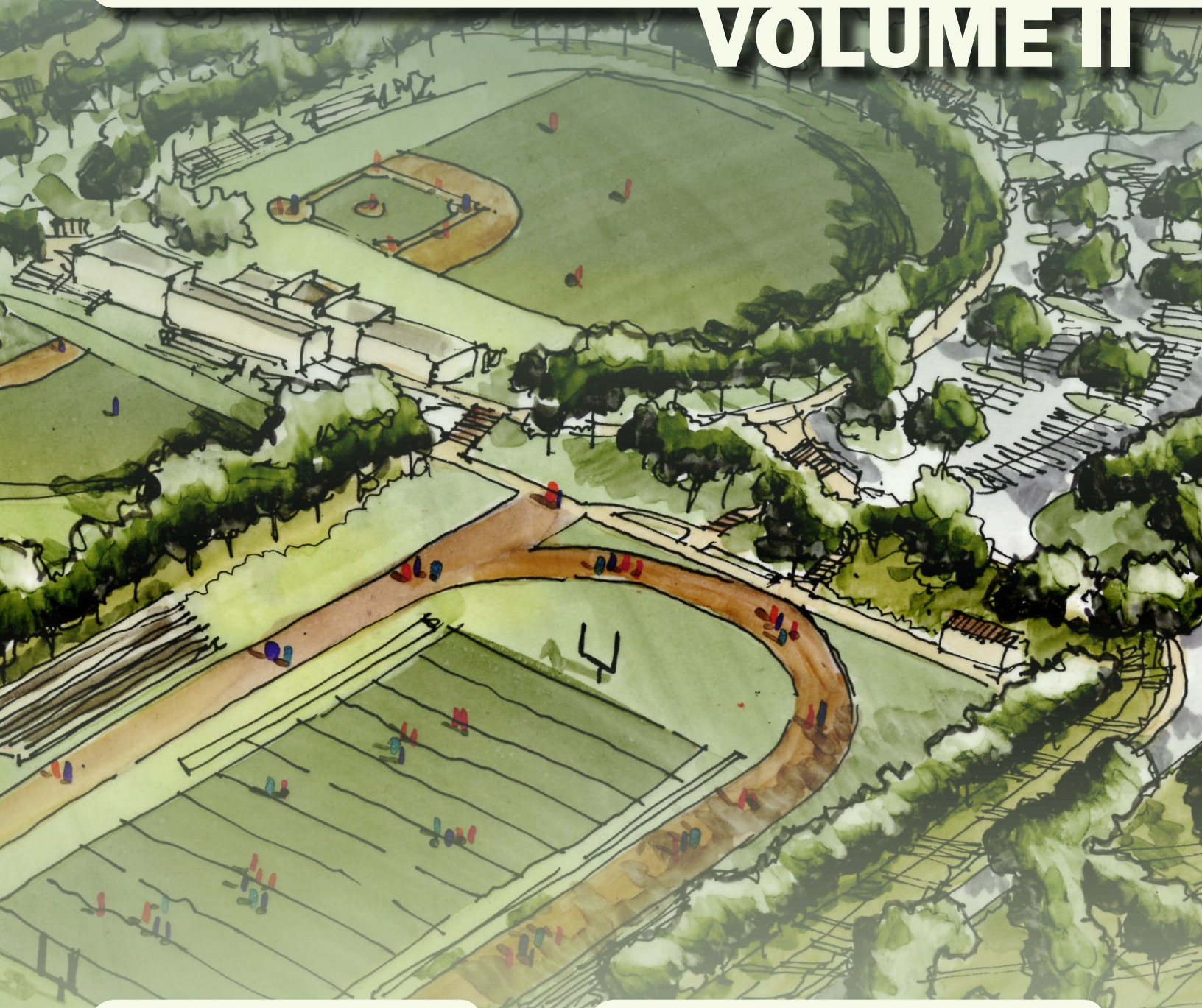
Claremont Colleges East Campus
Draft Environmental Impact Report

State Clearinghouse Number 2010021040
October, 2015

VOLUME II



Lead Agency
City of Upland
460 North Euclid Avenue
Upland, California 91786

Responsible Agency
City of Claremont
207 Harvard Avenue
Claremont, California

Prepared for
Claremont University Consortium
101 South Mills Avenue
Claremont, California 91711

Prepared by
MIG | Hogle-Ireland
1500 Iowa Avenue, Suite 110
Riverside, California 92507

APPENDIX A

Notice of Preparation and Scoping Materials

Project 2527

The Claremont Colleges East Campus Project
NOP/Scoping Comments

	NOP									Scoping
		A	B	C	D		E	F	G	
	NAHC	SCAQMD	IEUA	Caltrans Air	LAFCO	MWD	SBCO PW	Schenk	DFG	Matt Liebman
Aesthetics						Commented that project site has no MWD facilities				Non-Environmental Comment
Agriculture										
Air Quality		X								
Biological								X	X	
Cultural	X									
Geotechnical										
GHG		X								
Hazards/Materials				X			X			
HWQ										
Land Use										
Mineral										
Noise										
Public Services					X					
Recreation										
Transportation										
Utilities			X		X		X			
Cumulative										

Notice of Preparation

To: _____

From: City of Upland, ATTN: Karen Peterson
460 North Euclid Avenue
Upland, California 91786

Subject: Notice of Preparation of a Draft Environmental Impact Report

City of Upland will be the Lead Agency and will prepare an environmental impact report for the project identified below. We need to know the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval for the project.

The project description, location, and the potential environmental effects are contained in the attached materials. A copy of the Initial Study (☒ is ☐ is not) attached.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but not later than 30 days after receipt of this notice.

Please send your response to Karen Peterson, Senior Planner at the address shown above. We will need the name for a contact person in your agency.

Project Title: Claremont Colleges East Campus

Project Applicant, if any: Claremont University Consortium, ATTN: Tim Morrison

Date February 10, 2010

Signature _____

Title Senior Planner

Telephone 909-931-4327

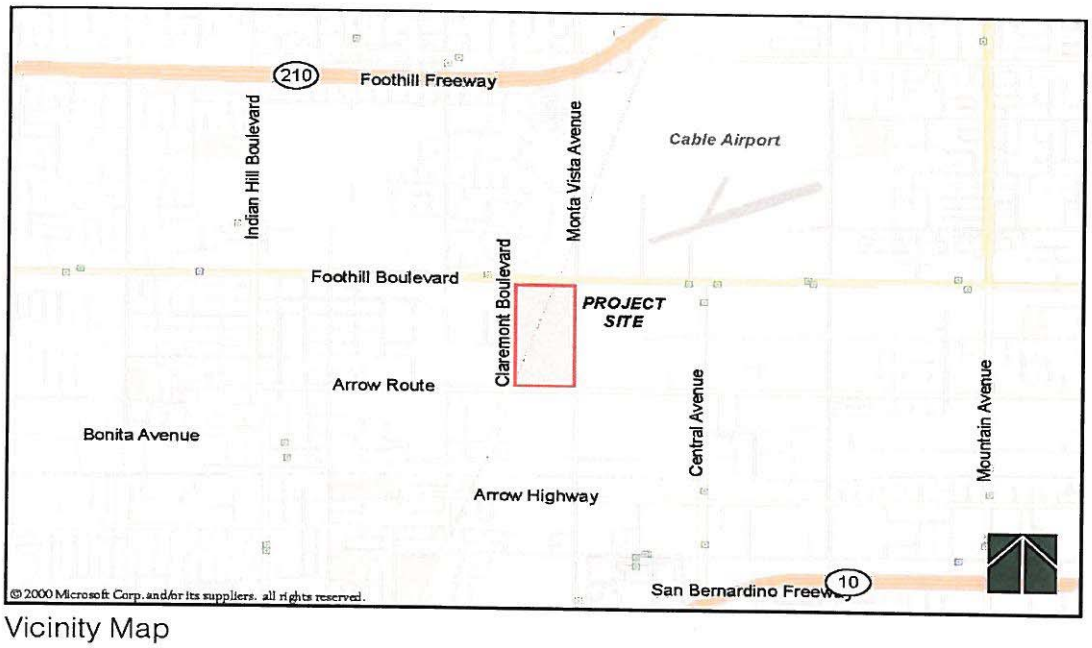
Reference: California Code of Regulations, Title 14, (CEQA Guidelines) Sections 15082(a), 15103, 15375.

NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT

The City of Upland will prepare an Environmental Impact Report and act as the Lead Agency under the California Environmental Quality Act for the following project:

Project Title: Claremont Colleges East Campus

Project Location: South of Foothill Boulevard, west of Monte Vista Avenue, north of Arrow Route/6th Street, and east of Claremont Boulevard within the Cities of Upland and Claremont



Vicinity Map

Description: The proposed project is a subdivision of approximately 80 acres of land for phased development of a private college sports complex with recreational/athletic fields, sports courts, parking, supporting building facilities and a sports medicine office. The purpose of the phased development is to accommodate the relocation of sports facilities and associated parking from the main college campus as well as provide overflow parking for the campus. Potentially significant impacts related to aesthetics, air quality biological resources, geology and soils, hazards and hazardous materials, hydrology and water quality, mineral resources, noise, public services, transportation and traffic, utilities and service systems, and associated cumulative impacts may occur as a result of the project. These impacts will be analyzed in the Environmental Impact Report (EIR). All other environmental impacts have been determined to be less than significant.

A copy of the **Notice of Preparation**, including a full description of the project and topics to be addressed in the Environmental Impact Report, will be available for public review from **February 11, 2010, to March 12, 2010**, at the Planning Division Counter at Upland City Hall, 460 N. Euclid Avenue, Upland, California, 91786. Please send any comments you may have in writing to Karen Peterson, Planning Manager, at Upland City Hall, by March 12, 2010.

In addition, a **Public Scoping Meeting** on the proposed Environmental Impact Report will be held at 6:30 p.m. on **Monday, March 15, 2010**, at the Carnegie Library located at the northeast corner of First Avenue and D Street within the Upland City Hall complex at 460 N. Euclid Avenue, Upland, California.

If you have any questions, please call Karen Peterson, Planning Manager, at (909) 931-4327.

(Space below for use of County Clerk only)

INLAND VALLEY
DAILY BULLETIN
(formerly The Daily Report)

2041 E. 4th Street
Ontario, CA 91764

PROOF OF PUBLICAT

(2015.5 C.C.P.)

STATE OF CALIFORNIA

County of San Bernardino

I am a citizen of the United States, I am over the age of eighteen years, and not a party to or interested in the above-entitled matter. I am the principal clerk of the printer of INLAND VALLEY DAILY BULLETIN, a newspaper of general circulation printed and published daily in the City of Ontario, County of San Bernardino, and which newspaper has been adjudged a newspaper of general circulation by the Superior Court of the County of San Bernardino, State of California, on the date of August 24, 1951, Case Number 70663. The notice, of which the annexed is a true printed copy, has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to wit:

2/10/10

I declare under penalty of perjury that the foregoing is true and correct.

Executed at Ontario, San Bernardino Co. California this 10 day of FEBRUARY, 20 10

signature

NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT

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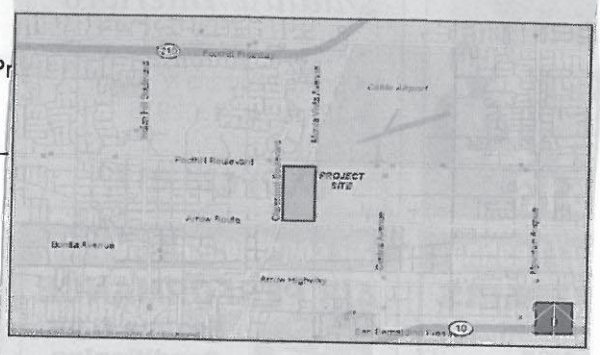
Project Title: Claremont Colleges East Campus

Project Location: South of Foothill Boulevard, west of Monte Vista Avenue, north of Arrow Route/6th Street, and east of Claremont Boulevard within the Cities of Upland and Claremont

Pr



Description: The proposed project is a subdivision of approximately 80 acres of land for phased development of a private college sports complex with recreational/athletic fields, sports courts, parking, supporting building facilities and a sports medicine office. The purpose of the phased development is to accommodate the relocation of sports facilities and associated parking from the main college campus as well as provide overflow parking for the campus. Potentially significant impacts related to aesthetics, air quality biological resources, geology and soils, hazards and hazardous materials, hydrology and water quality, mineral resources, noise, public services, transportation and traffic, utilities and service systems, and associated cumulative impacts may occur as a result of the project. These impacts will be analyzed in the Environmental Impact Report (EIR). All other environmental impacts have been determined to be less than significant.

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If you have any questions, please call Karen Peterson, Planning Manager, at (909) 931-4327.

Published: February 10, 2010

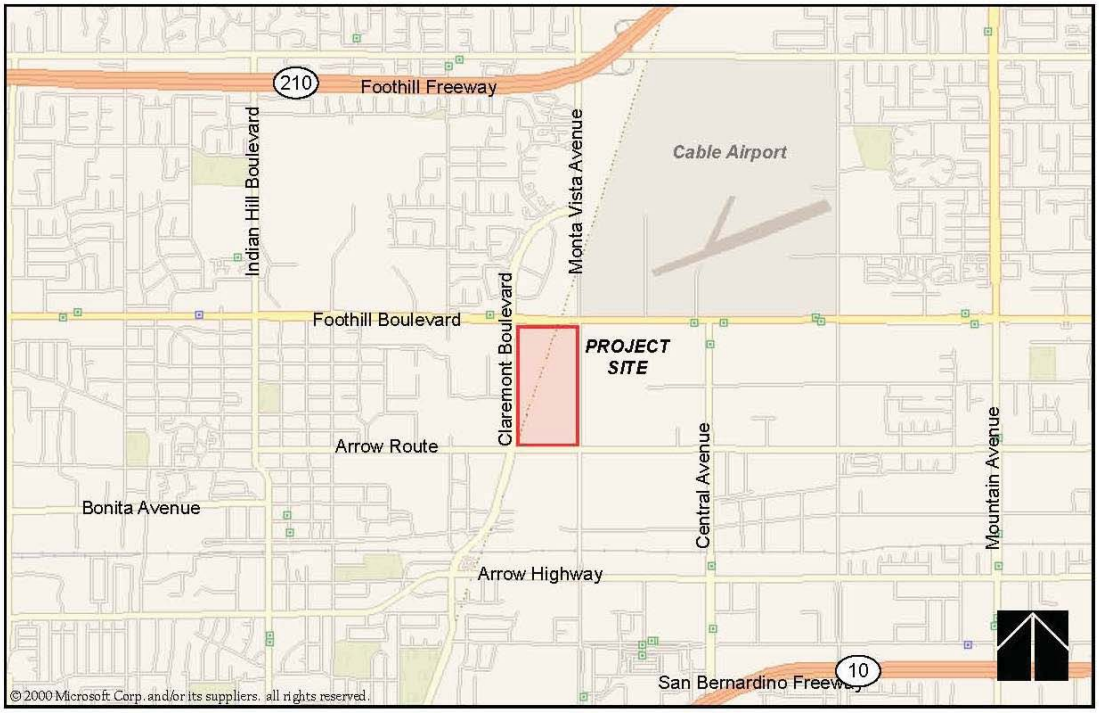
City of Upland
Claremont Colleges East Campus
Issues Summary

The following Issues Summary is prepared to accompany the Notice of Preparation (NOP) and provide information pursuant to Section 15082 of the State CEQA Guidelines.

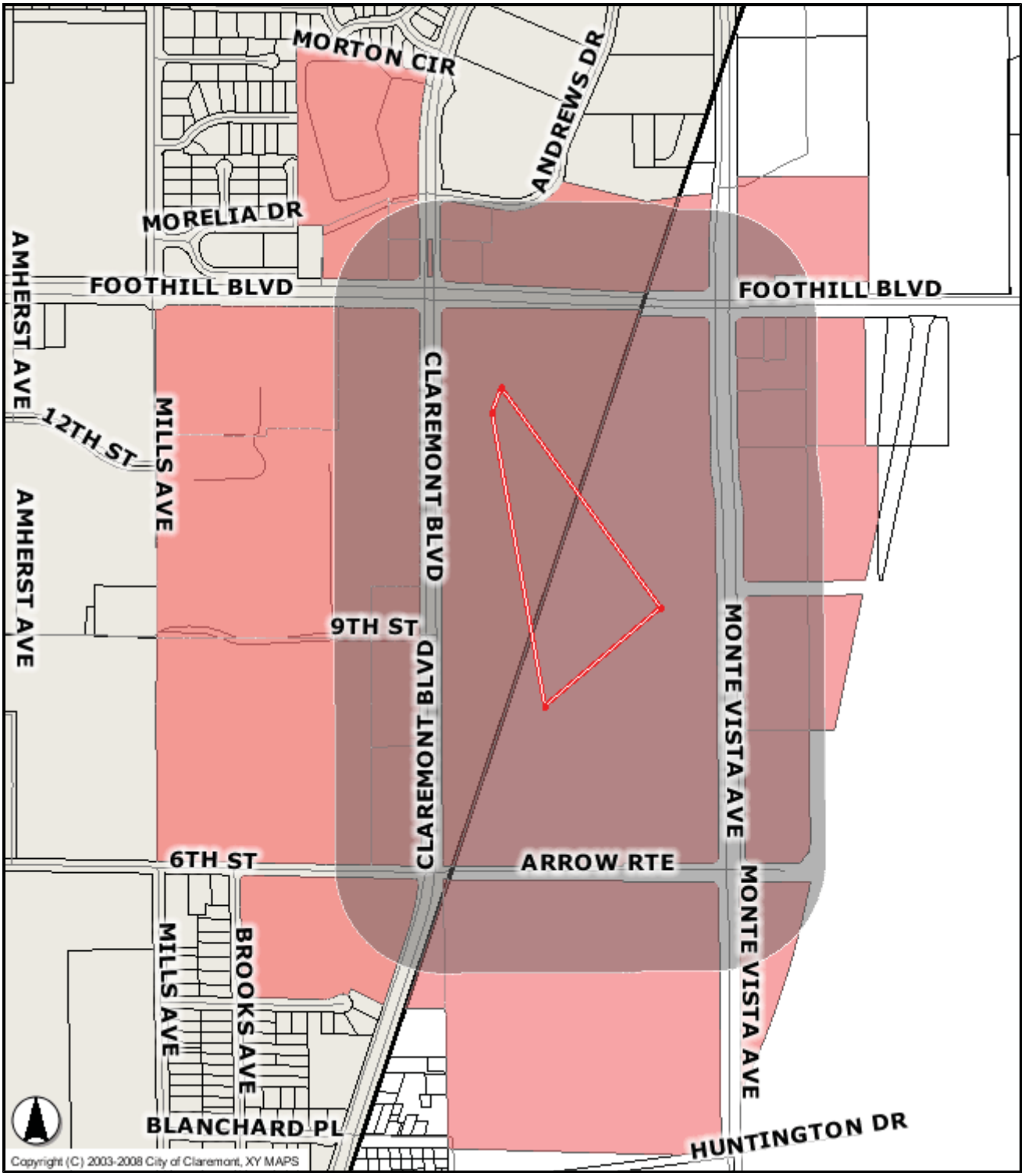
Project Location: The project site is located south of Foothill Boulevard, west of Monte Vista Avenue, north of Arrow Route/6th Street and east of Claremont Boulevard. The county line separating the City of Upland in San Bernardino County and the City of Claremont in Los Angeles County transverses the project site.

Project Description: The proposed Project is a subdivision of land for phased development of a college sports complex with recreational/athletic fields, sports courts, parking, supporting building facilities and a sports medicine office on an 80-acre former aggregate quarry. Existing land uses include an archery range and a temporary construction parking area adjacent to Claremont Boulevard in addition to a permitted Class III landfill site. The purpose of the phased development is the relocation of sports facilities and associated parking from the main college campus to the former quarry site as well as overflow parking for the campus.

Potential Environmental Impacts: Based on the analysis included in the Initial Study, potentially significant impacts related to aesthetics, air quality biological resources, geology and soils, hazards and hazardous materials, hydrology and water quality, mineral resources, noise, public services, transportation and traffic, utilities and service systems, and associated cumulative impacts may occur as a result of the project. These impacts will be analyzed in an Environmental Impact Report (EIR). All other environmental impacts have been determined to be less than significant.



Vicinity Map



City of Claremont

CUC Pit Project (500-foot Radius)

KAREN A. EVANS
FISH & WILDLIFE SERVICE
6010 HIDDEN VALLEY RD.
CARLSBAD CA 92009

LARRY ENG
STATE OF CALIFORNIA
DEPT. OF FISH & GAME
4949 VIEWRIDGE AVENUE
SAN DIEGO CA 92123

AIR RESOURCES BOARD
ATT: GENERAL COUNCIL
P O BOX 2815
SACRAMENTO, CA 95814

Comment [CRB1]: Claremont Agency List (32)

SO CALIF EDISON
800 W. CIENEGA AVE
SAN DIMAS CA 91775-2490

JEFFREY M. SMITH
SCAG
818 W SEVENTH ST, 12TH FL
LOS ANGELES CA 90017-3435

KYLE SNAY
GOLDEN STATE WATER CO
401 S SAN DIMAS CANYON RD
SAN DIMAS CA 91773

INTEGRATED WASTE MNGMT. BOARD
P.O. BOX 4025
SACRAMENTO, CA 95814-4025

ANTHONY MORALES
GABRIELENO/TONGVA TRIBAL COUNCIL
P O BOX 693
SAN GABRIEL CA 91778

IGR CEQA/PLANNING
CALTRANS DISTRICT 7
100 S MAIN ST.
LOS ANGELES CA 90012

MS. SUSAN FRANK
GABRIELINO BAND OF MISSION INDIANS OF CA
P O BOX 3021
BEAUMONT CA 92223

DAVID LEININGER
COUNTY OF LOS ANGELES FIRE
1320 N. EASTERN AVE
LOS ANGELES CA 90063-3294

LISA RUPPLE
CLAREMONT HERITAGE
P.O. BOX 742
CLAREMONT CA 97111

PLANNING DIVISION
CITY OF LA VERNE
3660 D STREET
LA VERNE CA 91750

SUSAN CHAPMAN
METRO CEQA REVIEW COORDINATION
ONE GATEWAY PLAZA
MS 99232
LOS ANGELES CA 90012

PLANNING DIVISION
CITY OF POMONA
505 S GAREY AVENUE
POMONA CA 91766

COUNTY OF SAN BERNARDINO
LAND USE SERVICES DEPT
385 N. ARROWHEAD AVE
SAN BERNARDINO CA 92415

MICHAEL DIAZ, CITY PLANNER
CITY OF MONTCLAIR
5111 BENITO
MONTCLAIR CA 91763

COUNTY OF LOS ANGELES
DEPT OF REGIONAL PLANNING
320 W TEMPLE ST., 13TH FL
LOS ANGELES CA 90012

CLAREMONT UNIFIED SCHOOL DISTRICT
170 W. SAN JOSE AVE
CLAREMONT CA 91711

LOS ANGELES COUNTY
RECORDER COUNTY CLERK
12400 E IMPERIAL HWY
NORWALK CA 90650

POMONA VALLEY TRANSPORTATION AUTHORITY
2120 FOOTHILL BLVD, #116
LA VERNE CA 91750

SO CALIFORNIA GAS COMPANY
P O BOX 3150
SAN DIMAS CA 91773

FOOTHILL TRANSIT
100 S VINCENT AVE STE 200
WEST COVINA CA 91790

LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD
320 W. 4TH ST., STE 200
LOS ANGELES CA 90013

CITY OF CLAREMONT
POLICE DEPARTMENT
570 W. BONITA AVE.
CLAREMONT, CA 91711

SO. COAST AIR QUALITY MANAGEMENT DISTRICT
21865 COPLEY DR
DIAMOND BAR CA 91765

STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
770 FAIRMONT AVE. #102
GLENDALE, CA 91203-1035

REBECCA DE LEON
ENVIRONMENTAL PLANNING TEAM
MWD
700 N. ALAMEDA ST, US3-230
LOS ANGELES CA 90012

CAL EPA
1001 I STREET
SACRAMENTO, CA
95812-2815

STATE MINING AND GEOLOGY BOARD
801 K STREET SUITE 2015
SACRAMENTO CA 95814

ANGELES NATIONAL FOREST
701 NORTH SANTA ANITA AVE.
ARCADIA, CA 91006

DR. SUSAN M. SCHENK
845 N INDIAN HILL BLVD
CLAREMONT CA 91711
(Electronic Copy)

CLARE PROPERTIES LLC
100 N CRESCENT DR 218
BEVERLY HILLS CA 90210

CLAREMONT INVESTORS LTD
2600 NUTWOOD AVE
FULLERTON CA 92831

CLAREMONT MCKENNA COLLEGE
1229 N DARTMOUTH AVE
CLAREMONT CA 91711

Comment [CRB2]: Claremont 500' Radius List (20)

CLAREMONT UNIV CONSORTIUM
1245 N DARTMOUTH AVE
CLAREMONT CA 91711

HARVEY MUDD COLLEGE
1229 N DARTMOUTH AVE
CLAREMONT CA 91711

HASSAN & SONS INC
5999 CERRITOS AVE
CYPRESS CA 90630

HUFF
PO BOX 542
UPLAND CA 91785

CLAREMONT RESIDENT
524 E FOOTHILL BLVD
CLAREMONT CA 91711

CLAREMONT RESIDENT
699 E FOOTHILL BLVD
CLAREMONT CA 91711

PLATFORM ENTERPRISES
701 E FOOTHILL BLVD
CLAREMONT CA 91711

VISTA DEL MONTE CORP
11548 SOUTH ST 24
CERRITOS CA 90703

WEIGAND PROPERTY PARTNERS
123 INDIAN HILL BLVD
CLAREMONT CA 91711

CLAREMONT RESIDENT
665 E FOOTHILL BLVD
CLAREMONT CA 91711

CLAREMONT RESIDENT
697 E FOOTHILL BLVD
CLAREMONT CA 91711

CLAREMONT RESIDENT
1050 N MILLS AVE
CLAREMONT CA 91711

CLAREMONT RESIDENT
735 E FOOTHILL BLVD
CLAREMONT CA 91711

CLAREMONT RESIDENT
636 MONTGOMERY CIR 5
CLAREMONT CA 91711

CLAREMONT RESIDENT
651 E 6TH ST
CLAREMONT CA 91711

CLAREMONT RESIDENT
750 S MILLS AVE
CLAREMONT CA 91711

CLAREMONT RESIDENT
1324 N CLAREMONT BLVD
CLAREMONT CA 91711

Bob Cable
Cable Airport
1749 W. 13th Street
Upland CA, 91786

John Pagano
Caltrans
464 West Fourth Street
San Bernardino CA, 92401

Lydia Roman, Regional Manager
Southern California Edison
1351 E. Francis Street
Ontario CA, 91761

Comment [CRB3]: Upland Agency List (33)

General Manager
Chino Basin Water Conservation District
4594 San Bernardino Street
Montclair CA, 91763

John V. Rossi
Chino Basin Watermaster
9641 San Bernardino Road
Ranch Cucamonga CA, 91730-2738

Mark Carnahan
City of Claremont
207 Harvard Avenue
Claremont CA, 91711

Planning
City of Los Angeles Dept. of Airports
1 World Way
Los Angeles CA, 90009

Planning Department
City of Rancho Cucamonga
10500 Civic Center Drive
Rancho Cucamonga CA, 91730

Armando Gonzales
Southern California Edison
7951 Redwood Avenue
Fontana CA, 92336

Peter Wulfman
County of San Bernardino-Solid Waste Management
825 E. Third Street
San Bernardino CA, 92415

Upland Engineer
GTE
1400 E. Phillips Boulevard
Pomona CA, 91766

State Water Resources Control Board
1001 I Street
Sacramento CA, 95814

Planning
Ontario/Montclair School District
950 West D Street
Ontario CA, 91762

Planning
San Bernardino Associated Governments
1170 W. Third Street, 2nd Floor
San Bernardino CA, 92410

Planning
Verizon
1400 E. Phillips Boulevard
Pomona CA, 91766

Michael Diaz, City Planner
City of Montclair
5111 Benito Street
Montclair CA, 91763-2808

Tim Morrison
Claremont University Consortium
101 S. Mills Avenue
Claremont CA, 91711-5053

Public Works-Environmental Management
County of San Bernardino
825 E. Third Street RM 201
San Bernardino CA, 92415-0835

Robert De Loach
Cucamonga Water District
10440 Ashford Street
Rancho Cucamonga CA, 91730

Inland Empire Utilities Agency
6075 Kimball Avenue
Chino CA, 91710

Dr. Susan M. Schenk
The Claremont Colleges
925 N. Mills Avenue
Claremont CA, 91711

Engineering
Pacific Telephone Company
3073 Adams RM 202
Riverside CA, 92504

Planning
San Gabriel Valley Municipal Water District
P.O. Box 1299
Azusa CA, 91702-1299

U.S. Army Corps of Engineers
40015 Sierra Highway, Suite B145
Palmdale CA, 93550-2117

Planning Department
City of Ontario
303 E. B Street
Ontario CA, 91762

Planning
Comcast Cable
1581 Commerce Street
Corona CA, 92880

Public Works-Transportation/Flood Control
County of San Bernardino
825 E. Third Street RM 206
San Bernardino CA, 92415-0835

California State Department of Water Resources
Division of Safety of Dams
P.O. Box 942836
Sacramento CA, 95812

Kathleen Rollings-McDonald, Executive Officer
Local Agency Formation Commission
215 N. D Street, Suite 204
San Bernardino CA, 92415-0490

Van Jew
Monte Vista Water District
10575 Central Avenue
Montclair CA, 91763

Charles Moorrees
San Antonio Water Company
139 N. Euclid Avenue
Upland CA, 91786

Bob Cruz
The Gas Company
196 E. Third Street
Pomona CA, 91766-1806

Superintendent of Schools
Upland Unified School District
390 Euclid Avenue, Suite 100
Upland CA, 91786-4764

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 · www.aqmd.gov

RECEIVED
FEB 23 2010
COMMUNITY DEVELOPMENT

February 18, 2010

Ms. Karen Peterson, Senior Planner
City of Upland
460 N. Euclid Avenue
Upland, CA 91786

Dear Ms. Peterson:

Notice of Preparation of a Draft Environmental Impact Report (Draft EIR) for the Claremont Colleges East Campus Project

The South Coast Air Quality Management District (SCAQMD) appreciates the opportunity to comment on the above-mentioned document. The SCAQMD's comments are recommendations regarding the analysis of potential air quality impacts from the proposed project that should be included in the draft environmental impact report (EIR). Please send the SCAQMD a copy of the Draft EIR upon its completion. **In addition, please send with the draft EIR all appendices or technical documents related to the air quality analysis and electronic versions of all air quality modeling and health risk assessment files. Electronic files include spreadsheets, database files, input files, output files, etc., and does not mean Adobe PDF files. Without all files and supporting air quality documentation, the SCAQMD will be unable to complete its review of the air quality analysis in a timely manner. Any delays in providing all supporting air quality documentation will require additional time for review beyond the end of the comment period.**

Air Quality Analysis

A.1 The SCAQMD adopted its California Environmental Quality Act (CEQA) Air Quality Handbook in 1993 to assist other public agencies with the preparation of air quality analyses. The SCAQMD recommends that the Lead Agency use this Handbook as guidance when preparing its air quality analysis. Copies of the Handbook are available from the SCAQMD's Subscription Services Department by calling (909) 396-3720. Alternatively, the lead agency may wish to consider using the California Air Resources Board (CARB) approved URBEMIS 2007 Model. This model is available on the SCAQMD Website at: www.urbemis.com.

A.2 The Lead Agency should identify any potential adverse air quality impacts that could occur from all phases of the project and all air pollutant sources related to the project. Air quality impacts from both construction (including demolition, if any) and operations should be calculated. Construction-related air quality impacts typically include, but are not limited to, emissions from the use of heavy-duty equipment from grading, earth-loading/unloading, paving, architectural coatings, off-road mobile sources (e.g., heavy-duty construction equipment) and on-road mobile sources (e.g., construction worker vehicle trips, material transport trips). Operation-related air quality impacts may include, but are not limited to, emissions from stationary sources (e.g., boilers), area sources (e.g., solvents and coatings), and vehicular trips (e.g., on- and off-road tailpipe emissions and entrained dust). Air quality impacts from indirect sources, that is, sources that generate or attract vehicular trips should be included in the analysis.

A.3 The SCAQMD has developed a methodology for calculating PM2.5 emissions from construction and operational activities and processes. In connection with developing PM2.5 calculation methodologies, the SCAQMD has also developed both regional and localized significance thresholds. The SCAQMD requests that the lead agency quantify PM2.5 emissions and compare the results to the recommended PM2.5 significance thresholds. Guidance for calculating PM2.5 emissions and PM2.5 significance thresholds can be found at the following internet address: http://www.aqmd.gov/ceqa/handbook/PM2_5/PM2_5.html.

A.4 In addition to analyzing regional air quality impacts the SCAQMD recommends calculating localized air quality impacts and comparing the results to localized significance thresholds (LSTs). LST's can be used in addition to the recommended regional significance thresholds as a second indication of air quality impacts when preparing a CEQA document. Therefore, when preparing the air quality analysis for the proposed project, it is recommended that the lead agency perform a localized significance analysis by either using the LSTs developed by the SCAQMD or performing dispersion modeling as necessary. Guidance for performing a localized air quality analysis can be found at http://www.aqmd.gov/ceqa/handbook/LST/LST.html.

A.5 In the event that the proposed project generates or attracts vehicular trips, especially heavy-duty diesel-fueled vehicles, it is recommended that the lead agency perform a mobile source health risk assessment. Guidance for performing a mobile source health risk assessment ("Health Risk Assessment Guidance for Analyzing Cancer Risk from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis") can be found on the SCAQMD's CEQA web pages at the following internet address: http://www.aqmd.gov/ceqa/handbook/mobile_toxic/mobile_toxic.html. An analysis of all toxic air contaminant impacts due to the decommissioning or use of equipment potentially generating such air pollutants should also be included.

A.6 The lead agency is also encouraged to prepare an analysis of greenhouse gas emissions pursuant to the recent filing of amendments to the CEQA guidelines by the State Office of Administrative Law.

Mitigation Measures

A.7 In the event that the project generates significant adverse air quality impacts, CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized during project construction and operation to minimize or eliminate significant adverse air quality impacts. To assist the Lead Agency with identifying possible mitigation measures for the project, please refer to Chapter 11 of the SCAQMD CEQA Air Quality Handbook for sample air quality mitigation measures. Additional mitigation measures can be found on the SCAQMD's CEQA web pages at the following internet address: www.aqmd.gov/ceqa/handbook/mitigation/MM_intro.html Additionally, SCAQMD's Rule 403 – Fugitive Dust, and the Implementation Handbook contain numerous measures for controlling construction-related emissions that should be considered for use as CEQA mitigation if not otherwise required. Other measures to reduce air quality impacts from land use projects can be found in the SCAQMD's Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. This document can be found at the following internet address: http://www.aqmd.gov/prdas/aqguide/aqguide.html. In addition, guidance on siting incompatible land uses can be found in the California Air Resources Board's Air Quality and Land Use Handbook: A Community Perspective, which can be found at the following internet address: http://www.arb.ca.gov/ch/handbook.pdf. CARB's Land Use Handbook is a general reference guide for evaluating and reducing air pollution impacts associated with new projects that go through the land use decision-making process. Pursuant to state CEQA Guidelines §15126.4 (a)(1)(D), any impacts resulting from mitigation measures must also be discussed.

Data Sources

A.8 SCAQMD rules and relevant air quality reports and data are available by calling the SCAQMD's Public Information Center at (909) 396-2039. Much of the information available through the Public Information Center is also available via the SCAQMD's World Wide Web Homepage (http://www.aqmd.gov).

The SCAQMD is willing to work with the Lead Agency to ensure that project-related emissions are accurately identified, categorized, and evaluated. Please call Ian MacMillan, Program Supervisor, CEQA Section, at (909) 396-3244 if you have any questions regarding this letter.

Sincerely,

Ian V. MacMillan

Ian MacMillan
Program Supervisor, CEQA Inter-Governmental Review
Planning, Rule Development & Area Sources

IM:AK
SBC100211-02AK
Control Number

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

6075 Kimball Ave, • Chino, CA 91708
P.O. Box 9020 • Chino, Hills, CA 91709
TEL (909) 993-1600 • FAX (909) 597-8875
www.ieua.org

RECEIVED
MAR 01 2010
COMMUNITY DEVELOPMENT

February 25, 2010

Karen Peterson
City of Upland
460 North Euclid Avenue
Upland, CA 91786

Subject: Notice of Preparation of a Draft Environmental Impact Report for the Claremont Colleges East Campus Project

Dear Ms. Peterson,

The Inland Empire Utilities Agency (IEUA) Planning Department has reviewed the above referenced subject and has the following comments/recommendations:

B.1 The project is located farther than 0.5 miles to an existing IEUA Recycled Water Line, but within distance of a future IEUA Recycled Water Line. We recommend that, if it is consistent with the City's Planning, you should consider use of recycled water in this development.

B.2 It appears that the development will provide wastewater flow to existing IEUA sewer lines, consistent with IEUA's Sewer Master Plan. Please continue to notify IEUA of any additional connections to our Regional Sewer System.

If you have any questions, please feel free to contact me at (909) 993-1635 or by email at rshaw@ieua.org.

Regards,

Ryan Shaw
Planning & Water Resources Department
Inland Empire Utilities Agency

Terry Catlin, President | Angel Santiago, Vice President | Michael E. Camacho, Secretary/Treasurer | Gene Koopman, Director | John L. Anderson, Director | Richard W. Atwater, Chief Executive Officer General Manager

DEPARTMENT OF TRANSPORTATION
DIVISION OF AERONAUTICS – M.S.#40
1120 N STREET
P. O. BOX 942874
SACRAMENTO, CA 94274-0001
PHONE (916) 654-4959
FAX (916) 653-9531
TTY 711

Flex your power!
Be energy efficient!

RECEIVED
MAR 11 2010
COMMUNITY DEVELOPMENT

March 1, 2010

Ms. Karen Peterson
City of Upland
160 North Euclid Avenue
Upland, CA 91786

Dear Ms. Peterson:

Re: City of Upland's Notice of Preparation of a Draft Environmental Impact Report for the Claremont Colleges East Campus; SCH# 2010021040

The California Department of Transportation (Caltrans), Division of Aeronautics (Division), reviewed the above-referenced document with respect to airport-related noise and safety impacts and regional aviation land use planning issues pursuant to the California Environmental Quality Act (CEQA). The Division has technical expertise in the areas of airport operations safety and airport land use compatibility. We are a funding agency for airport projects and we have permit authority for public-use and special-use airports and heliports.

The proposal is for the phased development of a college sports complex with recreational and athletic fields, sports courts, parking, supporting building facilities and a sports medicine office on an 80-acre former quarry site. 50 acres of the 80-acre site are within the City of Upland and the remaining 30 acres are within the City of Claremont. According to the Notice of Preparation (NOP), the purpose of the phased development is the relocation of sports facilities, associated parking and overflow parking from the existing main college campus to the former quarry site.

The project site is located approximately 2,000 feet southwest of the Cable Airport. Page 22 of the NOP states that "Cable Airport is a private airport located in the City of Upland northeast of the project site." Cable Airport is privately owned; however, it operates with a Public Airport Permit issued by the Division and is open to the public. Cable Airport is an important and active airport with approximately 116 based aircraft and over 92,000 annual operations.

C.1 The proposal should be coordinated with the Cable Airport to ensure that the proposal will be compatible with future as well as existing airport operations. Please contact the Airport Manager, Charles Barnett, at (909) 982-6021.

C.2 In accordance with California Education Code Section 81031 (c) and (d), available on-line at Education Code Section 81031-81033, prior to acquisition of land for a community college within two miles of an airport runway, the governing board of a community college district is required to submit written notification to the Division of Aeronautics requesting a site evaluation. Please contact the Division's Aviation Safety Officer for San Bernardino County, Patrick Miles, at (916) 654-5376, for questions concerning the school site evaluation.

Protecting people and property on the ground from the potential consequences of near-airport aircraft accidents is a fundamental land use compatibility-planning objective. While the chance of an aircraft injuring someone on the ground is historically quite low, an aircraft accident is a high consequence event. To protect people and property on the ground from the risks of near-airport aircraft accidents, some form of restrictions on land use is essential. The two principal methods for reducing the risk of injury and property damage on the ground are to limit the number of persons in an area and to limit the area covered by occupied structures. The potential severity of an off-airport aircraft accident is highly dependent upon the nature of the land use at the accident site.

The California Airport Land Use Planning Handbook (Handbook) identifies six airport safety zones based on risk levels. Portions of the project site appear to be within the Outer Approach and Departure Zone 4 and the Traffic Pattern Zone 6. The Handbook generally recommends that "outdoor stadiums and similar uses with very high intensities" be prohibited within Zone 6. CEQA, Public Resources Code 21096, requires the Handbook be used as a resource in the preparation of environmental documents for projects within airport land use compatibility plan boundaries or if such a plan has not been adopted, within two nautical miles of an airport. The Handbook is available on-line at http://www.dot.ca.gov/hq/planning/aeronaut/documents/ALUPHComplete-7-02rev.pdf.

C.3 The project site appears to be within the Safety Zones 1 and 2 as designated in the Airport Land Use Compatibility Plan (ALUCP) for Cable Airport. The western portion of the project site is also beneath the "approximate flight track" and the 60-65 decibel (dB) Community Noise Equivalent Level (CNEL) contours for Cable Airport as designated in the ALUCP. Page 30 of the ALUCP states that the "potential loss of life and property due to aircraft accidents is sufficient to require restriction of density and intensity of use restrictions in" Safety Area 1. Institutional facilities are considered incompatible; new uses that result in "large concentrations of people (more than 100 persons) shall be subject to review and approval of the Airport Land Use Commission. Because of the proximity to aircraft operations, structures in this area should not reflect glare, emit electronic interference, or produce smoke so as to endanger aircraft operations." According to page 35 of the ALCUP, institutional uses are "unacceptable in this zone unless it can be shown that adequate protection against exterior noise has been included in the design and construction together with a central air conditioning system and all windows permanently sealed (45 dB CNEL)."

C.4 California Public Utilities Code Section 21659 prohibits structural hazards near airports. Depending on structural heights and in accordance with Federal Aviation Regulation, Part 77 "Objects Affecting Navigable Airspace" a Notice of Proposed Construction or Alteration (Form 7460-1) may be required by the Federal Aviation Administration (FAA). Form 7460-1 is available on-line at https://oeaaa.faa.gov/oeaaa/external/portal.jsp and should be submitted electronically to the FAA. As stated previously, visual hazards associated with distracting lights, glare, and sources of smoke; as well as electronic hazards that may interfere with aircraft instruments or radio communication are also a concern.

Aviation plays a significant role in California's transportation system. This role includes the movement of people and goods within and beyond our State's network of over 250 airports. Aviation contributes nearly 9 percent of both total State employment (1.7 million jobs) and total State output

($110.7 billion) annually. These benefits were identified in a study entitled, "Aviation in California: Benefits to Our Economy and Way of Life," and available on-line at http://www.dot.ca.gov/hq/planning/aeronaut/econstudy2003.html. Aviation improves mobility, generates tax revenue, saves lives through emergency response, medical and fire fighting services, annually transports air cargo valued at over $170 billion and generates over $14 billion in tourist dollars, which in turn improves our economy and quality of life.

The protection of airports from incompatible land use encroachment is vital to California's economic future. Cable Airport is an economic asset that should be protected through effective airport land use compatibility planning and awareness. Although the need for compatible and safe land uses near airports is both a local and State issue, airport staff, airport land use commissions and airport land use compatibility plans are key to protecting an airport and the people residing and working in the vicinity of an airport. Consideration given to the issue of compatible land uses in the vicinity of an airport should help to relieve future conflicts between airports and their neighbors.

These comments reflect the areas of concern to the Division with respect to airport-related noise, safety, and regional land use planning issues. We advise you to contact our District 8 office concerning surface transportation issues.

Thank you for the opportunity to review and comment on this proposal. If you have any questions, please call me at (916) 654-5314 or by email at sandy.hesnard@dot.ca.gov.

Sincerely,

Sandy Hesnard

SANDY HESNARD
Aviation Environmental Specialist

c: State Clearinghouse, Cable Airport

LOCAL AGENCY FORMATION COMMISSION

215 North "D" Street, Suite 204 • San Bernardino, CA 92415-0490
(909) 383-9900 • Fax (909) 383-9901
E-mail: lafco@lafco.sbcounty.gov • www.sbclafco.org

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LEGAL COUNSEL

CLARK H. ALSOP

March 11, 2010

Karen Peterson, Senior Planner
City of Upland
460 North Euclid Avenue
Upland, CA 91786

RE: Notice of Preparation of a Draft Environmental Impact Report for the Claremont Colleges East Campus

Dear Ms. Peterson:

The Local Agency Formation Commission (LAFCO) received a copy of the Draft Notice of Preparation (NOP) for the project identified above. After reviewing the NOP, LAFCO has the following comments and/or concerns:

Overall Project Proposal:

D.1 The project, which is a proposal to create a college sports complex with recreation/athletic facilities, is being developed on two separate parcels. One of the parcels, APN 1007-011-01, is located within the City of Upland while the other, APN 8308-025-012, is located within the City of Claremont. LAFCO has some concerns with the delivery of services to a project that is in two separate jurisdictions. Not only does the delivery of services have the potential for possible duplication (such as water/sewer facilities running parallel to each other) but can also be a means of confusion for emergency services such as police, fire, etc. These service issues have to be identified in the draft Environmental Impact Report (EIR) and the ability to serve the project must be evaluated as part of the City's environmental assessment.

It is LAFCO's position that there are at least two options available that would clarify service related issues that affect the project. The first option involves a jurisdictional change to place the entire project area within a single jurisdiction. This would allow for a single provider to serve the project. The second option requires the establishment of a contract between both the Cities of Upland and Claremont pertaining to the service provider (i.e. fire, police, water, sewer, trash, etc.) for the project. This option was alluded to in some of the public services requirements identified in the document.

Option 1

Option 1 will require a sphere of influence amendment (expansion/reduction) and reorganization (annexation/detachment) between the Cities of Upland and Claremont in order to place the entire project area within a single jurisdiction. It will also require a County boundary change between the Counties of San Bernardino and Los Angeles pursuant to Government Code Section 23200-23220 since city boundaries cannot cross county lines.

In order to move forward with this option, the sphere of influence reduction and detachment of the parcel (from either the City of Claremont or the City of Upland) must first take place. Then, the county boundary change will have to proceed before the sphere of influence expansion and annexation of the parcel to the receiving city can occur. In addition, the annexing City will have to prezone the area pursuant to Government Code Section 56375(a)(7). The City's prezoning must also be evaluated in the Draft EIR.

Option 2

D.1
Continued

Option 2 requires that the Cities of Upland and Claremont agree on who provides the services to the project. This can be achieved through a contract that identifies the service requirements for the project, the provider of the services, the mechanism for how the project will be served, and the financing of the services. In this case, it would be a preferred choice that a single provider provide the services within the entire project, be it the City of Upland serving the area within the City of Claremont, or the City of Claremont serving the area within the City of Upland.

In evaluating this process, it should be identified which LAFCO, whether San Bernardino LAFCO or Los Angeles LAFCO, will make the determination related to Option 2.

LAFCO Responsible Agency under CEQA

If the proposed project proceeds with Option 1, either San Bernardino LAFCO or Los Angeles LAFCO will be using the City's environmental assessment as a responsible agency under CEQA. Therefore, the Draft EIR needs to clearly identify and evaluate the processing of the sphere of influence amendment and the reorganization, and the county boundary change.

Whether the project evaluates Option 1 or Option 2, some of the issues that need to be addressed in the Draft EIR include the type of services to be provided, the types of services that are available, and the existing infrastructure needs required to serve the area. These issues, among others, have potential indirect effects on environmental factors such as Aesthetics, Air Quality, Biological Resources, Cultural Resources, Geology and Soils, Hydrology and Water Quality, Land Use

D.1
Continued

and Planning, Noise, Population and Housing, Public Services, Recreation, Transportation/Traffic, and Utilities and Service Systems that will have to be addressed in the EIR.

In conclusion, it is LAFCO's position that the delivery of services by a single entity is the more efficient and effective way to serve the project. This can be permanently achieved through Option 1. However, if the project proceeds straddling between both jurisdictions, Option 2 can also provide the mechanism that would allow a single provider to serve the project.

If you have any questions concerning the information outlined above, please do not hesitate to contact me or Samuel Martinez, Senior LAFCO Analyst, at (909) 383-9900. Please include LAFCO on your distribution list to receive further information related to this project. We look forward to working with the City on this project.

Sincerely,

KATHLEEN ROLLINGS-McDONALD
Executive Officer

DEPARTMENT OF PUBLIC WORKS

FLOOD CONTROL • LAND DEVELOPMENT & CONSTRUCTION
SOLID WASTE MANAGEMENT • SURVEYOR • TRANSPORTATION

COUNTY OF SAN BERNARDINO

SOLID WASTE MANAGEMENT DIVISION
222 West Hospitality Lane, Second Floor •San Bernardino, CA 92415-0017 •(909) 386-8701
Administration/Engineering Fax (909) 386-8900

GRANVILLE M. "BOW" BOWMAN, P.E., P.L.S.
Director of Public Works

PETER H. WULFMAN
Solid Waste Division Manager

March 11, 2010

RECEIVED

MAR 17 2010

COMMUNITY DEVELOPMENT

Karen Peterson, Senior Planner
City of Upland
Community Development Department
460 N. Euclid Avenue
Upland, CA 91786-0460

RE: NOTICE OF PREPARATION (NOP) OF DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE CLAREMONT COLLEGES EAST CAMPUS

Dear Ms. Peterson:

Thank you for the opportunity to comment on the above-referenced project.

The County of San Bernardino Solid Waste Management Division is responsible for the management and oversight of all County landfill and waste transfer operations. As such, we would request that the following issues be addressed in the Environmental Impact Report:

E.1 The Initial Study was unclear about the location of the permitted Class III landfill site. A precise location is necessary in order to evaluate the impacts of the proposed project.

E.2 The creation of a new waste stream with this development and its impact on existing landfill capacity and traffic (information provided should include waste generation pre and post construction, estimated tonnage, existing approved tonnage at receiving landfill(s), potential increase in traffic at the development site [creation of new streets], traffic to the landfill itself, etc.);

E.3 Requirements for handling recycling, construction and demolition debris (information should include existing recycling programs);

E.4 Whether any hazardous waste will be generated, and, if so, types and quantities, including proposed disposal method(s) (information should address pre and post construction; i.e., will any hazardous materials be used during demolition and/or construction and the types/quantities of hazardous waste expected after project completion);

E.5 Availability of commercial waste haulers and expected increases in traffic due to expanded hauler routes to serve the proposed development.

Board of Supervisors

GREGORY C. DEVEREAUX
County Administrator

BRAD MITZELFELT ..... First District
PAUL BIANE ..... Second District
NEIL DERRY ..... Third District
GARY OVITT ..... Fourth District
JOSIE GONZALES ..... Fifth District

Should you have any questions or comments, please feel free to contact Mary Patterson, Solid Waste Programs Administrator, by phone at (909) 382-3237; by facsimile at (909) 386-8964, by mail to the address listed above, or by e-mail to mpatterson@swm.sbcounty.gov.

Sincerely,

Nancy Sansonetti, AICP, Principal Planner/Chief
Planning & Permitting Section

NS:mp

Ecc: Peter Wulfman, Division Manager – County of San Bernardino Solid Waste Management Division
File

Chris Brown

From: Pam Steele
Sent: Monday, March 15, 2010 12:11 PM
To: Chris Brown
Subject: FW: Scoping meeting for Claremont College east campus

-----Original Message-----
From: Karen Peterson [mailto:kpeterson@ci.upland.ca.us]
Sent: Monday, March 15, 2010 7:32 AM
To: Pam Steele; Mark Staples
Subject: FW: Scoping meeting for Claremont College east campus

Pam and Mark-

Here's another NOP comment.

-----Original Message-----
From: S.M. Schenk [mailto:sschenk@jsd.claremont.edu]
Sent: Friday, March 12, 2010 10:02 AM
To: Karen Peterson; Prasse, Lisa; Schenk, Susan
Subject: Scoping meeting for Claremont College east campus

Good day. Would you please bring this up for discussion at the scoping meeting March 15? I must be at another meeting that evening. Thank you.

Item IVf, Biological resources, should be listed as a potentially significant impact rather than as no impact.
Claremont has adopted a Sustainable City Plan which has sections relevant to this:
Goal 5.1 Protect Natural Open Space--maintain, improve and protect natural open space resources throughout Claremont Target:maintain location/size of existing natural areas within City

F.1 Disturbance by fire and flood has helped to shape the ecosystems in our area and they are adapted to rebound from such disturbance. Although the

quarry has been disturbed by human endeavor, it has a considerable amount of natural regrowth, some of it of a rare type (see EIR for North

Campus Master Plan referenced in the current initial study). The quarry

is home to many species and individuals, both native and naturalized. As

such, the loss of this area will have an effect on biodiversity, and on population and species numbers in the City. This is not limited to listed or large species or to ones needing corridors. The effect needs to be assessed and mitigation measures proposed to offset the loss.
Please amend the scope of the EIR to include this.
Thank you.

Cordially, Sue Schenk

Dr. Susan M. Schenk
The Claremont Colleges
925 N. Mills Ave
Claremont, CA 91711
mailto:sschenk@jsd.claremont.edu

"In the end, our society will be defined not only by what we create,
but by what we refuse to destroy." John C. Sawhill

California Natural Resources Agency
DEPARTMENT OF FISH AND GAME
South Coast Region
4949 Viewridge Avenue
San Diego, CA 92123
(858) 467-4201
http://www.dfg.ca.gov

ARNOLD SCHWARZENEGGER, Governor
JOHN MCCAMMAN, Director

March 15, 2010

Ms. Karen Peterson
City of Upland
160 North Euclid Avenue
Upland, CA 91786

Subject: Notice of Preparation of a Draft Environmental Impact Report for Claremont Colleges East Campus, SCH # 2010021040

Dear Ms. Peterson:

The Department of Fish and Game (Department) has reviewed the above-referenced Initial Study (IS) and Notice of Preparation (NOP), for a Draft Environmental Impact Report (DEIR). The project is a subdivision of land for phased development of a college sports complex with recreation/athletic fields, sports courts, parking, supporting building facilities and a sports medicine office in an 80-acre former aggregate quarry. The purpose of the phased development is the relocation of sports facilities and associated parking from the main college campus to the former quarry site as well as overflow parking for the campus. The project spans the City of Upland in San Bernardino County and the City of Claremont in Los Angeles County.

As described in the IS, from the 1920s until the mid 1970s, the site was used for the surface mining of aggregate materials. The site is currently used for temporary construction parking, as an archery range, and as a Class III Landfill. The site is described in the IS as being highly disturbed from past aggregate extraction, current landfill activities of inert waste and continuous grading of the fill on the alluvial surface of the quarry bottom. The site supports 45.5 acres of alluvial fan scrub habitat in various stages of growth, and rudural vegetation types with no major growths of trees. The site receives storm water runoff from the areas to the north which results in periodic ponding in surface depressions within the project boundaries. Ground water also temporarily rises and pools in the bottom of the quarry.

To enable Department staff to adequately review and comment on the proposed project we recommend the following information, where applicable, be included in the DEIR:

1. A complete, recent assessment of flora and fauna within and adjacent to the project area, with particular emphasis upon identifying endangered, threatened, and locally unique species and sensitive habitats.

G.1 a. A thorough recent assessment of rare plants and rare natural communities, including but not limited to: Riversidian sage scrub; Parry's spineflower (*Chorizanthe parryi var. parryi);* Santa Ana River Wooly-star (*Eriastrum densifolium ssp. Sanctorum*); slender horned spineflower (*Dodecahema leptocerus*); and Payson's jewelflower (*Caulanthus simulans*), following the Department's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (Attachment 1).

b. A complete, recent assessment of sensitive fish, wildlife, reptile, and amphibian species including but not limited to: San Bernardino Merriam's kangaroo rat (*Dipodomys merriami parvus*); northwestern San Diego pocket mouse (*Chaetodipus fallax*); San Diego desert woodrat (*Neotoma lepida intermedia*); San Diego black-tailed jackrabbit (*Lepus californicus bennettii*); coastal California gnatcatcher (*Polioptila californica*); western burrowing owl (*Athene cunicularia*); least Bell's vireo (*Vireo belli pusillus*); southwestern willow flycatcher (*Empidonax traillii extimus*); lesser night hawk (*Chordeiles acutipennis*); coastal cactus wren (*Campylorhynchus brunneicapillus couesi*); loggerhead shrike (*Lanius ludovicianus*); western spadefoot (*Spea hammondii*); coast horned lizard (*Phrynosoma coronatum*); silvery legless lizard (*Anniella pulchra*); southwestern pond turtle (*Actinemys marmorata pallida*); and coast range newt (*Taricha torosa*). Seasonal variations in use of the project area should also be addressed. Recent, focused, species-specific surveys, conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable, are required. Acceptable species-specific survey procedures should be developed in consultation with the Department and U.S. Fish and Wildlife Service.

G.1 Continued

c. Rare, threatened, and endangered species to be addressed should include all those which meet the California Environmental Quality Act (CEQA) definition (see CEQA Guidelines, Section 15380).

d. The Department's Biogeographic Data Branch in Sacramento should be contacted at (916) 322-2493 to obtain current information on any previously reported sensitive species and habitats, including Significant Natural Areas identified under Chapter 12 of the Fish and Game Code. Also, any Significant
Ecological Areas (SEAs) or Environmentally Sensitive Habitats (ESHs) or any areas that are considered sensitive by the local jurisdiction that are located in or adjacent to the project area must be addressed.

2. A thorough discussion of direct, indirect, and cumulative impacts expected to adversely affect biological resources, with specific measures to offset such impacts. This discussion should focus on maximizing avoidance, and minimizing impacts.

a.CEQA Guidelines, Section 15125(a), direct that knowledge of the regional setting is critical to an assessment of environmental impacts and that special emphasis should be placed on resources that are rare or unique to the region.

b. Project impacts should also be analyzed relative to their effects on off-site habitats and populations. Specifically, this should include nearby public lands, open space, adjacent natural habitats, and riparian ecosystems. Impacts to and maintenance of wildlife corridor/movement areas, including access to undisturbed habitat in adjacent areas are of concern to the Department and should be fully evaluated and provided. The analysis should also include a discussion of the potential for impacts resulting from such effects as increased vehicle traffic, outdoor artificial lighting, noise and vibration.

G.2

c. A cumulative effects analysis should be developed as described under CEQA Guidelines, Section 15130. General and specific plans, as well as past, present, and anticipated future projects, should be analyzed relative to their impacts on similar plant communities and wildlife habitats.

d. Impacts to migratory wildlife affected by the project should be fully evaluated including proposals to removal/disturb native and ornamental landscaping and other nesting habitat

for native birds. Impact evaluation may also include such elements as migratory butterfly roost sites and neo-tropical bird and waterfowl stop-over and staging sites. All migratory nongame native bird species are protected by international treaty under the Federal Migratory Bird Treaty Act (MBTA) of 1918 (50 C.F.R. Section 10.13). Sections 3503, 3503.5 and 3513 of the California Fish and Game Code prohibit take of birds and their active nests, including raptors and other migratory nongame birds as listed under the MBTA.

G.2 Continued

e. Impacts to all habitats from City or County required Fuel Modification Zones (FMZ) should be evaluated. Areas slated as mitigation for loss of habitat shall not occur within the FMZ.

f. Proposed project activities (including disturbances to vegetation) should take place outside of the breeding bird season (February 1- September 1) to avoid take (including disturbances which would cause abandonment of active nests containing eggs and/or young). If project activities cannot avoid the breeding bird season, nest surveys should be conducted and active nests should be avoided and provided with a minimum buffer as determined by a biological monitor (the Department recommends a minimum 500-foot buffer for all active raptor nests).

3. A range of alternatives should be analyzed to ensure that alternatives to the proposed project are fully considered and evaluated. A range of alternatives which avoid or otherwise minimize impacts to sensitive biological resources including wetlands/riparian habitats, alluvial scrub, coastal sage scrub, etc. should be included. Specific alternative locations should also be evaluated in areas with lower resource sensitivity where appropriate.

G.3

a. Mitigation measures for project impacts to sensitive plants, animals, and habitats should emphasize evaluation and selection of alternatives which avoid or otherwise minimize project impacts. Compensation for unavoidable impacts through acquisition and protection of high quality habitat elsewhere should be addressed with offsite mitigation locations clearly identified.

b. The Department considers Rare Natural Communities such as Riversidian alluvial fan sage scrub as threatened habitats having both regional and local significance. Thus, these communities should be fully avoided and otherwise protected from project-related impacts (Attachment 2).

c. The Department generally does not support the use of relocation, salvage, and/or transplantation as mitigation for impacts to rare, threatened, or endangered species. Department studies have shown that these efforts are experimental in nature and largely unsuccessful.

G.4

4. A California Endangered Species Act (CESA) Permit must be obtained, if the project has the potential to result in "take" of species of plants or animals listed under CESA, either during construction or over the life of the project. CESA Permits are issued to conserve, protect, enhance, and restore State-listed threatened or endangered species and their habitats. Early consultation is encouraged, as significant modification to the proposed project and mitigation measures may be required in order to obtain a CESA Permit. Revisions to the Fish and Game Code, effective January 1998, require that the Department issue a separate CEQA document for the issuance of a CESA permit unless the project CEQA document addresses all project impacts to listed species and specifies a mitigation monitoring and reporting program that will

meet the requirements of a CESA permit. For these reasons, the following information is requested:

G.4 Continued

a. Biological mitigation monitoring and reporting proposals should be of sufficient detail and resolution to satisfy the requirements for a CESA Permit.

b. A Department-approved Mitigation Agreement and Mitigation Plan are required for plants listed as rare under the Native Plant Protection Act.

5. The Department opposes the elimination of watercourses (including concrete channels) and/or the canalization of natural and manmade drainages or conversion to subsurface drains. All wetlands and watercourses, whether intermittent, ephemeral, or perennial, must be retained and provided with substantial setbacks which preserve the riparian and aquatic habitat values and maintain their value to on-site and off-site wildlife populations. The Department recommends a minimum natural buffer of 100 feet from the outside edge of the riparian zone on each side of a drainage.

G.5

a. The Department requires a Streambed Alteration Agreement (SAA), pursuant to Section 1600 *et seq.* of the Fish and Game Code, with the applicant prior to any direct or indirect impact to a lake or stream bed, bank or channel or associated riparian resources. The Department's issuance of a SAA may be a project that is subject to CEQA. To facilitate our issuance of the SAA when CEQA applies, the Department as a responsible agency under CEQA may consider the local jurisdiction's (Lead Agency) document for the project. To minimize additional requirements by the Department under CEQA the document should fully identify the potential impacts to the lake, stream or riparian resources and provide adequate avoidance, mitigation, monitoring and reporting commitments for issuance of the SAA. Early consultation is recommended, since modification of the proposed project may be required to avoid or reduce impacts to fish and wildlife resources.

Thank you for this opportunity to provide comment. Please contact Mr. Scott Harris, Environmental Scientist, at (626) 797-3170 if you should have any questions and for further coordination on the proposed project.

Sincerely,

Edmund Pert
Regional Manager
South Coast Region

Attachments

cc: Ms. Helen Birss, Los Alamitos
Ms. Terri Dickerson, Laguna Niguel
Mr. Kelly Schmoker, Pasadena
Mr. Scott Harris, Pasadena
Mr. Jeff Brandt, Ontario
State Clearinghouse, Sacramento

Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities

State of California
CALIFORNIA NATURAL RESOURCES AGENCY
Department of Fish and Game
November 24, 2009[1]

INTRODUCTION AND PURPOSE

The conservation of special status native plants and their habitats, as well as natural communities, is integral to maintaining biological diversity. The purpose of these protocols is to facilitate a consistent and systematic approach to the survey and assessment of special status native plants and natural communities so that reliable information is produced and the potential of locating a special status plant species or natural community is maximized. They may also help those who prepare and review environmental documents determine when a botanical survey is needed, how field surveys may be conducted, what information to include in a survey report, and what qualifications to consider for surveyors. The protocols may help avoid delays caused when inadequate biological information is provided during the environmental review process; assist lead, trustee and responsible reviewing agencies to make an informed decision regarding the direct, indirect, and cumulative effects of a proposed development, activity, or action on special status native plants and natural communities; meet California Environmental Quality Act (CEQA)[2] requirements for adequate disclosure of potential impacts; and conserve public trust resources.

DEPARTMENT OF FISH AND GAME TRUSTEE AND RESPONSIBLE AGENCY MISSION

The mission of the Department of Fish and Game (DFG) is to manage California's diverse wildlife and native plant resources, and the habitats upon which they depend, for their ecological values and for their use and enjoyment by the public. DFG has jurisdiction over the conservation, protection, and management of wildlife, native plants, and habitat necessary to maintain biologically sustainable populations (Fish and Game Code §1802). DFG, as trustee agency under CEQA §15386, provides expertise in reviewing and commenting on environmental documents and makes protocols regarding potential negative impacts to those resources held in trust for the people of California.

Certain species are in danger of extinction because their habitats have been severely reduced in acreage, are threatened with destruction or adverse modification, or because of a combination of these and other factors. The California Endangered Species Act (CESA) provides additional protections for such species, including take prohibitions (Fish and Game Code §2050 *et seq.*). As a responsible agency, DFG has the authority to issue permits for the take of species listed under CESA if the take is incidental to an otherwise lawful activity; DFG has determined that the impacts of the take have been minimized and fully mitigated; and, the take would not jeopardize the continued existence of the species (Fish and Game Code §2081). Surveys are one of the preliminary steps to detect a listed or special status plant species or natural community that may be impacted significantly by a project.

DEFINITIONS

Botanical surveys provide information used to determine the potential environmental effects of proposed projects on all special status plants and natural communities as required by law (i.e., CEQA, CESA, and Federal Endangered Species Act (ESA)). Some key terms in this document appear in **bold font** for assistance in use of the document.

For the purposes of this document, **special status plants** include all plant species that meet one or more of the following criteria[3]:

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1 This document replaces the DFG document entitled "Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened and Endangered Plants and Natural Communities."

2 http://ceres.ca.gov/ceqa/

3 Adapted from the East Alameda County Conservation Strategy available at http://www.fws.gov/sacramento/EACCS/Documents/080228_Species_Evaluation_EACCS.pdf

- Listed or proposed for listing as threatened or endangered under ESA or candidates for possible future listing as threatened or endangered under the ESA (50 CFR §17.12).

- Listed[4] or candidates for listing by the State of California as threatened or endangered under CESA (Fish and Game Code §2050 *et seq.*). A species, subspecies, or variety of plant is **endangered** when the prospects of its survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, over-exploitation, predation, competition, disease, or other factors (Fish and Game Code §2062). A plant is **threatened** when it is likely to become endangered in the foreseeable future in the absence of special protection and management measures (Fish and Game Code §2067).

- Listed as rare under the California Native Plant Protection Act (Fish and Game Code §1900 *et seq.*). A plant is **rare** when, although not presently threatened with extinction, the species, subspecies, or variety is found in such small numbers throughout its range that it may be endangered if its environment worsens (Fish and Game Code §1901).

- Meet the definition of rare or endangered under CEQA §15380(b) and (d). Species that may meet the definition of rare or endangered include the following:

  - Species considered by the California Native Plant Society (CNPS) to be "rare, threatened or endangered in California" (Lists 1A, 1B and 2);

  - Species that may warrant consideration on the basis of local significance or recent biological information[5];

  - Some species included on the California Natural Diversity Database's (CNDDB) *Special Plants, Bryophytes, and Lichens List* (California Department of Fish and Game 2008)[6].

- Considered a **locally significant species,** that is, a species that is not rare from a statewide perspective but is rare or uncommon in a local context such as within a county or region (CEQA §15125 (c)) or is so designated in local or regional plans, policies, or ordinances (CEQA Guidelines, Appendix G). Examples include a species at the outer limits of its known range or a species occurring on an uncommon soil type.

Special status natural communities are communities that are of limited distribution statewide or within a county or region and are often vulnerable to environmental effects of projects. These communities may or may not contain special status species or their habitat. The most current version of the Department's *List of California Terrestrial Natural Communities*[7] indicates which natural communities are of special status given the current state of the California classification.

Most types of wetlands and riparian communities are considered special status natural communities due to their limited distribution in California. These natural communities often contain special status plants such as those described above. These protocols may be used in conjunction with protocols formulated by other agencies, for example, those developed by the U.S. Army Corps of Engineers to delineate jurisdictional wetlands[8] or by the U.S. Fish and Wildlife Service to survey for the presence of special status plants[9].

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4 Refer to current online published lists available at: http://www.dfg.ca.gov/biogeodata.

5 In general, CNPS List 3 plants (plants about which more information is needed) and List 4 plants (plants of limited distribution) may not warrant consideration under CEQA §15380. These plants may be included on special status plant lists such as those developed by counties where they would be addressed under CEQA §15380. List 3 plants may be analyzed under CEQA §15380 if sufficient information is available to assess potential impacts to such plants. Factors such as regional rarity vs. statewide rarity should be considered in determining whether cumulative impacts to a List 4 plant are significant even if individual project impacts are not. List 3 and 4 plants are also included in the California Natural Diversity Database's (CNDDB) *Special Plants, Bryophytes, and Lichens List.* [Refer to the current online published list available at: http://www.dfg.ca.gov/biogeodata.] Data on Lists 3 and 4 plants should be submitted to CNDDB. Such data aids in determining or revising priority ranking.

6 Refer to current online published lists available at: http://www.dfg.ca.gov/biogeodata.

7 http://www.dfg.ca.gov/biogeodata/vegcamp/pdfs/natcomlist.pdf. The rare natural communities are asterisked on this list.

8 http://www.wetlands.com/regs/tlpge02e.htm

9 U.S. Fish and Wildlife Service Survey Guidelines available at http://www.fws.gov/sacramento/es/protocol.htm

BOTANICAL SURVEYS

Conduct botanical surveys prior to the commencement of any activities that may modify vegetation, such as clearing, mowing, or ground-breaking activities. It is appropriate to conduct a botanical field survey when:

- Natural (or naturalized) vegetation occurs on the site, and it is unknown if special status plant species or natural communities occur on the site, and the project has the potential for direct or indirect effects on vegetation; or
- Special status plants or natural communities have historically been identified on the project site; or
- Special status plants or natural communities occur on sites with similar physical and biological properties as the project site.

SURVEY OBJECTIVES

Conduct field surveys in a manner which maximizes the likelihood of locating special status plant species or special status natural communities that may be present. Surveys should be **floristic in nature**, meaning that every plant taxon that occurs on site is identified to the taxonomic level necessary to determine rarity and listing status. "Focused surveys" that are limited to habitats known to support special status species or are restricted to lists of likely potential species are not considered floristic in nature and are not adequate to identify all plant taxa on site to the level necessary to determine rarity and listing status. Include a list of plants and natural communities detected on the site for each botanical survey conducted. More than one field visit may be necessary to adequately capture the floristic diversity of a site. An indication of the prevalence (estimated total numbers, percent cover, density, etc.) of the species and communities on the site is also useful to assess the significance of a particular population.

SURVEY PREPARATION

Before field surveys are conducted, compile relevant botanical information in the general project area to provide a regional context for the investigators. Consult the CNDDB[10] and BIOS[11] for known occurrences of special status plants and natural communities in the project area prior to field surveys. Generally, identify vegetation and habitat types potentially occurring in the project area based on biological and physical properties of the site and surrounding ecoregion[12], unless a larger assessment area is appropriate. Then, develop a list of special status plants with the potential to occur within these vegetation types. This list can serve as a tool for the investigators and facilitate the use of reference sites; however, special status plants on site might not be limited to those on the list. Field surveys and subsequent reporting should be comprehensive and floristic in nature and not restricted to or focused only on this list. Include in the survey report the list of potential special status species and natural communities, and the list of references used to compile the background botanical information for the site.

SURVEY EXTENT

Surveys should be comprehensive over the entire site, including areas that will be directly or indirectly impacted by the project. Adjoining properties should also be surveyed where direct or indirect project effects, such as those from fuel modification or herbicide application, could potentially extend offsite. Pre-project surveys restricted to known CNDDB rare plant locations may not identify all special status plants and communities present and do not provide a sufficient level of information to determine potential impacts.

FIELD SURVEY METHOD

Conduct surveys using **systematic field techniques** in all habitats of the site to ensure thorough coverage of potential impact areas. The level of effort required per given area and habitat is dependent upon the vegetation and its overall diversity and structural complexity, which determines the distance at which plants can be identified. Conduct surveys by walking over the entire site to ensure thorough coverage, noting all plant taxa

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10 Available at http://www.dfg.ca.gov/biogeodata/cnddb

11 http://www.bios.dfg.ca.gov/

12 Ecological Subregions of California, available at http://www.fs.fed.us/r5/projects/ecoregions/toc.htm

observed. The level of effort should be sufficient to provide comprehensive reporting. For example, one person-hour per eight acres per survey date is needed for a comprehensive field survey in grassland with medium diversity and moderate terrain[13], with additional time allocated for species identification.

TIMING AND NUMBER OF VISITS

Conduct surveys in the field at the time of year when species are both evident and identifiable. Usually this is during flowering or fruiting. Space visits throughout the growing season to accurately determine what plants exist on site. Many times this may involve multiple visits to the same site (e.g. in early, mid, and late-season for flowering plants) to capture the floristic diversity at a level necessary to determine if special status plants are present[14]. The timing and number of visits are determined by geographic location, the natural communities present, and the weather patterns of the year(s) in which the surveys are conducted.

REFERENCE SITES

When special status plants are known to occur in the type(s) of habitat present in the project area, observe reference sites (nearby accessible occurrences of the plants) to determine whether those species are identifiable at the time of the survey and to obtain a visual image of the target species, associated habitat, and associated natural community.

USE OF EXISTING SURVEYS

For some sites, floristic inventories or special status plant surveys may already exist. Additional surveys may be necessary for the following reasons:

- Surveys are not current[15]; or
- Surveys were conducted in natural systems that commonly experience year to year fluctuations such as periods of drought or flooding (e.g. vernal pool habitats or riverine systems); or
- Surveys are not comprehensive in nature; or fire history, land use, physical conditions of the site, or climatic conditions have changed since the last survey was conducted[16]; or
- Surveys were conducted in natural systems where special status plants may not be observed if an annual above ground phase is not visible (e.g. flowers from a bulb); or
- Changes in vegetation or species distribution may have occurred since the last survey was conducted, due to habitat alteration, fluctuations in species abundance and/or seed bank dynamics.

NEGATIVE SURVEYS

Adverse conditions may prevent investigators from determining the presence of, or accurately identifying, some species in potential habitat of target species. Disease, drought, predation, or herbivory may preclude the presence or identification of target species in any given year. Discuss such conditions in the report.

The failure to locate a known special status plant occurrence during one field season does not constitute evidence that this plant occurrence no longer exists at this location, particularly if adverse conditions are present. For example, surveys over a number of years may be necessary if the species is an annual plant having a persistent, long-lived seed bank and is known not to germinate every year. Visits to the site in more

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13 Adapted from U.S. Fish and Wildlife Service kit fox survey guidelines available at www.fws.gov/sacramento/es/documents/kitfox_no_protocol.pdf

14 U.S. Fish and Wildlife Service Survey Guidelines available at http://www.fws.gov/sacramento/es/protocol.htm

15 Habitats, such as grasslands or desert plant communities that have annual and short-lived perennial plants as major floristic components may require yearly surveys to accurately document baseline conditions for purposes of impact assessment. In forested areas, however, surveys at intervals of five years may adequately represent current conditions. For forested areas, refer to "Guidelines for Conservation of Sensitive Plant Resources Within the Timber Harvest Review Process and During Timber Harvesting Operations", available at https://r1.dfg.ca.gov/portal/Portals/12/THPBotanicalGuidelinesJuly2005.pdf

16 U.S. Fish and Wildlife Service Survey Guidelines available at http://www.fws.gov/ventura/speciesinfo/protocols_guidelines/docs/botanicalinventories.pdf

than one year increase the likelihood of detection of a special status plant especially if conditions change. To further substantiate negative findings for a known occurrence, a visit to a nearby reference site may ensure that the timing of the survey was appropriate.

REPORTING AND DATA COLLECTION

Adequate information about special status plants and natural communities present in a project area will enable reviewing agencies and the public to effectively assess potential impacts to special status plants or natural communities[17] and will guide the development of minimization and mitigation measures. The next section describes necessary information to assess impacts. For comprehensive, systematic surveys where no special status species or natural communities were found, reporting and data collection responsibilities for investigators remain as described below, excluding specific occurrence information.

SPECIAL STATUS PLANT OR NATURAL COMMUNITY OBSERVATIONS

Record the following information for locations of each special status plant or natural community detected during a field survey of a project site.

- A detailed map (1:24,000 or larger) showing locations and boundaries of each special status species occurrence or natural community found as related to the proposed project. Mark occurrences and boundaries as accurately as possible. Locations documented by use of global positioning system (GPS) coordinates must include the datum[18] in which they were collected;
- The site-specific characteristics of occurrences, such as associated species, habitat and microhabitat, structure of vegetation, topographic features, soil type, texture, and soil parent material. If the species is associated with a wetland, provide a description of the direction of flow and integrity of surface or subsurface hydrology and adjacent off-site hydrological influences as appropriate;
- The number of individuals in each special status plant population as counted (if population is small) or estimated (if population is large);
- If applicable, information about the percentage of individuals in each life stage such as seedlings vs. reproductive individuals;
- The number of individuals of the species per unit area, identifying areas of relatively high, medium and low density of the species over the project site; and
- Digital images of the target species and representative habitats to support information and descriptions.

FIELD SURVEY FORMS

When a special status plant or natural community is located, complete and submit to the CNDDB a California Native Species (or Community) Field Survey Form[19] or equivalent written report, accompanied by a copy of the relevant portion of a 7.5 minute topographic map with the occurrence mapped. Present locations documented by use of GPS coordinates in map and digital form. Data submitted in digital form must include the datum[20] in which it was collected. If a potentially undescribed special status natural community is found on the site, document it with a Rapid Assessment or Relevé form[21] and submit it with the CNDDB form.

VOUCHER COLLECTION

Voucher specimens provide verifiable documentation of species presence and identification as well as a public record of conditions. This information is vital to all conservation efforts. Collection of voucher specimens should

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17 Refer to current online published lists available at: http://www.dfg.ca.gov/biogeodata. For Timber Harvest Plans (THPs) please refer to the "Guidelines for Conservation of Sensitive Plant Resources Within the Timber Harvest Review Process and During Timber Harvesting Operations", available at https://r1.dfg.ca.gov/portal/Portals/12/THPBotanicalGuidelinesJuly2005.pdf

18 NAD83, NAD27 or WGS84

19 http://www.dfg.ca.gov/biogeodata

20 NAD83, NAD27 or WGS84

21 http://www.dfg.ca.gov/biogeodata/vegcamp/veg_publications_protocols.asp

be conducted in a manner that is consistent with conservation ethics, and is in accordance with applicable state and federal permit requirements (e.g. incidental take permit, scientific collection permit). Voucher collections of special status species (or suspected special status species) should be made only when such actions would not jeopardize the continued existence of the population or species.

Deposit voucher specimens with an indexed regional herbarium[22] no later than 60 days after the collections have been made. Digital imagery can be used to supplement plant identification and document habitat. Record all relevant permittee names and permit numbers on specimen labels. A collecting permit is required prior to the collection of State-listed plant species[23].

BOTANICAL SURVEY REPORTS

Include reports of botanical field surveys containing the following information with project environmental documents:

- **Project and site description**
  - A description of the proposed project;
  - A detailed map of the project location and study area that identifies topographic and landscape features and includes a north arrow and bar scale; and,
  - A written description of the biological setting, including vegetation[24] and structure of the vegetation; geological and hydrological characteristics; and land use or management history.
- **Detailed description of survey methodology and results**
  - Dates of field surveys (indicating which areas were surveyed on which dates), name of field investigator(s), and total person-hours spent on field surveys;
  - A discussion of how the timing of the surveys affects the comprehensiveness of the survey;
  - A list of potential special status species or natural communities;
  - A description of the area surveyed relative to the project area;
  - References cited, persons contacted, and herbaria visited;
  - Description of reference site(s), if visited, and phenological development of special status plant(s);
  - A list of all taxa occurring on the project site. Identify plants to the taxonomic level necessary to determine whether or not they are a special status species;
  - Any use of existing surveys and a discussion of applicability to this project;
  - A discussion of the potential for a false negative survey;
  - Provide detailed data and maps for all special plants detected. Information specified above under the headings "Special Status Plant or Natural Community Observations," and "Field Survey Forms," should be provided for locations of each special status plant detected;
  - Copies of all California Native Species Field Survey Forms or Natural Community Field Survey Forms should be sent to the CNDDB and included in the environmental document as an Appendix. It is not necessary to submit entire environmental documents to the CNDDB; and,
  - The location of voucher specimens, if collected.

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22 For a complete list of indexed herbaria, see: Holmgren, P., N. Holmgren and L. Barnett. 1990. Index Herbariorum, Part 1: Herbaria of the World. New York Botanic Garden, Bronx, New York. 693 pp. Or: http://www.nybg.org/bsci/ih/ih.html

23 Refer to current online published lists available at: http://www.dfg.ca.gov/biogeodata.

24 A vegetation map that uses the National Vegetation Classification System (http://biology.usgs.gov/npsveg/nvcs.html), for example *A Manual of California Vegetation*, and highlights any special status natural communities. If another vegetation classification system is used, the report should reference the system, provide the reason for its use, and provide a crosswalk to the National Vegetation Classification System.

- **Assessment of potential impacts**
  - A discussion of the significance of special status plant populations in the project area considering nearby populations and total species distribution;
  - A discussion of the significance of special status natural communities in the project area considering nearby occurrences and natural community distribution;
  - A discussion of direct, indirect, and cumulative impacts to the plants and natural communities;
  - A discussion of threats, including those from invasive species, to the plants and natural communities;
  - A discussion of the degree of impact, if any, of the proposed project on unoccupied, potential habitat of the species;
  - A discussion of the immediacy of potential impacts; and,
  - Recommended measures to avoid, minimize, or mitigate impacts.

QUALIFICATIONS

Botanical consultants should possess the following qualifications:

- Knowledge of plant taxonomy and natural community ecology;
- Familiarity with the plants of the area, including special status species;
- Familiarity with natural communities of the area, including special status natural communities;
- Experience conducting floristic field surveys or experience with floristic surveys conducted under the direction of an experienced surveyor;
- Familiarity with the appropriate state and federal statutes related to plants and plant collecting; and,
- Experience with analyzing impacts of development on native plant species and natural communities.

SUGGESTED REFERENCES

Barbour, M., T. Keeler-Wolf, and A. A. Schoenherr (eds.). 2007. Terrestrial vegetation of California (3rd Edition). University of California Press.

Bonham, C.D. 1988. Measurements for terrestrial vegetation. John Wiley and Sons, Inc., New York, NY.

California Native Plant Society. Most recent version. Inventory of rare and endangered plants (online edition). California Native Plant Society, Sacramento, CA. Online URL http://www.cnps.org/inventory.

California Natural Diversity Database. Most recent version. Special vascular plants, bryophytes and lichens list. Updated quarterly. Available at www.dfg.ca.gov.

Elzinga, C.L., D.W. Salzer, and J. Willoughby. 1998. Measuring and monitoring plant populations. BLM Technical Reference 1730-1. U.S. Dept. of the Interior, Bureau of Land Management, Denver, Colorado.

Leppig, G. and J.W. White. 2006. Conservation of peripheral plant populations in California. Madroño 53:264-274.

Mueller-Dombois, D. and H. Ellenberg. 1974. Aims and methods of vegetation ecology. John Wiley and Sons, Inc., New York, NY.

U.S. Fish and Wildlife Service. 1996. Guidelines for conducting and reporting botanical inventories for federally listed plants on the Santa Rosa Plain. Sacramento, CA.

U.S. Fish and Wildlife Service. 1996. Guidelines for conducting and reporting botanical inventories for federally listed, proposed and candidate plants. Sacramento, CA.

Van der Maarel, E. 2005. Vegetation Ecology. Blackwell Science Ltd., Malden, MA.

Sensitivity of Top Priority Rare Natural Communities in Southern California

Sensitivity rankings are determined by the Department of Fish and Game, California Natural Diversity Data Base and based on either number of known occurrences (locations) and/or amount of habitat remaining (acreage). The three rankings used for these top priority rare natural communities are as follows:

S1.# Fewer than 6 known locations and/or on fewer than 2,000 acres of habitat remaining.

S2.# Occurs in 6-20 known locations and/or 2,000-10,000 acres of habitat remaining.

S3.# Occurs in 21-100-known locations and/or 10,000-50,000 acres of habitat remaining.

The number to the right of the decimal point after the ranking refers to the degree of threat posed to that natural community regardless of the ranking. For example:

S1.1 = very threatened
S2.2 = threatened
S3.3 = no current threats known

Sensitivity Rankings (February 1992)

Rank	Community Name
S1.1	Mojave Riparian Forest
	Sonoran Cottonwood Willow Riparian
	Mesquite Bosque
	Elephant Tree Woodland
	Crucifixion Thorn Woodland
	Allthorn Woodland
	Arizonan Woodland
	Southern California Walnut Forest
	Mainland Cherry Forest
	Southern Bishop Pine Forest
	Torrey Pine Forest
	Desert Mountain White Fir Forest
	Southern Dune Scrub
	Southern Coastal Bluff Scrub
	Maritime Succulent Scrub
	Riversidean Alluvial Fan Sage Scrub
	Southern Maritime Chaparral
	Valley Needlegrass Grassland
	Great Basin Grassland
	Mojave Desert Grassland
	Pebble Plains
	Southern Sedge Bog
	Cismontane Alkali Marsh

S1.2	Southern Foredunes Mono Pumice Flat Southern Interior Basalt Flow Vernal Pool
S2.1	Venturan Coastal Sage Scrub Diegan Coastal Sage Scrub Riversidean Upland Coastal Sage Scrub Riversidean Desert Sage Scrub Sagebrush Steppe Desert Sink Scrub Mafic Southern Mixed Chaparral San Diego Mesa Hardpan Vernal Pool San Diego Mesa Claypan Vernal Pool Alkali Meadow Southern Coastal Salt Marsh Coastal Brackish Marsh Transmontane Alkali Marsh Coastal and Valley Freshwater Marsh Southern Arroyo Willow Riparian Forest Southern Willow Scrub Modoc-Great Basin Cottonwood Willow Riparian Modoc-Great Basin Riparian Scrub Mojave Desert Wash Scrub Engelmann Oak Woodland Open Engelmann Oak Woodland Closed Engelmann Oak Woodland Island Oak Woodland California Walnut Woodland Island Ironwood Forest Island Cherry Forest Southern Interior Cypress Forest Bigcone Spruce-Canyon Oak Forest
S2.2	Active Coastal Dunes Active Desert Dunes Stabilized and Partially Stabilized Desert Dunes Stabilized and Partially Stabilized Desert Sandfield Mojave Mixed Steppe Transmontane Freshwater Marsh Coulter Pine Forest Southern California Fellfield White Mountains Fellfield
S2.3	Bristlecone Pine Forest Limber Pine Forest

STATE OF CALIFORNIA

GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH

STATE CLEARINGHOUSE AND PLANNING UNIT

ARNOLD SCHWARZENEGGER
GOVERNOR

CYNTHIA BRYANT
DIRECTOR

RECEIVED
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COMMUNITY DEVELOPMENT

Notice of Preparation

February 11, 2010

To: Reviewing Agencies

Re: Claremont Colleges East Campus
SCH# 2010021040

Attached for your review and comment is the Notice of Preparation (NOP) for the Claremont Colleges East Campus draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Karen Peterson
City of Upland
160 North Euclid Avenue
Upland, CA 91786

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

for. Scott Morgan
Acting Director, State Clearinghouse

Attachments
cc: Lead Agency

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
(916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Document Details Report
State Clearinghouse Data Base

SCH# 2010021040
Project Title Claremont Colleges East Campus
Lead Agency Upland, City of

Type NOP Notice of Preparation

Description The proposed project is a subdivision of land for phased development of a college sports complex with recreational/athletic fields, sports courts, parking, supporting building facilities and a sports medicine office in an 80-acre former aggregate quarry. The purpose of the phased development is the relocation of sports facilities and associated parking from the main college campus to the former quarry site as well as overflow parking for the campus.

Lead Agency Contact

Name Karen Peterson
Agency City of Upland
Phone 909-931-4327 **Fax**
email
Address 160 North Euclid Avenue
City Upland **State** CA **Zip** 91786

Project Location

County Los Angeles, San Bernardino
City Claremont, Upland
Region
Cross Streets Foothill Boulevard at Claremont Boulevard
Lat / Long 34° 06' 11.3" N / 117° 42' 03.5" W
Parcel No. 1007-011-01, 8308-025-012
Township 1S **Range** 8W **Section** 10 **Base** SBB&M

Proximity to:

Highways 66
Airports Cable Airport
Railways SPRR
Waterways San Antonio Creek
Schools Multiple
Land Use Upland: Class III Landfill/SP/I, Claremont: Archery Range, temporary Parking, Class III Landfill/IE/Institutional

Project Issues Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Drainage/Absorption; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Landuse; Cumulative Effects

Reviewing Agencies Resources Agency; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; Department of Fish and Game, Region 5; Department of Fish and Game, Region 6; Native American Heritage Commission; Caltrans, Division of Aeronautics; California Highway Patrol; Caltrans, District 7; Caltrans, District 8; Resources, Recycling and Recovery; Department of Toxic Substances Control; Regional Water Quality Control Board, Region 8

Date Received 02/11/2010 **Start of Review** 02/11/2010 **End of Review** 03/15/2010

Note: Blanks in data fields result from insufficient information provided by lead agency.

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH # 2010021040

Project Title: Claremont Colleges East Campus
Lead Agency: City of Upland
Contact Person: Karen Peterson
Mailing Address: 160 North Euclid Avenue
Phone: 909-931-4327
City: Upland
Zip: 91786
County: San Bernardino

Project Location: County: San Bernardino, Los Angeles
City/Nearest Community: Upland, Claremont
Cross Streets: Foothill Boulevard @ Claremont Boulevard
Zip Code: 91786/91711
Longitude/Latitude (degrees, minutes and seconds): 34 ° 06 ' 11.3 " N / 117 ° 42 ' 03.5 " W
Total Acres: ~80 acres
Assessor's Parcel No.: 1007-011-01, 8308-025-012
Section: 10
Twp.: 1S
Range: 8W
Base: SBBM
Within 2 Miles: State Hwy #: 66
Waterways: San Antonio Creek
Airports: Cable Airport
Railways: Southern Pacific
Schools: Multiple

Document Type:

CEQA: ☑ NOP ☐ Early Cons ☐ Neg Dec ☐ Mit Neg Dec
☐ Draft EIR ☐ Supplement/Subsequent EIR (Prior SCH No.) ____ Other: ____
NEPA: ☐ NOI ☐ EA ☐ Draft EIS ☐ FONSI
Other: ☐ Joint Document ☐ Final Document ☐ Other: ____

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STATE CLEARING HOUSE

Local Action Type:

☐ General Plan Update
☐ General Plan Amendment
☐ General Plan Element
☐ Community Plan
☐ Specific Plan
☐ Master Plan
☐ Planned Unit Development
☑ Site Plan
☐ Rezone
☐ Prezone
☐ Use Permit
☑ Land Division (Subdivision, etc.)
☐ Annexation
☐ Redevelopment
☐ Coastal Permit
☑ Other: Dev. Agreement

Development Type:

☐ Residential: Units ____ Acres ____
☐ Office: Sq.ft. ____ Acres ____ Employees ____
☐ Commercial: Sq.ft. ____ Acres ____ Employees ____
☐ Industrial: Sq.ft. ____ Acres ____ Employees ____
☑ Educational: College Sports Facilities
☐ Recreational: ____
☐ Water Facilities: Type ____ MGD ____
☐ Transportation: Type ____
☐ Mining: Mineral ____
☐ Power: Type ____ MW ____
☐ Waste Treatment: Type ____ MGD ____
☐ Hazardous Waste: Type ____
☐ Other: ____

Project Issues Discussed in Document:

☑ Aesthetic/Visual
☑ Agricultural Land
☑ Air Quality
☑ Archeological/Historical
☑ Biological Resources
☐ Coastal Zone
☑ Drainage/Absorption
☐ Economic/Jobs
☐ Fiscal
☑ Flood Plain/Flooding
☑ Forest Land/Fire Hazard
☑ Geologic/Seismic
☑ Minerals
☑ Noise
☑ Population/Housing Balance
☑ Public Services/Facilities
☑ Recreation/Parks
☑ Schools/Universities
☐ Septic Systems
☑ Sewer Capacity
☑ Soil Erosion/Compaction/Grading
☑ Solid Waste
☑ Toxic/Hazardous
☑ Traffic/Circulation
☑ Vegetation
☑ Water Quality
☑ Water Supply/Groundwater
☑ Wetland/Riparian
☐ Growth Inducement
☑ Land Use
☑ Cumulative Effects
☐ Other: ____

Present Land Use/Zoning/General Plan Designation:

Upland: Class III Landfill/SP/I, Claremont: Archery Range, Temporary Parking, Class III Landfill/IE/Institutional

Project Description: *(please use a separate page if necessary)*

The proposed Project is a subdivision of land for phased development of a college sports complex with recreational/athletic fields, sports courts, parking, supporting building facilities and a sports medicine office on an 80-acre former aggregate quarry. The purpose of the phased development is the relocation of sports facilities and associated parking from the main college campus to the former quarry site as well as overflow parking for the campus. See the attached Initial Study for more information related to the project.

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

Revised 2008

NOP Distribution List

County: San Bernardino / DOT Projects SCH#

Resources Agency

- [x] Resources Agency
  Nadell Gayou
- [ ] Dept. of Boating & Waterways
  Mike Sotelo
- [ ] California Coastal Commission
  Elizabeth A. Fuchs
- [ ] Colorado River Board
  Gerald R. Zimmerman
- [ ] Dept. of Conservation
  Rebecca Salazar
- [ ] California Energy Commission
  Eric Knight
- [ ] Cal Fire
  Allen Robertson
- [x] Office of Historic Preservation
  Wayne Donaldson
- [x] Dept of Parks & Recreation
  Environmental Stewardship Section
- [ ] Central Valley Flood Protection Board
  James Herota
- [ ] S.F. Bay Conservation & Dev't. Comm.
  Steve McAdam
- [x] Dept. of Water Resources
  Resources Agency
  Nadell Gayou
- [ ] _____
  Conservancy

Fish and Game

- [ ] Depart. of Fish & Game
  Scott Flint
  Environmental Services Division
- [ ] Fish & Game Region 1
  Donald Koch
- [ ] Fish & Game Region 1E
  Laurie Harnsberger
- [ ] Fish & Game Region 2
  Jeff Drongesen
- [ ] Fish & Game Region 3
  Charles Armor
- [ ] Fish & Game Region 4
  Julie Vance
- [x] Fish & Game Region 5
  Don Chadwick
  Habitat Conservation Program
- [x] Fish & Game Region 6
  Gabrina Gatchel
  Habitat Conservation Program
- [ ] Fish & Game Region 6 I/M
  Brad Henderson
  Inyo/Mono, Habitat Conservation Program
- [ ] Dept. of Fish & Game M
  George Isaac
  Marine Region

Other Departments

- [ ] Food & Agriculture
  Steve Shaffer
  Dept. of Food and Agriculture
- [ ] Depart. of General Services
  Public School Construction
- [ ] Dept. of General Services
  Anna Garbeff
  Environmental Services Section
- [ ] Dept. of Public Health
  Bridgette Binning
  Dept. of Health/Drinking Water

Independent Commissions,Boards

- [ ] Delta Protection Commission
  Linda Flack
- [ ] Cal EMA (Emergency Management Agency)
  Dennis Castrillo
- [ ] Governor's Office of Planning & Research
  State Clearinghouse
- [x] Native American Heritage Comm.
  Debbie Treadway
- [ ] Public Utilities Commission
  Leo Wong
- [ ] Santa Monica Bay Restoration
  Guangyu Wang
- [ ] State Lands Commission
  Marina Brand
- [ ] Tahoe Regional Planning Agency (TRPA)
  Cherry Jacques

Business, Trans & Housing

- [x] Caltrans - Division of Aeronautics
  Sandy Hesnard
- [ ] Caltrans - Planning
  Terri Pencovic
- [x] California Highway Patrol
  Scott Loetscher
  Office of Special Projects
- [ ] Housing & Community Development
  CEQA Coordinator
  Housing Policy Division

Dept. of Transportation

- [ ] Caltrans, District 1
  Rex Jackman
- [ ] Caltrans, District 2
  Marcelino Gonzalez
- [ ] Caltrans, District 3
  Bruce de Terra
- [ ] Caltrans, District 4
  Lisa Carboni
- [ ] Caltrans, District 5
  David Murray
- [ ] Caltrans, District 6
  Michael Navarro
- [x] Caltrans, District 7
  Elmer Alvarez
- [x] Caltrans, District 8
  Dan Kopulsky
- [ ] Caltrans, District 9
  Gayle Rosander
- [ ] Caltrans, District 10
  Tom Dumas
- [ ] Caltrans, District 11
  Jacob Armstrong
- [ ] Caltrans, District 12
  Chris Herre

Cal EPA

Air Resources Board

- [ ] Airport Projects
  Jim Lerner
  - [ ] Transportation Projects
    Douglas Ito
  - [ ] Industrial Projects
    Mike Tollstrup
- [x] California Department of Resources, Recycling & Recovery
  Sue O'Leary
- [ ] State Water Resources Control Board
  Regional Programs Unit
  Division of Financial Assistance
- [ ] State Water Resources Control Board
  Student Intern, 401 Water Quality Certification Unit
  Division of Water Quality
- [ ] State Water Resouces Control Board
  Steven Herrera
  Division of Water Rights
- [x] Dept. of Toxic Substances Control
  CEQA Tracking Center
- [ ] Department of Pesticide Regulation
  CEQA Coordinator

Regional Water Quality Control Board (RWQCB)

- [ ] RWQCB 1
  Cathleen Hudson
  North Coast Region (1)
- [ ] RWQCB 2
  Environmental Document Coordinator
  San Francisco Bay Region (2)
- [ ] RWQCB 3
  Central Coast Region (3)
- RWQCB 4
  Teresa Rodgers
  Los Angeles Region (4)
- [ ] RWQCB 5S
  Central Valley Region (5)
  - [ ] RWQCB 5F
    Central Valley Region (5)
    Fresno Branch Office
  - [ ] RWQCB 5R
    Central Valley Region (5)
    Redding Branch Office
- [ ] RWQCB 6
  Lahontan Region (6)
  - [ ] RWQCB 6V
    Lahontan Region (6)
    Victorville Branch Office
- [ ] RWQCB 7
  Colorado River Basin Region (7)
- [x] RWQCB 8
  Santa Ana Region (8)
- [ ] RWQCB 9
  San Diego Region (9)

- [ ] Other _____

Last Updated on 01/04/2010

STATE OF CALIFORNIA Arnold Schwarzenegger, Governor

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5390
Web Site www.nahc.ca.gov
e-mail: ds_nahc@pacbell.net

February 18, 2010

RECEIVED
FEB 22 2010
COMMUNITY DEVELOPMENT

Ms. Karen Peterson
CITY OF UPLAND
160 North Euclid Avenue
Upland, CA 91786

Re: SCH#2010021040 CEQA Notice of Preparation (NOP); draft Environmental Impact Report (DEIR) for the **Claremont Colleges East Campus Project**; located in the City of Upland; San Bernardino County, California

Dear Ms. Peterson:

The Native American Heritage Commission (NAHC) is the state 'trustee agency' pursuant to Public Resources Code §21070 for the protection and preservation of California's Native American Cultural Resources.. (Also see *Environmental Protection Information Center v. Johnson (1985) 170 Cal App. 3rd 604)* The California Environmental Quality Act (CEQA - CA Public Resources Code §21000-21177, amended in 2009) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per the California Code of Regulations §15064.5(b)(c)(f) CEQA guidelines). Section 15382 of the CEQA Guidelines defines a significant impact on the environment as "a substantial, or potentially substantial, adverse change in any of physical conditions within an area affected by the proposed project, including ...objects of historic or aesthetic significance." In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'area of potential effect (APE), and if so, to mitigate that effect. To adequately assess the project-related impacts on historical resources, the Commission recommends the following.

H-1 The Native American Heritage Commission did perform a Sacred Lands File (SLF) search in the NAHC SLF Inventory, established by the Legislature pursuant to Public Resources Code §5097.94(a) and Native American Cultural resources **were not identified** within the APE. Early consultation with Native American tribes in your area is the best way to avoid unanticipated discoveries once a project is underway. Enclosed are the names of the nearest tribes and interested Native American individuals that the NAHC recommends as 'consulting parties,' for this purpose, that may have knowledge of the religious and cultural significance of the historic properties in the project area (e.g. APE). We recommend that you contact persons on the attached list of Native American contacts. A Native American Tribe or Tribal Elder may be the only source of information about a cultural resource.. Also, the NAHC recommends that a Native American Monitor or Native American culturally knowledgeable person be employed whenever a professional archaeologist is employed during the 'Initial Study' and in other phases of the environmental planning processes.. Furthermore we suggest that you contact the California Historic Resources Information System (CHRIS) at the Office of Historic Preservation (OHP) Coordinator's office (at (916) 653-7278, for referral to the nearest OHP Information Center of which there are 11.

H-2 Consultation with tribes and interested Native American tribes and interested Native American individuals, as consulting parties, on the NAHC list ,should be conducted in compliance with the requirements of federal NEPA (42 U.S.C. 4321-43351) and Section 106 and 4(f) of federal NHPA (16 U.S.C. 470 [f]*et se),* 36 CFR Part 800.3, the President's Council on Environmental Quality (CSQ; 42 U.S.C. 4371 *et seq.*) and NAGPRA (25 U.S.C. 3001-3013), as appropriate. The 1992 *Secretary of the Interior's Standards for the Treatment of Historic Properties* were revised

H-2 continued so that they could be applied to all historic resource types included in the National Register of Historic Places and including *cultural landscapes.*

H-3 Lead agencies should consider avoidance, as defined in Section 15370 of the California Environmental Quality Act (CEQA) when significant cultural resources could be affected by a project. Also, Public Resources Code Section 5097.98 and Health & Safety Code Section 7050.5 provide for provisions for accidentally discovered archeological resources during construction and mandate the processes to be followed in the event of an accidental discovery of any human remains in a project location other than a 'dedicated cemetery. Discussion of these should be included in your environmental documents, as appropriate.

H-4 The authority for the SLF record search of the NAHC Sacred Lands Inventory, established by the California Legislature, is California Public Resources Code §5097.94(a) and is exempt from the CA Public Records Act (c.f. California Government Code §6254.10). The results of the SLF search are confidential. However, Native Americans on the attached contact list are not prohibited from and may wish to reveal the nature of identified cultural resources/historic properties. Confidentiality of "historic properties of religious and cultural significance' may also be protected the under Section 304 of the NHPA or at the Secretary of the Interior' discretion if not eligible for listing on the National Register of Historic Places. The Secretary may also be advised by the federal Indian Religious Freedom Act (cf. 42 U.S.C, 1996) in issuing a decision on whether or not to disclose items of religious and/or cultural significance identified in or near the APE and possibly threatened by proposed project activity.

CEQA Guidelines, Section 15064.5(d) requires the lead agency to work with the Native Americans identified by this Commission if the initial Study identifies the presence or likely presence of Native American human remains within the APE. CEQA Guidelines provide for agreements with Native American, identified by the NAHC, to assure the appropriate and dignified treatment of Native American human remains and any associated grave liens.

H-5 Health and Safety Code §7050.5, Public Resources Code §5097.98 and Sec. §15064.5 (d) of the California Code of Regulations (CEQA Guidelines) mandate procedures to be followed, including that construction or excavation be stopped in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery until the county coroner or medical examiner can determine whether the remains are those of a Native American. . Note that §7052 of the Health & Safety Code states that disturbance of Native American cemeteries is a felony.

Again, Lead agencies should consider avoidance, as defined in §15370 of the California Code of Regulations (CEQA Guidelines), when significant cultural resources are discovered during the course of project planning and implementation

Please feel free to contact me at (916) 653-6251 if you have any questions.

Sincerely,

Dave Singleton
Program Analyst

Attachment: List of Native American Contacts

Cc: State Clearinghouse

Native American Contacts
San Bernardino County
February 18, 2010

Pechanga Band of Mission Indians
Paul Macarro, Cultural Resource Center
P.O. Box 1477 Luiseno
Temecula , CA 92593
pmacarro@pechanga-nsn.
(951) 308-9295 Ext 8106
(951) 676-2768
(951) 506-9491 Fax

Ramona Band of Cahuilla Mission Indians
Joseph Hamilton, Chairman
P.O. Box 391670 Cahuilla
Anza , CA 92539
admin@ramonatribe.com
(951) 763-4105
(951) 763-4325 Fax

San Manuel Band of Mission Indians
James Ramos, Chairperson
26569 Community Center Drive Serrano
Highland , CA 92346
(909) 864-8933
(909) 864-3724 - FAX
(909) 864-3370 Fax

Tongva Ancestral Territorial Tribal Nation
John Tommy Rosas, Tribal Admin.
, Gabrielino Tongva
tattnlaw@gmail.com
310-570-6567

Gabrieleno/Tongva San Gabriel Band of Mission
Anthony Morales, Chairperson
PO Box 693 Gabrielino Tongva
San Gabriel , CA 91778
(626) 286-1262 -FAX
(626) 286-1632
(626) 286-1758 - Home
(626) 286-1262 Fax

Gabrielino Tongva Nation
Sam Dunlap, Chairperson
P.O. Box 86908 Gabrielino Tongva
Los Angeles , CA 90086
samdunlap@earthlink.net
(909) 262-9351 - cell

Morongo Band of Mission Indians
Michael Contreras, Cultural Heritage Prog.
12700 Pumarra Road Cahuilla
Banning , CA 92220 Serrano
mcontreras@monongo-nsn.
(951) 755-5025
(951)201-1866 - cell
(951) 922-0105 Fax

San Manuel Band of Mission Indians
Ann Brierty, Policy/Cultural Resources Departmen
26569 Community Center. Drive Serrano
Highland , CA 92346
abrierty@sanmanuel-nsn.
(909) 864-8933 EXT-3250
(909) 649-1585 - cell
(909) 862-5152 Fax

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code. Also, federal National Environmental Policy Act (NEPA), National Historic Preservation Act, Section 106, and federal NAGPRA.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2010021040; CEQA NOtice of Preparation (NOP); draft Environmnental Impact Report (DEIR) for the Claremont Colleeges East Campus Project; located in the City of Upland; San Bernardino County, California.

Native American Contacts
San Bernardino County
February 18, 2010

Serrano Nation of Indians
Goldie Walker
6588 Valaria Drive
Highland , CA 92346
(909) 862-9883

Serrano

Soboba Band of Luiseno Indians
Joseph Ontiveros, Cultural Resources Manager
P.O. Box 487
San Jacinto , CA 92581
jontiveros@soboba-nsn.gov
(951) 654-2765
FAX: (951) 654-4198

Luiseno

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code. Also, federal National Environmental Policy Act (NEPA), National Historic Preservation Act, Section 106, and federal NAGPRA.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2010021040; CEQA NOtice of Preparation (NOP); draft Environmnental Impact Report (DEIR) for the Claremont Colleeges East Campus Project; located in the City of Upland; San Bernardino County, California.

RECEIVED
MAR 11 2010
COMMUNITY DEVELOPMENT

Notice of Preparation

To: REBECCA DE LEON
ENVIRONMENTAL PLANNING TEAM
MWD
700 N. ALAMEDA ST, US3-230
LOS ANGELES CA 90012

From: City of Upland, ATTN: Karen Peterson
460 North Euclid Avenue
Upland, California 91786

Subject: Notice of Preparation of a Draft Environmental Impact Report

City of Upland will be the Lead Agency and will prepare an environmental impact report for the project identified below. We need to know the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval for the project.

The project description, location, and the potential environmental effects are contained in the attached materials. A copy of the Initial Study (☒ is ☐ is not) attached.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but not later than 30 days after receipt of this notice.

Please send your response to Karen Peterson, Senior Planner at the address shown above. We will need the name for a contact person in your agency.

Project Title: Claremont Colleges East Campus

Project Applicant, if any: Claremont University Consortium, ATTN: Tim Morrison

Date February 10, 2010

Signature Karen Peterson

Title Senior Planner

Telephone 909-931-4327

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA HAS NO EXISTING FACILITIES OR RIGHTS OF WAY WITHIN THE LIMITS OF THE PROJECT.
3/2/2010
JOB NO.: 10030201

Reference: California Code of Regulations, Title 14, (CEQA Guidelines) Sections 15082(a), 15103, 15375.

City of Upland Environmental Impact Report Scoping Meeting

Purpose of the EIR

- Public disclosure of the environmental consequences of a proposed project or plan
- Identify mitigation measures and examine alternatives to reduce or avoid potentially significant impacts
- Planning tool, to assist City's decision-makers in evaluating benefits/ disadvantages of a proposed project or plan

EIR Process

- Notice of Preparation (NOP)
- Scoping
- Prepare Draft EIR
- Draft EIR Public Review & Comment, Notice of Availability (NOA)
- Prepare Responses to Comments & Final EIR
- Prepare Findings, Mitigation Monitoring and Reporting Program and, if required, Statement of Overriding Conditions
- Certify Final EIR
- Notice of Determination (NOD)

Purpose of the Scoping Meeting

To invite the public, public agencies and other interested parties to assist the lead agency by providing input and direction in determining the scope and content of the environmental information to be included in the Environmental Impact Report for the project.

Questions? Please Contact:

Karen Peterson, Planning Manager
City of Upland
Community Development Department
460 North Euclid Avenue
Upland, California 91786

Phone: 909-931-4327

Email: kpeterson@ci.upland.ca.us

Planning in Motion
Hogle-Ireland, Inc.

Planning in Motion
Hogle-Ireland, Inc

MEETING SIGN IN ROSTER

Meeting: The Claremont Colleges EIR Scoping Meeting

Date: March 15, 2010

Attendee	Address (Organization)	Phone #	E-Mail Address
Katie Heer	1271 E Colton Ave Redlands CA 92374	480-980-7917	katherine_heer@redlands.edu
Matt Liebman	Q920		
LARRY BURIK	PITZER	(909) 607-2224	larry_burik@pitzer.edu
Robin Aspinall	2242 N. Palm Way Upland	(909) 946-1248	
Ken Pifer	1584 Honeydale Ct Upland	909 985-2528	
Lisa Prasse	City of Claremont		
Tim Morrison	CUC 101 S. Mills	909-607-1113	Timm@CUC.CLAREMONT.EDU
Katherine Inman Kubel	CUC 1245 N Harvard	909-621-8036	katherine@cuc.... edu
Brian Worley	CMC	909 607-1637	bworley@cmc.edu
K. M. Williamson	Claremont Planning	Commission	you have it ~~KM Williamso~~

The Claremont Colleges East Campus

Claremont University Consortium

EIR Scoping Meeting

Project Description

- Proposal by the Claremont University Consortium of a subdivision of an approximately 80-acre site, of which approximately 50 acres is in the City of Upland and approximately 30 acres is in the City of Claremont.
- In the City of Upland, the project proposes a 6-lot Tentative Parcel Map.
- In the City of Claremont, the project proposes 3-lot Tentative Parcel Map.
- Both cities will utilize a conceptual site plan solely for the purpose of the environmental review.
- The conceptual site plan will establish the density and intensity baseline for anticipated future uses, for the whole 80-acre site, to be analyzed in the Environmental Impact Report. Future Design Review or CUP applications in each City must be submitted prior to the actual development of the site.
- Purpose of the subdivisions is for the future purchase and development of collegiate and intramural athletic fields for The Claremont Colleges.
- The Cities of Upland and Claremont have agreed that the City of Upland shall be the Lead Agency for the environmental clearance for the proposed project.

Claremont University Consortium

Planning in Motion
Hogle-Ireland, Inc.

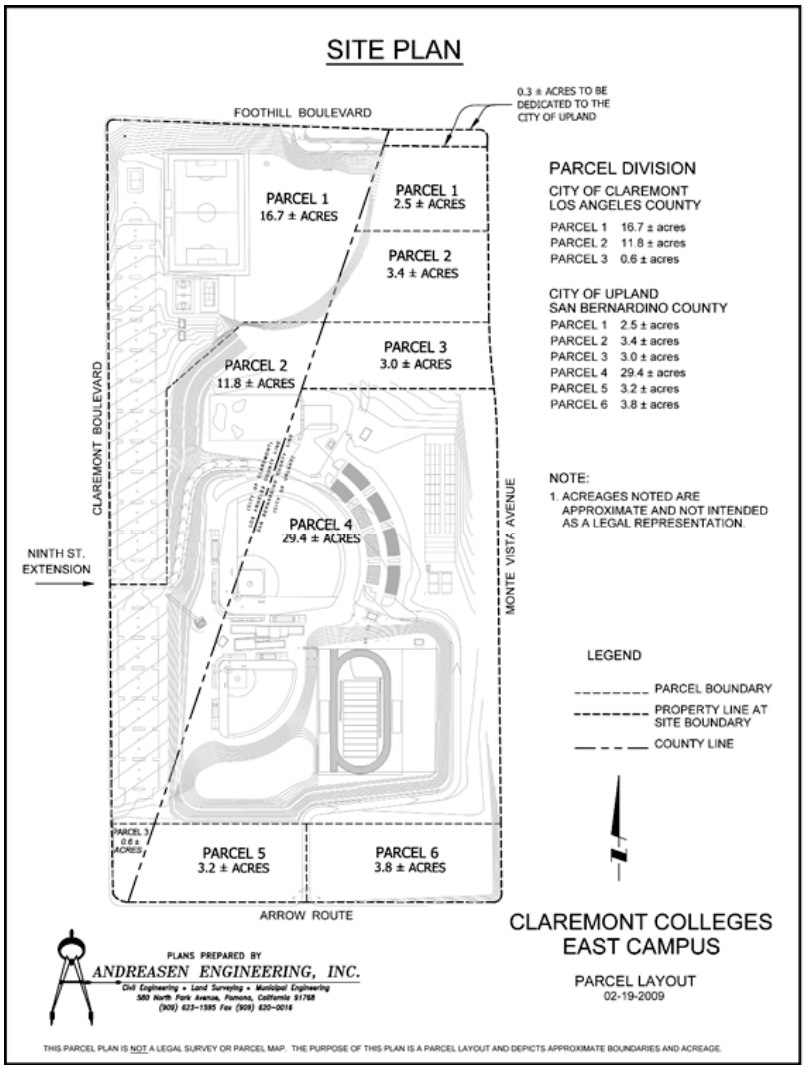
Location

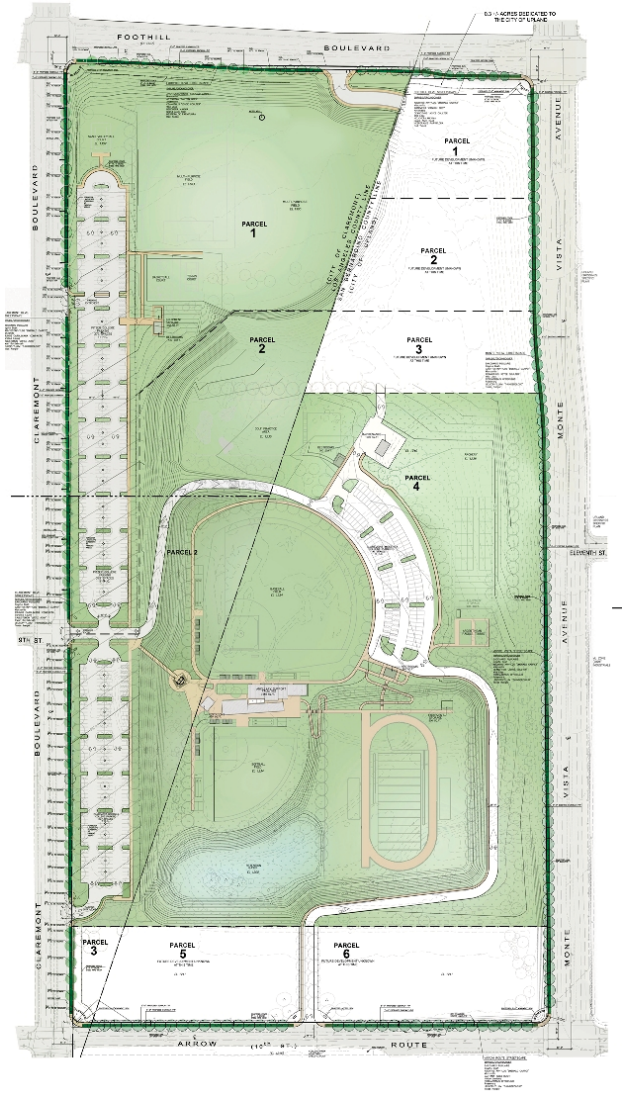
Vicinity Map

Claremont University Consortium

Planning in Motion
Hogle-Ireland, Inc.

Parcel Maps & Conceptual Site Plan





Claremont University Consortium

Planning in Motion
Hogle-Ireland, Inc.

Purpose of the EIR

- Public disclosure of the environmental consequences of a proposed project or plan
- Identify mitigation measures and examine alternatives to reduce or avoid potentially significant impacts
- Planning tool, to assist City's decision-makers in evaluating benefits/disadvantages of a proposed project or plan

Claremont University Consortium

Planning in Motion
Hogle-Ireland, Inc.

EIR Process

- Notice of Preparation (NOP)
- Scoping
- Prepare Draft EIR
- Draft EIR Public Review & Comment, Notice of Availability (NOA)
- Prepare Responses to Comments & Final EIR
- Prepare Findings, Mitigation Monitoring and Reporting Program and, if required, Statement of Overriding Conditions
- Certify Final EIR
- Notice of Determination (NOD)

Claremont University Consortium

Planning in Motion
Hogle-Ireland, Inc.

Topics Included in the EIR

- Aesthetics
- Air Quality
- Biological Resources
- Geology/Soils
- Hazards & Hazardous Materials
- Hydrology
- Mineral Resources
- Noise
- Public Services
- Transportation/Traffic
- Utilities/Service Systems
- Cumulative and Growth Inducing Impacts
- Alternatives
- Irreversible Environmental Changes
- Greenhouse gases and climate change

Claremont University Consortium

Planning in Motion
Hogle-Ireland, Inc.

Tentative EIR Schedule Outlook

Milestones	Estimated Completion Dates
Scoping Process	Completed (Feb. 11 – March 12)
First Draft EIR	June 2010
Draft EIR Distributed for Public Review & Comment (45 days)	July 2010
End of Draft EIR Public Review Period	August 2010
Prepare Responses to Comments on DEIR	September 2010
Prepare Final EIR Certification Documents	October 2010
Final EIR Certified	End of 2010

Claremont University Consortium

Planning in Motion
Hogle-Ireland, Inc.

Focus of Requested Comments on Scope of the EIR

- **Specific issues to be addressed in the EIR**
- Aesthetics – Lighting
- Biological Resources – Existing Sage Scrub on slopes
- Geology/Soils/Mineral Resources – Existing quarry and landfill/stockpile uses
- Hazards & Hazardous Materials – Currently on CAL FIRE, Fire Hazard Severity Zones Map
- Public Services, Utilities/Service Systems – Multiple and overlapping jurisdictions
- Transportation/Traffic – Perimeter improvements and Claremont Blvd/9th Street signal

Claremont University Consortium

Planning in Motion
Hogle-Ireland, Inc.

Purpose of the Scoping Meeting

- To invite the public, public agencies and other interested parties to assist the lead agency by providing input and direction in determining the scope and content of the environmental information to be included in the Environmental Impact Report for the project

Claremont University Consortium

Planning in Motion
Hogle-Ireland, Inc.

MEMO

Date: March 15, 2010

To: Project 2527 File

From: Christopher Brown

Subject: CUC East Campus Project
Scoping Meeting Comments

Summary
The Scoping Meeting was conducted by Karen Peterson (Planning Manager) of the City of Upland and Pam Steele, Christopher Brown, and Mark Staples of Hogle-Ireland. Ten members of the public attended the meeting. One public comment was received during the proceedings. The meeting began at approximately 6:30pm and concluded at approximately 7:15pm.

Comments Received

Mr. Matt Liebman How will the project be funded?

APPENDIX B

Initial Study

City of Upland

INITIAL STUDY

FOR

CLAREMONT COLLEGES EAST CAMPUS

Prepared for:

City of Upland
Community Development Department
460 N. Euclid Avenue
Upland, CA 91786-0460
(909) 931-4327
Attention: Karen Peterson, Senior Planner

Prepared by:

Hogle-Ireland Inc.
Pamela D. Steele / Randy Nichols, AICP
1500 Iowa Avenue, Suite 110
Riverside, California 92507-2165

February 11, 2010

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EVALUATION OF ENVIRONMENTAL IMPACTS:..... 13
ENVIRONMENTAL IMPACTS: 15
SOURCES CITED IN EVALUATION OF ENVIRONMENTAL IMPACTS:..... 34

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Exhibit No. **Page No.**

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Exhibit 2. Conceptual Site Plan 9
Exhibit 3. Parcel Map Layout..... 10
Exhibit 4. Existing Site Conditions..... 11

CITY OF UPLAND

ENVIRONMENTAL CHECKLIST FORM

EXECUTIVE SUMMARY:

This Initial Study is being prepared pursuant to Section 15063 (c)(3) of the California Environmental Quality Act (CEQA) Guidelines.

The purpose of this study is to assess the potential environmental impacts of the construction and operation of the proposed phased development. The project consists of the relocation of collegiate recreational/athletic facilities along with the parking to support those facilities as well as overflow campus parking on the approximately 80-acre site, of which approximately 50 acres is in the City of Upland and approximately 30 acres is in the City of Claremont. To proceed with the development in the City of Upland, the project will require adoption of a resolution approving a Parcel Map and approval of the conceptual site plan with a project condition to submit a Conditional Use Permit application prior to development of the site facilities. To accommodate phasing of improvements, a Development Agreement will be processed through the City of Upland or conditions to address the phasing will be prepared. To proceed with the development in the City of Claremont, the project will require adoption of a resolution approving a Parcel Map and the review of the intensity of uses of the conceptual site plan facilities with an understanding that prior to development of site facilities, approval of Design Review application(s) will be required. A Development Agreement will also be processed through the City of Claremont.

The Cities of Upland and Claremont have agreed that the City of Upland shall be the Lead Agency for the environmental clearance for the proposed project.

1. Project title: **Claremont Colleges East Campus**

2. Lead agency name and address: **City of Upland, 460 N. Euclid Avenue Upland, CA 91786-0460.**

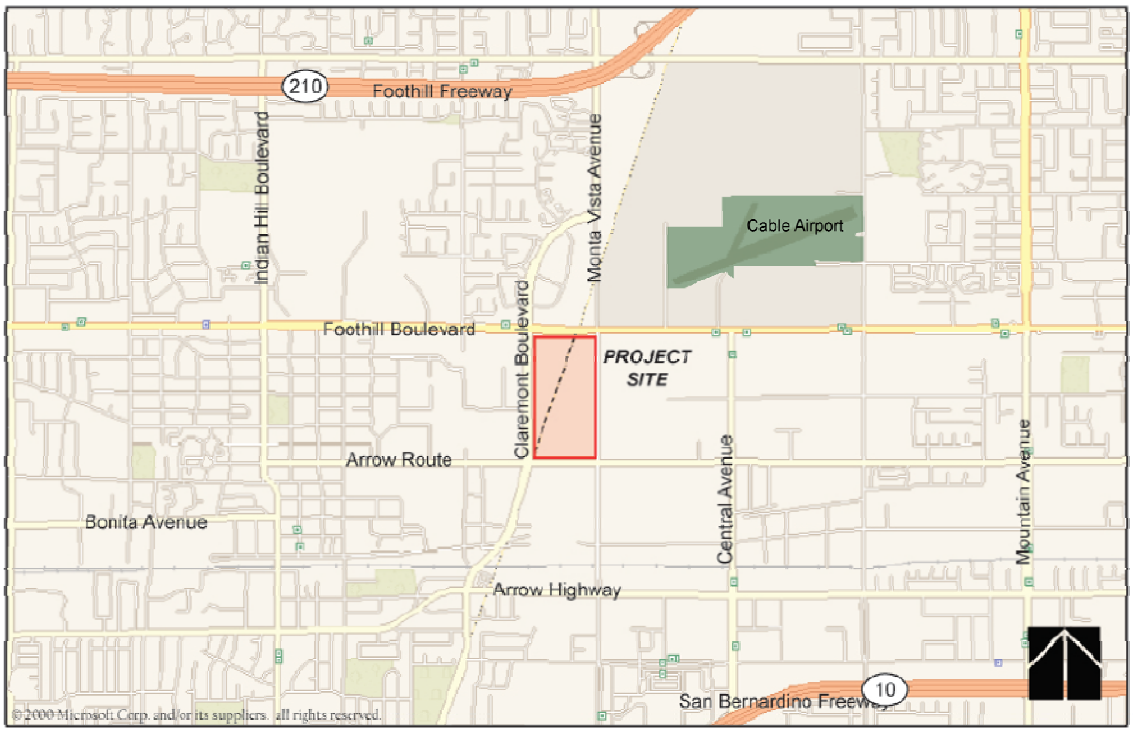
3. Contact person and phone number: **Attention: Karen Peterson, Senior Planner (909) 931-4327.**

4. Project location: **The project site is located south of Foothill Boulevard, west of Monte Vista Avenue, north of Arrow Route/6th Street and east of Claremont Boulevard. The county line separating the City of Upland in San Bernardino County and the City of Claremont in Los Angeles County transverses the project site. (See Exhibit 1, Project Regional Context/Vicinity Map).**

5. Project sponsor's name and address: **Hogle-Ireland Inc. Attn: Pamela D. Steele, 1500 Iowa Avenue, Suite 110, Riverside, CA 92507-2165**

6. General Plan Designation:
   City of Upland: Existing – **Institutional.** Proposed – **Institutional.**
   City of Claremont: Existing – **Institutional.** Proposed – **Institutional.**

Regional Context Map



Vicinity Map

EXHIBIT 1. PROJECT REGIONAL CONTEXT/VICINITY MAP

7. Description of project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation.) **The proposed Project is a subdivision of land for phased development of a college sports complex with recreational/athletic fields, sports courts, parking, supporting building facilities and a sports medicine office on an 80-acre former aggregate quarry. Existing land uses include an archery range and a temporary construction parking area adjacent to Claremont Boulevard in addition to a permitted Class III landfill site. The purpose of the phased development is the relocation of sports facilities and associated parking from the main college campus to the former quarry site as well as overflow parking for the campus.**

<u>Circulation</u>

Vehicular access is proposed from three streets:

a. **Arrow Route in Upland – Access from Arrow Route is proposed to provide circulation to sports fields in the southern region of the site.**
b. **Claremont Boulevard in Claremont- Three ingress/egress points are proposed to provide access to the sports facilities and parking adjacent to Claremont Boulevard.**
c. **Foothill Boulevard in Claremont-A possible future signalized access point, aligned with the proposed ingress/egress point for the proposed commercial development on the north side of Foothill Boulevard, is proposed in the City of Claremont (Caltrans District 7) to create access to the north/northeast portion of the project site.**

<u>Upland</u>

The proposed Project, within the City of Upland, is the subdivision of the approximately 50-acre parcel (Assessor Parcel Number 1007-011-01) into six parcels: Parcel 1 is approximately 2.5 acres; Parcel 2 is approximately 3.4 acres; Parcel 3 is approximately 3.0 acres; Parcel 4 is approximately 29.4 acres; Parcel 5 is approximately 3.2 acres and Parcel 6 is approximately 3.8 acres. The conceptual site plan establishes a program for future phased development of Parcel 4, by Claremont McKenna College, with uses anticipated to be a baseball field with seating, parking spaces, sports facilities such as a softball field, a soccer/lacrosse/football practice area, an enclosed paddle tennis court, restrooms, a sports medicine office, an archery range and an access point to the college facility via Arrow Route through Parcels 5 and 6. Proposed Parcels 1, 2, 3, 5 and 6 have no planned land uses and are created at this time to provide flexibility for future use by Claremont University Consortium or The Claremont Colleges with acknowledgement that a future environmental review will be needed to address those future uses.

<u>Claremont</u>

The proposed Project, within the City of Claremont, is the subdivision of the approximately 30-acre parcel (Assessor Parcel Number 8308-025-012) into three parcels: Parcel 1 is approximately 16.7 acres; Parcel 2 is approximately 11.8 acres; and Parcel 3 is approximately .6 acre. The project also proposes future development of the remainder of the collegiate recreational/athletic facility consisting primarily of the relocation of facilities from the Pitzer College and Claremont McKenna College campuses such as two parking areas which will be along Claremont Boulevard, a sand volleyball court, two multi-purpose fields, two basketball courts, a golf practice area, and minor accessory

buildings such as restrooms and an equipment storage structure. The accessory structures will be located in the west-central portion of Parcel 1 and would be the only buildings located within the boundaries of the City of Claremont. Parcel 3 within the City of Claremont has no planned land uses proposed as an element of the conceptual site plan and will remain vacant until a use is proposed. At such time that a use is proposed on Parcel 3, review for that use will be conducted with that application. (See Exhibit 2, Conceptual Site Plan and Exhibit 3, Parcel Map Layout, below.)

Decisions Required for Project

To proceed with the development in the City of Upland, the project will require approval of a Tentative Parcel Map and approval of the conceptual site plan with a project condition to submit a Conditional Use Permit application prior to development of the site facilities identified in the conceptual site plan. To proceed with the development in the City of Claremont, the project will require approval of a Tentative Parcel Map and approval of the conceptual site plan with a project condition to submit a Design Review application prior to development of the site facilities identified in the conceptual site plan.

8. Surrounding land uses and setting: (Briefly describe the project's surroundings.) **The site is located in a mixed land use setting. To the North are an existing fueling station, a retail plant nursery and vacant property intended to be used as a proposed commercial retail/office complex. To the East are office/industrial buildings and vacant land with an approved Mixed Use Specific Plan project. To the South is another Mixed Use Specific Plan project currently under construction with residential and commercial land uses. To the West are the campuses of The Claremont Colleges private college facilities. (See Exhibit 4, Existing Site Conditions, below.)**

9. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.)
    - **Caltrans District 7 for improvements to Foothill Boulevard (State Route 66).**
    - **Los Angeles Regional Water Quality Control Board for water quality monitoring.**
    - **City of Claremont for approval of Parcel Map, execution of a Development Agreement, and review of the density and intensity of uses proposed in the conceptual site plan.**
    - **San Bernardino County for landfill closure.**

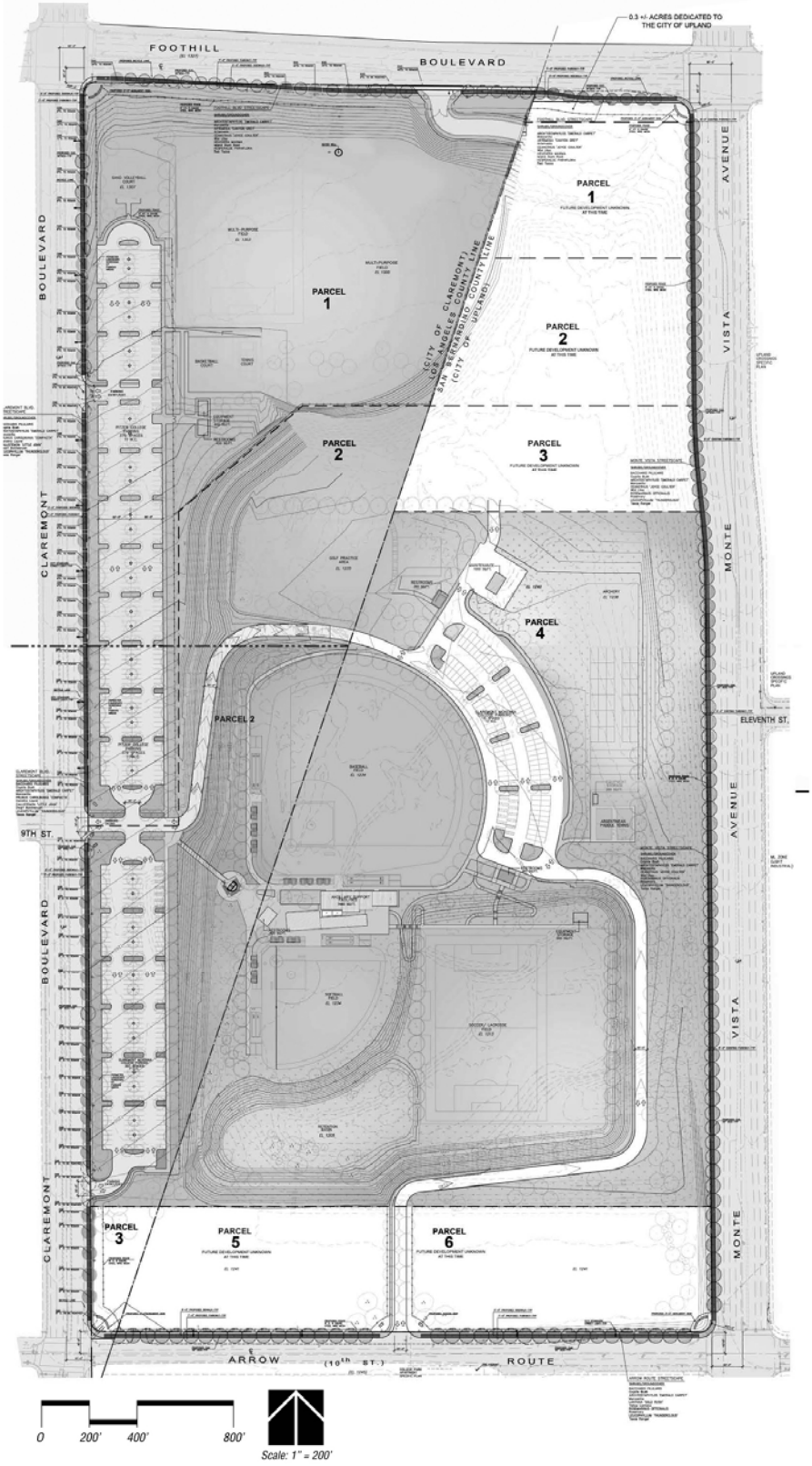


EXHIBIT 2. CONCEPTUAL SITE PLAN

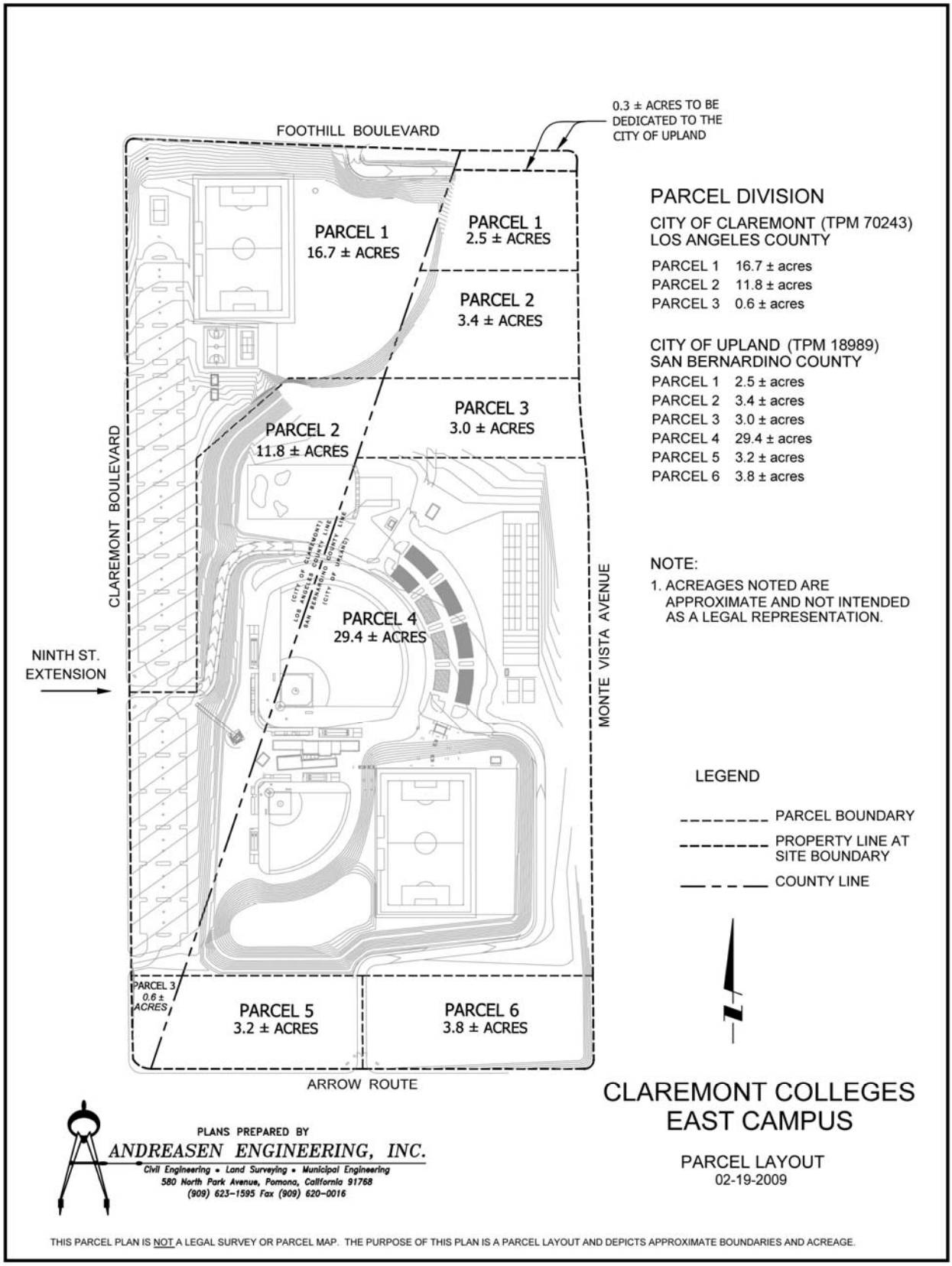
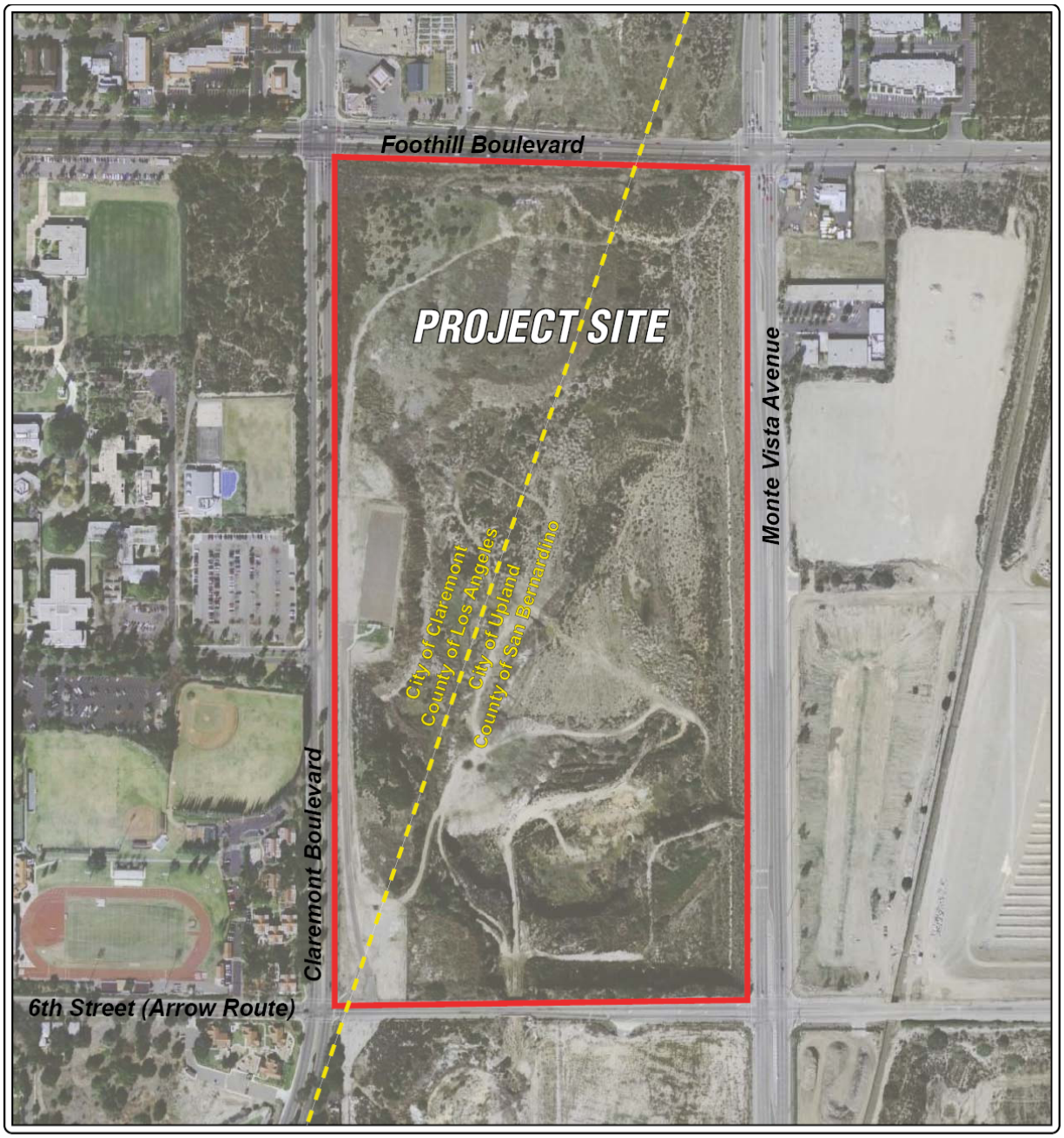


EXHIBIT 3. PARCEL MAP LAYOUT



Not to Scale

Aerial Photograph

CUC Quarry Site
Claremont/Upland, CA
August 25, 2008

EXHIBIT 4. EXISTING SITE CONDITIONS

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☒Aesthetics	☐Agriculture Resources	☒Air Quality
☒Biological Resources	☐Cultural Resources	☒Geology / Soils
☒Hazards & Hazardous Materials	☒Hydrology / Water Quality	☐ Land Use / Planning
☒Mineral Resources	☒Noise	☐Population / Housing
☒Public Services	☐Recreation	☒Transportation/Traffic
☒Utilities / Service Systems	☒Mandatory Findings of Significance	

DETERMINATION:

(To be completed by the Lead Agency)

On the basis of this initial evaluation:

	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on the attached pages have been added to the project. A MITIGATED NEGATIVE DECLARATION will be prepared.
X	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
	I find that the proposed project MAY have a significant effect(s) on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets, if the effect is a "potentially significant impact" or "potentially significant unless mitigated." An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable legal standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

Date

Karen Peterson, Senior Planner

City of Upland Community Development Dept.

EVALUATION OF ENVIRONMENTAL IMPACTS:

An Environmental Checklist Form (Form) has been used to evaluate the potential environmental impacts associated with the proposed project. The Form has been prepared by the Resources Agency of California to assist local governmental agencies, such as the City of Upland, in complying with the requirements of the Statutes and Guidelines for implementing the California Environmental Quality Act. In the Form, environmental effects are evaluated as follows:

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in its response. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is “Potentially Significant”, “Less Than Significant With Mitigation”, or “Less Than Significant”. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from an "Earlier Analyses," as described in #5 below, may be cross-referenced).

5. Earlier analyses may be used where, pursuant to tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. In this case, a brief discussion should identify the following:

   (a) Earlier Analysis Used. Identify and state where they are available for review.

   (b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   (c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances).

7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8. The explanation of each issue should identify:

   (a) The significance criteria or threshold, if any, used to evaluate each question.

   (b) The mitigation measure identified, if any, to reduce the impact to less than significance.

ENVIRONMENTAL IMPACTS:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
I. AESTHETICS: *Would the project:*				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character of quality of the site and its surroundings?	☐	☐	☐	☒
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☒	☐	☐	☐

I. a-d) The project site is an approximately 80-acre former aggregate quarry. It was mined for aggregate materials to a depth of approximately 50 to 80 feet. There are no buildings, no distinctive natural landscape features such as trees, streams, rock outcroppings or any other unique landforms on site. No State designated scenic highways exist within the immediate area, although within the City of Upland, Foothill Boulevard is designated as a route of scenic and historical value. Implementation of the proposed Project would change the current visual character through a variety of landscaping and development enhancements that would be an improvement to the existing aesthetic character of the site. Since the proposed sports fields and related facilities will lie well below street level, the proposed Project would not adversely affect any scenic vistas such as views of the San Gabriel Mountains to the north.

There are presently no lighting sources within the project site. A variety of outdoor lighting is proposed, including parking lot lighting and playing field lighting. Without proper design and illumination controls, this new lighting could potentially affect nearby residential uses. Potential adverse effects and related lighting controls will be assessed in the Environmental Impact Report.

II. AGRICULTURE RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. *Would the project:*				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
agricultural use, or a Williamson Act contract?				
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	☐	☐	☐	☒
II. a-c) The project site is identified as "Urban and Built-Up Land" as shown on the latest map prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency.[1] No Williamson Act contracts were found for the project site, and there are no adjacent agricultural uses.[2] Historically, from the 1920's until 1972, the project site was used as an aggregate quarry. Currently, the site is used for an archery range, as temporary construction parking adjacent to Claremont Boulevard, and as a landfill for inert waste. A majority of the site's native topsoil has been removed due to past quarry operations and thus there is minimal soil value to support crop production. Neither City's General Plan designates this site for farming or other agricultural purposes. It is designated in each City's General Plan as Institutional. This project would not result in any adverse impact to farmland or other agricultural resources.				
III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. *Would the project:*				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☒	☐	☐	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☒	☐	☐	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☒	☐	☐	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒

[1] California Department of Conservation, Farmland Mapping & Monitoring Program. 2007. State of California. 21 March 2008. <ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/statewide/fmmp2004_811.pdf>.

[2] California Department of Conservation, Williamson Act. 2007. State of California. 21 March 2008. <ftp://ftp.consrv.ca.gov/pub/dlrp/WA/ >.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact

III. a-e) The proposed Project will relocate existing sports facilities, playing fields, and parking which are currently on the Pitzer College and Claremont McKenna College campuses located west of the project site. The new sports facilities will support the needs of the college community for general recreation, physical education, team practice and scheduled team sports. The proposed Project is consistent with the General Plan Designations for both Upland and Claremont.

The proposed Project is located within the South Coast Air Basin (SCAB) which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SCAQMD prepares a basin-wide plan known as the Air Quality Management Plan (AQMP) to address attainment status programs to meet Federal and State clean air quality standards.

The project will be evaluated based on Appendix G of the State CEQA Guidelines, which states that a project would normally be considered to have a significant effect on air quality if the project would violate any ambient air quality standards, contribute substantially to an existing air quality violation, expose sensitive receptors to substantial pollutants concentrations, or conflict with adopted environmental plans and goals of the community in which it is located.

The State of California (State) and the federal government have established health-based ambient air quality standards (AAQS) for seven criteria air pollutants. The pollutants include ozone (O3), CO, nitrogen dioxide (NO_2), sulfur dioxide (SO_2), coarse particulate matter with a diameter of 10 microns or less (PM10), fine particulate matter less than 2.5 microns in diameter (PM2.5), and lead. In addition, the State has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles.

Long-term objectionable odors affecting a substantial number of people are not expected to occur from the proposed Project. Conducting sports related activities is not associated with odor generation. Waste management control programs are in place for both municipalities involved in approval of the project. Waste generated by the project would be managed through use of municipal waste management procedures currently in place.

The potential effects on air quality, criteria pollutants, and sensitive receptors from an increase in traffic, or through construction and operation of the new facilities will be analyzed and discussed further in the Environmental Impact Report. An Air Quality Study for the project will address this range of potential impacts, and will be prepared in accordance with the SCAQMD's CEQA Handbook.

Greenhouse gas emissions will be addressed in the cumulative impacts subsections of *Section XVII* of this environmental document.

IV. BIOLOGICAL RESOURCES: *Would the project:*				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the	☒	☐	☐	☐

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
California Department of Fish and Game or U.S. Fish and Wildlife Service?				
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☒	☐
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

IV. a-f) From the 1920s until the mid-1970s, the site was in continual use for surface mining of aggregate materials. The site is currently used for temporary construction parking, as an archery range and as a Class III Landfill. The project site is highly disturbed from past aggregate extraction, current landfill activities of inert waste, and continuous grading of the fill on the alluvial surface of the quarry bottom. A biological survey determined that this site supports 45.5 acres of alluvial fan scrub habitat in various stages of growth, along with other ruderal vegetation types. There are no local, regional or state conservation plans affecting this site. The site receives unintended storm water runoff from areas to the north, which results in periodic ponding in surface depressions within the project boundaries. Additionally, at times ground water temporarily rises and pools in the bottom of the quarry because the San Jose fault which crosses diagonally beneath the project site acts as a ground water barrier. Typically, the water percolates into the ground or evaporates. This site is not within or adjacent to any recognized wildlife corridors and does not contain or affect any native wildlife nursery sites. This Project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. During construction and site modification activities, there is a potential to impact sensitive plants and wildlife species and/or natural communities. There are no significant trees within the master site plan area; however, construction of roadway

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
improvements and/or utility laterals could affect trees within the rights-of-way. A biological resources assessment will be completed as part of the Environmental Impact Report to assess the potential for impacts to candidate, sensitive, or special status species, wetlands, and/or sensitive natural communities. Application of City regulations to address trees will also be examined.				
V. CULTURAL RESOURCES: *Would the project:*				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	☐	☐	☐	☒
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐
V. a-d) A Historical/Archaeological Resources Survey Report was prepared by CRM Tech (Revised July 3, 2007). Based on a records search and a field survey of the project site, CRM Tech did not encounter any historical or archaeological resources as defined by CEQA, within or immediately adjacent to the project area. The field survey was conducted walking parallel north-south transects spaced 25 meters apart, and systematically examined the entire project site for any evidence of human activities dating to prehistoric or historic periods. The records search resulted in a total of 14 cultural resources recorded in the project vicinity; none of which were located within the project site. Additionally, based on information contained in the Upland Crossings Specific Plan Environmental Impact Report, the likelihood of paleontological resources is minimal due to the type of soils present on-site. The project site is highly disturbed from past aggregate extraction, current landfill activities of inert waste, and continuous grading of the fill on the alluvial surface of the quarry bottom, thus the potential to encounter paleontological resources such as fossilized materials is greatly diminished. Excavation into native subsurface materials is not anticipated for the grading required for the proposed sports facilities. Adherence to California Health and Safety Code Section 7050.5, requiring the cessation of grading and construction activities and the contacting of the coroner if human remains are uncovered will mitigate any potential significant impacts to human remains. This project is not expected to result in any adverse impacts to cultural or paleontological resources and no additional analysis or mitigation is required.				

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
VI. GEOLOGY AND SOILS: *Would the project:*				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☒	☐	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☒	☐	☐
iv) Landslides?	☐	☒	☐	☐
VI. a.i-iv) A Preliminary Geotechnical Assessment was prepared by RMA Group (August 21, 2007). This assessment determined that based on the results of a geologic fault investigation performed in 2001 and observation of older alluvial soils exposed at the bottom of a quarry, the San Jose Fault is not a surface fault rupture hazard based on current State of California criteria and a fault setback zone is not required. Furthermore, based on information gathered during the initial assessment of the site, the proposed development is geologically and geotechnically feasible, subject to appropriate planning, engineering, and approvals of governing agencies. The findings and recommendations of the geotechnical report will be presented in the EIR to include evaluation of the potential need for and feasibility of mitigation measures.				
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☒	☐	☐	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
VI.b-e) Due to the many years of quarrying activities on a majority of the site, little native topsoil remains and this is not considered of significant value. Soil erosion during construction will be minimized through mandatory compliance with routine control measures to be specified in the General Construction Permit, pursuant to the statewide NPDES Permit program. The developed site will include extensive landscaping, plus impervious surfaces such as parking parcels, driveways, building roofs, frontage street improvements, paved walkways, and the like that will reduce erosion potential, compared to existing conditions. In order to develop the site, the existing compacted fill, roadfill and alluvial soils in the quarry bottom will require removal of vegetation, scarification, moisture conditioning and compaction prior to placement of engineered fill. The site has been permitted as a Class III landfill qualifying to accept inert wastes such as construction debris. These types of materials, if not properly placed, could result in unstable building foundations or differential settlement. The proposed Project is designed to limit the types of improvements in areas with landfill materials to avoid adverse effects associated with these soil components. The presence of clay soils is highly unlikely, due to the types of materials that were mined from the site as clays would negatively affect aggregate production. Expansive soil problems, therefore, are not anticipated. No use of septic disposal systems is expected as sewer lines are available for connection in the surrounding areas. The suitability of on-site soils for building placement, non-engineered fill conditions, and the closure of the landfill will be reviewed in the Environmental Impact Report.				
VII. HAZARDS AND HAZARDOUS MATERIALS: Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
VII. a-d) The proposed Project is a subdivision of land for development of primarily replacement recreational/athletic facilities with support structures and parking areas in the Cities of Upland and Claremont.				

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
The proposed Project is not located within one-quarter mile of an existing or proposed public school. The project site is not listed as a hazardous materials site pursuant to California Government Code Section 65962.5. As a result of the Class III landfill on the project site, a groundwater well was installed to monitor water quality levels that may be affected by landfill activities. Phase I and Phase II level Environmental Site Assessments (ESA) were prepared (Geomatrix, June 2004 and September 2008) to investigate site conditions to determine if there are areas of concern that need to be remediated. Results of the ESAs will be presented in the EIR.				
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?		☒	☐	☐
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☒	☐
VII. e- f) The proposed phased Project is a subdivision of land for development of relocated recreational/athletic facilities with support structures and parking areas for use by The Claremont Colleges in the Cities of Upland and Claremont. The Cable Airport is a private airport located in the City of Upland northeast of the project site. The closest point of the project site to Cable Airport is the northeastern-most corner at Foothill Boulevard and Monte Vista Avenue, which is approximately 2,000 feet southwest of the departure end of Runway 24 at Cable Airport at a length of 3,864 feet per FAA data[3] and approximately 2260 feet from Runway 24 at a length of 3,600 feet per the Cable Airport Comprehensive Airport Land Use Plan (CACLUP). The proposed Project would support a range of outdoor recreational and sports uses for Pitzer College and Claremont McKenna College, which would involve varying concentrations of people. The proposed land uses and intensities of persons are relevant in analyzing categorical parameters of compatibility relative to the project site's distance from Cable Airport. To address this issue and to assess compliance with the CACLUP, the FAA and the California Airport Land Use Planning Handbook, 2002, an aeronautical study memorandum, "Evaluation of the land use compatibility issues associated with the proposed development of the Claremont Colleges Quarry Site near the Cable Airport", was prepared by Walter E. Gilfillan & Associates (February 13, 2008). Findings in this evaluation are consistent with a determination of compatibility of the proposed Project near Cable Airport. A complete assessment of this project's exposure to airport-related hazards will be provided in the Environmental Impact Report. The aeronautical evaluation states that all three of the airport compatibility sources, the FAA, California Airport Land Use Planning Handbook, 2002 (CALTRANS) and the CACLUP identify the Runway Protection Zone (RPZ) immediately off the ends of runways as having high risk exposure due to arriving and departing aircraft operations. The proposed project is not located in the RPZ. Due to the proximity of the airport, the issue of whether the proposed Project would result in hazards for				

[3] FAA website: <http://www.faa.gov/airports_airtraffic/airports/airport_safety/airportdata_5010/menu/index.cfm >.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
persons watching or participating in sports or activities or for persons working in the project area will be assessed in the Environmental Impact Report.				
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☒	☐
VII. g-h) The project site is currently used for temporary construction parking, as an archery range and as a Class III Landfill. These existing uses are not compatible with use of the site for emergency planning. No adopted plan lists the project site for purposes of emergency evacuation. When all phases of development proposed by this project are complete, the proposed Project will have five access points: Arrow Route in Upland, Foothill Boulevard and three access points along Claremont Boulevard within Claremont. All access points will be designed to accommodate emergency response vehicles. The proposed Project is not expected to negatively impact implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. The project area is urbanized and is surrounded by urban land uses. The Upland and Claremont General Plans do not identify risk of wildland fires as a concern within the area of the project site; however, the site is designated as a Very High Fire Hazard Severity Zone (VHFHSZ) by maps prepared by the California Department of Forestry and Fire Protection.[4] Based on the Fire Hazard Elements assessed in preparation of the severity maps, the project site and other areas in the vicinity are generally characterized as susceptible to wildland fires due to factors such as the steepness of on-site slopes, the types of on-site vegetation, the general weather, and the susceptibility to fire brand ignition (ignition by embers that move ahead of a main fire). The severity maps are developed solely on the potential fire hazard without considering the actual risk of exposure to a wildland fire. The project site has a low risk of being exposed to a wildland fires because the site is located over three miles from the San Gabriel Mountains and is located in a long-established urban area. Furthermore, development will consist primarily of irrigated sports fields that does not constitute vegetation or conditions that are conducive to wildfires. Therefore, based on the risk of wildlife and the proposed project conditions, impacts due to wildland fires will be less than significant.				
VIII. HYDROLOGY AND WATER QUALITY: *Would the project:*				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
VIII. a) The project is not subject to 'point source' waste discharge requirements as administered by the Los Angeles or Santa Ana Regional Water Quality Control Boards (RWQCB) and is not subject to				

[4] California Department of Forestry and Fire Protection, Very High Fire Hazard Severity Zones in LRA. SW San Bernardino County. November 2008

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
the City's Non-domestic Wastewater Permit program because it does not discharge any industrial or other non-typical types of wastewater. General wastewater generated from the future restrooms, offices, and locker-room type facilities on the southern portion of the site will likely be discharged into the City of Upland sewer system. Restrooms located on the northwestern portion of the project site will likely be serviced by the City of Claremont sewer system. Wastewater Discharge Requirements (WDRs) for wastewater treatment plants serving the City of Upland are issued by the Santa Ana RWQCB and WDRs for treatment facilities serving the City of Claremont are issued by the Los Angeles RWQCB. Treatment of general wastewaters from the project will not require any upgrades to any treatment facility and would not result in usual or excessive amounts of discharges that could violate applicable WDRs. Short-term surface water quality impacts could potentially occur during the grading and construction phases. For example, runoff of loose soils and/or construction wastes and fuels during a rainstorm could flow into local storm drains located on Claremont Boulevard, Arrow Highway, and Monte Vista Avenue. Such contaminated runoff could potentially threaten downstream water resources that receive runoff from the local drainage network. Significant water quality impacts during the construction phases will be avoided through compliance with the National Pollutant Discharge Elimination System (NPDES) regulations set forth under the Federal Clean Water Act. Pursuant to NPDES regulations, the contractor must obtain a General Construction Permit from the RWQCB. To obtain that permit, the contractor will submit a Stormwater Pollution Prevention Plan (SWPPP) that specifies best management practices (BMPs) to prevent storm water from contacting waste materials and other pollutants in the construction zones. BMPs will include erosion and sediment controls, runoff water quality monitoring and means of waste disposal, implementation of approved local plans, and prevention and containment of accidental fuel spills or other waste releases. Compliance with the approved permit will ensure that the project does not violate any water quality standards during construction. Due to the nature of the proposed development (sports and recreation fields with parking), the majority of the area proposed for development (Parcels 1 and 2 in the City of Claremont and Parcel 4 in the City of Upland) will remain unpaved and will be planted with native landscaping materials in non-playing field areas and sod to provide grassy areas for softball, baseball, soccer, and other sports fields, therefore increases in urban runoff will be minimal. Furthermore, all drainage is proposed to be directed to an on-site retention basin, thereby minimizing any discharges into either City's storm drain system. The project does include parking lots on the western edge and central portion of the site. All runoff from the proposed parking lots is proposed to be directed south through vegetated swales and/or perimeter landscaping that will filter contaminants prior to discharge into the proposed retention basin. These swales and possibly other structural and non-structural BMPs will be incorporated into the project design and long-term maintenance program of the sports fields and other facilities. These measures will be detailed in the project's Standard Urban Stormwater Mitigation Plan (SUSMP) as required by NPDES Permits issued by the Los Angeles RWQCB. Implementation of the SUSMP, project design features, and existing standards will ensure the project does not result in substantial pollutant loading or violate any water quality standard.				
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream river, in a manner which would result in substantial erosion or siltation on- or off-site during construction?	☐	☐	☒	☐

VIII. b-c) A well located in the northwest portion of the project site is used to comply with a groundwater monitoring order imposed by the Los Angeles Regional Water Quality Control Board (RWQCB) as a result of the Class III landfill on the project site. This well is expected to remain in place through development of the project for monitoring purposes. As noted in the Phase I and II ESAs, because the project site lies within two different Regional Water Quality Control Board jurisdictions (Los Angeles and Santa Ana Regions), the two water boards have agreed that the Los Angeles RWQCB will provide regulatory oversight of the subject property. The project is not anticipated to substantially deplete groundwater resources because the site will remain primarily pervious and all from runoff from impervious surfaces will be directed to the proposed retention basin. This will allow percolation of any storm water or water used for landscaping, thereby recharging under water aquifers. The proposed restrooms and other facilities will use minimal amounts of water during periodic activities and events. The project will have less than significant impacts related to groundwater depletion and recharge.

Construction activities (as discussed in Section VIII.a, above) will be subject to the requirements of the NPDES program that requires installation of BMPs to reduce erosion and siltation. Adherence to these requirements will ensure that impacts due on- or off-site erosion will be less than significant.

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☒	☐

VIII. d) The existing on-site drainage pattern is defined by its previous use as an aggregate mine that generally flows from north to south and is not discharged into either City's storm drain system. Proposed site improvements include drainage controls to convey all runoff from the development into a retention basin located on the southwestern portion of the site. Therefore, no incremental increase in drainage discharges to either City's storm drain system will occur. The retention basin will comply with both Cities' standards for containment of incremental flows that could occur during a 100-year design storm event. The project will not result in the alteration of a stream or river because none exist on-site or in the project vicinity. Impacts resulting in on- or off-site flooding due to changes in drainage patterns will be less than significant.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
e) Would the project create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of post-construction polluted runoff, such as from areas of material storage, vehicle fueling, vehicle or equipment maintenance (including washing), waste handling, hazardous materials handling or storage, delivery areas, loading docks or other outdoor work areas?	☐	☐	☐	☒
f) Otherwise substantially degrade water quality or beneficial uses?	☒	☐	☐	☐
VIII. f) Due to past mining activities on the project site, potential contamination and therefore degradation of groundwater resources may occur. Potential impacts to groundwater quality will be further evaluated in the Environmental Impact Report.				
g) Place housing within a 100-year flood hazard as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other hazard delineation map?	☐	☐	☐	☒
h) Place housing within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
VIII. e, g-h) The project will not discharge runoff into either City's existing storm drain system because the project includes a retention basin that will capture all on-site drainage; therefore the project will not impact the capacity of any existing storm drain system. The project will not otherwise impact water quality. According to a review of City documents[5] and Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs) for Claremont and Upland, the project site is not within a 100-year flood zone. A retention basin is proposed as part of the master site plan, to retain run-off from the 100-year storm. No housing is proposed in conjunction with the project. No impacts related to 100-year flooding events will occur.				
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☒	
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☒	☐
VIII. i-j) According to the Preliminary Geotechnical Assessment, prepared by RMA Group and dated August 21, 2007, the project site has a remote "potential of being an inundation zone in the event of failure of the San Antonio Dam." The Preliminary Geotechnical Assessment also indicates that there				

[5] City of Upland website: <http://www.ci.upland.ca.us/asp/Site/ComDev/Planning/Crossing/index.asp >. March 18, 2008.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
is a "slight seiche hazard in the southern portion of the quarry where the retention basin is planned. However, this does not appear to be a large constraint due to the type of development proposed and the minimal water quantities that will be in the basin at most times. Tsunamis do not pose hazards due to the inland location of the site. The project site will not be impacted by mudflows because areas surrounding the project site are flat and a primary component for a mudflow to occur is slope. Therefore, impacts due to inundation by seiche, tsunami, or mudflow will be less than significant.				
k) Would the project have the potential for significant changes in the flow velocity or volume of storm water runoff to cause environmental harm?	☐	☐	☐	☒
VIII. k) The proposed Project provides a retention basin, in the southern part of the site, which will be designed to contain the runoff from a 100-year storm. In addition, the project is designed to accommodate excess storm water overflow in the adjacent proposed soccer field if the volume of water collected on-site should ever surpass the capacity of the retention basin. No adverse impact is expected from flow velocity or volume of storm waters.				
IX. LAND USE AND PLANNING: *Would the project:*				
a) Physically divide an established community?	☐	☐	☐	☒
IX. a) The project site is transversely divided by the boundary line between the City of Upland in San Bernardino County and the City of Claremont in Los Angeles County. The proposed Project is a subdivision of land to be used primarily for replacement of collegiate recreational/athletic fields, sports courts and parking. The project is designed across city/county boundary lines with no buildings straddling those boundary lines. The proposed future development will have the effect of creating a seamless private open space land use from one city/county to the other. Surrounding land uses vary. West of the site is the project proponent's own private college campus. North of Foothill Boulevard is an existing commercial development. East of Monte Vista Avenue is an existing industrial use and a not-yet-built mixed-use residential and commercial development and a proposed new commercial development. South of Arrow Route is a mixed-use residential and commercial project currently being developed. The proposed Project would create a large park-like environment which has the effect of enhancing the surrounding land uses and would not physically divide an established community. The proposed use will compliment the proposed and existing uses within the vicinity of the project. Negative impacts to surrounding communities and other uses are not expected.				
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐
c) Conflict with any applicable habitat conservation plan or natural community	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
conservation plan?				

IX. b-c) No changes in the existing land use regulations established by either city would be required to permit the proposed land subdivision, conceptual site plan, and development of for future sports and athletic facilities. More precise development plans will be submitted for each City's approval, prior to construction of any sports facilities, to ensure consistency with the master plan and conformance with local development standards. The project site has been mostly disturbed by past quarry operations and ongoing land use activities; thus there is little natural habitat value. The project site is not subject to a natural community conservation plan, or any other adopted habitat plan. No impact relative to land use codes or an established conservation plan for either city is anticipated.

X. MINERAL RESOURCES: *Would the project:*				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☒	☐	☐	☐
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☒	☐	☐	☐

X. a-b) Historically, the project site was an aggregate quarry that provided construction-quality sand, gravel and rock resources for use in various types of projects. Quarry operations ceased in 1972. Since then, the site has been used as a Class III Landfill, as an archery range and for temporary construction parking. This land is designated on Figure 5-3 of the City of Claremont's Open Space, Parkland, Conservation, and Air Quality Element of the General Plan as MRZ-2, and on Exhibit 9.3 of the City of Upland's Mineral Resources Supplement to the General Plan as MRZ-2, which is an area where adequate information indicates that significant mineral deposits are present or there is a high likelihood for their presence; however the site no longer provides substantial mineral value to the State, region, or locality. Although a significant loss of mineral resources is not anticipated; potentially significant impacts associated with closure of the landfill and reclamation of the site pursuant to the Surface Mining and Reclamation Act of 1975 (SMARA) will be further evaluated in the Environmental Impact Report.

XI. NOISE: *Would the project:*				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) A substantial permanent increase in	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
ambient noise levels in the project vicinity above levels existing without the project?				
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☒	☐	☐	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐

XI. a-f) The Upland Municipal Code establishes base ambient noise levels at 65 dB(A) at anytime for uses not specified in the General Plan such as the proposed Project's future development as an exterior non-residential use. The Claremont General Plan establishes noise contours at 65 CNEL for the project site. Proposed sports fields and recreation areas will be located below surrounding ground surfaces. The adjacent slopes will buffer much of the noise from sports activities, and this noise source is not expected to negatively affect nearby land uses. Proposed parking lots along Claremont Boulevard would generate regular traffic noise that could potentially affect existing or future facilities on the adjacent part of the main campus. Construction of the proposed facilities is not expected to require any pile driving or other kinds of techniques involving significant ground-borne noise or vibration potential. The proposed future development does not include any residential uses and the proposed recreational uses are not considered to be noise-sensitive. Impacts from adjacent traffic noise and occasional aircraft flyovers, therefore, would not have a significant effect on this project. New noise sources attributable to the project that may impact neighboring properties include an increase in traffic noise on Claremont Boulevard, Foothill Boulevard, Monte Vista Avenue and Arrow Route/6th Street and temporary construction noise from development of the proposed Project. Proposed recreational activities and facilities would not create a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. Since the potential exists for a rise in noise levels during construction and due to additional vehicle trips to the site, these noise impacts will be reviewed in the Environmental Impact Report.

XII. POPULATION AND HOUSING: *Would the project:*				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension or roads or other infrastructure)?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
XII. a-c) The proposed Project is the subdivision of land and conceptual site plan for future construction of various sports fields, recreational facilities and parking to replace facilities that currently exist on the Claremont College campus west of the project site. No homes or businesses are proposed and there are no homes or businesses that currently exist on this site. This project would not, therefore, have any effects involving inducement of population growth or displacing temporary or permanent housing structures. Minor infrastructure improvements such as sewer, gas, water, and electrical laterals will be installed to serve proposed accessory uses such as restrooms and sports-related offices on-site. Such minor improvements would not induce growth in this area.				
XIII. PUBLIC SERVICES:				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	☐	☒	☐	☐
Police protection?	☐	☒	☐	☐
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒
XIII. a) Since this project is being undertaken on private land owned by Claremont University Consortium with land sales restricted to The Claremont Colleges and does not include any housing, it will have no effect on public schools or parks and minimal effect, if any, on other public services. Both the City of Upland and the City of Claremont have Emergency Response plans in place and a Memorandum of Understanding for cross jurisdictional assistance. The Environmental Impact Report will address the need to understand and modify, if necessary, the Memorandum of Understanding, and mitigation measure(s) will be provided, if needed. A less than significant impact with mitigation incorporated is expected on police and fire protection services.				
XIV. RECREATION:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
the facility would occur or be accelerated?				
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse effect on the environment?	☐	☐	☐	☒
XIV. a-b) Since this project is proposed on private land owned by Claremont University Consortium with land sales restricted to The Claremont Colleges and would be utilized for college-related recreation and sports purposes, it would have no effect on any existing or planned public recreation facilities.				
XV. TRANSPORTATION/TRAFFIC: *Would the project:*				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☒	☐	☐	☐
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☒	☐	☐	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☒	☐
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☒	☐	☐	☐
e) Result in inadequate emergency access?	☐	☐	☐	☒
f) Result in inadequate parking capacity?	☒	☐	☐	☐
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☒	☐	☐	☐
XV. a-g) A variety of regularly occurring and informal recreation activities would occur due to implementation of the proposed Project, which would generate additional traffic to this site that does not presently occur. Some of this traffic is already generated at recreational facilities on the main campus and would be shifted to the project site. The volume and possible congestion effects of the				

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
project's traffic, especially during peak hours, will therefore be evaluated in the EIR. This assessment will be based on the net new trips estimated and the distribution of project-related traffic in the surrounding street network. The proposed Pitzer College parking lot is designed to provide parking not only for recreational activities but for also students residing in dorms to the west of the project site. The potential impacts of attracting student traffic between the dorms and the proposed parking lots will be analyzed in the EIR. The conceptual site plan includes a sufficient amount of on-site parking; however due to the complexities of providing parking for both on- and off-site uses, parking will also be discussed in the EIR. New driveways are proposed to provide access from Claremont Boulevard, Arrow Route, and possibly in the future, from Foothill Boulevard. Each one must be designed to comply with the applicable street design standards of the responsible jurisdiction; compliance with these existing standards will ensure that no hazards are created due to the design of these new vehicular access points. Of particular concern to safety is the intersection of 9th Street and Claremont Boulevard. This intersection is likely to experience extensive pedestrian and vehicle traffic as students cross 9th Street from the Pitzer College parking lot to the existing student dorms, and vice versa. The need for a traffic signal or other pedestrian and bicycle crossing safety features will be examined in the EIR. The proposed plan provides a sufficient range of access options for emergency vehicles and no adverse impacts involving emergency access are anticipated. Although the project site is not designated in either City's General Plan for establishment of some form of alternative transportation facility, the need for such an amenity will be examined in the EIR due to the potential for alternative transit options to alleviate traffic. Students, faculty and staff could walk or ride bicycles to this site, since it is within a relatively convenient distance of the main campus and the need and provision of minor amenities such as bicycle racks will be examined during the City's standard Design Review procedures.				
XVI. UTILITIES AND SERVICE SYSTEMS: *Would the project:*				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effect?	☒	☐	☒	☐
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☒	☐	☒	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☒	☐	☐	☐
e) Result in a determination by the	☒	☐	☐	☒

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☒	☐	☐	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

XVI. a-c, e-g) Wastewater would be generated by toilets and sinks in the restrooms and possibly by accessory structures; this would result in an increase of wastewater to the existing wastewater collection and treatment system. Storm waters would be retained on-site within a new detention basin and the site will be designed to handle any significant storm water overflows through sheet flows into soccer fields adjacent to the retention basin. Potentially significant impacts to wastewater collection and treatment facilities, the storm drainage system, and landfills could occur if these facilities are not adequate to serve the project in light of current and future demand. Therefore, the EIR will assess the level of impact with respect to wastewater facilities and discharge requirements, effects of the on- and off-site storm drainage system, and solid waste disposal.

XVI: b) The proposed project will require installation of potable water lines for restrooms and other accessory structures along with landscape irrigation lines. The project will require nominal amounts of water for restroom and facilities uses, however the project will require substantial amount of water for irrigation purposes. The amount of water necessary to maintain the proposed sports fields is anticipated to be substantially more than is currently required to maintain current site conditions and could result in potentially significant impacts if adequate infrastructure is not readily available or sufficient supply sources are not available to serve the site. The availability of water and the adequacy of the existing infrastructure will be examined in the EIR.

XVII. MANDATORY FINDINGS OF SIGNIFICANCE:				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☒	☐	☐	☐

XVII. a) As discussed in the response to checklist items IV.a-g, potentially significant impacts to sensitive biological resources will be examined in the Environmental Impact Report. Environmental effects associated with project-related drainage and water quality controls, and outdoor lighting will also be examined in further detail in the EIR. As discussed in the response to items V.a-d, no significant impacts involving cultural, historical, or paleontological resources are expected.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
b) Does the project have impacts that are individually limited, but cumulatively considerable? (Are the incremental effects of the project considerable when viewed in connection with those of past projects, those of other current projects, and those of probable future projects)	☒	☐	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings either directly or indirectly?	☒	☐	☐	☐

XVII. b-c) The proposed project's potential for significant cumulative impacts will be considered as a required part of the environmental analysis and in relation to required alternatives to be discussed in the Environmental Impact Report. The Report will address the potential for adverse impacts on human beings with respect to air quality, air traffic hazards, noise, hazardous materials, and traffic. In addition, the State recently passed legislation requiring a reduction in greenhouse gas (GHG) emissions such as carbon dioxide (CO_2), methane (CH_4), nitrous oxide (NO), ozone (O_3) and some chlorofluorocarbons (CFCs) which have been determined by prevailing scientific opinion to contribute to global (climate) warming. AB 32, the California Global Warming Solutions Act of 2006, requires that greenhouse gases emitted in California be reduced to 1990 levels by the year 2020 and 80 percent below 1990 levels by 2050. The potential for the project to generate a cumulatively considerable level of GHG's will also be assessed in the Environmental Impact Report.

SOURCES CITED IN EVALUATION OF ENVIRONMENTAL IMPACTS:

Section 15150 of the State CEQA Guidelines permits an environmental document to incorporate by reference other documents that provide relevant data. The documents outlined below are hereby incorporated by reference, and the pertinent material is summarized throughout this Initial Study where that information is relevant to the analysis of impacts of the proposed project. All documents incorporated by reference are available for review at the City of Upland Planning Department, 460 N. Euclid Avenue, Upland, CA 91786-0460. The office hours are Monday through Friday between 8:00 a.m. and 5:00 p.m.

1. City of Upland General Plan (Adopted June 21, 1982 as amended through August 23, 2001)

2. Upland Municipal Code (Adopted April 23, 2007 as amended through the November 2008 Code Supplement)

3. City of Claremont General Plan (Adopted November 14, 2006)

4. Claremont Municipal Code (Adopted October 10, 1978 as amended July 22, 2008)

5. CEQA Implementing Procedures, City of Upland (Adopted September 10, 2007)

6. Final Environmental Impact Report Upland Crossing Specific Plan, LSA (Certified August 28, 2006).

7. Historical/Archaeological Resources Survey Report, CRM Tech (Revised July 3, 2007). (Attachment A)

HISTORICAL/ARCHAEOLOGICAL RESOURCES SURVEY REPORT

CLAREMONT UNIVERSITY CONSORTIUM PROJECT

In the Cities of Claremont and Upland
Los Angeles and San Bernardino Counties, California

For Submittal to:

City of Claremont
Planning Division
P.O. Box 880
Claremont, CA 9711-0880

and

City of Upland
Community Development Department
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June 21, 2007
July 3, 2007 (Revised)
CRM TECH Contract No. 2084-R01

NATIONAL ARCHAEOLOGICAL DATABASE INFORMATION

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Date: June 21, 2007
July 3, 2007 (Revised)

Title: Historical/Archaeological Resources Survey Report: Claremont University Consortium Project, in the Cities of Claremont and Upland, Los Angeles and San Bernardino Counties, California.

For Submittal to: City of Claremont
Planning Division
P.O. Box 880
Claremont, CA 91711-0880
(909) 399-5460

City of Upland
Community Development Department
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USGS Quadrangle: Ontario, Calif., 7.5' quadrangle (Section 10, T1S R8W, San Bernardino Base Meridian)

Project Size: Approximately 80 acres

Keywords: Claremont-Upland area, Los Angeles and San Bernardino Counties; historical/archaeological resources survey; no "historical resources" under CEQA

MANAGEMENT SUMMARY

In June 2007, at the request of UltraSystems Environmental, CRM TECH performed a cultural resources study on approximately 80 acres of former quarry land that is slated for development as part of the Claremont University Consortium project designed to establish recreational/athletic fields on the site. The project area is situated on the west side of Monte Vista Avenue, between Foothill Boulevard and Arrow Route, within the northeast quarter of Section 10, T1S R8W, San Bernardino Base Meridian. The subject property is diagonally bisected from southwest to northeast by two jurisdictional boundaries, with the west portion located in the City of Claremont, Los Angeles County, and the east portion located in the City of Upland, San Bernardino County.

The study is part of the environmental review process for the proposed development on the property. The Cities of Claremont and Upland, as Lead Agencies for the project, required the study in compliance with the California Environmental Quality Act (CEQA). The purpose of the study is to provide the Lead Agencies with the necessary information and analysis to determine whether the proposed project would cause substantial adverse changes to any historical/archaeological resources that may exist in or around the project area, as mandated by CEQA. In order to identify and evaluate such resources, CRM TECH conducted a historical/archaeological resources records search, pursued historical background research, and carried out an intensive-level field survey.

Through the various avenues of research, this study did not encounter any "historical resources," as defined by CEQA, within or immediately adjacent to the project area. Therefore, CRM TECH recommends to the Cities of Claremont and Upland a finding of *No Impact* regarding cultural resources. No further cultural resources investigation is recommended for the project unless development plans undergo such changes as to include areas not covered by this study. However, if buried cultural materials are encountered during any earth-moving operations associated with the project, all work in that area should be halted or diverted until a qualified archaeologist can evaluate the nature and significance of the finds.

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INTRODUCTION

In June 2007, at the request of UltraSystems Environmental, CRM TECH performed a cultural resources study on approximately 80 acres of former quarry land that is slated for development as part of the Claremont University Consortium project designed to establish recreational/athletic fields on the site. The project area is situated on the west side of Monte Vista Avenue, between Foothill Boulevard and Arrow Route, within the northeast quarter of Section 10, T1S R8W, San Bernardino Base Meridian (Figs. 1, 2). The subject property is diagonally bisected from southwest to northeast by two jurisdictional boundaries, with the west portion located in the City of Claremont, Los Angeles County, and the east portion located in the City of Upland, San Bernardino County.

The study is part of the environmental review process for the proposed development on the property. The Cities of Claremont and Upland, as Lead Agencies for the project, required the study in compliance with the California Environmental Quality Act (CEQA; PRC §21000, et seq.). The purpose of the study is to provide the Lead Agencies with the necessary information and analysis to determine whether the proposed project would cause substantial adverse changes to any historical/archaeological resources that may exist in or around the project area, as mandated by CEQA. In order to identify and evaluate such resources, CRM TECH conducted a historical/archaeological resources records search, pursued historical background research, and carried out an intensive-level field survey. The following report is a complete account of the methods, results, and final conclusion of the study.

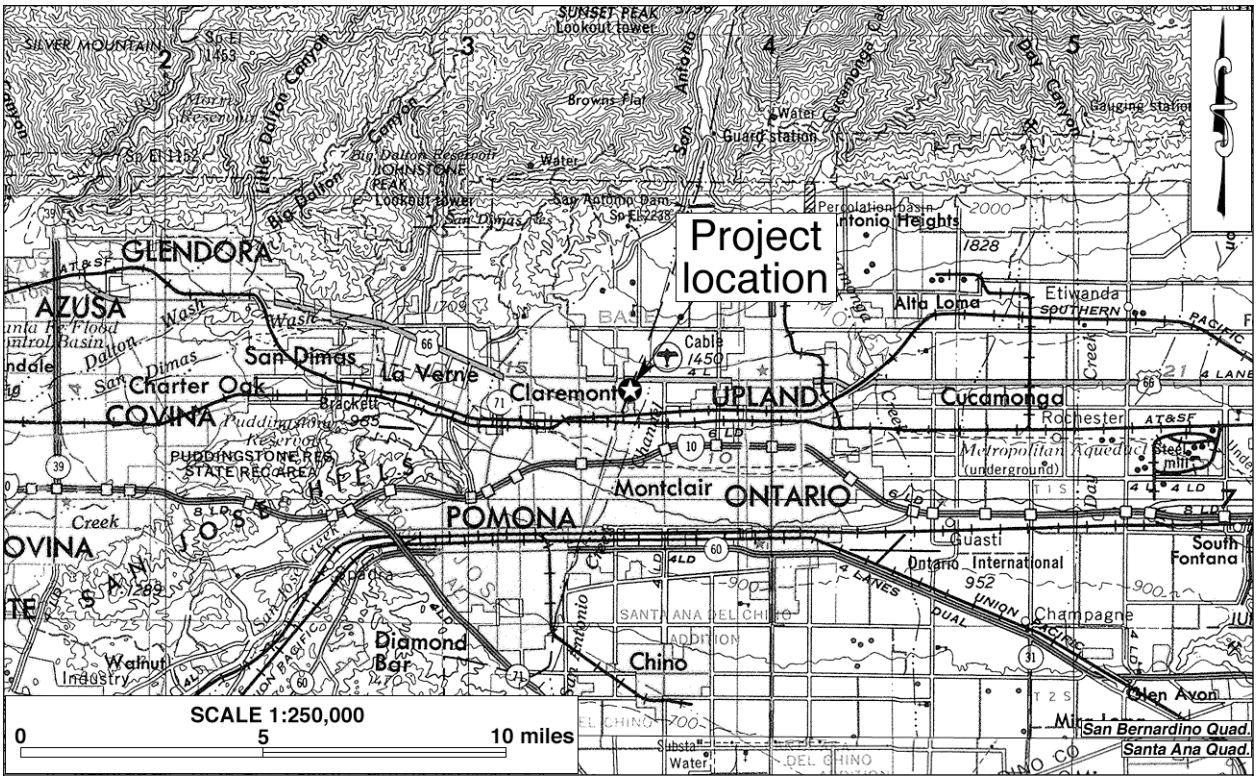

Figure 1. Project vicinity. (Based on USGS San Bernardino and Santa Ana, Calif., 1:250,000 quadrangles [USGS 1969; 1979])

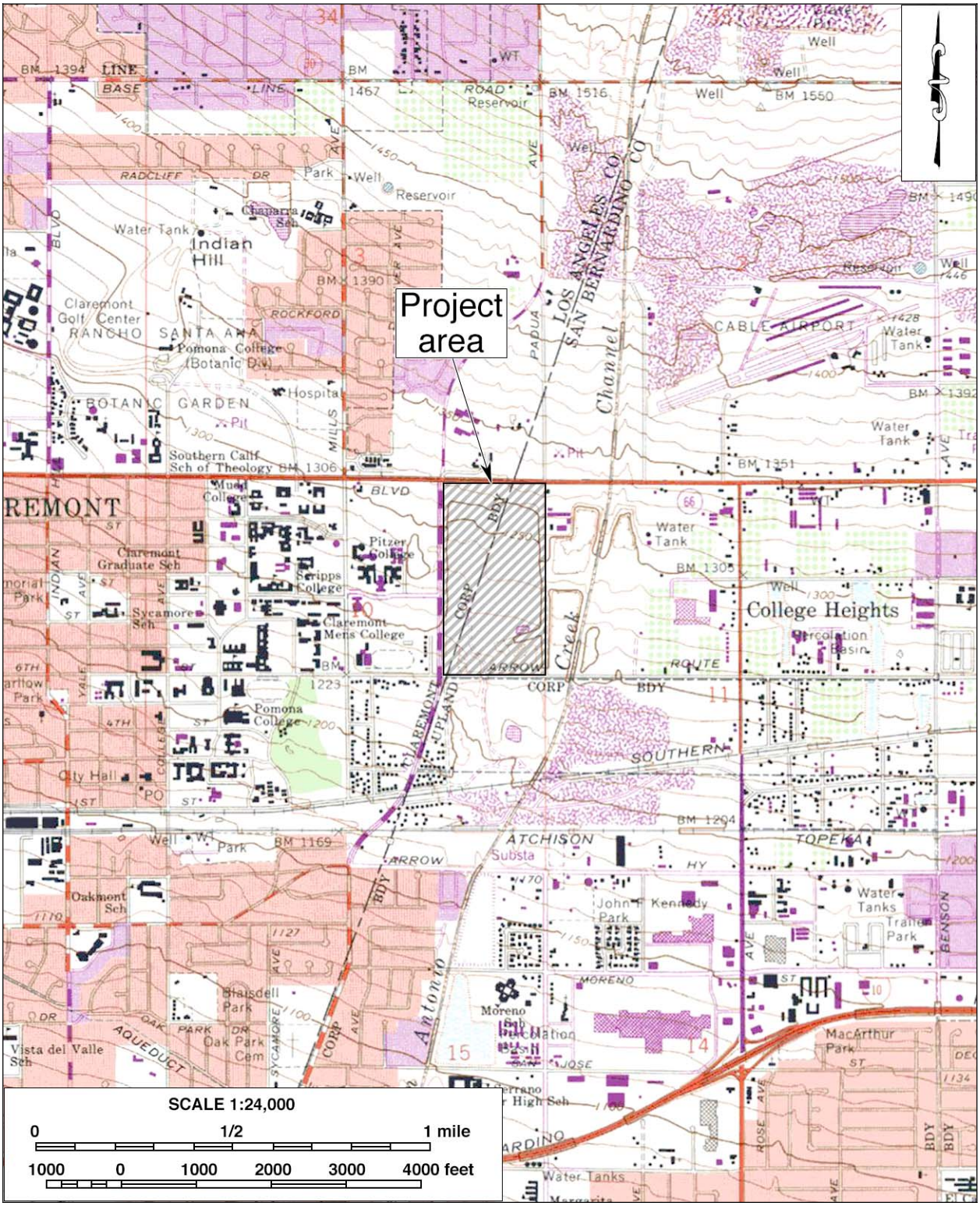

Figure 2. Project area. (Based on USGS Ontario, Calif., 1:24,000 quadrangle [USGS 1981])

SETTING

CURRENT NATURAL SETTING

The project area, situated within an alluvial fan, sits in a highly urbanized setting at elevations ranging between 1,210 and 1,320 feet above mean sea level. The property is bounded on the north and south by Foothill Boulevard and Arrow Route, respectively, while its western and eastern boundaries are defined by Claremont Boulevard and Monte Vista Avenue, respectively. Soils within the project area are made up of coarse sand with large rocks and gravel. Vegetation consists of buckwheat, Indian tobacco, wild mustard, tumbleweed, foxtail, and landscaping plants (Fig. 3).

Much disturbance is visible on the property due to previous quarrying activities. A large pit envelops much of the project area, where at some points it reaches depths of about 100 feet (Fig. 3). Also visible on the property are a number of roads, both dirt and asphalt-paved, emanating from the pit. Some grading and subsequent filling of the northern and southern portions of the property has occurred in the recent past (Fig. 3). A storage area is present in the southwest corner of the project area while an archery range occupies the west-central portion (Fig. 3). An asphalt road running in a north-south direction just west of Claremont Boulevard connects the archery range with the storage area (Fig. 3).

CULTURAL SETTING

Ethnohistoric Context

The project locale lies in an area where the traditional territories of the Serranos and the Gabrielinos adjoined and overlapped with each other, at least during the Late Prehistoric and Protohistoric Periods. The homeland of the Gabrielinos, probably the most influential Native American group in aboriginal southern California (Bean and Smith 1978a:538), was centered in the Los Angeles Basin, and reached as far east as the San Bernardino-Riverside area. The homeland of the Serranos was primarily the San Bernardino Mountains, including the slopes and lowlands on the north and south flanks.

Whatever the linguistic affiliation, Native Americans in and around the project area exhibited similar social organization and resource procurement strategies. Villages were based on clan or lineage groups. Their home/base sites are marked by midden deposits, often with bedrock mortars. During their seasonal rounds to exploit plant resources, small groups would migrate within their traditional territory in search of specific plants and animals. Their gathering strategies often left behind signs of special use sites, usually grinding slicks on bedrock boulders, at the locations of the resources.

As early as 1542, the Gabrielinos were in contact with the Spanish during the historic expedition of Juan Rodríguez Cabrillo. But it was not until 1769 that the Spaniards took steps to colonize Gabrielino territory. Shortly afterwards, most of the Gabrielino people were incorporated into Mission San Gabriel and other missions in southern California. The Serranos were brought into the mission system after 1819, when an *asistencia* of Mission San Gabriel was established in present-day Loma Linda. Due to introduced diseases, dietary

Figure 3. Overview of the current natural setting of the project area. *Clockwise from upper left*: Gravel pit (view to the east); graded area (view to the west); archery range (view to the northeast); paved road just west of Claremont Boulevard (view to the south). (Photos taken on June 15, 2007)

deficiencies, and forceful reduction, Gabrielino and Serrano population dwindled rapidly. By 1900, the Gabrielinos had almost ceased to exist as a culturally identifiable group (Bean and Smith 1978a:540). The Serranos, meanwhile, were mostly settled on the San Manuel and the Morongo Indian Reservations (Bean and Smith 1978b:573).

Historic Context

The project area is located in the lower reaches of San Antonio Canyon, near the base of the San Gabriel Mountains, and between the cities of Claremont and Upland. The San Gabriel Mountain Range derived its name from the San Gabriel River, which was named in 1769 during Gaspar de Portolá's expedition, at the onset of Spanish colonization of Alta California. Francisco Garcés, the famed Spanish explorer, mentioned *La Sierra de San Gabriel* as early as 1776. In 1810, José Maria Pico led a series of 14 military expeditions into the heart of the mountain range in pursuit of "renegade" Indians. Throughout the early 1800s, residents of the Pueblo of Los Angeles sometimes entered the mountains to capture grizzly bears for the popular events of bear-bull fighting. Aside from such occasional expeditions, however, the San Gabriels remained largely beyond the scope of Spanish colonization activities during the first few decades of the historic period.

Like all other major mountain ranges in California, the San Gabriel Mountains first received the attention of the colonizers for the rich natural resources they promised, most notably gold and timber. In the late 1810s, Joseph Chapman became the first logger to leave his mark in the history of the mountain range, although logging on a smaller scale may have started 30 years earlier. In 1842, the San Gabriels were the scene of the first gold rush in California, when Francisco Lopes discovered the precious metal on the range's western edge. Along with hopeful miners, the U.S. annexation of Alta California in 1848 brought waves of American immigrants to the once sparsely populated territory. Later, spurred by the completion of the Southern Pacific Railroad and the competing Santa Fe Railroad in the 1870s-1880s, a land boom swept across much of southern California. Many towns were laid out along the rail route between San Bernardino and Los Angeles during this time, including Claremont and Upland.

A disastrous drought in the 1890s brought an end to the real estate boom and might have emptied the neophyte towns were it not for the rise of the citrus industry, and, for Claremont, a decision of a local land-holding company to transfer its Hotel Claremont and 260 vacant lots to the newly-established Pomona College in 1888. The college eventually developed into the Claremont Colleges, a prestigious consortium that includes Pomona College, Claremont McKenna College, Scripps College, Harvey Mudd College, Pitzer College, Keck Graduate Institute, and the Claremont Graduate University.

Claremont growers are credited with forming one of the first citrus cooperatives for marketing and shipping their fruit, a model upon which citrus giant Sunkist was reportedly modeled. Meanwhile to the east, the nearby community of Upland had been established by the Chaffey brothers who pioneered the influential concept of the mutual water company, by which water rights are directly tied to land ownership. Thanks partially to this practice, Upland, or North Ontario as it was known then, survived and flourished with the rise of the citrus industry as the leading economic pursuit in rural southern California. The area soon became known for the cultivation of citrus fruits and, to a lesser extent, olives and grapes. Renamed in 1902, Upland incorporated in 1906. Claremont did the same the following year.

The end of World War II and the completion of Interstate 10 through the area again spurred residential development as growers sold their land for housing tracts. Today, Claremont, with a population of 33,998 in 2000, is known for its prestigious Claremont Colleges, its tree-lined streets, and historic buildings. Upland, with a 2000 census population of 68,393, has developed into an urban community that strives to maintain its hometown charm. Both are primarily residential, and each features a downtown area dominated by custom shops and restaurants that present a leisurely urban ambiance.

RESEARCH METHODS

RECORDS SEARCH

The records search for this study was carried out by CRM TECH staff archaeologists at the Archaeological Information Center (AIC), San Bernardino County Museum, Redlands, and the South Central Coastal Information Center (SCCIC), California State University,

Fullerton. CRM TECH archaeologist Nina Gallardo (see App. 1 for qualifications) conducted the records search at the AIC on June 8, 2007, while CRM TECH archaeologist Mariam Dahdul (see App. 1 for qualifications) visited the SCCIC on June 12, 2007.

During the records search, Gallardo and Dahdul examined maps and records on file at the AIC and SCCIC for previously identified cultural resources inside or within a one-mile radius of the project area, and existing cultural resources reports pertaining to the vicinity. Previously identified cultural resources include properties designated as California Historical Landmarks, or Points of Historical Interest, as well as those listed in the National Register of Historic Places, the California Register of Historical Resources, or the California Historical Resource Information System.

HISTORICAL RESEARCH

Historical background research for this study was conducted by CRM TECH historian Terri Jacquemain (see App. 1 for qualifications) on the basis of published literature in local and regional history and historic maps of the Claremont-Upland area. Among maps consulted for this study were the U.S. General Land Office's (GLO) land survey plat maps dated 1865-1876 and the U.S. Geological Survey's (USGS) topographic maps dated 1903, 1944, and 1954. These maps are collected at the Science Library of the University of California, Riverside, and the California Desert District of the U.S. Bureau of Land Management, located in Moreno Valley.

FIELD SURVEY

On June 15, 2007, CRM TECH archaeologists Daniel Ballester and Nina Gallardo (see App. 1 for qualifications) carried out the intensive-level, on-foot field survey of the project area. During the survey, Ballester and Gallardo walked parallel north-south transects spaced 25 meters (approx. 80 feet) apart. In this way, the ground surface in the entire project area was systematically and carefully examined for any evidence of human activities dating to the prehistoric or historic periods (i.e., 50 years ago or older). Ground visibility was poor (10%) in areas with dense vegetation growth but excellent (90-100%) in areas with sparse ground cover. The results of the survey are discussed below.

RESULTS AND FINDINGS

RECORDS SEARCH

According to records on file at the South Central Coastal Information Center (SCCIC) and the Archaeological Information Center (AIC), the project area had not been previously surveyed for cultural resources, and no cultural resources were recorded on the property. Outside the project boundaries but within a one-mile radius, SCCIC and AIC records show a total of 19 previous cultural resources studies covering various tracts of land and linear features, including two immediately to the south and east of the project area (Fig. 4).

As a result of these and other similar studies in the vicinity, a total of 14 cultural resources were recorded within the scope of the records search, as listed in Table 1. The majority of the sites dated to the historic period and included roads and railroads, bridges, buildings,

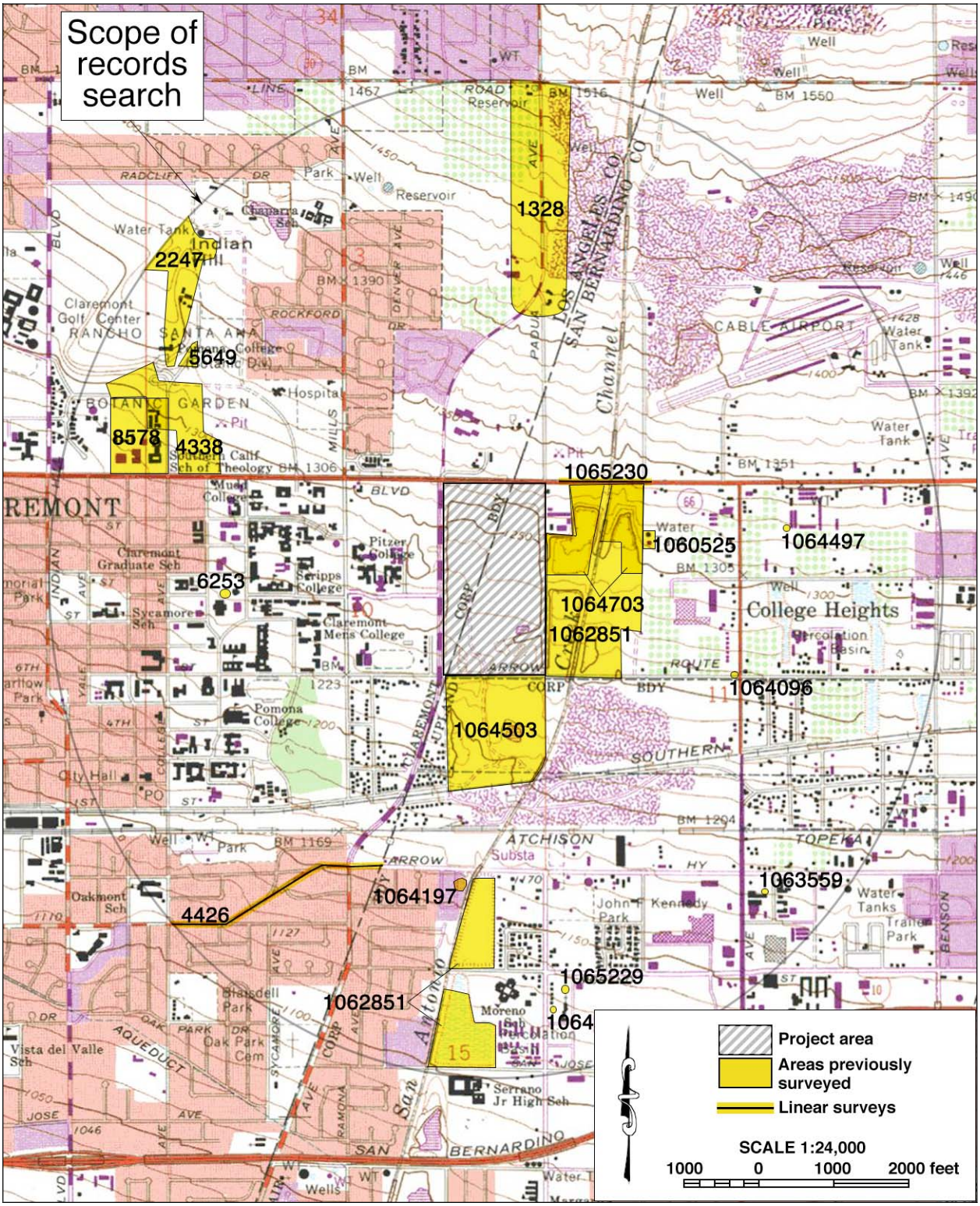

Figure 4. Previous cultural resources surveys in the vicinity of the project area, listed by AIC and SCCIC file numbers. Locations of historical/archaeological sites are not shown as a protective measure.

Table 1. Previously Recorded Cultural Resources within the Scope of the Records Search		
Site No.	**Recorded by/Date**	**Description**
19-000108	Cunningham et al. 1990	Lithic scatter; historic-era refuse scatter
19-180777; NRHP*	Krinsky 1980	Scripps College for Women—group of buildings constructed in the 1920s-1930s
19-185417; CPHI**	Howse 1989	Women's Club of Claremont—two-story wood frame structure constructed in 1908
19-186102; NRHP*	?	Atchison, Topeka, and Santa Fe Railroad Station at 110 W. 1st Street
19-186125; NRHP*	Snowiss 1977	Russian Village District consisting of 15 residences built from native fieldstone and discarded building materials, ca. 1920s
36-002910	Hammond 2003	SR 66 (formerly U.S. Highway 66), ca. late 1930s
36-006847	Horne and Inoway 1998	Atchison, Topeka, and Santa Fe's "Kite-Shaped Track," a popular late 19th and early 20th century railroad excursion route
36-007792	Landis 1993	Historic-period refuse scatter
36-007793	Landis 1993	Historic-period refuse scatter
36-007794	Landis 1993	Historic-period refuse scatter and structural remains
36-016454;	Merrill 1987	Old San Bernardino Road, ca. 1839-1915
36-018721	Pursell 1979	Bridge, ca. 1929-1937
36-018723	Pursell 1979	Bridge, ca. 1929-1937
36-020273	Taniguchi 2004	Arrow Route Bridge, ca. 1926

* Listed on the National Register of Historic Places
** Listed as a California Point of Historical Interest

refuse scatters, and a railroad station. One of the sites contained a historic-era trash scatter and a prehistoric—i.e., Native American—chipping station. Of the linear features identified during the records search, a segment of State Route 66 (formerly U.S. Highway 66) traverses in an east-west direction just north of the project area. Since none of these previously recorded cultural resources, including SR 66, was located within the project boundaries, none of them requires further consideration during this study.

HISTORICAL RESEARCH

In the 1850s-1870s, when the U.S. government conducted the first systematic land surveys in the region, a few roads were the only man-made features noted in the project vicinity, and no discernable signs of settlement and/or land development activities were found in or near the project area (Fig. 5; GLO 1865). By the 1890s, after the establishment of the town of Claremont a short distance to the west, a number of scattered buildings had appeared in the project vicinity, including two buildings on the eastern edge of the property (Fig. 6). Meanwhile, the forerunners of today's Foothill Boulevard and Arrow Route had also appeared along the northern and southern boundaries of the present project area, respectively (Fig. 6). Between 1894 and 1939, the two buildings in the project area were apparently removed (Fig. 7), and the property remained vacant into the early 1950s (Fig. 8). By the mid-1950s, however, a gravel pit had been established in the southern portion of the property, and eventually expanded to include much of the project area in the late 1960s and early 1970s (Geomatrix Consultants, Inc. 2004:6-7).

FIELD SURVEY

The intensive-level field survey produced completely negative results for potential cultural resources. The entire project area was closely inspected for any evidence of human activities dating to the prehistoric or historic periods, but none was found. No buildings,

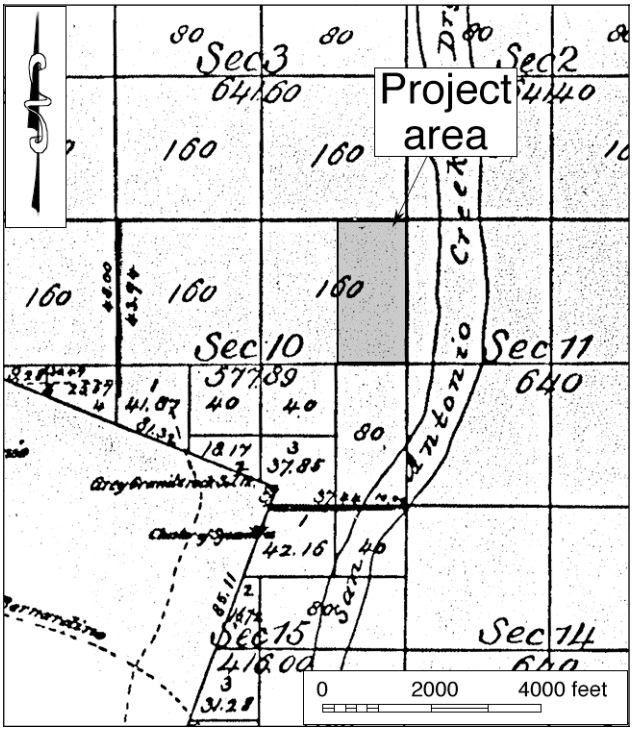

Figure 5. The project area and vicinity in 1852-1874. (Source: GLO 1875)

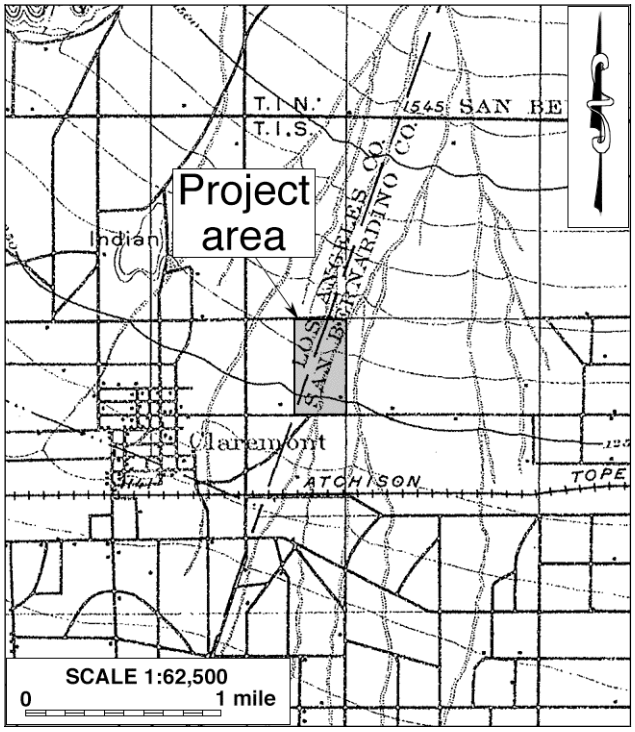

Figure 6. The project area and vicinity in 1894. (Source: USGS 1903)

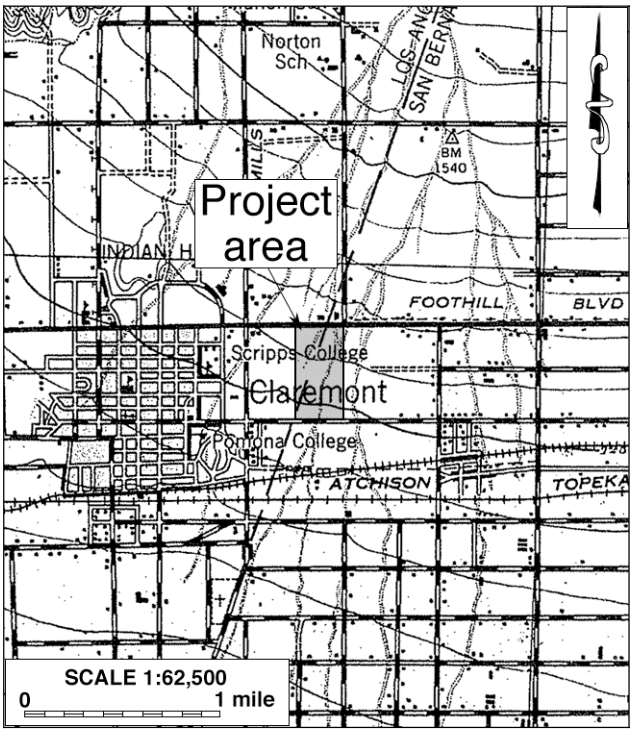

Figure 7. The project area and vicinity in 1939. (Source: USGS 1944)

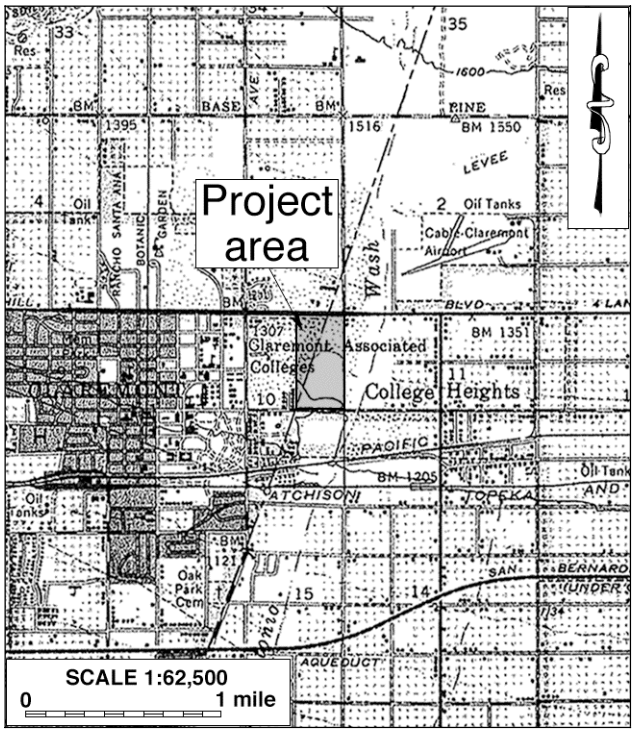

Figure 8. The project area and vicinity in 1952. (Source: USGS 1954)

structures, objects, sites, features, or artifacts more than 50 years of age were encountered during the field survey. Much of the property has been heavily disturbed by past operations of the gravel pit mentioned above. Modern trash was found scattered over much of the pit as well as in other parts of the project area.

DISCUSSION

The purpose of this study is to identify any cultural resources within or immediately adjacent to the project area, and to assist the Cities of Claremont and Upland in determining whether such resources meet the official definition of "historical resources," as provided in the California Public Resources Code, in particular CEQA.

According to PRC §5020.1(j), "'historical resource' includes, but is not limited to, any object, building, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California." More specifically, CEQA guidelines state that the term "historical resources" applies to any such resources listed in or determined to be eligible for listing in the California Register of Historical Resources, included in a local register of historical resources, or determined to be historically significant by the Lead Agency (Title 14 CCR §15064.5(a)(1)-(3)).

Regarding the proper criteria for the evaluation of historical significance, CEQA guidelines mandate that "a resource shall be considered by the lead agency to be 'historically significant' if the resource meets the criteria for listing on the California Register of Historical Resources" (Title 14 CCR §15064.5(a)(3)). A resource may be listed in the California Register if it meets any of the following criteria:

(1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
(2) Is associated with the lives of persons important in our past.
(3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
(4) Has yielded, or may be likely to yield, information important in prehistory or history. (PRC §5024.1(c))

As discussed above, all research procedures conducted during this study have produced negative results, and no potential "historical resources" were encountered throughout the course of the study. Based on these findings, and in light of the criteria listed above, the present report concludes that *no historical resources exist within or adjacent to the project area*.

RECOMMENDATIONS

CEQA establishes that "a project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment" (PRC §21084.1). "Substantial adverse change," according to PRC §5020.1(q), "means demolition, destruction, relocation, or alteration such that the significance of a historical resource would be impaired."

Since no "historical resources" were encountered during the course of this study, CRM TECH presents the following recommendations to the Cities of Claremont and Upland:

- No historical resources exist within or immediately adjacent to the project area, and thus the project as currently proposed will not cause a substantial adverse change to any known historical resources.
- No further cultural resources investigation is necessary for the proposed project unless development plans undergo such changes as to include areas not covered by this study.
- If buried cultural materials are discovered during any earth-moving operations associated with the project, all work in that area should be halted or diverted until a qualified archaeologist can evaluate the nature and significance of the finds.

CONCLUSION

The foregoing report has provided background information on the project area, outlined the methods used in the current study, and presented the results of the various avenues of research. Throughout the course of the study, no "historical resources," as defined by CEQA, were encountered within or immediately adjacent to the project area. Therefore, the Cities of Claremont and Upland may reach a finding of *No Impact* regarding cultural resources, with the condition that any buried cultural materials unearthed during earth-moving activities be examined and evaluated by a qualified archaeologist prior to further disturbances.

REFERENCES

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1978a Gabrielino. In *Handbook of North American Indians*, Vol. 8: *California*, edited by Robert F. Heizer, pp. 538-549. Smithsonian Institution, Washington, D.C.

1978b Serrano. In *Handbook of North American Indians*, Vol. 8: *California*, edited by Robert F. Heizer, pp. 570-574. Smithsonian Institution, Washington, D.C.

Geomatrix Consultants, Inc.

2004 Phase I Environmental Site Assessment: Pit Property, Claremont, California. On file, Geomatrix Consultants, Inc., Costa Mesa, California.

GLO (General Land Office, U.S. Department of the Interior)

1865 Plat Map: Township No. 1 South Range No. 8 West, San Bernardino Meridian; surveyed in 1852-1865.

1875 Plat Map: Township No. 1 South Range No. 8 West, San Bernardino Meridian; surveyed in 1852-1874.

USGS (United States Geological Survey, U.S. Department of the Interior)

1903 Map: Cucamonga, Calif. (15', 1:62,500); surveyed in 1894.

1944 Map: Cucamonga, Calif. (15’, 1:62,500);. aerial photographs taken in 1939.

1954 Map: Ontario, Calif. (15', 1:62,500); aerial photographs taken in 1952.

1969 Map: San Bernardino, Calif. (1:250,000); 1958 edition revised.

1979 Map: Santa Ana, Calif. (1:250,000); 1959 edition revised.

1981 Map: Ontario, Calif. (7.5', 1:24,000); 1967 edition photorevised in 1981.

APPENDIX 1:
PERSONNEL QUALIFICATIONS

PRINCIPAL INVESTIGATOR/HISTORIAN
Bai "Tom" Tang, M.A.

Education

1988-1993	Graduate Program in Public History/Historic Preservation, UC Riverside.
1987	M.A., American History, Yale University, New Haven, Connecticut.
1982	B.A., History, Northwestern University, Xi'an, China.
2000	"Introduction to Section 106 Review," presented by the Advisory Council on Historic Preservation and the University of Nevada, Reno.
1994	"Assessing the Significance of Historic Archaeological Sites," presented by the Historic Preservation Program, University of Nevada, Reno.

Professional Experience

2002-	Principal Investigator, CRM TECH, Riverside, California.
1993-2002	Project Historian/Architectural Historian, CRM TECH, Riverside, California.
1993-1997	Project Historian, Greenwood and Associates, Pacific Palisades, California.
1991-1993	Project Historian, Archaeological Research Unit, UC Riverside.
1990	Intern Researcher, California State Office of Historic Preservation, Sacramento.
1990-1992	Teaching Assistant, History of Modern World, UC Riverside.
1988-1993	Research Assistant, American Social History, UC Riverside.
1985-1988	Research Assistant, Modern Chinese History, Yale University.
1985-1986	Teaching Assistant, Modern Chinese History, Yale University.
1982-1985	Lecturer, History, Xi'an Foreign Languages Institute, Xi'an, China.

Honors and Awards

1988-1990	University of California Graduate Fellowship, UC Riverside.
1985-1987	Yale University Fellowship, Yale University Graduate School.
1980, 1981	President's Honor List, Northwestern University, Xi'an, China.

Cultural Resources Management Reports

Preliminary Analyses and Recommendations Regarding California's Cultural Resources Inventory System (With Special Reference to Condition 14 of NPS 1990 Program Review Report). California State Office of Historic Preservation working paper, Sacramento, September 1990.

Numerous cultural resources management reports with the Archaeological Research Unit, Greenwood and Associates, and CRM TECH, since October 1991.

Membership

California Preservation Foundation.

PRINCIPAL INVESTIGATOR/ARCHAEOLOGIST
Michael Hogan, Ph.D., RPA*

Education

1991	Ph.D., Anthropology, University of California, Riverside.
1981	B.S., Anthropology, University of California, Riverside; with honors.
1980-1981	Education Abroad Program, Lima, Peru.

2002	Section 106—National Historic Preservation Act: Federal Law at the Local Level. UCLA Extension Course #888.
2002	"Recognizing Historic Artifacts," workshop presented by Richard Norwood, Historical Archaeologist.
2002	"Wending Your Way through the Regulatory Maze," symposium presented by the Association of Environmental Professionals.
1992	"Southern California Ceramics Workshop," presented by Jerry Schaefer.
1992	"Historic Artifact Workshop," presented by Anne Duffield-Stoll.

Professional Experience

2002-	Principal Investigator, CRM TECH, Riverside, California.
1999-2002	Project Archaeologist/Field Director, CRM TECH, Riverside.
1996-1998	Project Director and Ethnographer, Statistical Research, Inc., Redlands.
1992-1998	Assistant Research Anthropologist, University of California, Riverside
1992-1995	Project Director, Archaeological Research Unit, U. C. Riverside.
1993-1994	Adjunct Professor, Riverside Community College, Mt. San Jacinto College, U.C. Riverside, Chapman University, and San Bernardino Valley College.
1991-1992	Crew Chief, Archaeological Research Unit, U. C. Riverside.
1984-1998	Archaeological Technician, Field Director, and Project Director for various southern California cultural resources management firms.

Research Interests

Cultural Resource Management, Southern Californian Archaeology, Settlement and Exchange Patterns, Specialization and Stratification, Culture Change, Native American Culture, Cultural Diversity.

Cultural Resources Management Reports

Author and co-author of, contributor to, and principal investigator for numerous cultural resources management study reports since 1986.

Memberships

* Register of Professional Archaeologists.
Society for American Archaeology.
Society for California Archaeology.
Pacific Coast Archaeological Society.
Coachella Valley Archaeological Society.

PROJECT ARCHAEOLOGIST/REPORT WRITER
Mariam Dahdul, M.A.

Education

2002 M.A., Anthropology, California State University, Fullerton.
1993 B.A., Geography, California State University, Fullerton.

2003 "Ceramics Analysis," graduate seminar presented by Dr. Delaney-Rivera, California State University, Fullerton.
2002 "Section 106-National Historic Preservation Act: Federal Law at the Local Level," presented by UCLA Extension.
2002 "Historic Archaeology Workshop," presented by Richard H. Norwood, Base Archaeologist, Edwards Air Force Base.

Professional Experience

2000- Project Archaeologist, CRM TECH, Riverside.
- Preparing cultural resources management reports, maps, and site records;
- Analyzing beads, ornaments, and shell;
- Conducting archaeological field surveys;
- Participating in various archaeological testing and mitigation programs.

Laboratory and Field Experience

2001 Archaeological field school under the direction of Dr. Brian Byrd.
- Test excavations of sites at the San Elijo Lagoon Reserve, including flotation of soil samples and sorting and cataloguing of artifacts.

2000 Archaeological field class under the direction of Dr. Claude Warren.
- Excavated units at Soda Lake in the Mojave Desert and produced lake bottom stratigraphic profiles.

1999-2000 Archaeology Laboratory, CSU, Fullerton.
- Assisted in the cataloguing of artifacts.

1999 Field survey course under the direction of Dr. Phyllisa Eisentraut.
- Surveyed and mapped prehistoric site in the Mojave Desert.

Papers Presented

2002 "Shell Beads from the Coachella Valley," Sixth Annual Symposium of the Coachella Valley Archaeological Society.
2002 "Shell Beads from the Coachella Valley," Kelso Conference on the Archaeology of the California and Mojave Deserts.

Cultural Resources Management Reports

Co-author of and contributor to numerous cultural resources management study reports since 2000.

PROJECT ARCHAEOLOGIST/FIELD DIRECTOR
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Education

1998 B.A., Anthropology, California State University, San Bernardino.
1997 Archaeological Field School, University of Las Vegas and University of California, Riverside.
1994 University of Puerto Rico, Rio Piedras, Puerto Rico.

2002 "Historic Archaeology Workshop," presented by Richard Norwood, Base Archaeologist, Edwards Air Force Base; presented at CRM TECH, Riverside.

Professional Experience

2002- Field Director, CRM TECH, Riverside.
- Report writing, site record preparation, and supervisory responsibilities over all aspects of fieldwork and field crew.

1999-2002 Project Archaeologist, CRM TECH, Riverside.
- Survey, testing, data recovery, monitoring, and mapping.

1998-1999 Field Crew, K.E.A. Environmental, San Diego.
- Two and a half months of excavations on Topomai village site, Marine Corp Air Station, Camp Pendleton.

1998 Field Crew, A.S.M. Affiliates, Encinitas.
- Two weeks of excavations on a site on Red Beach, Camp Pendleton, and two weeks of survey in Camp Pendleton, Otay Mesa, and Encinitas.

1998 Field Crew, Archaeological Research Unit, University of California, Riverside.
- Two weeks of survey in Anza Borrego Desert State Park and Eureka Valley, Death Valley National Park.

PROJECT ARCHAEOLOGIST
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Education

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Professional Experience

2004- Project Archaeologist, CRM TECH, Riverside.
- Surveys, excavations, mapping, and records searches.

Honors and Awards

2000-2002 Dean's Honors List, University of California, Riverside.

HISTORIAN
Terri Jacquemain, M.A.

Education

2004 M.A., Public History and Historic Resource Management, University of California, Riverside.
2002 B.S., Anthropology, University of California, Riverside.

Professional Experience

2003- Historian/Report Writer, CRM TECH, Riverside.
Writer/co-author of cultural resource reports for CEQA and NHPA Section 106 compliance
Historic context development, building surveys and recordation, historical research based on published literature, historic maps, oral interviews, county and city archival records, internet sources, and consultation with local historical societies
Primary and archival research in Riverside, San Bernardino, San Diego, Orange, Los Angeles, Imperial, Kern, and Contra Costa counties
Architectural history and Description

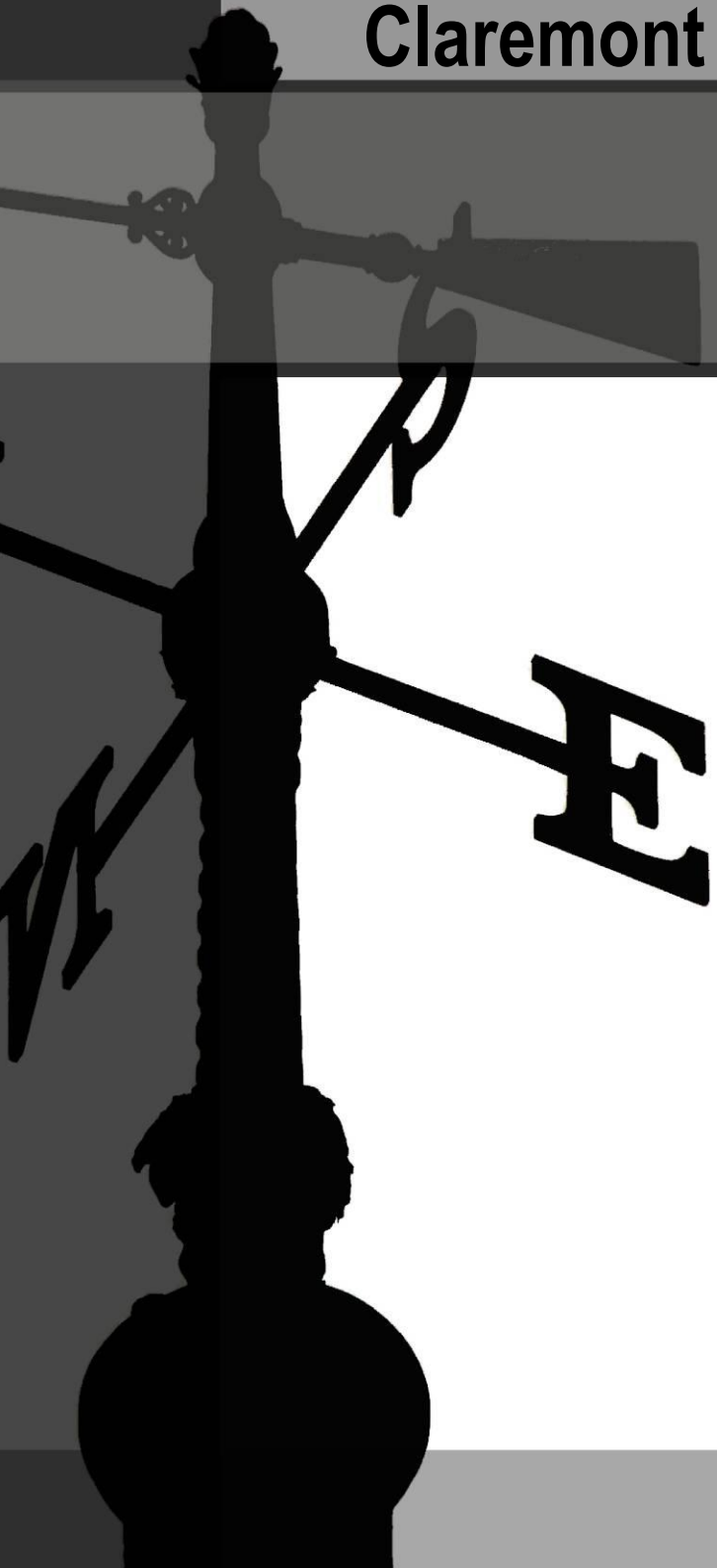
2002-2003 Teaching Assistant, Religious Studies Department, University of California, Riverside.
1997-1999 Reporter, *Inland Valley Daily Bulletin*, Ontario, California.
1991-1997 Reporter, *The Press-Enterprise*, Riverside.

Memberships

California Council for the Promotion of History.
Friends of Public History, University of California Riverside.

APPENDIX C

Air Quality Analysis



Claremont Colleges East Campus

Air Quality & Climate Change Assessment

November 2014 (13346)

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Claremont Colleges East Campus

Air Quality & Climate Change Assessment

November 2014

Cities of Claremont and Upland
Los Angeles and San Bernardino Counties

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Appendices

Appendix A CalEEMod Output

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Construction-related and operational emissions of criteria pollutants were modeled and analyzed for the proposed project located on the Claremont Colleges East Campus property in the Cities of Upland and Claremont. This report also analyzes the proposed project's consistency with the South Coast Air Quality Management District (SCAQMD) 2012 Air Quality Management Plan (AQMP) for the South Coast Air Basin. Cumulative impacts were analyzed using the methodology provided by the 1993 SCAQMD California Environmental Quality Act (CEQA) Air Quality Handbook. The results of this report find that the thresholds established by SCAQMD for volume and receptor-specific criteria pollutant emissions and toxic air contaminants will not be exceeded.

Additionally, this report models and analyzes construction-related and operational emissions of greenhouse gases from the proposed project. This analysis utilizes guidance provided in the California Air Pollution Control Officers Association (CAPCOA) *CEQA and Climate Change* white paper and the *Quantifying Greenhouse Gas Mitigation Measures* handbook. Modeling of emissions utilizes the California Emissions Estimator Model (CalEEMod) v 2013.2.2. The results of this report find that the interim threshold established by the South Coast Air Quality Management District for greenhouse gas emissions will not be exceeded.

Project Description

The proposed project includes the subdivision of three existing parcels totaling 74.44 acres. One parcel within the City of Upland will be subdivided into six parcels and two parcels in the City of Claremont will be subdivided into three parcels. In addition, improvements to Claremont Boulevard, Foothill Boulevard, Monte Vista Avenue, and Arrow Route are proposed.

MASTER SITE PLAN, CITY OF UPLAND

A Master Site Plan has been prepared to guide site development within the City of Upland over a 10-15 year timeframe. The Master Plan identifies the locations of proposed sports fields, activity areas, and ancillary buildings and structures. The baseball field, softball field, football/track field, and archery range would be relocation sites for replaced facilities as proposed in the Claremont-McKenna Colleges (CMC) Master Plan. The Argentinean paddle tennis court and all-purpose athletic fields (in conjunction with the City of Claremont Site Plan) would be new sports facilities along with proposed ancillary facilities.

SITE PLAN, CITY OF CLAREMONT

A Site Plan has been prepared to guide site development within the City of Claremont over a 10-15 year timeframe. The Site Plan identifies the locations of proposed parking areas, sports fields, activity areas, and ancillary buildings and structures. The proposed multi-purpose fields, volleyball courts, and basketball courts are replacement facilities that were previously removed from the Pitzer College campus to accommodate new student housing. The golf practice area and all-purpose athletic fields (in conjunction with the City of Upland Master Site Plan) would be new sports facilities along with the proposed ancillary facilities.

Air Quality

The proposed project will not result in substantial emissions of oxides of nitrogen, volatile organic compounds, or particulate matter and would not exceed the regional growth assumptions used in the Air Quality Management Plan (AQMP) with mitigation incorporated. The proposed project will not individually cause or cumulatively contribute to an air quality standard violation. Toxics emissions, carbon monoxide, and localized criteria pollutants will not substantially impact sensitive receptors in vicinity of the proposed project. The proposed project will not expose a substantial number of people to odors.

Climate Change

Greenhouse gas emissions will not exceed interim SCAQMD threshold and will not conflict with local or state greenhouse gas emissions strategies.

Mitigation Measures

AQ-1 Before the City issues building permits, the permittee must submit, to the satisfaction of the Director of Community and Economic Development, or designee, a Coating Restriction Plan (CRP), consistent with South Coast Air Quality Management District (SCAQMD) guidelines and a letter agreeing to include in any construction contracts and/or subcontracts a requirement that the contractors adhere to the requirements of the CRP. The CRP measures must be implemented to the satisfaction of the Director of Community and Economic Development, or designee. These may include the following:

- The volatile organic compounds (VOC) of proposed architectural coatings cannot exceed 100 g/l for non residential interior and exterior applications.

This measure shall conform to the performance standard that emissions of volatile organic compounds from application of interior or exterior coatings shall not exceed the daily emissions thresholds established by the South Coast Air Quality Management District.

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This report models and analyzes construction-related and operational emissions of criteria air pollutants, toxic air contaminants, and greenhouse gas emissions from the proposed project. The proposed project includes the relocation of a baseball field, softball field, football/track field, archery range, multi-purpose fields, volleyball courts, and basketball courts to the project site and the development of new Argentinean paddle tennis fields, all-purpose athletic fields, and golf practice areas. The project also includes improvements to Claremont Boulevard, Foothill Boulevard, Monte Vista Avenue, and Arrow Route.

The air quality analysis provided herein utilizes guidance provided in the South Coast Air Quality Management District (SCAQMD) the 1993 California Environmental Quality Act (CEQA) Air Quality handbook as amended and supplemented (http://www.aqmd.gov/ceqa/hdbk.html). Modeling of emissions utilizes the following software and guidelines:

- California Emissions Estimator Model (CalEEMod) v 2013.2.2
- California Department of Transportation (Caltrans) *Carbon Monoxide Protocol*

The climate change analysis provided herein utilizes guidance provided in the California Air Pollution Control Officers Association (CAPCOA) *CEQA and Climate Change* white paper and the *Quantifying Greenhouse Gas Mitigation Measures* handbook. Modeling of greenhouse gas emissions utilizes the California Emissions Estimator Model (CalEEMod) v 2013.2.2.

This report has been prepared utilizing project-specific characteristics where available. In those instances where project-specific data is not available, the analysis has been supplemented by established model default values or other standardized sources of comparable data. In any case where non-project defaults or other data have been used, a "worst-case" scenario was developed to ensure a conservative estimate of emissions.

This report has been prepared for use by the Lead Agency to assess potential project-related air quality impacts in compliance with the State CEQA Statutes and Guidelines, particularly in respect to the air quality issues identified in Appendix G of the State CEQA Guidelines. This report suggests significance thresholds pursuant to published data for review and consideration by the Lead Agency that is responsible for making determinations of significance pursuant to CEQA.

This document has been reviewed in accordance with the *Table 7-2, Checklist for an Air Quality Analysis Section* of the SCAQMD Air Quality Handbook for quality control purposes.

This report was prepared by Christopher Brown (Director of Environmental Services) and Olivia Chan (Project Associate) of MIG | Hogle-Ireland, Inc. under contract by Claremont University Consortium.

Christopher Brown
Director of Environmental Services

Olivia Chan
Project Associate

Climate

The proposed project is located in the City of Claremont, Los Angeles County and the City of Upland, County of San Bernardino, California. The broader Los Angeles Basin is defined by a Mediterranean climate with dry summers and rainy winters. Annual rainfall averages 18.67 inches with the rainy season occurring during the winter.[1] The coolest month of the year is December with an average monthly low of 41.2° Fahrenheit (F). The warmest month is July with an average monthly high of 88.5° F. The annual average maximum temperature is 74.4° F and the annual average minimum temperature is 49.6° F.

Regional Air Quality

The proposed project is located within the South Coast Air Basin (Basin).[2] The basin includes Orange County and the non-desert portions of Los Angeles, San Bernardino, and Riverside Counties. The San Gabriel, San Bernardino, and San Jacinto Mountains bound the Basin to the north and east that trap ambient air and pollutants within the Los Angeles and Inland Empire valleys below. The South Coast Air Quality Management District (SCAQMD) manages the Basin. Pursuant to the California Clean Air Act (CCAA), SCAQMD is responsible for bringing air quality within the Basin into conformity with federal and State air quality standards by reducing existing emission levels and ensuring that future emission levels meet applicable air quality standards. SCAQMD works with federal, State, and local agencies to reduce pollutant sources through the development of rules and regulations.

Both California and the federal government have established health-based ambient air quality standards (AAQS) for seven air pollutants (known as *criteria pollutants*). These pollutants include ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), inhalable particulate matter with a diameter of 10 microns or less (PM_{10}), fine particulate matter with a diameter of 2.5 microns or less ($PM_{2.5}$), and lead (Pb). The State has also established AAQS for the additional pollutants of visibility reducing particles, sulfates, hydrogen sulfide, and vinyl chloride. The AAQS are designed to protect the health and welfare of the populace within a reasonable margin of safety. Where the State and federal standards differ, State AAQS are more stringent than federal AAQS. Federal and State standards are shown in Table 1 (Ambient Air Quality Standards). A brief description of each criteria pollutant is provided below.

Ozone. Ozone is a pungent, colorless, and highly reactive gas that forms from the atmospheric reaction of organic gases with nitrogen oxides in the presence of sunlight. Ozone is most commonly associated with smog. Ozone precursors such as reactive organic gases (ROG) and oxides of nitrogen (NO_X) are released from mobile and stationary sources. Ozone is a respiratory irritant and can cause cardiovascular diseases, eye irritation, and impaired cardiopulmonary function. Ozone can also damage building materials and plant leafs.

Carbon Monoxide. Carbon monoxide is primarily emitted from vehicles due to the incomplete combustion of fuels. Carbon monoxide has wide ranging impacts on human health because it combines with hemoglobin in the body and reduces the amount of oxygen transported in the bloodstream. Carbon monoxide can result in reduced tolerance for exercise, impairment of mental function, impairment of fetal development, headaches, nausea, and death at high levels of exposure.

Nitrogen Dioxide. Nitrogen dioxide and other oxides of nitrogen (NO_X) contribute to the formation of smog and results in the brownish haze associated with it. They are primarily emitted from motor vehicle exhaust but can be omitted from other high-temperature stationary sources. Nitrogen oxides can aggravate respiratory illnesses, reduce visibility, impair plant growth, and form acid rain.

Particulate Matter. Particulate matter is a complex mixture of small-suspended particles and liquid droplets in the air. Particulate matter between ten microns and 2.5 microns is known as PM_{10}, also known as coarse or inhalable particulate matter. PM_{10} is emitted from diverse sources including road dust, diesel soot, combustion products, abrasion of tires and brakes, construction operations, and windstorms. PM_{10} can also be formed secondarily in the atmosphere when NO_2 and SO_2 react with ammonia. Particulate matter less than 2.5 microns in size are called $PM_{2.5}$ or fine particulate matter. $PM_{2.5}$ is

primarily emitted from point sources such as power plants, industrial facilities, automobiles, wood-burning fireplaces, and construction sites. Particulate matter is deposited in the lungs and cause permanent lung damage, potentially resulting in lung disease and respiratory symptoms like asthma and bronchitis. Particulate matter has also been linked to cardiovascular problems such as arrhythmia and heart attacks. Particulate matter can also interfere with the body's ability to clear the respiratory tract and can act as a carrier of absorbed toxic substances. Particulate matter causes welfare issues because it scatters light and reduces visibility, causes environmental damage such as increasing the acidity of lakes and streams, and can stain and damage stone, such as that applied in statues and monuments.

Sulfur Dioxide. Sulfur dioxide and other oxides of sulfur (SO_X) are reactive gases emitted from the burning of fossil fuels, primarily from power plants and other industrial facilities.[3] Other less impacting sources include metal extraction activities, locomotives, large ships, and off-road equipment. Human health impacts associated with SO_X emissions include bronchoconstriction and increased asthma symptoms.

Lead. Lead is primarily emitted from metal processing facilities (i.e. secondary lead smelters) and other sources such as manufacturers of batteries, paints, ink, ceramics, and ammunition. Historically, automobiles were the primary sources before lead was phased out of gasoline. The health effects of exposure to lead include gastrointestinal disturbances, anemia, kidney diseases, and potential neuromuscular and neurologic dysfunction. Lead is also classified as a probable human carcinogen.

Table 1
Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[1]		National Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secontary[3,6]	Method[7]
Ozone (O_3)	1 Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	-	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.07 ppm (137 µg/m^3)		0.075 ppm (147 µg/m^3)		
Respirable Particulate Matter (PM_{10}) [8]	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		-		
Fine Particulate Matter($PM_{2.5}$) [8]	24 Hour	-	-	35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	12 µg/m^3	15 µg/m^3	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/ m^3)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m^3)	-	Non-Dispersive Infrared Photometry (NDIR) -
	8 Hour	9.0 ppm (10mg/m^3)		9 ppm (10 mg/m^3)	-	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/ m^3)		-	-	
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	0.03 ppm (57 µg/m^3)	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m^3)	Same as Primary Standard	Gas Phase Chemiluminescence
	1 Hour	0.18 ppm (339 µg/m^3)		100 ppb (188 µg/m^3)	-	
Sulfur Dioxide (SO_2)	1 Hour	0.25 ppm (655 µg/m^3)	Ultraviolet Fluorescence	75 ppb (196 µg/m^3)	-	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method) -
	3 Hour	-		-	0.5 ppm (1,300 µg/m^3)	
	24 Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (for certain areas)[10]	-	
	Annual Arithmetic Mean	-		0.030 ppm (for certain areas)[10]	-	
Lead[11,12]	30 Day Average	1.5 µg/m^3	Atomic Absorption	-	-	High Volume Sampler and Atomic Absorption
	Calendar Quarter	-		1.5 µg/m^3 (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average[10]	-		0.15 µg/m^3		
Visibility Reducing Particles[13]	8 Hour	See footnote 13	Beta Attenuation and Transmittance through Filter Tape	No Federal Standards		
Sulfates	24 Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[11]	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

Source: ARB, June 2013

PPM, parts per million
µg/m3, micrograms per cubic meter

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), and particulate matter (PM_{10}, $PM_{2.5}$, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m^3 is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal

to or less than the standard. Contact U.S. EPA for further clarification and current national policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the EPA.
8. On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 µg/m^3 to 12.0 µg/m^3. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 µg/m^3, as was the annual secondary standard of 15 µg/m^3. The existing 24-hour PM_{10} standards (primary and secondary) of 150 µg/m^3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
9. To attain the 1-hour national standard, the 3-year average of the 98th percentile of the daily maximum 1-hour daily maximum concentrations at each site must not exceed 100ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national standards to the California standards the units can be converted from ppb to ppm. In this case, the national standards of 100ppb is identical to 0.100ppm.
10. On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
11. The ARB has identified lead and vinyl chloride as "toxic air contaminants" with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
11. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 µg/m^3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
12. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Non-Attainment Status

Air pollution levels are measured at monitoring stations located throughout the Basin. Areas that are in nonattainment with respect to criteria pollutants are required to prepare plans and implement measures that will bring the region into attainment. Table 2 (South Coast Air Basin Attainment Status) summarizes the attainment status in the non-desert portion of the Basin for the criteria pollutants.[4] The non-desert portion of the Basin is currently in nonattainment status for ozone, inhalable and fine particulate matter, nitrogen dioxide, and lead.

Pollution problems in the Basin are caused by emissions within the area and the specific meteorology that promotes pollutant concentrations. Emissions sources vary widely from smaller sources such as individual residential water heaters and short-term grading activities to extensive operational sources including long-term operation of electrical power plants and other intense industrial uses. Pollutants in the Basin are blown inward from coastal areas by sea breezes from the Pacific Ocean and are prevented from horizontally dispersing due to the surrounding mountains. This is further complicated by atmospheric temperature inversions that create inversion layers. The inversion layer in Southern California refers to the warm layer of air that lies over the cooler air from the Pacific Ocean. This is strongest in the summer and prevents ozone and other pollutants from dispersing upward. A ground-level surface inversion commonly occurs during winter nights and traps carbon monoxide emitted during the morning rush hour.

Table 2
South Coast Air Basin Attainment Status

Pollutant	Federal	State
O_3 (1-hr)	--	Nonattainment
O_3 (8-hr)	Nonattainment	Nonattainment
PM_{10}	Attainment	Nonattainment
$PM_{2.5}$	Nonattainment	Nonattainment
CO	Attainment	Attainment
NO_2	Attainment	Nonattainment
SO_2	Attainment	Attainment
Pb	Nonattainment	Nonattainment
VRP	--	Unclassified
SO_4	--	Attainment
H_2S	--	Unclassified
Sources: ARB 2014		

Local Air Quality

The project site is located within the South Coast Air Basin (SCAB), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The northwestern portion of the project site is located in the City of Claremont, the Pomona/Walnut Valley monitoring area (SRA 10), and the southeastern portion of the project site is located in the City of Upland, the Northwest San Bernardino Valley monitoring area (SRA 32). The air quality in SRA 10 is monitored at Station 75 and SRA 32 is monitored at Station 5175. Air monitoring results for SRA 10 and SRA 32 over the last three years of available data are summarized in Table 3 (2011-2013 Local Air Quality).[5] [6] [7] Note that SO_2, PM_{10}, $PM_{2.5}$, TSP, Pb, and SO_4 are not measured at Station 10 and SO_2, PM_{10}, and $PM_{2.5}$ are not measured at Station 32. In addition, CO 1-hour maximum concentration and SO_4 was not measured at Station 10 or Station 32 for all three years. The maximum quarterly average for Pb was not measured for Station 10. Table 4 (2011-2013 Air Quality Standards Exceedance) summarizes the number of days for each monitoring year that air quality standards were exceeded for each monitoring area. Based on the 2011-2013 air quality monitoring data, the Pomona/Walnut Valley area exceeds State 8-hour ozone standards for up to 28 day and the Northwest San Bernardino Valley area exceeds State 8-hour ozone standards for up to 66 days a year.

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Table 3
2011-2013 Local Air Quality

Year	CO (PPM)		O_3 (PPM)		NO_2 (ppb)		SO_2 (ppb)		PM_{10} (µg/m^3)		$PM_{2.5}$ (µg/m^3)		TSP (µg/m^3)		Pb (µg/m^3)		SO_4 (µg/m^3)
	Max 1-hr	Max 8-hr	Max 1-hr	Max 8-hr	Max 1-hr	AAM	Max 1-hr	Max 24-hr	Max 24-hr	AAM	Max 24-hr	AAM	Max 24-hr	AAM	Max Month	Max Qtr	Max 24-hr
SRA 10 Pomona/Walnut Valley																	
2013*	--	1.6	0.125	0.099	78.8	22.5	--	--	--	--	--	--	--	--	--	--	--
2012	--	1.5	0.117	0.092	81.6	21.4	--	--	--	--	--	--	--	--	--	--	--
2011	--	1.6	0.119	0.096	87.3	24.6	--	--	--	--	--	--	--	--	--	--	--
SRA 32 Northwest San Bernardino Valley																	
2013*	--	1.7	0.143	0.111	62.1	17.7	--	--	--	--	--	--	--	--	0.008	0.006	--
2012	--	1.1	0.136	0.111	66.7	19.5	--	--	--	--	--	--	106	43.4	0.007	0.006	--
2011	--	1.3	0.145	0.122	68.5	19.6	--	--	--	--	--	--	94	47.2	0.009	0.007	--

Source: SCAQMD 2011-2013

** Draft Air Quality Data*
-- pollutant not monitored
ppm, parts per million
ppb, parts per billion
µg/m^3, micrograms per cubic meter
AAM, annual arithmetic mean

Table 4
2011-2013 Air Quality Standards Exceedance

Year	O_3 (PPM)			PM_{10} (µg/m^3)		$PM_{2.5}$ (µg/m^3)
	Fed* 8-hr	State 1-hr	State 8-hr	Fed 24-hr	State 24-hr	Fed^ 24-hr
SRA 10 Pomona/Walnut Valley						
2013*	15	12	22	--	--	--
2012	15	21	28	--	--	--
2011	16	15	24	--	--	--
SRA 32 Northwest San Bernardino Valley						
2013*	27	25	44	--	--	--
2012	45	42	66	--	--	--
2011	36	36	45	--	--	--

Source: SCAQMD 2011-2013

*Draft Air Quality Data
-- pollutant not monitored
* 0.075 ppm
^35 µg/m^3

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Sensitive Receptors

Some populations are more susceptible to the effects of air pollution than the population at large. These susceptible populations are defined as sensitive receptors. Sensitive receptors include children, the elderly, the sick, and the athletic. Land uses associated with sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities (including hospitals), rehabilitation centers, convalescent centers, and retirement homes. Pollutants of particular concern to sensitive receptors include carbon monoxide, toxic air contaminants, and odors. Specific sensitive receptors within one-quarter mile of the project site include The Children's School at Claremont McKenna College located at the northwest corner of Claremont Boulevard and Arrow Route and residential use to the south and northwest of the project site.

Toxic Emission Sources

Toxic air contaminants (TACs) refer to a diverse group of "non-criteria" air pollutants that can affect human health, but do not have established ambient air quality standards. TACs are classified as carcinogenic and noncarcinogenic, where carcinogenic TACs can cause cancer and noncarcinogenic TACs can cause acute and chronic impacts to different target organ systems (e.g., eyes, respiratory, reproductive, developmental, nervous, and cardiovascular). Diesel Particulate Matter (DPM), which is emitted in the exhaust from diesel engines, was listed by the State as a TAC in 1998. DPM has historically been used as a surrogate measure of exposure for all diesel exhaust emissions. DPM consists of fine particles (fine particles have a diameter less than 2.5 µm), including a subgroup of ultrafine particles (ultrafine particles have a diameter less than 0.1 µm). Collectively, these particles have a large surface area which makes them an excellent medium for absorbing organics. The visible emissions in diesel exhaust include carbon particles or "soot." Diesel exhaust also contains a variety of harmful gases and cancer-causing substances. Exposure to DPM may be a health hazard, particularly to children whose lungs are still developing and the elderly who may have other serious health problems. DPM levels and resultant potential health effects may be higher in close proximity to heavily traveled roadways with substantial truck traffic or near industrial facilities.

According to the EPA and California Air Resources Board (CARB), there is one source of industrial- or utility-related toxic emissions uses within one-quarter mile of the project site.[8] Holliday Rock, located at 2193 W. Foothill Boulevard, is a construction sand and gravel mining facility with the latest release recorded in 2012. The proposed project does not contain equipment or otherwise attract mobile sources (such as high volume trucks) that could emit high levels of DPM.

Local Transportation

The proposed project is generally bound by Foothill Boulevard on the north, Arrow Route on the south, Monte Vista Avenue on the east, and Claremont Boulevard on the west. Under existing weekday traffic conditions, Indian Hill Boulevard at Foothill Boulevard operates at LOS F during the PM peak hour and SR-210 freeway ramps at Baseline Road operates at LOS F during the AM peak hour. Under existing weekend traffic conditions, the intersections carried over for weekend analysis operate at acceptable levels of services.

Odors

According to the CEQA Air Quality Handbook, land uses associated with odor complains include agricultural operations, wastewater treatment plants, landfills, and certain industrial operations (such as manufacturing uses that produce chemicals, paper, etc.). The proposed project is not a use generally associated with substantial odors.

Climate Change

DEFINING CLIMATE CHANGE

Climate change is the distinct change in measures of climate for a long period of time. Climate change can result from natural processes and from human activities. Natural changes in the climate can be caused by indirect processes such as changes in

the Earth's orbit around the Sun or direct changes within the climate system itself (i.e. changes in ocean circulation). Human activities can affect the atmosphere through emissions of gases and changes to the planet's surface. Emissions affect the atmosphere directly by changing its chemical composition, while changes to the land surface indirectly affects the atmosphere by changing the way the Earth absorbs gases from the atmosphere. The term "climate change" is preferred over the term "global warming" because "climate change" conveys the fact that other changes can occur beyond just average increase in temperatures near the Earth's surface. Elements that indicate that climate change is occurring on Earth include:

- Rising of global surface temperatures by 1.3° Fahrenheit (F) over the last 100 years
- Changes in precipitation patterns
- Melting ice in the Arctic
- Melting glaciers throughout the world
- Rising ocean temperatures
- Acidification of oceans
- Range shifts in plant and animal species

Climate change is intimately tied to the Earth's greenhouse effect. The greenhouse effect is a natural occurrence that helps regulate the temperature of the planet. The majority of radiation from the Sun hits the Earth's surface and warms it. The surface in turn radiates heat back towards the atmosphere, known as infrared radiation. Gases and clouds in the atmosphere trap and prevent some of this heat from escaping back into space and re-radiate it in all directions. This process is essential to supporting life on Earth because it keeps the planet approximately 60° F warmer than without it. Emissions from human activities since the beginning of the industrial revolution (approximately 150 years) are adding to the natural greenhouse effect by increasing the gases in the atmosphere that trap heat, thereby contributing to an average increase in the Earth's temperature. Human activities that enhance the greenhouse effect are detailed below.

Greenhouse Gases

The greenhouse effect is caused by a variety of "greenhouse gases". Greenhouse gases (GHGs) occur naturally and from human activities. Greenhouse gases produced by human activities include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Since the year 1750, it is estimated that the concentrations of carbon dioxide, methane, and nitrous oxide in the atmosphere have increased over 36 percent, 148 percent, and 18 percent, respectively, primarily due to human activity. The primary GHGs are discussed below.[9]

Carbon Dioxide. CO_2 is emitted and removed from the atmosphere naturally. Animal and plant respiration involves the release of carbon dioxide from animals and its absorption by plants in a continuous cycle. The ocean-atmosphere exchange results in the absorption and release of CO_2 at the sea surface. Carbon dioxide is also released from plants during wildfires. Volcanic eruptions release a small amount of CO_2 from the Earth's crust.

Human activities that affect carbon dioxide in the atmosphere include burning of fossil fuels, industrial processes, and product uses. Combustion of fossil fuels is the largest source of carbon dioxide emissions in the United States, accounting for approximately 85 percent of all equivalent emissions. Because of the fossil fuels used, the largest of these sources is electricity generation and transportation. When fossil fuels are burned, the carbon stored in them is released into the atmosphere entirely as CO_2. Emissions from onsite industrial activities also emit carbon dioxide such as cement, metal, and chemical production and use of petroleum produced in plastics, solvents, and lubricants.

Methane. Methane (CH_4) is emitted from human activities and natural sources. Natural sources of methane include wetlands, gas hydrates, permafrost, termites, oceans, freshwater bodies, soils, and wildfires. Human activities that cause methane releases include fossil fuel production, animal digestive processes from farms, manure management, and waste management. It is estimated that 50 percent of global methane emissions are human generated. Wetlands are the primary natural producers of methane in the world because the habitat is conducive to bacteria that produce methane during decomposition of organic material. Methane is produced from landfills as solid waste decomposes. Methane is a primary component of natural gas and is emitted during its production, processing, storage, transmission, distribution, and use. Decomposition of organic material in

manure stocks or in liquid manure management systems also releases methane. Releases from animal digestive processes are the primary source of human-related methane.

Nitrous Oxide. Anthropogenic (human) sources of nitrous oxide include agricultural soil management, animal manure management, sewage treatment, combustion of fossil fuels, and production of certain acids. N_2O is produced naturally in soil and water, especially in wet, tropical forests. The primary human-related source of N_2O is agricultural soil management due to use of synthetic nitrogen fertilizers and other techniques to boost nitrogen in soils. Combustion of fossil fuels (mobile and stationary) is the second leading source of nitrous oxide, although parts of the world where catalytic converters are used (such as California) have significantly lower levels than those areas that do not.

High Global Warming Potential Gases. High global warming potential (GWP) gases (or fluorinated gases) are entirely manmade and are mainly used in industrial processes. HFCs, PFCs, and SF_6 are high GWP gases. These types of gases are used in aluminum production, semiconductor manufacturing, electric power transmission, magnesium production and processing, and in the production of hydrochlorofuorocarbon-22 (HCFC-22). High GWP gases are also used as substitutes for ozone-depleting gases like chlorofluorocarbons (CFCs) and halons. Use of high GWP gases as substitutes for ozone-depleting substances is the primary use of these gases in the United States.

Water Vapor. It should be noted that water vapor is also a significant GHG in the atmosphere; however, concentration of water vapor in the air is primarily dependent on air temperature and cannot be influenced by humans.

GHGs behave differently in the atmosphere and contribute to climate change in different ways. Some gases have more potential to reflect infrared heat back towards the earth while some persist in the atmosphere longer than others. To equalize the contribution of GHGs to climate change, the Intergovernmental Panel on Climate Change (IPCC) devised a weighted metric to compare all greenhouse gases to carbon dioxide.[10] The weighting depends on the lifetime of the gas in the atmosphere and its radiative efficiency. As an example, over a time horizon of 100-years, emissions of nitrous oxide will contribute to climate change 298 times more than the same amount of emissions of carbon dioxide while emissions of HFC-23 would contribute 14,800 times more than the same amount of carbon dioxide. These differences define a gas's GWP. Table 5 (Global Warming Potential of Greenhouse Gases) identifies the lifetime and GWP of select GHGs. The lifetime of the GHG represents how many years the GHG will persist in the atmosphere. The GWP of the GHG represents the GHG's relative potential to induce climate change as compared to carbon dioxide.

Carbon Sequestration

Carbon sequestration is the process by which plants absorb CO_2 from the atmosphere and store it in biomass like leaves and grasses. Agricultural lands, forests, and grasslands can all sequester carbon dioxide, or emit it. The key is to determine if the land use is emitting carbon dioxide faster than it is absorbing it. Young, fast-growing trees are particularly good at absorbing more than they release and are known as a *sink*. Agricultural resources often end up being sources of carbon release because of soil management practices. Deforestation contributes to carbon dioxide emissions by removing trees, or carbon sinks, that would otherwise absorb CO_2. Forests are a crucial part of sequestration in some parts of the world, but not much in the United States. Another form of sequestration is geologic sequestration. This is a manmade process that results in the collection and transport of CO_2 from industrial emitters (i.e. power plants) and injecting it into underground reservoirs.

Table 5
Global Warming Potential (GWP) of Greenhouse Gases (GHG)

GHG	Lifetime (yrs)	GWP
Carbon Dioxide	50-200	1
Methane	12	25
Nitrous Oxide	114	298
HFC-23	270	14,800
HFC-134a	14	1,430
HFC-152a	1.4	124
PFC-14	50,000	7,390
PFC-116	10,000	12,200
Sulfur Hexafluoride	3,200	22,800
Source: IPCC 2007[11]		

CLIMATE CHANGE AND CALIFORNIA

Specific, anticipated impacts to California have been identified in the 2009 California Climate Adaptation Strategy prepared by the California Natural Resources Agency (CNRA) through extensive modeling efforts.[12] General climate changes in California indicate that:

- California is likely to get hotter and drier as climate change occurs with a reduction in winter snow, particularly in the Sierra Nevadas
- Some reduction in precipitation is likely by the middle of the century
- Sea-levels will rise up to an estimated 55 inches
- Extreme events such as heat waves, wildfires, droughts, and floods will increase
- Ecological shifts of habitat and animals are already occurring and will continue to occur

It should be noted that changes are based on the results of several models prepared under different climatic scenarios; therefore, discrepancies occur between the projections. The potential impacts of global climate change in California are detailed below.

Public Health and Welfare

Concerns related to public health and climate change includes higher rates of mortality and morbidity, change in prevalence and spread of disease vectors, decreases in food quality and security, reduced water availability, and increased exposure to pesticides. These concerns are all generally related to increase in ambient outdoor air temperature, particularly in summer.

Higher rates of mortality and morbidity could arise from more frequent heat waves at greater intensities. Health impacts associated with extreme heat events include heat stroke, heat exhaustion, and exacerbation of medical conditions such as cardiovascular and respiratory diseases, diabetes, nervous system disorders, emphysema, and epilepsy. Climate change would result in degradation of air quality promoting the formation of ground-level pollutants, particularly ozone. Degradation of air quality would increase the severity of health impacts from criteria and other air pollutants discussed in Section 4.3 (Air Quality). Temperature increases and increases in carbon dioxide are also expected to increase plant production of pollens, spores, and fungus. Pollens and spores could induce or aggravate allergic rhinitis, asthma, and obstructive pulmonary diseases.

Precipitation projections suggest that California will become drier over the next century due to reduced precipitation and increased evaporation from higher temperatures. These conditions could result in increased occurrences of drought. Surface water reductions will increase the need to pump groundwater, reducing supplies and increasing the potential for land subsidence.

Precipitation changes are also suspected to impact the Sierra snowpack (see "Water Management" herein). Earlier snow melts could coincide with the rainy season and could result in failure of the flood control devices in that region. Flooding can cause property damage and loss of life for those affected. Increased wildfires are also of concern as the State "dries" over time. Wildfires can also cause property damage, loss of life, and injuries to citizens and emergency response services.

Sea-level rises would also threaten human health and welfare. Flood risks will be increased in coastal areas due to strengthened storm surges and greater tidal damage that could result in injury and loss of property and life. Gradual rising of the sea will permanently inundate many coastal areas in the state.

Other concerns related to public health are changes in the range, incidence, and spread of infectious, water-borne, and food-borne diseases. Changes in humidity levels, distribution of surface water, and precipitation changes are all likely to shift or increase the preferred range of disease vectors (i.e. mosquitoes). This could expose more people and animals to potential for vector-borne disease.

Biodiversity and Habitat

Changes in temperature will change the livable ranges of plants and animals throughout the state and cause considerable stress on these species. Species will shift their range if appropriate habitat is available and accessible if they cannot adapt to their new climate. If they do not adapt or shift, they face local extirpation or extinction. As the climate changes, community compositions and interactions will be interrupted and changed. These have substantial implications on the ecosystems in the state. Extreme events will lead to tremendous stress and displacement on affected species. This could make it easier for invasive species to enter new areas, due to their ability to more easily adapt. Precipitation changes would alter stream flow patterns and affect fish populations during their life cycle. Sea level rises could impact fragile wetland and other coastal habitat.

Water Management

Although disagreement among scientists on long-term precipitation patterns in the State has occurred, it is generally accepted by scientists that rising temperatures will impact California's water supply due to changes in the Sierra Nevada snowpack. Currently, the State's water infrastructure is designed to both gather and convey water from melting snow and to serve as a flood control device. Snowpack melts gradually through spring warming into early summer, releasing an average of approximately 15 million acre-feet of water. The State's concern related to climate change is that due to rising temperatures, snowpack melt will begin earlier in the spring and will coincide with the rainy season. The combination of precipitation and snowmelt would overwhelm the current system, requiring tradeoffs between water storage and flood protection to be made. Reduction in reserves from the Sierra Nevada snowpack is troublesome for California and particularly for Southern California. Approximately 75-percent of California's available water supply originates in the northern third of the state while 80 percent of demand occurs in the southern two-thirds. There is also concern is that rising temperatures will result in decreasing volumes from the Colorado River basin. Colorado River water is important to Southern California because it supplies water directly to Metropolitan Water District of Southern California. Water from the Colorado River is also used to recharge groundwater basins in the Coachella Valley.

Agriculture

California is the most agriculturally productive state in the US resulting in more than 37 billion dollars in revenue in 2008. California is the nation's leading producer of nearly 80 crops and livestock commodities, supplying more than half of the nation's fruit and vegetables and over 90 percent of the nation's production of almonds, apricots, raisin grapes, olives, pistachios, and walnuts. Production of crops is not limited to the Central Valley but also occurs in Southern California. Strawberries and grapes are grown in San Bernardino and Riverside Counties. Orange County and San Diego County also contribute to strawberry production. Cherries are also grown in Los Angeles and Riverside County. Anticipated impacts to agricultural resources are mixed when compared to the potentially increased temperatures, reduced chill hours, and changes in precipitation associated with climate change. For example, wheat, cotton, maize, sunflower, and rice are anticipated to show declining yields as temperatures rise. Conversely, grapes and almonds would benefit from warming temperatures. Anticipated increases in the number and severity in heat waves would have a negative impact on livestock where heat stress

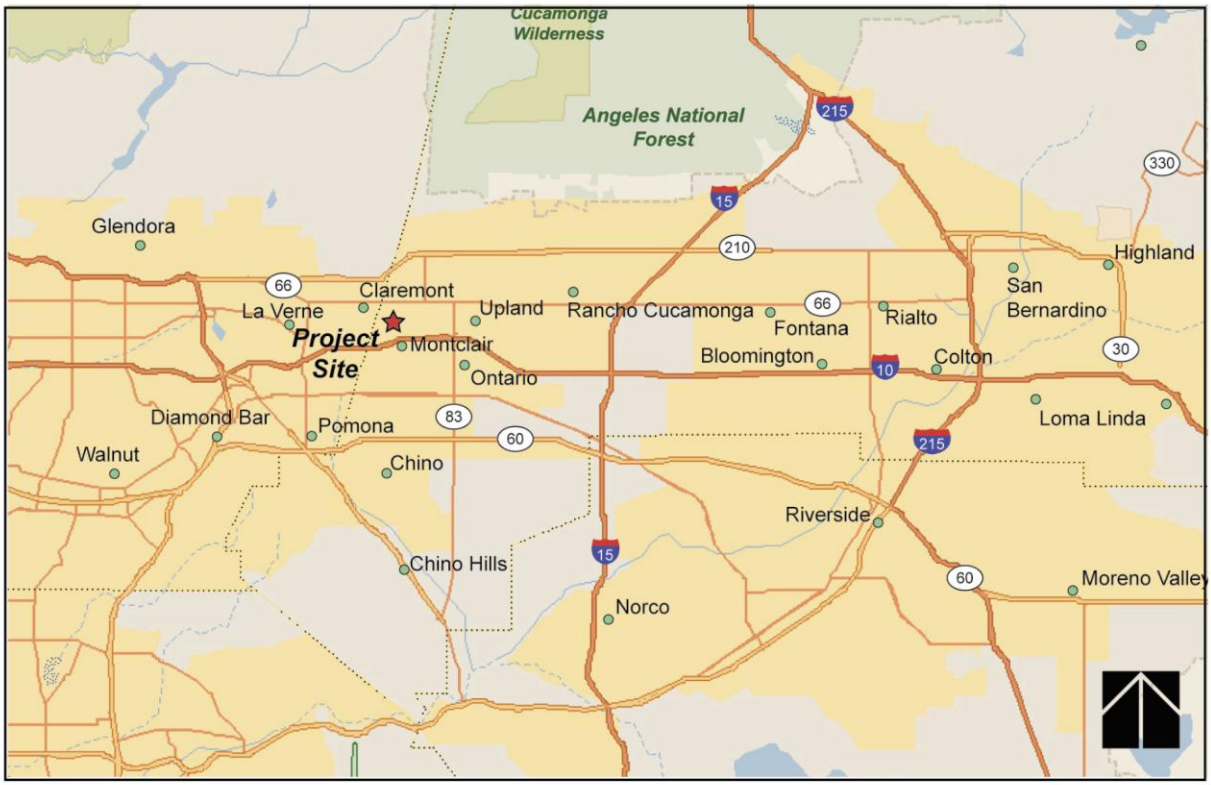
would make livestock more vulnerable to disease, infection and mortality. The projected drying trend and changes in precipitation are a threat to agricultural production in California. Reduced water reliability and changes in weather patterns would impact irrigated farmlands and reduce food security. Furthermore, a drying trend would increase wildfire risk. Overall, agriculture in California is anticipated to suffer due to climate change impacts.

Forestry

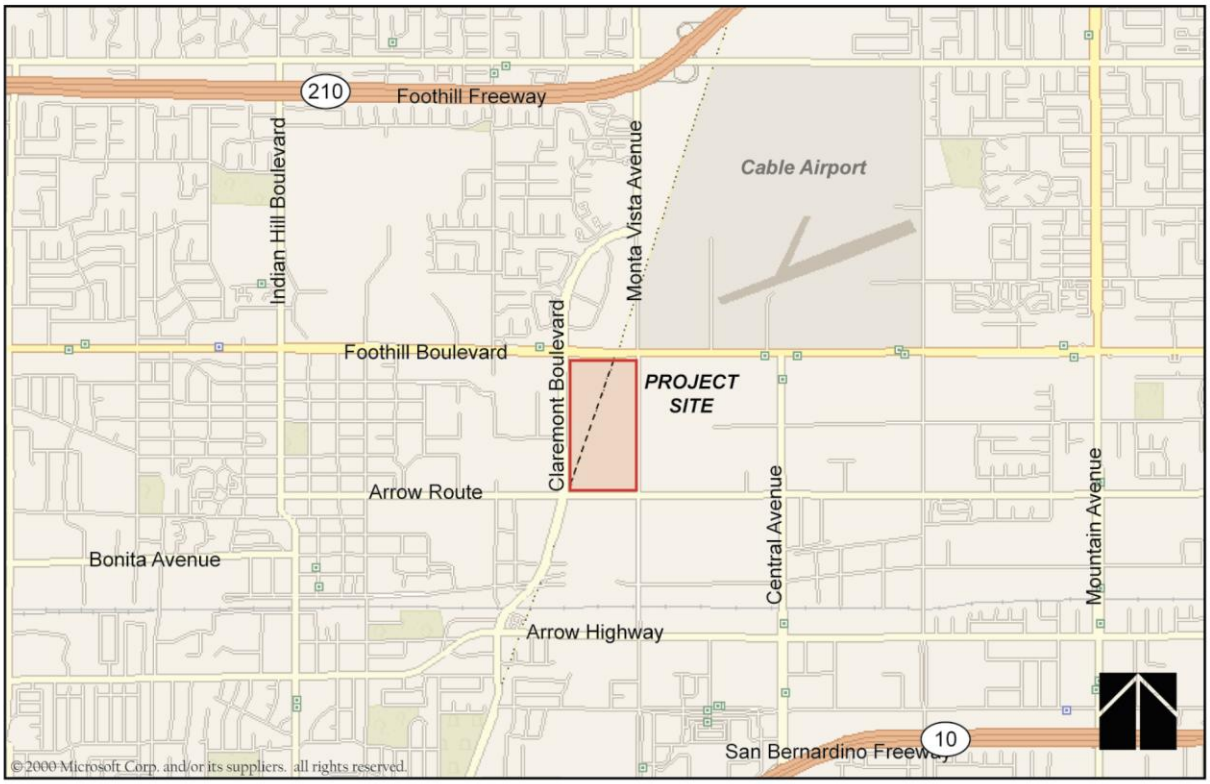
Increases in wildfires will substantially impact California's forest resources that are prime targets for wildfires. This can increase public safety risks, property damage, emergency response costs, watershed quality, and habitat fragmentation. Climate change is also predicted to affect the behavior or plant species including seed production, seedling establishment, growth, and vigor due to rising temperatures. Precipitation changes will affect forests due to longer dry periods and moisture deficits and drought conditions that limit seedling and sapling growth. Prolonged drought also weakens trees, making them more susceptible to disease and pest invasion. Furthermore, as trees die due to disease and pest invasion (i.e. the Bark Beetle invasion of the San Bernardino Forest), wildfires can spread more rapidly.

Transportation and Energy Infrastructure

Higher temperatures will require increased cooling, raising energy production demand. Higher temperatures also decrease the efficiency of distributing electricity and could lead to more power outages during peak demand. Climate changes would impact the effectiveness of California's transportation infrastructure as extreme weather events damage, destroy, and impair roadways and railways throughout the state causing governmental costs to increase as well as impacts to human life as accidents increase. Other infrastructure costs and potential impacts to life would increase due to the need to upgrade levees and other flood control devices throughout the state. Infrastructure improvement costs related to climate change adaptation are estimated in the tens of billions of dollars.



Regional Context Map



Vicinity Map

Source: Hogle-Ireland, 2011

Exhibit 1 Regional Context and Vicinity Map

MIG | Hogle-Ireland

Claremont Colleges East Campus EIR
Upland/Claremont, CA

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The following summarizes Federal, State, and local regulations related to air quality, pollution control, greenhouse gas emissions.

Clean Air Act

The Federal Clean Air Act (CAA) defines the Environmental Protection Agency's (EPA) responsibilities for protecting and improving the United States air quality and ozone layer.[13] Key components of the CAA include reducing ambient concentrations of air pollutants that cause health and aesthetic problems, reducing emission of toxic air pollutants, and stopping production and use of chemicals that destroy the ozone.

Federal clean air laws require areas with unhealthy levels of ozone, inhalable particulate matter, Carbon monoxide, nitrogen dioxide, and sulfur dioxide to develop State Implementation Plans (SIPs); comprehensive documents that identify how an area will attain NAAQS. Deadlines for attainment were established in the 1990 amendments to the CAA based on the severity of an area's air pollution problem. Failure to meet air quality deadlines can result in sanctions against the State or the EPA taking over enforcement of the CAA in the affected area. SIPs are a compilation of new and previously submitted plans, programs, district rules, and State and Federal regulations. The SCAQMD implements the required provisions of an applicable SIP through its AQMP. Currently, SCAQMD implements the 8-hr Ozone and $PM_{2.5}$ SIP in the 2007 AQMP and the PM_{10} SIP in the 2003 AQMP. The $PM_{2.5}$ SIP is currently being revised by SCAQMD in response to partial disapproval by the EPA. The 2012 Lead SIP for the Los Angeles County portion of SCAB was adopted by the SCAQMD Board on May 4, 2012 and approved by ARB on May 24, 2012 and forwarded to the EPA for approval as a revision to the California SIP.

California Clean Air Act

The California Clean Air Act (CCAA) of 1988 was enacted to develop plans and strategies for attaining California Ambient Air Quality Standards (CAAQS). The California Air Resources Board (ARB), which is part of the California Environmental Protection Agency (Cal-EPA), develops statewide air quality regulations, including industry-specific limits on criteria, toxic, and nuisance pollutants. The CCAA is more stringent than Federal law in a number of ways including revised standards for PM_{10} and ozone and State for visibility reducing particles, sulfates, hydrogen sulfide, and vinyl chloride.

Toxic Hotspots

State requirements specifically address air toxics issues through Assembly Bill (AB) 1807 (known as the Tanner Bill) that established the State air toxics program and the Air Toxics Hot Spots Information and Assessment Act (AB 2588). The air quality regulations developed from these bills have been modified recently to incorporate the Federal regulations associated with the Federal Clean Air Act Amendments of 1990. The Air Toxics Hot Spots Information and Assessment Act (Hot Spots Act) was enacted in September 1987. Under this bill, stationary sources of emissions are required to report the types and quantities of certain substances that their facilities routinely release into the air.

The SCAQMD is required to prepare an annual report on the status and forecast of air toxic "hot spots" pursuant to Section 44363 of the California Health and Safety Code. SCAQMD monitors facilities that are not exempt from the fee and reporting requirements of AB2588.

Some facilities are covered under "umbrella" permits that address industry-wide categories. SCAQMD has issued general permits for the following seven activities:

- Retail gasoline dispensing
- Perchloroethylene dry cleaning
- Auto body shops
- Fiberglass molding
- Printing

- Metal plating
- Wood striping and finishing

Emissions inventories and risk assessment guidelines have been prepared for the seven industry-wide categories. Approximately 1,400 auto body shops, 3,200 gasoline stations, and 1,400 perchloroethylene dry cleaners within the District are covered under these umbrella permits.

Depending on the severity of the facilities' TAC releases, SCAQMD requires either public notification of toxic hot spots or preparation of a risk reduction plan, as follows:

	Cancer Risk (per million)	Acute Risk	Chronic Risk
Action Risk Level	>= 25	>= 3.0	>= 3.0
Public Notification Level	>= 10	>= 1.0	>= 1.0
Exempt	<1	<0.1	<0.1

2012 Air Quality Management Plan

The purpose of an Air Quality Management Plan (AQMP) is to bring an air basin into compliance with federal and state air quality standards and is a multi-tiered document that builds on previously adopted AQMPs.[14] The 2003 AQMP was adopted in August 2003 and demonstrated O_3 and PM_{10} for the Basin. It also provides the maintenance plans for CO and NO_2, which the Basin has been in attainment for since 1997 and 1992, respectively. The 2007 AQMP for the Basin was approved by the SCAQMD Board of Directors in June 2007. The 2007 AQMP builds on the 2003 AQMP and is designed to address the federal 8-hour ozone and $PM_{2.5}$ air quality standards. The AQMP identifies short- and long-term control measures designed to reduce stationary, area, and mobile source emissions, organized into four primary components:

1. District Stationary and Mobile Source Control Measures
2. Air Resources Board (ARB) State Strategy
3. Supplement to ARB Control Strategy
4. SCAG Regional Transportation Strategy and Control Measures

The 2012 AQMP was adopted by the SCAQMD board on December 7, 2012. The 2012 AQMP incorporated the latest scientific and technological information and planning assumptions, including the 2012 Regional Transportation Plan/Sustainable Communities Strategy and updated emission inventory methodologies for various source categories. The 2012 AQMP includes the new and changing federal requirements, implementation of new technology measures, and the continued development of economically sound, flexible compliance approaches. The SCAQMD is currently initiating an early development process for preparation of the 2016 AQMP.

SCAQMD Rule Book

In order to control air pollution in the Basin, SCAQMD adopts rules that establish permissible air pollutant emissions and governs a variety of businesses, processes, operations, and products to implement the AQMP and the various federal and state air quality requirements. SCAQMD does not adopt rules for mobile sources; those are established by ARB or the United States Environmental Protection Agency (EPA). Rules that will be applicable during construction of the proposed warehouse include Rule 403 (Fugitive Dust) and Rule 1113 (Architectural Coatings). Rule 403 prohibits emissions of fugitive dust from any grading activity, storage pile, or other disturbed surface area if it crosses the project property line or if emissions caused by vehicle movement cause substantial impairment of visibility (defined as exceeding 20 percent opacity in the air). Rule 403 requires the implementation of Best Available Control Measures (BACM) and includes additional provisions for projects disturbing more than five acres and those disturbing more than fifty acres. Rule 1113 establishes maximum concentrations of VOCs in paints and other applications and establishes the thresholds for low-VOC coatings.

Executive Order S-3-05

Executive Order S-3-05 was issued by California Governor Arnold Schwarzenegger and established targets for the reduction of greenhouse gas emission at the milestone years of 2010, 2020, and 2050. Statewide GHG emissions must be reduced to 1990 levels by year 2020 and by 80 percent beyond that by year 2050. The Order requires the Secretary of the California Environmental Protection Agency (CalEPA) to coordinate with other State departments to identify strategies and reduction programs to meet the identified targets. A Climate Action Team (CAT) was created and is headed by the Secretary of CalEPA who reports on the progress of the reduction strategies. The latest CAT *Biennial Report to the Governor and Legislature* was completed in December 2010.[15] CAT also works in 11 subgroups to support development and implementation of the Scoping Plan (see "California Global Warming Solutions Act" herein).

California Global Warming Solutions Act

The California State Legislature adopted the California Global Warming Solutions Act in 2006 (AB 32). AB 32 establishes the caps on statewide greenhouse gas emissions proclaimed in Executive Order S-3-05 and establishes a regulatory timeline to meet the reduction targets. The timeline is as follows:

January 1, 2009	Adopt Scoping Plan
January 1, 2010	Early action measures take effect
January 1, 2011	Adopt GHG reduction measures
January 1, 2012	Reduction measures take effect
December 31, 2020	Deadline for 2020 reduction target

As part of AB 32, CARB had to determine what 1990 GHG emissions levels were and projected a business-as-usual (BAU) estimate for 2020 to determine the amount of GHG emissions that will need to be reduced. BAU is a term used to define emissions levels without considering reductions from future or existing programs or technologies. 1990 emissions are estimated at 427 million metric tons of carbon dioxide equivalent (MMTCO2E) while 2020 emissions (after accounting for the economic downturn in 2008 and implementation of Pavley 1 vehicle emissions reductions and the State Renewable Portfolio Standard identified in Air Resources Board Scoping Plan below) are estimated at 507 MMTCO2E; therefore, California GHG emissions must be reduced 80 MMTCO2E (507 – 427 = 80) by 2020, a reduction of approximately 16 percent below BAU. Emissions are required to be reduced an additional 80 percent below 1990 levels by 2050.

Sustainable Communities and Climate Protection Act

In January 2009, California Senate Bill (SB) 375 went into effect known as the Sustainable Communities and Climate Protection Act.[16] The objective of SB 375 is to better integrate regional planning of transportation, land use, and housing to reduce sprawl and ultimately reduce greenhouse gas emissions and other air pollutants. SB 375 tasks ARB to set greenhouse gas reduction targets for each of California's 18 regional Metropolitan Planning Organizations (MPOs). Each MPO is required to prepare a Sustainable Communities Strategy (SCS) as part of their Regional Transportation Plan (RTP). The SCS is a growth strategy in combination with transportation policies that will show how the MPO will meet its GHG reduction target. If the SCS cannot meet the reduction goal, an Alternative Planning Strategy (APS) may be adopted that meets the goal through alternative development, infrastructure, and transportation measures or policies.

In the Southern California Association of Governments (SCAG) region (in which the proposed project is located), sub-regions can also elect to prepare their own SCS or APS. In August 2010, ARB released the proposed GHG reduction targets for the MPOs to be adopted in September 2010. The proposed reduction targets for the SCAG region were 8-percent by year 2020 and 13-percent by year 2035. The 8-percent year 2020 target was adopted in September 2010 and tentatively adopted the year 2035 until February 2011 to provide additional time for SCAG, ARB, and other stakeholders to account for additional

resources (such as state transportation funds) needed to achieve the proposed targets. In February 2011, the SCAG President affirmed the year 2035 reduction target and SCAG Staff updated ARB on additional funding opportunities.

Air Resources Board Scoping Plan

The ARB Scoping Plan is the comprehensive plan to reach the GHG reduction targets stipulated in AB 32. The key elements of the plan are to expand and strengthen energy efficiency programs, achieve a statewide renewable energy mix of 33 percent, develop a cap-and-trade program with other partners in the Western Climate Initiative (includes seven states in the United States and four territories in Canada), establish transportation-related targets, and establish fees.[17] The Scoping Plan measures are identified in Table 6 (Scoping Plan Measures). Note that the current early discrete actions are incorporated into these measures. ARB estimates that implementation of these measures will reduce GHG emissions in the state by 174 MMTCO2E by 2020; therefore, implementation of the Scoping Plan will meet the 2020 reduction target. In a report prepared on September 23, 2010, ARB indicates that 40 percent of the reduction measures identified in the Scoping Plan have been secured.[18] The cap-and-trade program began on January 1, 2012 after ARB completes a series of activities that deal with the registration process, compliance cycle, and tracking system; however, covered entities will not have an emissions obligation until 2013.[19] ARB is currently working on the low carbon fuel standard where public hearings and workshops are currently being conducted. In August 2011, the Scoping plan was reapproved by the ARB Board with the program's environmental documentation.

The ARB as prepared the First Update to the Scoping Plan (Update) with a draft made available for public review on February 10, 2014. The Update to the Scoping Plan builds upon the 2008 Scoping Plan with new strategies and recommendations. The Update identifies opportunities to leverage existing and new funds to further drive GHG emission reductions through strategic planning and targeted low carbon investments. The Update defines ARB's climate change priorities for the next five years and sets the groundwork to reach post-2020 goals set forth in Executive Orders S-3-05 and B-16-2012. The Update highlights California's progress toward meeting the 2020 GHG emission reduction goals defined in the 2008 Scoping Plan. It also evaluates how to align the State's long-term GHG reduction strategies with other State policy priorities for water, waste, natural resources, clean energy, transportation, and land use. A draft Environmental Analysis (EA) was released for a 45-day public review period on March 14, 2014. After considering public comments and Board direction, the final First Update, summary of comments received on the draft EA, and ARB's responses to those comments were released on May 15, 2014. The First Update to the Scoping Plan was approved by the Board on May 22, 2014.

Water Conservation in Landscaping Act

Section 65591 of the Government Code requires all local jurisdictions to adopt a water efficient landscape ordinance. The ordinance is to address water conservation through appropriate use and grouping of plants based on environmental conditions, water budgeting to maximize irrigation efficiency, storm water retention, and automatic irrigation systems. Failure to adopt a water efficiency ordinance requires a local jurisdiction to enforce the provisions of the State's model water efficiency ordinance. In 2009, the Department of Water Resources (DWR) updated the Model Water Efficient Landscape Ordinance pursuant to amendments to the 1991 Act. These amendments and the new model ordinance went into effect on January 1, 2010. The amended Act is applicable to any new commercial, multi-family, industrial or tract home project containing 2,500 square feet (SF) or more of landscaping. Individual landscape projects of 5,000 SF or more on single-family properties will also be subject to the Act. All landscape plans are required to include calculations verifying conformance with the maximum applied water allowance and must be prepared and stamped by a licensed landscape architect.

California Green Building Standards

New California Green Building Standards Code (CALGREEN) went into effect on January 1, 2014.[20] The purpose of the new addition to the California Building Code (CBC) is to improve public health, safety, and general welfare by enhancing the design and construction of buildings using concepts to reduce negative impacts or produce positive impacts on the environment. The CALGREEN regulations cover planning and design, energy efficiency, water efficiency and conservation, material conservation and resources efficiency, and environmental quality. Many of the new regulations have the effect of reducing greenhouse gas emissions from the operation of new buildings. Table 7 (CALGREEN Requirements) summarizes the

previous requirements of the CBC and the new requirements of CALGREEN that went into effect in January 2011. Minor technical revisions and additional requirements went into effect in July 2012. The Code was further updated in 2013, effective January 1, 2014 through 2016.

Table 6
Scoping Plan Measures

Measure	Description
T-1	Pavely I and II – Light Duty Vehicle Greenhouse Gas Standards
T-2	Low Carbon Fuel Standard
T-3	Regional Transportation-Related Greenhouse Gas Targets
T-4	Vehicle Efficiency Measures
T-5	Ship Electrification at Ports
T-6	Good Movement Efficiency Measures
T-7	Heavy-Duty Vehicle Aerodynamic Efficiency
T-8	Medium and Heavy-Duty Vehicle Hybridization
T-9	High Speed Rail
E-1	Energy Efficiency (Electricity Demand Reduction)
E-2	Increase Combined Heat and Power Use
E-3	Renewable Portfolio Standard
E-4	Million Solar Roofs
CR-1	Energy Efficiency (Natural Gas Demand Reduction)
CR-2	Solar Water Heating
GB-1	Green Buildings
W-1	Water Use Efficiency
W-2	Water Recycling
W-3	Water System Energy Efficiency
W-4	Reuse Urban Runoff
W-5	Increase Renewable Energy Production
W-6	Public Good Charge (Water)
I-1	Energy Efficiency for Large Industrial Sources
I-2	Oil and Gas Extraction GHG Reductions
I-3	Oil and Gas Transmission Leak Reductions
I-4	Refinery Flare Recovery Process Improvements
I-5	Removal of Methane Exemption from Existing Refinery Regulations
RW-1	Landfill Methane Control
RW-2	Increase Landfill Methane Capture Efficiency
RW-3	Recycling and Zero Waste
F-1	Sustainable Forest Target
H-1	Motor Vehicle Air Conditioning
H-2	Non-Utilities and Non-Semiconductor SF_6 Limits
H-3	Semiconductor Manufacturing PFC Reductions
H-4	Consumer Products High GWP Limits
H-5	High GWP Mobile Source Reductions
H-6	High GWP Stationary Source Reductions
H-7	High GWP Mitigation Fees
A-1	Large Dairy Methane Capture
Source: ARB 2008[21]	

Table 7
CALGREEN Requirements

Item		Requirements	
		Previous	CALGREEN
4.1	Stormwater Management	Stormwater management required on projects > than one acre	All projects subject to stormwater management.
	Surface Drainage	Surface water must flow away from building	Drainage patterns must be analyzed
4.2	Energy Efficiency	California Energy Code	Minimum energy efficiency to be established by California Energy Commissions
4.3	Indoor Water Use	HCD maximum flush rates; CEC water use standards for appliances and fixtures	Indoor water use must decrease by at least 20 percent (prescriptive or performance based)
	Multiple Showerheads	Not covered	Multiple showerheads cannot exceed combined flow of the code
	Irrigation Controllers	Not covered	Irrigation controllers must be weather or soil moisture based controllers
4.4	Joint Protection	Plumbing and Mechanical Codes	All openings must be sealed with materials that rodents cannot penetrate
	Construction Waste	Local Ordinances	Establishes minimum 50 percent recycling and waste management plan
	Operation	Plumbing Code for gray water systems	Educational materials and manuals must be provided to building occupants and owners to ensure proper equipment operation
4.5	Fireplaces	Local Ordinances	Gas fireplaces must be direct-vent sealed-combustion type; Wood stoves and pellet stoves must meet USEPA Phase II emissions limits
	Mechanical Equipment	Not covered	All ventilation equipment must be sealed from contamination during construction
	VOCs	Local Ordinances	Establishes statewide limits on VOC emissions from adhesives, paints, sealants, and other coatings
	Capillary Break	No prescriptive method of compliance	Establishes minimum requirements for vapor barriers in slab on grade foundations
	Moisture Content	Current mill moisture levels for wall and floor beams is 15-20 percent	Moisture content must be verified prior to enclosure of wall or floor beams
	Whole House Fans	Not covered	Requires insulted louvers and closing mechanism when fan is off
	Bath Exhaust Fans	Not covered	Requires Energy Star compliance and humidistat control
	HVAC Design	Minimal requirements for heat loss, heat gain, and duct systems	Entire system must be designed in respects to the local climate
7	Installer Qualifications	HVAC installers need not be trained	HVAC installers must be trained or certified
	Inspectors	Training only required for structural materials	All inspectors must be trained
Source: HCD 2010			

Claremont Sustainable City Plan

The City of Claremont adopted the Sustainable City Plan in October 2008 and updated the plan in October 2013.[22] The purpose of the plan is to establish a framework to promote the City of Claremont's vision to balance social needs, environmental health, and economic prosperity while preserving natural resources, avoiding social inequities, and continuing economic opportunity. The Plan establishes targets for municipal operations and community behavior to reduce natural resources consumption, particularly in terms of energy use. These targets are listed below:

- The City must decrease energy consumption in City Facilities by 20% of 2006 levels by 2015 and 30% by 2020.
- The City must decrease water consumed at City facilities and parks by 20% by 2015 and 30% by 2020.
- The City must utilize best practices and environmentally superior supplies for office operations, fleet maintenance and operations, and park and facilities maintenance.
- All new Municipal facilities must be constructed to green standards (LEED Gold certification).
- Reduce electrical energy consumption community wide to 13% of 2006 levels by 2015 abd 20% by 2020.

- Reduce water consumption citywide 20% by 2012 and 40% by 2017.
- Divert 70% of solid waste from landfills by 2015 and 75% by 2020.
- All new construction should be designed, constructed and operated to LEED Silver standards.

Each goal of the Sustainable City Plan is supported by actions, policies, and programs necessary for achievement. The majority of the programs and actions supporting the goals of the Plan will help curb emissions of greenhouse gases within the City of Claremont, particularly where energy efficiency and reductions in vehicle miles traveled (VMT) are highlighted. The Sustainable City Plan is organized around the following seven goal areas:

1. Resources Conservation
   - Energy
   - Water and Wastewater
   - Solid Waste

2. Environment and Public Health
   - Air Quality
   - Toxic Materials Reduction and Management
   - Organic and Sustainable Foods and Products
   - Local Agriculture and Horticulture

3. Transportation
   - Non-motorized Transportation: Increased Walking and Bicycling
   - Trip Reduction (For Single Occupant Vehicles (SOV's))
   - Reduction in Vehicle Miles Traveled
   - Cleaner Fuels

4. Sustainable Built Environment
   - New Construction (Public and Private)
   - Neighborhood Development
   - Infrastructure Development
   - Existing Development (Retrofitting)

5. Open Space and Land Use (Ecology)
   - Natural and Constructed Open Space
   - Urban Forest
   - Protect and Restore Native Habitats

6. Housing & Economic Sustainability
   - Diversity of Jobs, Businesses and Housing Stock
   - Meeting State Mandates for Affordable Housing
   - Neighborhood Preservation
   - Fair Trade
   - Economic Viability

7. Outreach, Education and Implementation
   - Understanding of Sustainability for General Public and all Stakeholder Groups
   - Implementation of Sustainability Plan
   - Tracking Progress Toward Goals

The proposed project includes the subdivision of the project of the three existing parcels totaling 74.44 acres. One parcel within the City of Upland will be subdivided into six parcels and two parcels in the City of Claremont will be subdivided into three parcels. In addition, improvements to Claremont Boulevard, Foothill Boulevard, Monte Vista Avenue, and Arrow Route are proposed.

MASTER SITE PLAN, CITY OF UPLAND

A Master Site Plan has been prepared to guide site development within the City of Upland over a 10-15 year timeframe. The Master Plan identifies the locations of proposed sports fields, activity areas, and ancillary buildings and structures. The baseball field, softball field, football/track field, and archery range would be relocation sites for replaced facilities as proposed in the Claremont-McKenna Colleges (CMC) Master Plan. The Argentinean paddle tennis court and all-purpose athletic fields (in conjunction with the City of Claremont Site Plan) would be new sports facilities along with proposed ancillary facilities.

SITE PLAN, CITY OF CLAREMONT

A Site Plan has been prepared to guide site development within the City of Claremont over a 10-15 year timeframe. The Site Plan identifies the locations of proposed parking areas, sports fields, activity areas, and ancillary buildings and structures. The proposed multi-purpose fields, volleyball courts, and basketball courts are replacement facilities that were previously removed from the Pitzer College campus to accommodate new student housing. The golf practice area and all-purpose athletic fields (in conjunction with the City of Upland Master Site Plan) would be a new sports facility along with the proposed ancillary facilities.

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The impact analysis contained herein was prepared utilizing guidance provided in the 1993 SCAQMD California Environmental Quality Act (CEQA) Air Quality Handbook. The thresholds identified in Appendix G of the State CEQA Guidelines have been utilized to determine the significance of potential impacts.

Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines, the proposed project could result in potentially significant impacts related to air quality if it:

A. Conflicts with or obstructs implementation of the applicable air quality plan.
B. Violates any air quality standard or contributes substantially to an existing or projected air quality violation.
C. Results in a cumulatively considerable net increase of any criteria pollutant that the region is non-attainment under an applicable Federal or State ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors).
D. Exposes sensitive receptors to substantial pollutant concentrations.
E. Create objectionable odors affecting a substantial number of people.

To determine if maximum daily criteria pollutant emissions from construction and operation of the proposed project are significant, the SCAQMD significance thresholds are used. These thresholds are identified in Table 8 (SCAQMD Maximum Daily Emissions Thresholds).

Table 8
SCAQMD Maximum Daily Emissions Thresholds (lbs/days)

Pollutant	Construction	Operation
NO_X	100	55
VOC/ROG	75	55
PM_{10}	150	150
$PM_{2.5}$	55	55
SO_X	150	150
CO	550	550
Lead	3	3
Source: SCAQMD 2011		

AQMP Consistency

A significant impact could occur if the proposed project conflicts with or obstructs the implementation of South Coast Air Basin 2012 Air Quality Management Plan. Conflicts and obstructions that hinder implementation of the AQMP can delay efforts to meet attainment deadlines for criteria pollutants and maintaining existing compliance with applicable air quality standards. Pursuant to the methodology provided in Chapter 12 of the 1993 SCAQMD CEQA Air Quality Handbook, consistency with the South Coast Air Basin 2012 Air Quality Management Plan (AQMP) is affirmed when a project (1) does not increase the frequency or severity of an air quality standards violation or cause a new violation and (2) is consistent with the growth assumptions in the AQMP.[23] Consistency review is presented below:

1. The proposed project would result in short-term construction and long-term pollutant emissions that are less than the CEQA significance emissions thresholds established by the SCAQMD, as demonstrated in Section 6.3 et seq of this report; therefore, the proposed project could not result in an increase in the frequency or severity of any air quality standards violation and will not cause a new air quality standard violation.

2. The CEQA Air Quality Handbook indicates that consistency with AQMP growth assumptions must be analyzed for new or amended General Plan elements, Specific Plans, and *significant projects*. *Significant projects* include airports, electrical

generating facilities, petroleum and gas refineries, designation of oil drilling districts, water ports, solid waste disposal sites, and off-shore drilling facilities; therefore, the proposed project is not defined as *significant*.

Based on the consistency analysis presented above, the proposed project will not conflict with the AQMP.

Pollutant Emissions

DEMOLITION

The project site is current vacant. No demolition activities will occur.

BUILDING CONSTRUCTION

Short-term criteria pollutant emissions will occur during on-site grading, building construction, paving, and coating activities. Emissions will occur from use of equipment, worker, vendor, and hauling trips, and disturbance of on-site soils (fugitive dust). To determine if construction of the proposed project could result in a significant air quality impact, the California Emissions Estimator Model (CalEEMod) has been utilized. Specific information regarding construction phase lengths and construction equipment anticipated is not available; therefore, default CalEEMod assumptions for construction activities have been utilized. Default CalEEMod data is based on surveys of existing land uses and activities.[24] Utilization of default data is appropriate when site-specific information is not available. The proposed project is tentatively scheduled to be completed in five phases over a 10-15 year timeframe starting with approval of the tentative parcel maps. The phasing plan is based on costs associated with construction and operation of each phase. The phasing plan is summarized below.

Phase	Start Year	On-Site Development	Off-Site Improvements
I	0	Obtain TPM Approvals	--
	1	Record Maps Sell Parcels	Record Dedications
II	2	Construct 2 Parking lots along Claremont Boulevard Parcel 3 (Claremont) Parcel 5 (Upland) Parcel 6 (Upland)	Claremont Boulevard Arrow Route
III	4	Parcel 1 (Claremont) Parcel 2 (Claremont) Parcel 4 (Upland)	Foothill Boulevard
IV	7	Parcel 2 (Claremont) Parcel 4 (Upland)	Monte Vista Avenue
V	10-15	Complete on-site facilities*	

** Completion of athletic fields to be determined upon availability of funding*

The results of the CalEEMod outputs for each construction phase are summarized in Table 9 (Maximum Daily Construction Emissions (lbs/day)). Based on the results of the model, maximum daily emissions from the construction of Phase V will result in excessive emissions of volatile organic chemicals (identified as reactive organic gases) associated with interior and exterior coating activities. Using the default assumption of 250 grams per liter (g/l) VOC content for non-residential interior and exterior surfaces, daily VOC emissions would reach 139.23 g/l in 2025. To compensate for excessive VOC emissions from coating activities for the proposed project, Mitigation Measure AQ-1 requires a maximum of 100 g/l for non-residential interior and exterior surfaces. Use of low-VOC coatings during construction activities will reduce VOC emissions to 55.80 g/l.

Table 9
Maximum Daily Construction Emissions (lbs/day)

Source	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Claremont Boulevard						
2017	1.29	12.71	8.30	0.01	1.36	0.78
Threshold	**75**	**100**	**550**	**150**	**150**	**55**
Substantial?	No	No	No	No	No	No
Arrow Route						
2017	1.29	12.71	8.30	0.01	1.36	0.78
Threshold	**75**	**100**	**550**	**150**	**150**	**55**
Substantial?	No	No	No	No	No	No
Phase II						
2017	23.52	51.85	40.37	0.04	21.02	12.52
Threshold	**75**	**100**	**550**	**150**	**150**	**55**
Substantial?	No	No	No	No	No	No
Foothill Boulevard						
2019	1.01	9.92	7.93	0.01	1.17	0.61
Threshold	**75**	**100**	**550**	**150**	**150**	**55**
Substantial?	No	No	No	No	No	No
Phase III						
2019	4.08	51.58	35.69	0.04	20.42	11.96
Threshold	**75**	**100**	**550**	**150**	**150**	**55**
Substantial?	No	No	No	No	No	No
Monte Vista Avenue						
2022	0.73	6.88	7.67	0.01	0.97	0.42
Threshold	**75**	**100**	**550**	**150**	**150**	**55**
Substantial?	No	No	No	No	No	No
Phase IV						
2022	3.82	38.50	35.91	0.06	19.82	11.41
2023	26.27	6.44	9.18	0.02	0.45	0.32
Threshold	**75**	**100**	**550**	**150**	**150**	**55**
Substantial?	No	No	No	No	No	No
Phase V						
2025	55.80	27.31	32.05	0.06	19.30	10.93
Threshold	**75**	**100**	**550**	**150**	**150**	**55**
Substantial?	No	No	No	No	No	No

OPERATIONAL AND AREA SOURCES

Long-term criteria air pollutant emissions will result from the operation of the proposed project. Long-term emissions are categorized as area source emissions, energy demand emissions, and operational emissions. Operational emissions will result from automobile and other vehicle sources associated with daily trips to and from the sports fields. The California Emissions Estimator Model (CalEEMod) was utilized to estimate mobile source emissions. Trips are based on project trip generation rates used in the project traffic study prepared by Linscott, Law & Greenspan Engineers based on the operations of the existing sports fields.[25] Area source emissions are the combination of many small emission sources that include use of outdoor landscape maintenance equipment, use of consumer products such as cleaning products, and periodic repainting of the proposed project. Energy demand is based on default CalEEMod electricity and natural gas demand assumptions. Proposed sports fields are currently operational at their existing locations. The proposed project includes the relocation of existing sports fields to the project site and the addition of an Argentinean paddle tennis field, all purpose athletic fields, and a golf practice area. Operational emissions associated with existing sports fields are summarized in Table 10 (Existing Long-Term Daily Emissions (lbs/day)).

Operational source emissions for the proposed project including operation of relocated and new activities were modeled under year 2025. Year 2025 emissions were modeled for weekday practice days, weekday game days, fall weekend game days, and spring weekend days. The results of the CalEEMod model for summer and winter conditions are summarized in Table 11 (Proposed Long-Term Daily Emissions (lbs/day)). Operational emissions associated with existing sports fields to be relocated to the project site have been subtracted from the total proposed emissions to provide an accurate analysis of project impacts. Net operational emissions for each scenario are summarized in Table 12 (Net Long-Term Daily Emissions (lbs/day)).

Based on the results of the model, the net daily operational emissions associated with the proposed project will not exceed the thresholds established by SCAQMD.

Table 10
Existing Long-Term Daily Emissions (lbs/day)

Source	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Weekday Practice Day						
Summer						
Area Sources	62.48	0.00	0.01	0.00	0.00	0.00
Energy Demand	0.00	0.00	0.00	0.00	0.00	0.00
Mobile Sources	0.60	1.66	6.89	0.01	0.93	0.26
Summer Total	*63.08*	*1.66*	*6.89*	*0.01*	*0.93*	*0.26*
Winter						
Area Sources	62.48	0.00	0.01	0.00	0.00	0.00
Energy Demand	0.00	0.00	0.00	0.00	0.00	0.00
Mobile Sources	0.63	1.74	6.77	0.01	0.93	0.26
Winter Total	*63.11*	*1.74*	*6.78*	*0.01*	*0.93*	*0.26*
Weekday Game Day						
Summer						
Area Sources	62.88	0.00	0.01	0.00	0.00	0.00
Energy Demand	0.71	6.44	5.41	0.04	0.49	0.49
Mobile Sources	1.32	3.63	15.09	0.03	2.03	0.58
Summer Total	*64.91*	*10.07*	*20.51*	*0.07*	*2.52*	*1.07*
Winter						
Area Sources	62.88	0.00	0.01	0.00	0.00	0.00
Energy Demand	0.71	6.44	5.41	0.04	0.49	0.49
Mobile Sources	1.38	3.82	14.83	0.03	2.03	0.58
Winter Total	*64.96*	*10.26*	*20.25*	*0.07*	*2.52*	*1.07*
Weekend Game Day (Fall)						
Summer						
Area Sources	30.80	0.00	0.00	0.00	0.00	0.00
Energy Demand	0.28	2.52	2.12	0.02	0.19	0.19
Mobile Sources	6.60	18.11	75.31	0.15	10.12	2.89
Summer Total	*37.68*	*20.63*	*77.43*	*0.16*	*10.31*	*3.08*
Winter						
Area Sources	30.80	0.00	0.00	0.00	0.00	0.00
Energy Demand	0.28	2.52	2.12	0.02	0.19	0.19
Mobile Sources	6.87	19.06	74.03	0.14	10.12	2.89
Winter Total	*37.95*	*21.58*	*76.15*	*0.15*	*10.31*	*3.08*
Weekend Game Day (Spring)						
Summer						
Area Sources	50.06	0.00	0.00	0.00	0.00	0.00
Energy Demand	0.71	6.44	5.41	0.04	0.49	0.49
Mobile Sources	2.67	7.32	30.46	0.06	4.09	1.17
Summer Total	*53.44*	*13.76*	*35.87*	*0.10*	*4.58*	*1.66*
Winter						
Area Sources	50.06	0.00	0.00	0.00	0.00	0.00
Energy Demand	0.71	6.44	5.41	0.04	0.49	0.49
Mobile Sources	2.78	7.71	29.94	0.06	4.09	1.17
Winter Total	*53.55*	*14.15*	*35.35*	*0.09*	*4.28*	*1.66*

Table 11
Proposed Long-Term Daily Emissions (lbs/day)

Source	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Weekday Practice Day						
Summer						
Area Sources	74.65	0.00	0.01	0.00	0.00	0.00
Energy Demand	0.01	0.09	0.07	0.00	0.01	0.01
Mobile Sources	0.81	1.99	8.91	0.03	1.80	0.51
Summer Total	*75.47*	*2.08*	*9.00*	*0.03*	*1.81*	*0.51*
Winter						
Area Sources	74.65	0.00	0.01	0.00	0.00	0.00
Energy Demand	0.01	0.09	0.07	0.00	0.01	0.01
Mobile Sources	0.84	2.09	8.82	0.03	1.80	0.51
Winter Total	*75.50*	*2.18*	*8.90*	*0.03*	*1.81*	*0.51*
Weekday Game Day						
Summer						
Area Sources	74.65	0.00	0.01	0.00	0.00	0.00
Energy Demand	0.68	6.21	5.22	0.04	0.47	0.47
Mobile Sources	1.19	2.64	12.74	0.05	3.33	0.93
Summer Total	*76.52*	*8.85*	*17.96*	*0.09*	*3.81*	*1.41*
Winter						
Area Sources	74.65	0.00	0.01	0.00	0.00	0.00
Energy Demand	0.68	6.21	5.22	0.04	0.53	0.47
Mobile Sources	1.22	2.77	12.67	0.05	3.33	0.93
Winter Total	*67.83*	*8.76*	*16.89*	*0.08*	*3.54*	*1.33*
Weekend Game Day (Fall)						
Summer						
Area Sources	39.43	0.00	0.00	0.00	0.00	0.00
Energy Demand	0.26	2.40	2.01	0.01	0.18	0.18
Mobile Sources	3.67	8.17	39.37	0.15	10.31	2.89
Summer Total	*43.37*	*10.57*	*41.39*	*0.17*	*10.49*	*3.07*
Winter						
Area Sources	39.43	0.00	0.00	0.00	0.00	0.00
Energy Demand	0.26	2.40	2.01	0.01	0.18	0.18
Mobile Sources	3.78	8.57	39.17	0.15	10.31	2.89
Winter Total	*43.48*	*10.97*	*41.19*	*0.16*	*10.49*	*3.07*
Weekend Game Day (Spring)						
Summer						
Area Sources	58.70	0.00	0.01	0.00	0.00	0.00
Energy Demand	0.67	6.12	5.14	0.04	0.47	0.47
Mobile Sources	1.79	3.98	19.20	0.08	5.03	1.41
Summer Total	*61.16*	*10.10*	*24.35*	*0.11*	*5.49*	*1.87*
Winter						
Area Sources	58.70	0.00	0.01	0.00	0.00	0.00
Energy Demand	0.67	6.12	5.14	0.04	0.47	0.47
Mobile Sources	1.84	4.18	19.11	0.07	5.03	1.41
Winter Total	*61.21*	*10.30*	*24.25*	*0.11*	*5.49*	*1.87*

Table 12
Net Long-Term Daily Emissions (lbs/day)

Source	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Weekday Practice Day						
Summer						
Area Sources	+12.18	--	--	--	--	--
Energy Demand	+0.01	+0.09	+0.07	--	+0.01	+0.01
Mobile Sources	+0.20	+0.33	+2.03	+0.01	+0.88	+0.24
Net Summer Total	*+12.39*	*+0.42*	*+2.10*	*+0.01*	*+0.88*	*+0.25*
Winter						
Area Sources	+12.18	--	--	--	--	--
Energy Demand	+0.01	+0.09	+0.07	--	+0.01	+0.01
Mobile Sources	+0.21	+0.35	+2.05	+0.01	+0.88	+0.24
Net Winter Total	*+12.39*	*+0.43*	*+2.13*	*+0.01*	*+0.88*	*+0.25*
Threshold	**55**	**55**	**550**	**150**	**150**	**55**
Significant?	No	No	No	No	No	No
Weekday Game Day						
Summer						
Area Sources	+11.78	--	--	--	--	--
Energy Demand	-0.03	-0.25	-0.20	--	-0.02	-0.02
Mobile Sources	-0.14	-0.98	-2.35	+0.02	+1.31	+0.35
Net Summer Total	*+11.62*	*-1.22*	*-2.55*	*+0.02*	*+1.29*	*+0.34*
Winter						
Area Sources	+11.78	--	--	--	--	--
Energy Demand	-0.03	-0.23	-0.20	--	+0.04	-0.02
Mobile Sources	-0.14	-1.05	-2.16	+0.02	+1.31	+0.35
Net Winter Total	*+2.87*	*-1.50*	*-3.36*	*+0.01*	*+1.02*	*+0.26*
Threshold	**55**	**55**	**550**	**150**	**150**	**55**
Significant?	No	No	No	No	No	No
Weekend Game Day (Fall)						
Summer						
Area Sources	-10.63	--	--	--	--	--
Energy Demand	-0.44	-4.04	-3.40	-0.02	-0.31	-0.31
Mobile Sources	+1.00	+0.85	+8.97	+0.09	+6.22	+1.72
Net Summer Total	*-10.07*	*-3.20*	*+5.52*	*+0.07*	*+5.91*	*+1.41*
Winter						
Area Sources	-10.63	--	--	--	--	--
Energy Demand	-0.44	-4.04	-3.40	-0.02	-0.31	-0.31
Mobile Sources	+1.00	+0.86	+9.24	+0.09	+6.22	+1.72
Net Winter Total	*-10.07*	*-3.18*	*+5.84*	*+0.07*	*+6.21*	*+1.41*
Threshold	**55**	**55**	**550**	**150**	**150**	**55**
Significant?	No	No	No	No	No	No
Weekend Game Day (Spring)						
Summer						
Area Sources	+8.63	--	--	--	--	--
Energy Demand	-0.04	-0.32	-0.27	--	-0.02	-0.02
Mobile Sources	-0.88	-3.34	-11.25	+0.02	+0.93	+0.24
Net Summer Total	*+7.72*	*-3.66*	*-11.52*	*+0.01*	*+0.91*	*+0.21*
Winter						
Area Sources	+8.63	--	--	--	--	--
Energy Demand	-0.04	-0.32	-0.27	--	-0.02	-0.02
Mobile Sources	-0.93	-3.53	-10.83	+0.02	+1.93	+0.24
Net Winter Total	*+7.66*	*-3.85*	*-11.10*	*+0.01*	*+0.91*	*+0.21*
Threshold	**55**	**55**	**550**	**150**	**150**	**55**
Significant?	No	No	No	No	No	No

Localized Emissions

TOXIC AIR CONTAMINANTS

Demolition of existing structures built during the 1980s or earlier could expose demolition workers and surrounding uses to airborne asbestos emissions due to the potential presence of asbestos-containing materials (ACM). This is because that as portions of the building are removed and destroyed, asbestos has the potential to become agitated and become airborne. The project site is currently vacant; therefore, the project will not involve demolition activities and will not expose demolition workers to asbestos-containing materials (ACM). Operationally, the proposed project does not emit toxic air contaminants.

CARBON MONOXIDE HOTSPOTS

A carbon monoxide (CO) hotspot is an area of localized CO pollution that is caused by severe vehicle congestion on major roadways, typically near intersections. CO hotspots have the potential to violate State and Federal CO standards at intersections, even if the broader Basin is in attainment for Federal and State levels. The California Department of Transportation Project-Level Carbon Monoxide Protocol (Protocol) screening procedures have been utilized to determine if the proposed project could potentially result in a CO hotspot.[26] According to Section 3.1.3 of the Protocol, the proposed project is not regionally significant and therefore is only required to examine local impacts. Regionally significant projects are defined in 40 CFR Section 93.101 and through extension in 40 CFR Section 93.105(c)(1)(ii), as follows:

> *Regionally significant project means a transportation project (other than an exempt project) that is on a facility which serves regional transportation needs (such as access to and from the area outside of the region, major activity centers in the region, major planned developments such as new retail malls, sports complexes, etc., or transportation terminals as well as most terminals themselves) and would normally be included in the modeling of a metropolitan area's transportation network, including at a minimum all principal arterial highways and all fixed guideway transit facilities that offer an alternative to regional highway travel.*

Localized impacts are analyzed in Protocol Section 4. The local analysis procedures in Section 4.7.1 indicate that the proposed project has the potential to worsen air quality (as defined for Protocol purposes only) because it will result in an increase in the number of vehicles operating in *cold start* mode by more than two percent. *Cold Start* mode refers to a vehicle started after an hour or more being turned off. Existing trips from existing sports fields have not been considered to provide a worst case analysis. The proposed project will result in an average daily trip (ADT) increase of approximately 272 trips on weekday practice days, 504 trips on weekday game days, 1,558 Saturday trips on weekend game days in the fall, and 760 Saturday trips on weekend game days in the spring. The local analysis procedures then direct to Protocol Sections 4.7.3 and 4.7.4. These sections indicate that if the proposed project involves signalized intersections performing at Level of Service (LOS) E or worse then the proposed project will be subject to a screening analysis. The proposed project will involve one signalized intersection operating at LOS F during the PM peak hour as identified in the project traffic study under existing conditions; therefore, a screening analysis is performed to determine if a detailed analysis will be required. Section 4.4 references Appendix A of the Protocol for screening purposes; however, because of the age of the assumptions used in the screening procedures, they are no longer accepted. The Sacramento Metropolitan Air Quality Management District (SMAQMD) developed a screening threshold that states that any project involving an intersection experiencing 31,600 vehicles per hour or more will require detailed analysis.[27] The proposed project will not involve an intersection experiencing this level of traffic; therefore, the proposed project passes the screening analysis and impacts are deemed acceptable. Based on the local analysis procedures, the proposed project is satisfactory pursuant to the Protocol and will not result in a CO hotspot.

LOCALIZED SIGNIFICANCE THRESHOLDS

As part of SCAQMD's environmental justice program, attention has recently been focusing more on the localized effects of air quality. Although the region may be in attainment for a particular criteria pollutant, localized emissions from construction activities coupled with ambient pollutant levels can cause localized increases in criteria pollutant that exceed national and/or State air quality standards.

Construction-related criteria pollutant emissions and potentially significant localized impacts were evaluated pursuant to the SCAQMD Final Localized Significant Thresholds Methodology. This methodology provides screening tables for one- through five-acre project scenarios, depending on the amount of site disturbance during a day. The construction of Phase 2 will disturb approximately 0.5 acres per day (10 total acres of disturbance / 20 days of grading = 0.5 acres per day). The construction of Phase 3 will disturb approximately 0.5 acres per day (10 total acres of disturbance / 20 days of grading = 0.5 acres per day). The construction of Phase 4 will disturb approximately 2.5 acres per day (275 total acres of disturbance / 110 days of grading = 2.5 acres per day). The construction of Phase 5 will disturb approximately 2.5 acres per day (75 total acres of disturbance / 30 days of grading = 2.5 acres per day). Linear regression was used to determine screening thresholds for 0.5 acres for Phases 2 and 3 and 2.5 acres for Phases 4 and 5. Maximum daily emissions of oxides of nitrogen (NO_X), carbon monoxide (CO), and particulate matter (PM_{10} and $PM_{2.5}$) will occur during construction of the proposed project, grading of the project site, and paving of parking acres and drive aisles. Table 13 (Construction Localized Significance Threshold Analysis) summarizes on-site emissions as compared to the local thresholds established for Source Receptor Area (SRA) 10 (Pomona/Walnut Valley) and SRA 32 (Northwest San Bernardino Valley). A 50 meter receptor distance was used to reflect the proximity of the residential uses to the south of the project site. Based on the results of the on-site emissions analysis, SCAQMD localized significance thresholds will not be exceeded.

Potentially significant localized impacts during operation of the proposed project were also evaluated. Linear regression was used to determine screening thresholds for the area and energy source emissions resulting from operation of the sports fields and ancillary structures on 65.54 acres. Table 14 (Operational Localized Significant Threshold Analysis summarizes area and energy source emissions as compared to the local thresholds established for SRA 10 and SRA 32 under the weekday practice day, weekday game day, fall weekend game day, and spring weekend game day scenarios. A 50 meter receptor distance was used to reflect the proximity of the residential uses to the south of the project site. Based on the results of the analysis, SCAQMD localized significance thresholds will not be exceeded. Note that emissions will also not exceed, and are well below, SCAQMD localized significance thresholds for one-, two-, or five-acre sites.

Table 13
Construction Localized Significance Threshold Analysis

	NO_2	CO	PM_{10}	$PM_{2.5}$
Phase II				
Site Preparation	51.75	39.40	20.82	12.46
Grading	35.98	25.38	8.59	5.24
Building Construction	12.67	8.04	0.86	0.79
Architectural Coating	2.19	1.87	0.17	0.17
Paving	9.83	7.24	0.60	0.56
SCAQMD Localized Significance Threshold (SRA 10)	*117.99*	*822.76*	*8.25*	*3.75*
SCAQMD Localized Significance Threshold (SRA 32)	*135.25*	*1,190*	*7.5*	*5.50*
Threshold Exceeded?	**No**	**No**	**No**	**No**
Phase III				
Site Preparation	42.50	34.81	20.22	11.91
Grading	28.38	23.39	8.09	4.78
Paving	14.94	14.37	0.81	0.74
SCAQMD Localized Significance Threshold (SRA 10)	*117.99*	*822.76*	*8.25*	*3.75*
SCAQMD Localized Significance Threshold (SRA 32)	*135.25*	*1,190*	*7.5*	*5.50*
Threshold Exceeded?	**No**	**No**	**No**	**No**
Phase IV				
Site Preparation	32.65	29.97	19.61	11.35
Grading	38.43	35.10	10.40	5.19
Building Construction	6.98	7.13	0.37	0.34
Architectural Coating	1.30	1.81	0.07	0.07
Paving	6.15	8.67	0.30	0.28
SCAQMD Localized Significance Threshold (SRA 10)	*184.15*	*1,425.46*	*20.63*	*6.13*
SCAQMD Localized Significance Threshold (SRA 32)	*210.71*	*1,994*	*26.12*	*8.42*
Threshold Exceeded?	**No**	**No**	**No**	**No**
Phase V				
Site Preparation	23.53	24.89	19.10	10.88
Grading	27.26	31.35	9.86	4.69
Building Construction	12.41	16.05	0.53	0.49
Paving	6.01	8.74	0.27	0.25
Architectural Coating	1.15	1.81	0.05	0.05
SCAQMD Localized Significance Threshold (SRA 10)	*184.15*	*1,425.46*	*20.63*	*6.13*
SCAQMD Localized Significance Threshold (SRA 32)	*210.71*	*1,994*	*26.12*	*8.42*
Threshold Exceeded?	**No**	**No**	**No**	**No**

Table 14
Operational Localized Significance Threshold Analysis

	NO_2	CO	PM_{10}	$PM_{2.5}$
Weekday Practice Day	0.09	0.01	0.01	0.01
Weekday Game Day	6.21	5.23	0.53	0.47
Weekend Game Day (Fall)	2.40	2.01	0.18	0.18
Weekend Game Day (Spring)	6.12	5.15	0.47	0.47
SCAQMD Localized Significance Threshold (SRA 10)	*2,269.33*	*20,422.56*	*97.56*	*31.02*
SCAQMD Localized Significance Threshold (SRA 32)	*2,589.27*	*27,336.08*	*137.58*	*19.26*
Threshold Exceeded?	**No**	**No**	**No**	**No**

Odors

According to the CEQA Air Quality Handbook, land uses associated with odor complaints include agricultural operations, wastewater treatment plants, landfills, and certain industrial operations (such as manufacturing uses that produce chemicals, paper, etc.). The proposed project is sited on a previous quarry with residential uses to the south, commercial uses to the north, and Pitzer College and Claremont McKenna College campuses to the west. The proposed project would not produce odors that would affect a substantial number of people considering that the proposed project will not result in the manufacturing of any products or conduct other heavy industrial operations.

Cumulative Impacts

CUMULATIVE CONSTRUCTION IMPACTS

Cumulative short-term, construction-related emissions from the proposed project will not contribute considerably to any potential cumulative air quality impact because short-term project emissions will be less than significant and other concurrent construction projects in the region will be required to implement standard air quality regulations and mitigation pursuant to State CEQA requirements, just as this project has.

CUMULATIVE OPERATIONAL IMPACTS

As discussed in Section 6.2 (AQMP Consistency) of this report, the proposed project is consistent with current land use designations and is consistent with the growth assumptions of the AQMP. Therefore, the proposed project will not contribute to any potential cumulative air quality impacts.

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Thresholds of Significance

The proposed project could result in potentially significant impacts related to greenhouse gas emissions and global climate change if it would:

A. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
B. Conflict with an applicable plan, policy, or regulation adopted for the purposes of reducing the emissions of greenhouse gases.

A numerical threshold for determining the significance of greenhouse gas emissions in the South Coast Air Basin (Basin) has not officially been adopted by the SCAQMD. As an interim threshold based on guidance provided in the CAPCOA *CEQA and Climate Change* white paper, a non-zero threshold based on Approach 2 of the handbook will be used.[28] Threshold 2.5 (Unit-Based Thresholds Based on Market Capture) establishes a numerical threshold based on capture of approximately 90 percent of emissions from future development. The latest threshold developed by SCAQMD using this method is 3,000 metric tons carbon dioxide equivalent ($MTCO_2E$) per year for residential and commercial projects.[29] This threshold is based on the review of 711 CEQA projects.

Direct and Indirect Emissions

The proposed project will include activities that emit greenhouse gas emissions over the short- and long-term. While one project could not be said to cause global climate change, individual projects contribute cumulatively to greenhouse gas emissions that result in climate change.

If net emissions resulting from the proposed project exceeds the 3,000 MTCO2E threshold a potentially significant impact could occur because the proposed project would be outside of the smallest ten-percent of commercial GHG emitters and could contribute to climate change impacts such as temperature increases, precipitation changes, increases in natural hazards, and other identified impacts. To determine if the proposed project will exceed the threshold, a greenhouse gas emissions inventory was prepared for the proposed project and is analyzed below.

SHORT-TERM EMISSIONS

The proposed project will result in short-term greenhouse gas emissions from construction and installation activities. Greenhouse gas emissions will be released by equipment used for grading, paving, building construction, and architectural coating activities. GHG emissions will also result from worker and vendor trips to and from the project site. Table 15 (Construction Greenhouse Gas Emissions) summarizes the estimated yearly emissions from construction activities. Carbon dioxide emissions from construction equipment and worker/vendor trips were estimated utilizing the California Emissions Estimator Model (CalEEMod) version 2013.2.2. Construction activities are short-term and cease to emit greenhouse gases upon completion, unlike operational emissions that are continuous year after year until operation of the use ceases. Because of this difference, SCAQMD recommends in its draft threshold to amortize construction emissions over a 30-year operational lifetime. This normalizes construction emissions so that they can be grouped with operational emissions in order to generate a precise project GHG inventory. Amortized construction emissions for each construction phase are included in Table 15.

Table 15
Construction Greenhouse Gas Emissions

	GHG Emissions (MT/YR)			
	CO_2	CH_4	N_2O	TOTAL*
Claremont Boulevard Improvements				
2017	1,274.87	0.31	0.00	1,281.31
SUB-TOTAL	1,274.87	0.31	0.00	1,281.31
*AMORTIZED TOTAL^*	*42.50*	*0.01*	*0.00*	*41.71*
Arrow Route Improvements				
2017	1,274.87	0.31	0.00	1,281.31
SUB-TOTAL	1,274.87	0.31	0.00	1,281.31
*AMORTIZED TOTAL^*	*42.50*	*0.01*	*0.00*	*41.71*
Phase II				
2017	119.47	0.03	0.00	120.17
SUB-TOTAL	119.47	0.03	0.00	120.17
*AMORTIZED TOTAL^*	*3.98*	*0.00*	*0.00*	*4.01*
Foothill Boulevard Improvements				
2019	1,230.27	0.31	0.00	1,236.68
SUB-TOTAL	1,230.27	0.31	0.00	1,236.68
*AMORTIZED TOTAL^*	*41.01*	*0.01*	*0.00*	*41.22*
Phase III				
2019	67.90	0.02	0.00	68.33
SUB-TOTAL	67.90	0.02	0.00	68.33
*AMORTIZED TOTAL^*	*2.26*	*0.00*	*0.00*	*2.28*
Monte Vista Improvements				
2022	1,197.75	0.30	0.00	1,204.15
SUB-TOTAL	1,197.75	0.30	0.00	1,204.15
*AMORTIZED TOTAL^*	*39.93*	*0.01*	*0.00*	*40.14*
Phase IV				
2022	427.98	0.13	0.00	430.79
2023	32.00	0.01	0.00	32.20
SUB-TOTAL	459.98	0.14	0.00	462.99
*AMORTIZED TOTAL^*	*15.33*	*0.00*	*0.00*	*15.43*
Phase V				
2025	227.24	0.06	0.00	228.50
SUB-TOTAL	227.24	0.06	0.00	228.50
*AMORTIZED TOTAL^*	*7.57*	*0.00*	*0.00*	*7.62*
Amortized Project Total	***195.08***	***0.04***	***0.00***	***194.12***

* MTCO2E
Note: Slight variations may occur due to rounding and variations in modeling software
^ Amortized over 30-years

LONG-TERM EMISSIONS

Proposed project activities will result in continuous greenhouse gas emissions from mobile, area, and operational sources. Mobile sources including vehicle trips to and from the project site will result primarily in emissions of CO_2 with minor emissions of methane and nitrous oxide. The most significant GHG emission from natural gas usage will be methane. Electricity usage by the proposed project and indirect usage of electricity for water and wastewater conveyance will result primarily in emissions of carbon dioxide. Disposal of solid waste will result in emissions of methane from the decomposition of waste at landfills coupled with CO_2 emission from the handling and transport of solid waste. These sources combine to define the long-term greenhouse gas emissions inventory for the build-out of the proposed project.

The methodology utilized for each emissions source in CalEEMod is based on the CAPCOA *Quantifying Greenhouse Gas Mitigation Measures* handbook.[30] A summary of the existing, proposed, and net operational greenhouse gas emissions is included in Table 16 (Existing Long-Term Greenhouse Gas Emissions), Table 17 (Proposed Long-Term Greenhouse Gas Emissions), and Table 18 (Net Long-Term Greenhouse Gas Emissions). The emissions inventories are presented as metric tons of carbon dioxide equivalent (MTCO2E) meaning that all emissions have been weighted based on their Global Warming Potential (GWP) (a metric ton is equal to 1.102 US short tons). Mobile sources are based on annual vehicle miles traveled (VMT) based on daily trip generation identified in the project traffic study.[31] Indoor water demand was estimated based on the number of plumbing fixtures to be installed. Outdoor water demand was estimated using irrigation estimates provided by Claremont McKenna College and Pitzer College. Natural gas, electricity, and solid waste generation were projected using CalEEMod default values.

Table 16
Existing Long-Term Greenhouse Gas Emissions

Source	GHG Emissions (MT/YR)			
	CO_2	CH_4	N_2O	TOTAL*
Area Emissions	0.00	0.00	0.00	0.00
Energy Demand	10,637.21	0.42	0.12	10,684.05
Mobile Emissions	71.91	0.00	0.00	71.96
Solid Waste Disposal	0.96	0.06	0.00	2.15
Water/Wastewater Treatment/Conveyance	16.17	0.02	0.00	16.74
TOTAL	*10,726.25*	*0.50*	*0.12*	*10,774.90*

* MTCO2E/YR: metric tons of carbon dioxide equivalent per year
Note: Slight variations may occur due to rounding

Table 17
Proposed Long-Term Greenhouse Gas Emissions

Source	GHG Emissions (MT/YR)			
	CO_2	CH_4	N_2O	TOTAL*
Area Emissions	0.00	0.00	0.00	0.00
Energy Demand	12,247.52	0.49	0.14	12,301.42
Mobile Emissions	128.94	0.00	0.00	129.03
Solid Waste Disposal	6.75	0.40	0.00	15.14
Water/Wastewater Treatment/Conveyance	28.86	0.09	0.00	31.61
TOTAL	*12,412.08*	*0.99*	*0.14*	*12,477.19*

* MTCO2E/YR: metric tons of carbon dioxide equivalent per year
Note: Slight variations may occur due to rounding

Table 18
Net Long-Term Greenhouse Gas Emissions

Source	GHG Emissions (MT/YR)			
	CO_2	CH_4	N_2O	TOTAL*
Area Emissions	--	--	--	--
Energy Demand	+1,610.31	+0.07	+0.02	+1,617.37
Mobile Emissions	+57.03	--	--	+57.07
Solid Waste Disposal	+5.79	+0.34	--	+12.99
Water/Wastewater Treatment/Conveyance	+12.69	+0.07	--	+14.87
TOTAL	*+1,685.82*	*+0.48*	*+0.02*	*+1,702.30*

* MTCO2E/YR: metric tons of carbon dioxide equivalent per year
Note: Slight variations may occur due to rounding

GREENHOUSE GAS EMISSIONS INVENTORY

Tables 19 (Greenhouse Gas Emissions Inventory) summarizes the yearly estimated greenhouse gas emissions from construction of the proposed project and operational sources under operational conditions. Net greenhouse gas emissions associated with the proposed project would not exceed the 3,000 MTCO2E threshold.

Table 19
Greenhouse Gas Emissions Inventory

Source	GHG Emissions (MT/YR)			
	CO_2	CH_4	N_2O	TOTAL*
Construction^	195.08	0.04	0.00	194.12
Net Operational	1,685.82	0.48	0.02	1,702.30
GRAND TOTAL	**1,880.9**	**0.52**	**0.02**	**1,896.42**

* MTCO2E/YR: metric tons of carbon dioxide equivalent per year
Note: Slight variations may occur due to rounding
^ Construction impacts amortized over 30-years

Greenhouse Gas Emissions Reduction Planning

CALIFORNIA AIR RESOURCES BOARD SCOPING PLAN

ARB's *Scoping Plan* identifies strategies to reduce California's greenhouse gas emissions in support of AB32. Many of the strategies identified in the Scoping Plan are not applicable at the project level, such as long-term technological improvements to reduce emissions from vehicles. Some measures are applicable and supported by the proposed project, such as energy efficiency. Finally, while some measures are not directly applicable, the proposed project would not conflict with their implementation. Reduction measures are grouped into 18 action categories, as follows:

1. **California Cap-and-Trade Program Linked to Western Climate Initiative Partner Jurisdictions.** Implement a broad-based California cap-and-trade program to provide a firm limit on emissions. Link the California cap–and-trade program with other Western Climate Initiative Partner programs to create a regional market system to achieve greater environmental and economic benefits for California.[32] Ensure California's program meets all applicable AB 32 requirements for market-based mechanisms.
2. **California Light-Duty Vehicle Greenhouse Gas Standards.** Implement adopted Pavley standards and planned second phase of the program. Align zero-emission vehicle, alternative and renewable fuel and vehicle technology programs with long-term climate change goals.
3. **Energy Efficiency.** Maximize energy efficiency building and appliance standards, and pursue additional efficiency efforts including new technologies, and new policy and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California (including both investor-owned and publicly owned utilities).
4. **Renewables Portfolio Standards.** Achieve 33 percent renewable energy mix statewide.
5. **Low Carbon Fuel Standard.** Develop and adopt the Low Carbon Fuel Standard.
6. **Regional Transportation-Related Greenhouse Gas Targets.** Develop regional greenhouse gas emissions reduction targets for passenger vehicles.
7. **Vehicle Efficiency Measures.** Implement light-duty vehicle efficiency measures.
8. **Goods Movement.** Implement adopted regulations for the use of shore power for ships at berth. Improve efficiency in goods movement activities.
9. **Million Solar Roofs Program.** Install 3,000 megawatts of solar-electric capacity under California's existing solar programs.
10. **Medium- and Heavy-Duty Vehicles.** Adopt medium- (MD) and heavy-duty (HD) vehicle efficiencies. Aerodynamic efficiency measures for HD trucks pulling trailers 53-feet or longer that include improvements in trailer aerodynamics

and use of rolling resistance tires were adopted in 2008 and went into effect in 2010.[33] Future, yet to be determined improvements, includes hybridization of MD and HD trucks.

11. **Industrial Emissions.** Require assessment of large industrial sources to determine whether individual sources within a facility can cost-effectively reduce greenhouse gas emissions and provide other pollution reduction co-benefits. Reduce greenhouse gas emissions from fugitive emissions from oil and gas extraction and gas transmission. Adopt and implement regulations to control fugitive methane emissions and reduce flaring at refineries.
12. **High Speed Rail.** Support implementation of a high speed rail system.
13. **Green Building Strategy.** Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings.
14. **High Global Warming Potential Gases.** Adopt measures to reduce high warming global potential gases.
15. **Recycling and Waste.** Reduce methane emissions at landfills. Increase waste diversion, composting and other beneficial uses of organic materials, and mandate commercial recycling. Move toward zero-waste.
16. **Sustainable Forests.** Preserve forest sequestration and encourage the use of forest biomass for sustainable energy generation. The 2020 target for carbon sequestration is 5 million MTCO2E/YR.
17. **Water.** Continue efficiency programs and use cleaner energy sources to move and treat water.
18. **Agriculture.** In the near-term, encourage investment in manure digesters and at the five-year Scoping Plan update determine if the program should be made mandatory by 2020.

Table 20 summarizes the proposed project's consistency with the State Scoping Plan. As summarized, the proposed project will not conflict with any of the provisions of the Scoping Plan and in fact supports four of the action categories through energy efficiency, water conservation, and recycling.

Table 20
Scoping Plan Consistency Summary

Action	Supporting Measures	Consistency
Cap-and-Trade Program	--	**Not Applicable.** These programs involve capping emissions from electricity generation, industrial facilities, and broad scoped fuels. Caps do not directly affect sports fields/recreational uses.
Light-Duty Vehicle Standards	T-1	**Not Applicable.** This is a statewide measure establishing vehicle emissions standards.
Energy Efficiency	E-1	**Consistent.** The project will include a variety of building, water, and solid waste efficiencies consistent with CALGREEN requirements.
	E-2	
	CR-1	
	CR-2	
Renewables Portfolio Standard	E-3	**Not Applicable.** Establishes the minimum statewide renewable energy mix.
Low Carbon Fuel Standard	T-2	**Not Applicable.** Establishes reduced carbon intensity of transportation fuels.
Regional Transportation-Related Greenhouse Gas Targets	T-3	**Not Applicable.** The project will not result in substantial emissions of greenhouse gas emissions; therefore, transportation related emissions reductions are not required.
Vehicle Efficiency Measures	T-4	**Not Applicable.** Identifies measures such as minimum tire-fuel efficiency, lower friction oil, and reduction in air conditioning use.
Goods Movement	T-5	**Not applicable.** Identifies measures to improve goods movement efficiencies such as advanced combustion strategies, friction reduction, waste heat recovery, and electrification of accessories.
	T-6	
Million Solar Roofs Program	E-4	**Not Applicable.** Sets goal for use of solar systems throughout the state.
Medium- & Heavy-Duty Vehicles	T-7	**Not applicable.** Medium-duty and heavy-duty trucks and trailers will not operate from the proposed project.
	T-8	
Industrial Emissions	I-1	**Not Applicable.** These measures are applicable to large industrial facilities (> 500,000 MTCOE2/YR) and other intensive uses such as refineries.
	I-2	
	I-3	
	I-4	
	I-5	
High Speed Rail	T-9	**Not Applicable.** Supports increased mobility choice.
Green Building Strategy	GB-1	**Consistent.** The project will include a variety of building, water, and solid waste efficiencies consistent with CALGREEN requirements.
High Global Warming Potential Gases	H-1	**Not Applicable.** The proposed project is not a substantial source of high GWP emissions and will
	H-2	

	H-3	comply with any future changes in air conditioning, fire protection suppressant, and other requirements.
	H-4	
	H-5	
	H-6	
	H-7	
Recycling and Waste	RW-1	**Consistent.** The project will be required to recycle a minimum of 50 percent from construction activities and operations per State requirements.
	RW-2	
	RW-3	
Sustainable Forests	F-1	**Not Applicable.** The project site is not forested and the project will not result in the loss of any forest land.
Water	W-1	**Consistent.** The project will include use of low-flow fixtures and efficient landscaping per State requirements.
	W-2	
	W-3	
	W-4	
	W-5	
	W-6	
Agriculture	A-1	**Not Applicable.** The project is not an agricultural use.

Energy Conservation

INTRODUCTION

This energy conservation analysis has been prepared pursuant to California Public Resources Code Section 21100(b)(3) and Appendix F of the California Environmental Quality Act (CEQA) Guidelines.

The purpose of this analysis is to assess the short- and long-term energy demand of the proposed project, identify proposed and required conservation measures, and assess the extent to which the proposed project would conserve energy. Project energy demand will not be wasteful, inefficient, or unnecessary if it does not increase energy demand over typical construction and operating requirements.

Energy demand and conservation effectiveness are primarily based on demand surveys utilized in the California Emissions Estimator Model (CalEEMod). CalEEMod estimates energy demand for purposes of modeling greenhouse gas emissions.

Appendix F of the State CEQA Guidelines states that the goal of assessing energy conservation in a project is to ensure the wise and efficient use of energy. Energy efficiency is achieved by decreasing energy consumption, decreasing reliance on fossil fuels, and increasing use of renewable energy sources. The guidelines for analysis of energy conservation provided in Appendix F of the State CEQA Guidelines are provided herein.

CEQA APPENDIX F: ENERGY CONSERVATION

I. Introduction

The goal of conserving energy implies the wise and efficient use of energy. The means of achieving this goal include:

(1) decreasing overall per capita energy consumption,
(2) decreasing reliance on fossil fuels such as coal, natural gas and oil, and
(3) increasing reliance on renewable energy sources.

In order to assure that energy implications are considered in project decisions, the California Environmental Quality Act requires that EIRs include a discussion of the potential energy impacts of proposed projects, with particular emphasis on

avoiding or reducing inefficient, wasteful and unnecessary consumption of energy (see Public Resources Code section 21100(b)(3)). Energy conservation implies that a project's cost effectiveness be reviewed not only in dollars, but also in terms of energy requirements. For many projects, cost effectiveness may be determined more by energy efficiency than by initial dollar costs. A lead agency may consider the extent to which an energy source serving the project has already undergone environmental review that adequately analyzed and mitigated the effects of energy production.

II. EIR Contents

Potentially significant energy implications of a project shall be considered in an EIR to the extent relevant and applicable to the project. The following list of energy impact possibilities and potential conservation measures is designed to assist in the preparation of an EIR. In many instances specific items may not apply or additional items may be needed. Where items listed below are applicable or relevant to the project, they should be considered in the EIR.

A. Project Description may include the following items:

1. *Energy consuming equipment and processes which will be used during construction, operation and/or removal of the project. If appropriate, this discussion should consider the energy intensiveness of materials and equipment required for the project.*
2. *Total energy requirements of the project by fuel type and end use.*
3. *Energy conservation equipment and design features.*
4. *Identification of energy supplies that would serve the project.*
5. *Total estimated daily vehicle trips to be generated by the project and the additional energy consumed per trip by mode.*

B. Environmental Setting may include existing energy supplies and energy use patterns in the region and locality.

C. Environmental Impacts may include:

1. *The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance and/or removal. If appropriate, the energy intensiveness of materials may be discussed.*
2. *The effects of the project on local and regional energy supplies and on requirements for additional capacity.*
3. *The effects of the project on peak and base period demands for electricity and other forms of energy.*
4. *The degree to which the project complies with existing energy standards.*
5. *The effects of the project on energy resources.*
6. *The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.*

D. Mitigation Measures may include:

1. *Potential measures to reduce wasteful, inefficient and unnecessary consumption of energy during construction, operation, maintenance and/or removal. The discussion should explain why certain measures were incorporated in the project and why other measures were dismissed.*
2. *The potential of siting, orientation, and design to minimize energy consumption, including transportation energy, increase water conservation and reduce solid waste.*
3. *The potential for reducing peak energy demand.*
4. *Alternate fuels (particularly renewable ones) or energy systems.*
5. *Energy conservation which could result from recycling efforts.*

E. Alternatives should be compared in terms of overall energy consumption and in terms of reducing wasteful, inefficient and unnecessary consumption of energy.

F. *Unavoidable Adverse Effects may include wasteful, inefficient and unnecessary consumption of energy during the project construction, operation, maintenance and/or removal that cannot be feasibly mitigated.*
G. *Irreversible Commitment of Resources may include a discussion of how the project preempts future energy development or future energy conservation.*
H. *Short-Term Gains versus Long-Term Impacts can be compared by calculating the project's energy costs over the project's lifetime.*
I. *Growth Inducing Effects may include the estimated energy consumption of growth induced by the project.*

Energy Demand

Short-term energy demand would result from construction of the proposed project. This would include energy demand from worker and vendor vehicle trips and construction equipment usage. Long-term energy demand would result from operation of the proposed project. This would include energy demand from vehicle trips, electricity and natural gas usage, and water and wastewater conveyance. This section quantifies the energy needs of these activities.

Construction Activities

Worker and vendor trips have been estimated based on the construction schedule assumptions used in the preparation of the project air quality and climate change report. The construction schedule for the proposed project includes an anticipated start date in early March 2017. Vendor trips are based on construction vendor trip data compiled by the Sacramento Metropolitan Air Quality Management District. Fuel consumption from worker and vendor trips is estimated by evaluating the number of vehicle trips and travel distances required to complete each construction phase. Construction is scheduled to occur in the years 2017 through 2025. Fuel economy for the worker vehicle fleet mix (70 percent automobile and 30 percent light duty truck) is estimated at 38.7 miles per gallon (mpg) in 2017, 42.8 mpg in 2019, and 43.9 in years 2022 through 2025, based on estimates prepared by the California Air Resources Board (ARB).[34] Fuel economy standards are available through the year 2020. The fuel economy for year 2020 has been used for all subsequent years to provide a worst case analysis as fuel economy improves year by year. Fuel efficiency for the vendor medium duty vehicle fleet mix is estimated using data provided by the National Highway Traffic Safety Administration (NHTSA) in the Environmental Impact Statement (EIS) for the adopted national medium- and heavy-duty vehicle fuel consumption standard.[35] Worker vehicles are assumed to be gasoline and vendor vehicles are assumed to be diesel. Fuel demand for worker and vendor trips for each construction phase activity is calculated as follows:

$$\text{Fuel} = \frac{\text{Trips} * \text{Length}}{\text{Economy}} * \text{Days}$$

Where:

Fuel	= Total Fuel Demand (gallons)
Trips	= Daily Worker/Vendor Trips
Length	= Trip Length (miles)
Economy	= Fuel Economy of Vehicle Fleet (miles/gallon)
Days	= Total Days of Activity

Calculations for total worker and vendor fuel consumption are provided in Table 21 (Construction Worker Gasoline Demand) and Table 22 (Construction Vendor Diesel Demand. No hauling trips are anticipated during construction. Total gasoline consumption from worker trips is estimated to be 2,915.04 gallons and estimated total diesel consumption is estimated at 449.30 gallons.

Table 21
Construction Worker Gasoline Demand

Phase	Trips	Trip Length	Total Miles	Fuel Economy	gal/day	Total Days	Total Demand
Claremont Boulevard							
Site Preparation	5	14.7	73.5	38.7	1.90	1	1.90
Paving	18	14.7	264.6	38.7	6.84	5	34.19
Phase Subtotal							*36.09*
Arrow Route							
Site Preparation	5	14.7	73.5	38.7	1.90	1	1.90
Paving	18	14.7	264.6	38.7	6.84	5	34.19
Phase Subtotal							*36.09*
Phase II							
Site Preparation	18	14.7	264.6	38.7	6.84	10	68.37
Grading	15	14.7	220.5	38.7	5.70	20	113.95
Building Construction	8	14.7	117.6	38.7	3.04	100	303.88
Architectural Coating	15	14.7	220.5	38.7	5.70	5	28.49
Paving	2	14.7	29.4	38.7	0.76	20	15.19
Phase Subtotal							*529.88*
Foothill Boulevard							
Site Preparation	5	14.7	73.5	42.8	1.72	1	1.72
Paving	18	14.7	264.6	42.8	6.18	5	30.91
Phase Subtotal							*32.63*
Phase III							
Site Preparation	18	14.7	264.6	42.8	6.18	10	61.82
Grading	15	14.7	220.5	42.8	5.15	20	103.04
Paving	15	14.7	220.5	42.8	5.15	20	103.04
Phase Subtotal							*267.90*
Monte Vista Avenue							
Site Preparation	5	14.7	73.5	43.9	1.67	1	1.67
Paving	18	14.7	264.6	43.9	6.03	5	30.14
Phase Subtotal							*31.81*
Phase IV							
Site Preparation	18	14.7	264.6	43.9	6.03	40	241.09
Grading	20	14.7	294	43.9	6.70	110	736.67
Building Construction	8	14.7	117.6	43.9	2.68	100	267.88
Architectural Coating	2	14.7	29.4	43.9	0.67	5	3.35
Paving	13	14.7	191.1	43.9	4.35	40	174.12
Phase Subtotal							*1,423.11*
Phase V							
Site Preparation	18	14.7	264.6	43.9	6.03	10	60.27
Grading	20	14.7	294	43.9	6.70	30	200.91
Building Construction	8	14.7	117.6	43.9	2.68	100	267.88
Paving	15	14.7	220.5	43.9	5.02	5	25.11
Architectural Coating	2	14.7	29.4	43.9	0.67	5	3.35
Phase Subtotal							*557.52*
						Total Worker Gasoline Use (gal)	**2,915.04**

Table 22
Construction Vendor Diesel Demand

Phase	Trips	Trip Length	Total Miles	Fuel Efficiency	gal/day	Total Days	Total Demand
Phase II Building Construction	3	6.9	20.7	10.75	1.93	100	192.56
Phase IV Building Construction	1	6.9	6.9	10.75	0.64	100	64.19
Phase V Building Construction	3	6.9	20.7	10.75	1.93	100	192.56
						Total Vendor Diesel Use (gal)	449.30

Diesel fuel consumption by construction equipment has been estimated based on the construction schedule and equipment usage assumptions used in the preparation of the project air quality and climate change analysis. The construction schedule and equipment assumptions are based on SCAQMD construction survey data that accounts for equipment needs at over 50 construction sites. Fuel usage is determined by evaluating the anticipated usage of each piece of equipment at an estimated fuel use rate of 0.04 gallons per horsepower hour.[36] Equipment fuel demand for each construction phase activity is calculated as follows:

Fuel = HP * Load * Rate * Pieces * Hrs * Days

Where:

Fuel = Total Fuel Demand (gallons)
HP = Horsepower of Equipment
Load = Load Factor of Equipment
Pieces = Number of Equipment Required for Activity
Hrs = Hours per Day Equipment is in Operation
Days = Total Days of Activity

Calculations for total construction equipment diesel consumption are provided in Table 23 (Construction Equipment Diesel Demand). Total diesel consumption after all construction phases is estimated to be 69,469.02 gallons.

Table 23
Construction Equipment Diesel Demand

Phase and Activity	Equipment Type	Horse Power	Load Factor	Fuel Rate	Fuel Use/Hr	No. Equipment	Hrs/Day	Total Days	Total Fuel Use
Claremont Boulevard									
Site Preparation	Graders	174	0.41	0.04	2.85	1	8	1	22.83
Site Preparation	Tractors/Loaders/Backhoes	97	0.37	0.04	1.44	1	8	1	11.48
Paving	Cement and Mortar Mixers	9	0.56	0.04	0.20	4	6	5	24.19
Paving	Pavers	125	0.42	0.04	2.10	1	7	5	73.50
Paving	Rollers	80	0.38	0.04	1.22	1	7	5	42.56
Paving	Tractors/Loaders/Backhoes	97	0.37	0.04	1.44	1	7	5	50.25
								Phase Subtotal	*224.81*
Arrow Route									
Site Preparation	Graders	174	0.41	0.04	2.85	1	8	1	22.83
Site Preparation	Tractors/Loaders/Backhoes	97	0.37	0.04	1.44	1	8	1	11.48
Paving	Cement and Mortar Mixers	9	0.56	0.04	0.20	4	6	5	24.19
Paving	Pavers	125	0.42	0.04	2.10	1	7	5	73.50
Paving	Rollers	80	0.38	0.04	1.22	1	7	5	42.56
Paving	Tractors/Loaders/Backhoes	97	0.37	0.04	1.44	1	7	5	50.25
								Phase Subtotal	*224.81*
Phase II									
Site Preparation	Tractors/Loaders/Backhoes	97	0.37	0.04	1.44	4	8	10	459.39
Site Preparation	Rubber Tired Dozers	255	0.4	0.04	4.08	3	8	10	979.20
Grading	Excavators	162	0.38	0.04	2.46	1	8	20	393.98
Grading	Rubber Tired Dozers	255	0.4	0.04	4.08	1	8	20	652.80
Grading	Graders	174	0.41	0.04	2.85	1	8	20	456.58
Grading	Tractors/Loaders/Backhoes	97	0.37	0.04	1.44	3	8	20	689.09
Building Construction	Cranes	226	0.29	0.04	2.62	1	4	100	1,048.64
Building Construction	Forklifts	89	0.2	0.04	0.71	2	6	100	854.40
Building Construction	Tractors/Loaders/Backhoes	97	0.37	0.04	1.44	2	8	100	2,296.96
Architectural Coating	Air Compressors	78	0.48	0.04	1.50	1	6	5	44.93
Paving	Cement and Mortar Mixers	9	0.56	0.04	0.20	4	6	20	96.77
Paving	Tractors/Loaders/Backhoes	97	0.37	0.04	1.44	1	7	20	200.98
Paving	Pavers	125	0.42	0.04	2.10	1	7	20	294.00
Paving	Rollers	80	0.38	0.04	1.22	1	7	20	170.24
								Phase Subtotal	*8,637.96*
Foothill Boulevard									
Site Preparation	Graders	174	0.41	0.04	2.85	1	8	1	22.83

Phase and Activity	Equipment Type	Horse Power	Load Factor	Fuel Rate	Fuel Use/Hr	No. Equipment	Hrs/Day	Total Days	Total Fuel Use
Site Preparation	Tractors/Loaders/Backhoes	97	0.37	0.04	1.44	1	8	1	11.48
Paving	Cement and Mortar Mixers	9	0.56	0.04	0.20	4	6	5	24.19
Paving	Pavers	125	0.42	0.04	2.10	1	7	5	73.50
Paving	Rollers	80	0.38	0.04	1.22	1	7	5	42.56
Paving	Tractors/Loaders/Backhoes	97	0.37	0.04	1.44	1	7	5	50.25
								Phase Subtotal	*224.81*
Phase III									
Site Preparation	Tractors/Loaders/Backhoes	97	0.37	0.04	1.44	4	8	10	459.39
Site Preparation	Rubber Tired Dozers	255	0.4	0.04	4.08	3	8	10	979.20
Grading	Excavators	162	0.38	0.04	2.46	1	8	20	393.98
Grading	Rubber Tired Dozers	255	0.4	0.04	4.08	1	8	20	652.80
Grading	Graders	174	0.41	0.04	2.85	1	8	20	456.58
Grading	Tractors/Loaders/Backhoes	97	0.37	0.04	1.44	3	8	20	689.09
Paving	Pavers	125	0.42	0.04	2.10	2	8	20	672.00
Paving	Rollers	80	0.38	0.04	1.22	2	8	20	389.12
Paving	Paving Equipment	130	0.36	0.04	1.87	2	8	20	599.04
								Phase Subtotal	*5,291.20*
Monte Vista Avenue									
Site Preparation	Graders	174	0.41	0.04	2.85	1	8	1	22.83
Site Preparation	Tractors/Loaders/Backhoes	97	0.37	0.04	1.44	1	8	1	11.48
Paving	Cement and Mortar Mixers	9	0.56	0.04	0.20	4	6	5	24.19
Paving	Pavers	125	0.42	0.04	2.10	1	7	5	73.50
Paving	Rollers	80	0.38	0.04	1.22	1	7	5	42.56
Paving	Tractors/Loaders/Backhoes	97	0.37	0.04	1.44	1	7	5	50.25
								Phase Subtotal	*224.81*
Phase IV									
Site Preparation	Tractors/Loaders/Backhoes	97	0.37	0.04	1.44	4	8	40	1,837.57
Site Preparation	Rubber Tired Dozers	255	0.4	0.04	4.08	3	8	40	3,916.80
Grading	Scrapers	361	0.48	0.04	6.93	2	8	110	12,198.91
Grading	Excavators	162	0.38	0.04	2.46	2	8	110	4,333.82
Grading	Rubber Tired Dozers	255	0.4	0.04	4.08	1	8	110	3,590.40
Grading	Graders	174	0.41	0.04	2.85	1	8	110	2,511.17
Grading	Tractors/Loaders/Backhoes	97	0.37	0.04	1.44	2	8	110	2,526.66
Building Construction	Cranes	226	0.29	0.04	2.62	1	4	100	1,048.64
Building Construction	Forklifts	89	0.2	0.04	0.71	2	6	100	854.40
Building Construction	Tractors/Loaders/Backhoes	97	0.37	0.04	1.44	2	8	100	2,296.96

Phase and Activity	Equipment Type	Horse Power	Load Factor	Fuel Rate	Fuel Use/Hr	No. Equipment	Hrs/Day	Total Days	Total Fuel Use
Architectural Coating	Air Compressors	78	0.48	0.04	1.50	1	6	5	44.93
Paving	Pavers	125	0.42	0.04	2.10	1	6	40	504.00
Paving	Rollers	80	0.38	0.04	1.22	1	7	40	340.48
Paving	Cement and Mortar Mixers	9	0.56	0.04	0.20	1	6	40	48.38
Paving	Paving Equipment	130	0.36	0.04	1.87	1	8	40	599.04
Paving	Tractors/Loaders/Backhoes	97	0.37	0.04	1.44	1	8	40	459.39
								Phase Subtotal	*37,111.55*
Phase V									
Site Preparation	Tractors/Loaders/Backhoes	97	0.37	0.04	1.44	4	8	10	459.39
Site Preparation	Rubber Tired Dozers	255	0.4	0.04	4.08	3	8	10	979.20
Grading	Scrapers	361	0.48	0.04	6.93	2	8	30	3,326.98
Grading	Excavators	162	0.38	0.04	2.46	2	8	30	1,181.95
Grading	Rubber Tired Dozers	255	0.4	0.04	4.08	1	8	30	979.20
Grading	Graders	174	0.41	0.04	2.85	1	8	30	684.86
Grading	Tractors/Loaders/Backhoes	97	0.37	0.04	1.44	2	8	30	689.09
Building Construction	Cranes	226	0.29	0.04	2.62	1	6	100	1,572.96
Building Construction	Forklifts	89	0.2	0.04	0.71	3	8	100	1,708.80
Building Construction	Generator Sets	84	0.74	0.04	2.49	1	8	100	1,989.12
Building Construction	Tractors/Loaders/Backhoes	97	0.37	0.04	1.44	3	7	100	3,014.76
Building Construction	Welders	46	0.45	0.04	0.83	1	8	100	662.40
Paving	Pavers	125	0.42	0.04	2.10	1	7	5	73.50
Paving	Rollers	80	0.38	0.04	1.22	1	7	5	42.56
Paving	Air Compressors	78	0.48	0.04	1.50	1	6	5	44.93
Paving	Cement and Mortar Mixers	9	0.56	0.04	0.20	4	6	5	24.19
Paving	Tractors/Loaders/Backhoes	97	0.37	0.04	1.44	1	7	5	50.25
Architectural Coating	Air Compressors	78	0.48	0.04	1.50	1	6	5	44.93
								Phase Subtotal	*17,529.07*
								Total Construction Equipment Diesel Demand (gal)	**69,469.02**

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Operational Activities

Mobile Sources

Users of the proposed project will result in the generation of vehicle trips to and from the project site. This will result in the use of gasoline and diesel fuels over the life of the proposed project. Vehicle trips from the proposed project were estimated in the project traffic study based on current use of existing facilities and anticipated use of new facilities. Similar to construction worker and vendor trips, fuel consumption by operation-related vehicles will depend on the number of trips and the length of the trip. Operational trip type, trip length, and fleet mix were generated in CalEEMod from data provided by ARB and SCAQMD. Total annual trips were estimated based on current operations of existing sports facilities and anticipated use of the additional facilities. One hundred percent of trips are assumed to be student Home to School (H-S) trips and are assumed to run on gasoline. Annual operational fuel demand was calculated as follows:

$$Fuel_{TT} = \frac{Trips * TTP_{TT} * Type * TL_{TT}}{Economy}$$

Where:

Fuel = Total Annual Fuel Demand (gallons)
Trips = Total Annual Trips
TTP = Total Trip Percentage
Type = Ratio of Fleet by Fuel Type
Economy = Fuel Economy of Vehicle Fleet (miles/gallon)
TT = Trip Type

Calculations for existing annual mobile source fuel consumption are provided in Table 24 (Existing Mobile Source Gasoline Demand) and proposed annual mobile source fuel consumption is provided in Table 25 (Proposed Mobile Source Gasoline Demand). Mobile sources from the proposed project will require an addition of approximately 2,789 gallons of gasoline per year at build out of the proposed project.

Table 24
Existing Mobile Source Gasoline Demand

Trip Type	Total Trips	Trip Length	Total Miles	Fuel Economy	Total Demand
Employee Home-to-School (Weekday)	28,386	8.4	219,367	43.9	4,997
Employee Home-to-School (Weekend)	17,060	8.4	131,840	43.9	3,003
Total Operational Gasoline Demand (gal)					**8,000**

Table 25
Proposed Mobile Source Gasoline Demand

Trip Type	Total Trips	Trip Length	Total Miles	Fuel Economy	Total Demand
Employee Home-to-School (Weekday)	37,206	8.4	287,528	43.9	6,550
Employee Home-to-School (Weekend)	24,080	8.4	186,090	43.9	4,239
Total Operational Gasoline Demand (gal)					**10,789**

Electricity and Natural Gas Use

Electricity and natural gas would be required to provide energy to the proposed assisted living facility for indoor and outdoor lighting, office equipment, building cooling and heating, kitchen operations, and water heating. Existing energy demand was estimated using CalEEMod historical calculations and proposed energy demand was estimated using CalEEMod default calculations. Existing electricity demand at existing facilities is 28,790,700 kilowatt hours per year (kWh/yr) and proposed

electricity demand is 33,200,100 kWh/yr. Net electricity demand for the proposed project will be approximately 4,409,400 kilowatt hours per year (kWh/yr). Existing natural gas demand at existing facilities is 44,942,100 thousand British Thermal Units per year (k/BTU/yr) and proposed natural gas demand is 51,472,600 kBTU/yr. Net natural gas demand will be approximately 6,530,500 thousand British Thermal Units per year (kBTU/yr).

Water and Wastewater

Electricity will indirectly be required to treat and convey water to the project site and convey wastewater away from the project site. Water demand for the proposed project was estimated using fixture counts and irrigation estimates provided by Claremont McKenna College and Pitzer College. Electricity demand for water-related energy is estimated using the CEC *Refining Estimates of Water-Related Energy Use in California*.[37] Water demand is estimated to increase by approximately 2.59 million gallons per year (MGY) (without consideration of CALGREEN 2011 building code requirements). Wastewater discharges were estimated using existing and proposed fixture counts. Net wastewater generation is approximately 1.54 million gallons per year. Indirect energy demand for water and wastewater purposes is calculated as follows:

$$Indirect_W = (D_W * Supply) + (D_W * Treat) + (D_W * Distribute)$$

Where:

Indirect = Indirect Electricity Demand (kWh/year)
D = Demand/Discharge (million gallons per year)
Supply = Electricity Required to Supply (kWh)
Treat = Electricity Required to Treat (kWh)
Distribute = Electricity Required to Convey (kWh)
W = Water or Wastewater

Indirect electricity demand for water and wastewater treatment and conveyance is detailed in Table 26 (Existing Indirect Electricity Demand) for existing conditions and Table 27 (Proposed Indirect Electricity Demand) for proposed project conditions. Water and wastewater treatment and conveyance will increase by approximately 31,717 kWh/yr of electricity.

Table 26
Existing Indirect Electricity Demand

Source	MGY	Supply	Treat	Distribute	Total
Water	4.94	9,727	111	1,272	54,847
Wastewater	0.55	--	1,911		1,051
				Total Indirect Demand (kWh/yr)	55,898

Table 27
Proposed Indirect Electricity Demand

Source	MGY	Supply	Treat	Distribute	Total
Water	7.53	9,727	111	1,272	83,621
Wastewater	2.09	--	1,911		3,994
				Total Indirect Demand (kWh/yr)	87,615

Energy Demand by Source

Existing long-term energy demand is summarized in Table 28 (Existing Energy Demand by Source), proposed short- and long-term energy demand is summarized in Table 29 (Proposed Energy Demand by Source), and net energy demand by source is summarized in Table 30 (Net Energy Demand by Source). Electricity demand has been summarized by production source, based on the *Emissions and Generation Resource Integrated Database* (eGRID) for Southern California Edison (SCE).[38] Construction-related demand has been amortized over a 30-year period to compare to annual operational emissions.

Energy Conservation

The proposed project will be subject to state water efficiency regulations pursuant to the California Building Code (CBC) that will reduce long-term project energy demand. These requirements would reduce wasteful, inefficient, and unnecessary consumption of energy over the long-term. The following quantifies energy demand reductions pursuant to these requirements.

California Building Code

Pursuant to the CBC CALGREEN requirements, the proposed project will be subject to the following requirements:[39]

- 20 percent reduction in water demand (5.303.2)
- 20 percent reduction in wastewater discharges (5.303.4)

Reduce Water and Wastewater Demand (5.303.2 & 5.303.4)

The minimum 20 percent reduction in water demand and wastewater discharges would decrease indoor water demand and wastewater discharges. This would result in a concurrent reduction in energy demand to supply, treat, and convey water and wastewater.

CONCLUSION

With implementation of existing regulations, energy demand for the proposed project will not be wasteful, inefficient, or unnecessary.

Table 28
Existing Energy Demand by Source

Activity	Gasoline (gal/yr)	Diesel (gal/yr)	Natural Gas (kBTU/yr)	Electricity (kWh/yr)				
				Coal	Oil	Natural Gas	Nuclear	Hydro
Construction								
Worker	--	--	--	--	--	--	--	--
Vendor/Hauler	--	--	--	--	--	--	--	--
Equipment	--	--	--	--	--	--	--	--
Operational								
Mobile	8,000	--	--	--	--	--	--	--
Natural Gas	--	--	44,942,100	--	--	--	--	--
Direct Electricity	--	--	--	9,312,899	25,393	19,031	15,245,741	4,187,636
Indirect Electricity	--	--	--	18,081	49	37	29,600	8,130
Total	**8,000**	**--**	**44,942,100**	**9,330,980**	**25,443**	**19,068**	**15,275,341**	**4,195,767**

Table 29
Proposed Energy Demand by Source

Activity	Gasoline (gal/yr)	Diesel (gal/yr)	Natural Gas (kBTU/yr)	Electricity (kWh/yr)				
				Coal	Oil	Natural Gas	Nuclear	Hydro
Construction								
Worker	97	--	--	--	--	--	--	--
Vendor/Hauler	--	15	--	--	--	--	--	--
Equipment	--	2,316	--	--	--	--	--	--
Operational								
Mobile	10,789	--	--	--	--	--	--	--
Natural Gas	--	--	51,472,600	--	--	--	--	--
Direct Electricity	--	--	--	10,739,203	29,282	21,945	17,580,681	4,828,988
Indirect Electricity	--	--	--	28,341	77	58	46,395	12,744
Total	**10,886**	**2,331**	**51,472,600**	**10,767,544**	**29,360**	**22,003**	**17,627,077**	**4,841,731**

Table 30
Net Energy Demand by Source

Activity	Gasoline (gal/yr)	Diesel (gal/yr)	Natural Gas (kBTU/yr)	Electricity (kWh/yr)				
				Coal	Oil	Natural Gas	Nuclear	Hydro
Construction								
Existing	--	--	--	--	--	--	--	--
Proposed	97	2,331	--	--	--	--	--	--
Net Construction Demand	*+97*	*+2,331*	--	--	--	--	--	--
Operational								
Existing	8,000	--	44,942,100	9,330,980	25,443	19,068	15,275,341	4,195,767
Proposed	10,789	--	51,472,600	10,767,544	29,360	22,003	17,627,077	4,841,731
Net Operational Demand	*+2,789*	--	*+6,530,500*	*+1,436,564*	*+3,917*	*+2,935*	*+2,351,736*	*+645,964*
Total Net Demand	**+2,886**	**+2,331**	**+6,530,500**	**+1,436,564**	**+3,917**	**+2,935**	**+2,351,736**	**+645,964**

AQ-1 Before the City issues building permits, the permittee must submit, to the satisfaction of the Community Development or Community and Economic Development Director, or designee, a Coating Restriction Plan (CRP), consistent with South Coast Air Quality Management District (SCAQMD) guidelines and a letter agreeing to include in any construction contracts and/or subcontracts a requirement that the contractors adhere to the requirements of the CRP. The CRP measures must be implemented to the satisfaction of the Community Development or Community and Economic Development Director, or designee. These may include the following:

- The volatile organic compounds (VOC) of proposed architectural coatings cannot exceed 100 g/l for non residential interior and exterior applications.

Pursuant to SCAQMD Rule 1113 (Architectural Coatings). this measure shall conform to the performance standard that emissions of volatile organic compounds from application of interior or exterior coatings shall not exceed the daily emissions thresholds established by the South Coast Air Quality Management District.

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Existing Weekday Game Day

CMS Baseball

	ROG	NOX	CO	SO2	PM10	PM2.5
Summer						
Area Sources	17.8607	0.00002	0.00167	0	0.00001	0.00001
Energy Demand	0.3996	3.6325	3.0513	0.0218	0.2761	0.2761
Mobile Sources	0.5833	1.599	6.6512	0.0129	0.8939	0.2552
Summer Total	18.8436	5.2315	9.7042	0.0347	1.17	0.5313
Winter						
Area Sources	17.8607	0.00002	0.00167	0	0.00001	0.00001
Energy Demand	0.3996	3.6325	3.0513	0.0218	0.2761	0.2761
Mobile Sources	0.6065	1.6835	6.538	0.0123	0.8941	0.2554
Winter Total	18.8668	5.3161	9.591	0.0341	1.1702	0.5315

CMS Softball

	ROG	NOX	CO	SO2	PM10	PM2.5
Summer						
Area Sources	13.817	0.00001	0.00129	0	0	0
Energy Demand	0.3091	2.8101	2.3605	0.0169	0.2136	0.2136
Mobile Sources	0.2423	0.6641	2.7622	0.00536	0.3712	0.106
Summer Total	14.3684	3.4742	5.124	0.0222	0.5848	0.3196
Winter						
Area Sources	13.817	0.00001	0.00129	0	0	0
Energy Demand	0.3091	2.8101	2.3605	0.0169	0.2136	0.2136
Mobile Sources	0.2519	0.6992	2.7152	0.00509	0.3713	0.1061
Winter Total	14.378	3.5093	5.077	0.022	0.5849	0.3196

Football Practice

	ROG	NOX	CO	SO2	PM10	PM2.5
Summer						
Area Sources	6.2023	0.00001	0.00058	0	0	0
Energy Demand	0	0	0	0	0	0
Mobile Sources	0.1089	0.2984	1.2411	0.00241	0.1668	0.0476
Summer Total	6.3111	0.2984	1.2417	0.00241	0.1668	0.0476
Winter						
Area Sources	6.2023	0.00001	0.00058	0	0	0
Energy Demand	0	0	0	0	0	0
Mobile Sources	0.1132	0.3141	1.22	0.00229	0.1668	0.0477
Winter Total	6.3154	0.3142	1.2205	0.00229	0.1668	0.0477

Pitzer Fields

	ROG	NOX	CO	SO2	PM10	PM2.5
Summer						
Area Sources	18.7947	0.00002	0.00176	0	0.00001	0.00001
Energy Demand	0	0	0	0	0	0
Mobile Sources	0.28	0.7675	3.1925	0.00619	0.4291	0.1225

Summer Total	19.0747	0.7675	3.1943	0.00619	0.4291	0.1225
Winter						
Area Sources	18.7947	0.00002	0.00176	0	0.00001	0.00001
Energy Demand	0	0	0	0	0	0
Mobile Sources	0.2911	0.8081	3.1382	0.00588	0.4292	0.1226
Winter Total	19.0859	0.8081	3.14	0.00588	0.4292	0.1226

Track Practice

	ROG	NOX	CO	SO2	PM10	PM2.5
Summer						
Area Sources	6.2023	0.00001	0.00058	0	0	0
Energy Demand	0	0	0	0	0	0
Mobile Sources	0.1089	0.2984	1.2411	0.00241	0.1668	0.0476
Summer Total	6.3111	0.2984	1.2417	0.00241	0.1668	0.0476
Winter						
Area Sources	6.2023	0.00001	0.00058	0	0	0
Energy Demand	0	0	0	0	0	0
Mobile Sources	0.1132	0.3141	1.22	0.00229	0.1668	0.0477
Winter Total	6.3154	0.3142	1.2205	0.00229	0.1668	0.0477

Total Weekday Game Day

	ROG	NOX	CO	SO2	PM10	PM2.5
Summer						
Area Sources	62.877	0.00007	0.00588	0	0.00002	0.00002
Energy Demand	0.7087	6.4426	5.4118	0.0387	0.4897	0.4897
Mobile Sources	1.3234	3.6274	15.0881	0.02927	2.0278	0.5789
Summer Total	64.9089	10.07	20.5059	0.06791	2.5175	1.0686
Winter						
Area Sources	62.877	0.00007	0.00588	0	0.00002	0.00002
Energy Demand	0.7087	6.4426	5.4118	0.0387	0.4897	0.4897
Mobile Sources	1.3759	3.819	14.8314	0.02785	2.0282	0.5795
Winter Total	64.9615	10.2619	20.249	0.06656	2.5179	1.0691

Existing Wkdy Game Day - CMS Baseball

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Arena	15.68	Acre	15.68	683,020.80	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblVehicleTrips	CC_TTP	81.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	DV_TP	0.28	0.00
tblVehicleTrips	PB_TP	0.60	0.00
tblVehicleTrips	PR_TP	0.66	100.00
tblVehicleTrips	WD_TR	33.33	8.55
tblWater	IndoorWaterUseRate	21,107,735.76	350,400.00
tblWater	OutdoorWaterUseRate	1,347,302.28	1,045,983.10

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	17.8607	2.0000e-005	1.6700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.3996	3.6325	3.0513	0.0218		0.2761	0.2761		0.2761	0.2761						
Mobile	0.5833	1.5990	6.6512	0.0129	0.8686	0.0253	0.8939	0.2320	0.0232	0.2552						
Total	**18.8436**	**5.2315**	**9.7042**	**0.0347**	**0.8686**	**0.3013**	**1.1700**	**0.2320**	**0.2993**	**0.5313**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	17.8607	2.0000e-005	1.6700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.3996	3.6325	3.0513	0.0218		0.2761	0.2761		0.2761	0.2761						
Mobile	0.5833	1.5990	6.6512	0.0129	0.8686	0.0253	0.8939	0.2320	0.0232	0.2552						
Total	**18.8436**	**5.2315**	**9.7042**	**0.0347**	**0.8686**	**0.3013**	**1.1700**	**0.2320**	**0.2993**	**0.5313**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.5833	1.5990	6.6512	0.0129	0.8686	0.0253	0.8939	0.2320	0.0232	0.2552						
Mitigated	0.5833	1.5990	6.6512	0.0129	0.8686	0.0253	0.8939	0.2320	0.0232	0.2552						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	134.06	0.00	0.00	292,796	292,796
Total	134.06	0.00	0.00	292,796	292,796

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Arena	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.516610	0.060517	0.179979	0.140587	0.041566	0.006616	0.015092	0.027587	0.001923	0.002530	0.004314	0.000602	0.002075

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.3996	3.6325	3.0513	0.0218		0.2761	0.2761		0.2761	0.2761						
NaturalGas Unmitigated	0.3996	3.6325	3.0513	0.0218		0.2761	0.2761		0.2761	0.2761						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	37051.5	0.3996	3.6325	3.0513	0.0218		0.2761	0.2761		0.2761	0.2761						
Total		**0.3996**	**3.6325**	**3.0513**	**0.0218**		**0.2761**	**0.2761**		**0.2761**	**0.2761**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	37.0515	0.3996	3.6325	3.0513	0.0218		0.2761	0.2761		0.2761	0.2761						
Total		**0.3996**	**3.6325**	**3.0513**	**0.0218**		**0.2761**	**0.2761**		**0.2761**	**0.2761**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	17.8607	2.0000e-005	1.6700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Mitigated	17.8607	2.0000e-005	1.6700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.3367					0.0000	0.0000		0.0000	0.0000						
Consumer Products	13.5238					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.7000e-004	2.0000e-005	1.6700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**17.8607**	**2.0000e-005**	**1.6700e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.3367					0.0000	0.0000		0.0000	0.0000						
Consumer Products	13.5238					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.7000e-004	2.0000e-005	1.6700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**17.8607**	**2.0000e-005**	**1.6700e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Existing Wkdy Game Day - CMS Baseball

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Arena	15.68	Acre	15.68	683,020.80	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblVehicleTrips	CC_TTP	81.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	DV_TP	0.28	0.00
tblVehicleTrips	PB_TP	0.60	0.00
tblVehicleTrips	PR_TP	0.66	100.00
tblVehicleTrips	WD_TR	33.33	8.55
tblWater	IndoorWaterUseRate	21,107,735.76	350,400.00
tblWater	OutdoorWaterUseRate	1,347,302.28	1,045,983.10

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	17.8607	2.0000e-005	1.6700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.3996	3.6325	3.0513	0.0218		0.2761	0.2761		0.2761	0.2761						
Mobile	0.6065	1.6835	6.5380	0.0123	0.8686	0.0254	0.8941	0.2320	0.0233	0.2554						
Total	**18.8668**	**5.3161**	**9.5910**	**0.0341**	**0.8686**	**0.3015**	**1.1702**	**0.2320**	**0.2994**	**0.5315**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	17.8607	2.0000e-005	1.6700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.3996	3.6325	3.0513	0.0218		0.2761	0.2761		0.2761	0.2761						
Mobile	0.6065	1.6835	6.5380	0.0123	0.8686	0.0254	0.8941	0.2320	0.0233	0.2554						
Total	**18.8668**	**5.3161**	**9.5910**	**0.0341**	**0.8686**	**0.3015**	**1.1702**	**0.2320**	**0.2994**	**0.5315**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.6065	1.6835	6.5380	0.0123	0.8686	0.0254	0.8941	0.2320	0.0233	0.2554						
Mitigated	0.6065	1.6835	6.5380	0.0123	0.8686	0.0254	0.8941	0.2320	0.0233	0.2554						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	134.06	0.00	0.00	292,796	292,796
Total	134.06	0.00	0.00	292,796	292,796

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Arena	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.516610	0.060517	0.179979	0.140587	0.041566	0.006616	0.015092	0.027587	0.001923	0.002530	0.004314	0.000602	0.002075

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.3996	3.6325	3.0513	0.0218		0.2761	0.2761		0.2761	0.2761						
NaturalGas Unmitigated	0.3996	3.6325	3.0513	0.0218		0.2761	0.2761		0.2761	0.2761						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	37051.5	0.3996	3.6325	3.0513	0.0218		0.2761	0.2761		0.2761	0.2761						
Total		**0.3996**	**3.6325**	**3.0513**	**0.0218**		**0.2761**	**0.2761**		**0.2761**	**0.2761**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	37.0515	0.3996	3.6325	3.0513	0.0218		0.2761	0.2761		0.2761	0.2761						
Total		**0.3996**	**3.6325**	**3.0513**	**0.0218**		**0.2761**	**0.2761**		**0.2761**	**0.2761**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	17.8607	2.0000e-005	1.6700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Mitigated	17.8607	2.0000e-005	1.6700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.3367					0.0000	0.0000		0.0000	0.0000						
Consumer Products	13.5238					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.7000e-004	2.0000e-005	1.6700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**17.8607**	**2.0000e-005**	**1.6700e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.3367					0.0000	0.0000		0.0000	0.0000						
Consumer Products	13.5238					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.7000e-004	2.0000e-005	1.6700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**17.8607**	**2.0000e-005**	**1.6700e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Existing Wkdy Game Day - CMS Softball

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Arena	12.13	Acre	12.13	528,382.80	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblVehicleTrips	CC_TTP	81.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	DV_TP	0.28	0.00
tblVehicleTrips	PB_TP	0.60	0.00
tblVehicleTrips	PR_TP	0.66	100.00
tblVehicleTrips	WD_TR	33.33	4.59
tblWater	IndoorWaterUseRate	16,328,879.77	0.00
tblWater	OutdoorWaterUseRate	1,042,268.92	1,045,983.10

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	13.8170	1.0000e-005	1.2900e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.3091	2.8101	2.3605	0.0169		0.2136	0.2136		0.2136	0.2136						
Mobile	0.2423	0.6641	2.7622	5.3600e-003	0.3608	0.0105	0.3712	0.0964	9.6300e-003	0.1060						
Total	**14.3684**	**3.4742**	**5.1240**	**0.0222**	**0.3608**	**0.2241**	**0.5848**	**0.0964**	**0.2232**	**0.3196**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	13.8170	1.0000e-005	1.2900e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.3091	2.8101	2.3605	0.0169		0.2136	0.2136		0.2136	0.2136						
Mobile	0.2423	0.6641	2.7622	5.3600e-003	0.3608	0.0105	0.3712	0.0964	9.6300e-003	0.1060						
Total	**14.3684**	**3.4742**	**5.1240**	**0.0222**	**0.3608**	**0.2241**	**0.5848**	**0.0964**	**0.2232**	**0.3196**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.2423	0.6641	2.7622	5.3600e-003	0.3608	0.0105	0.3712	0.0964	9.6300e-003	0.1060						
Mitigated	0.2423	0.6641	2.7622	5.3600e-003	0.3608	0.0105	0.3712	0.0964	9.6300e-003	0.1060						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	55.68	0.00	0.00	121,598	121,598
Total	55.68	0.00	0.00	121,598	121,598

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Arena	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.516610	0.060517	0.179979	0.140587	0.041566	0.006616	0.015092	0.027587	0.001923	0.002530	0.004314	0.000602	0.002075

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.3091	2.8101	2.3605	0.0169		0.2136	0.2136		0.2136	0.2136						
NaturalGas Unmitigated	0.3091	2.8101	2.3605	0.0169		0.2136	0.2136		0.2136	0.2136						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	28663	0.3091	2.8101	2.3605	0.0169		0.2136	0.2136		0.2136	0.2136						
Total		**0.3091**	**2.8101**	**2.3605**	**0.0169**		**0.2136**	**0.2136**		**0.2136**	**0.2136**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	28.663	0.3091	2.8101	2.3605	0.0169		0.2136	0.2136		0.2136	0.2136						
Total		**0.3091**	**2.8101**	**2.3605**	**0.0169**		**0.2136**	**0.2136**		**0.2136**	**0.2136**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	13.8170	1.0000e-005	1.2900e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Mitigated	13.8170	1.0000e-005	1.2900e-003	0.0000		0.0000	0.0000		0.0000	0.0000						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.3549					0.0000	0.0000		0.0000	0.0000						
Consumer Products	10.4620					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.3000e-004	1.0000e-005	1.2900e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**13.8170**	**1.0000e-005**	**1.2900e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.3549					0.0000	0.0000		0.0000	0.0000						
Consumer Products	10.4620					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.3000e-004	1.0000e-005	1.2900e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**13.8170**	**1.0000e-005**	**1.2900e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Existing Wkdy Game Day - CMS Softball

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Arena	12.13	Acre	12.13	528,382.80	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblVehicleTrips	CC_TTP	81.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	DV_TP	0.28	0.00
tblVehicleTrips	PB_TP	0.60	0.00
tblVehicleTrips	PR_TP	0.66	100.00
tblVehicleTrips	WD_TR	33.33	4.59
tblWater	IndoorWaterUseRate	16,328,879.77	0.00
tblWater	OutdoorWaterUseRate	1,042,268.92	1,045,983.10

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	13.8170	1.0000e-005	1.2900e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.3091	2.8101	2.3605	0.0169		0.2136	0.2136		0.2136	0.2136						
Mobile	0.2519	0.6992	2.7152	5.0900e-003	0.3608	0.0106	0.3713	0.0964	9.7000e-003	0.1061						
Total	**14.3780**	**3.5093**	**5.0770**	**0.0220**	**0.3608**	**0.2241**	**0.5849**	**0.0964**	**0.2233**	**0.3196**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	13.8170	1.0000e-005	1.2900e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.3091	2.8101	2.3605	0.0169		0.2136	0.2136		0.2136	0.2136						
Mobile	0.2519	0.6992	2.7152	5.0900e-003	0.3608	0.0106	0.3713	0.0964	9.7000e-003	0.1061						
Total	**14.3780**	**3.5093**	**5.0770**	**0.0220**	**0.3608**	**0.2241**	**0.5849**	**0.0964**	**0.2233**	**0.3196**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.2519	0.6992	2.7152	5.0900e-003	0.3608	0.0106	0.3713	0.0964	9.7000e-003	0.1061						
Mitigated	0.2519	0.6992	2.7152	5.0900e-003	0.3608	0.0106	0.3713	0.0964	9.7000e-003	0.1061						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	55.68	0.00	0.00	121,598	121,598
Total	55.68	0.00	0.00	121,598	121,598

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Arena	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.516610	0.060517	0.179979	0.140587	0.041566	0.006616	0.015092	0.027587	0.001923	0.002530	0.004314	0.000602	0.002075

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.3091	2.8101	2.3605	0.0169		0.2136	0.2136		0.2136	0.2136						
NaturalGas Unmitigated	0.3091	2.8101	2.3605	0.0169		0.2136	0.2136		0.2136	0.2136						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	28663	0.3091	2.8101	2.3605	0.0169		0.2136	0.2136		0.2136	0.2136						
Total		**0.3091**	**2.8101**	**2.3605**	**0.0169**		**0.2136**	**0.2136**		**0.2136**	**0.2136**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	28.663	0.3091	2.8101	2.3605	0.0169		0.2136	0.2136		0.2136	0.2136						
Total		**0.3091**	**2.8101**	**2.3605**	**0.0169**		**0.2136**	**0.2136**		**0.2136**	**0.2136**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	13.8170	1.0000e-005	1.2900e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Mitigated	13.8170	1.0000e-005	1.2900e-003	0.0000		0.0000	0.0000		0.0000	0.0000						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.3549					0.0000	0.0000		0.0000	0.0000						
Consumer Products	10.4620					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.3000e-004	1.0000e-005	1.2900e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**13.8170**	**1.0000e-005**	**1.2900e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.3549					0.0000	0.0000		0.0000	0.0000						
Consumer Products	10.4620					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.3000e-004	1.0000e-005	1.2900e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**13.8170**	**1.0000e-005**	**1.2900e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Existing Wkdy Game Day - Football Practice

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	5.45	Acre	5.45	237,184.20	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblLandUse	LandUseSquareFeet	237,402.00	237,184.20
tblVehicleTrips	CC_TTP	48.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	ST_TR	1.59	0.00
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	WD_TR	1.59	4.59
tblWater	OutdoorWaterUseRate	6,493,573.36	1,045,983.10

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.2023	1.0000e-005	5.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.1089	0.2984	1.2411	2.4100e-003	0.1621	4.7100e-003	0.1668	0.0433	4.3300e-003	0.0476						
Total	**6.3111**	**0.2984**	**1.2417**	**2.4100e-003**	**0.1621**	**4.7100e-003**	**0.1668**	**0.0433**	**4.3300e-003**	**0.0476**						

Mitigated Operational

Category	lb/day										lb/day					
Area	6.2023	1.0000e-005	5.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.1089	0.2984	1.2411	2.4100e-003	0.1621	4.7100e-003	0.1668	0.0433	4.3300e-003	0.0476						
Total	**6.3111**	**0.2984**	**1.2417**	**2.4100e-003**	**0.1621**	**4.7100e-003**	**0.1668**	**0.0433**	**4.3300e-003**	**0.0476**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.1089	0.2984	1.2411	2.4100e-003	0.1621	4.7100e-003	0.1668	0.0433	4.3300e-003	0.0476						
Mitigated	0.1089	0.2984	1.2411	2.4100e-003	0.1621	4.7100e-003	0.1668	0.0433	4.3300e-003	0.0476						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	25.02	0.00	0.00	54,634	54,634
Total	25.02	0.00	0.00	54,634	54,634

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.516610	0.060517	0.179979	0.140587	0.041566	0.006616	0.015092	0.027587	0.001923	0.002530	0.004314	0.000602	0.002075

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	6.2023	1.0000e-005	5.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Mitigated	6.2023	1.0000e-005	5.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.5060					0.0000	0.0000		0.0000	0.0000						
Consumer Products	4.6963					0.0000	0.0000		0.0000	0.0000						
Landscaping	6.0000e-005	1.0000e-005	5.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**6.2023**	**1.0000e-005**	**5.8000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.5060					0.0000	0.0000		0.0000	0.0000						
Consumer Products	4.6963					0.0000	0.0000		0.0000	0.0000						
Landscaping	6.0000e-005	1.0000e-005	5.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**6.2023**	**1.0000e-005**	**5.8000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Existing Wkdy Game Day - Football Practice

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	5.45	Acre	5.45	237,184.20	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblLandUse	LandUseSquareFeet	237,402.00	237,184.20
tblVehicleTrips	CC_TTP	48.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	ST_TR	1.59	0.00
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	WD_TR	1.59	4.59
tblWater	OutdoorWaterUseRate	6,493,573.36	1,045,983.10

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.2023	1.0000e-005	5.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.1132	0.3141	1.2200	2.2900e-003	0.1621	4.7400e-003	0.1668	0.0433	4.3600e-003	0.0477						
Total	**6.3154**	**0.3142**	**1.2205**	**2.2900e-003**	**0.1621**	**4.7400e-003**	**0.1668**	**0.0433**	**4.3600e-003**	**0.0477**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.2023	1.0000e-005	5.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.1132	0.3141	1.2200	2.2900e-003	0.1621	4.7400e-003	0.1668	0.0433	4.3600e-003	0.0477						
Total	**6.3154**	**0.3142**	**1.2205**	**2.2900e-003**	**0.1621**	**4.7400e-003**	**0.1668**	**0.0433**	**4.3600e-003**	**0.0477**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.1132	0.3141	1.2200	2.2900e-003	0.1621	4.7400e-003	0.1668	0.0433	4.3600e-003	0.0477		212.0306	212.0306	9.9800e-003		212.2401
Mitigated	0.1132	0.3141	1.2200	2.2900e-003	0.1621	4.7400e-003	0.1668	0.0433	4.3600e-003	0.0477		212.0306	212.0306	9.9800e-003		212.2401

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	25.02	0.00	0.00	54,634	54,634
Total	25.02	0.00	0.00	54,634	54,634

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.516610	0.060517	0.179979	0.140587	0.041566	0.006616	0.015092	0.027587	0.001923	0.002530	0.004314	0.000602	0.002075

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	6.2023	1.0000e-005	5.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Mitigated	6.2023	1.0000e-005	5.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.5060					0.0000	0.0000		0.0000	0.0000						
Consumer Products	4.6963					0.0000	0.0000		0.0000	0.0000						
Landscaping	6.0000e-005	1.0000e-005	5.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**6.2023**	**1.0000e-005**	**5.8000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.5060					0.0000	0.0000		0.0000	0.0000						
Consumer Products	4.6963					0.0000	0.0000		0.0000	0.0000						
Landscaping	6.0000e-005	1.0000e-005	5.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**6.2023**	**1.0000e-005**	**5.8000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Existing Wkdy Game Day - Pitzer Fields

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	16.50	Acre	16.50	718,740.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblVehicleTrips	CC_TTP	48.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	ST_TR	1.59	0.00
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	WD_TR	1.59	3.90
tblWater	IndoorWaterUseRate	0.00	197,100.00
tblWater	OutdoorWaterUseRate	19,659,442.27	1,251,269.50

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	18.7947	2.0000e-005	1.7600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.2800	0.7675	3.1925	6.1900e-003	0.4169	0.0121	0.4291	0.1114	0.0111	0.1225						
Total	**19.0747**	**0.7675**	**3.1943**	**6.1900e-003**	**0.4169**	**0.0121**	**0.4291**	**0.1114**	**0.0111**	**0.1225**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	18.7947	2.0000e-005	1.7600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.2800	0.7675	3.1925	6.1900e-003	0.4169	0.0121	0.4291	0.1114	0.0111	0.1225						
Total	**19.0747**	**0.7675**	**3.1943**	**6.1900e-003**	**0.4169**	**0.0121**	**0.4291**	**0.1114**	**0.0111**	**0.1225**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.2800	0.7675	3.1925	6.1900e-003	0.4169	0.0121	0.4291	0.1114	0.0111	0.1225						
Mitigated	0.2800	0.7675	3.1925	6.1900e-003	0.4169	0.0121	0.4291	0.1114	0.0111	0.1225						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	64.35	0.00	0.00	140,540	140,540
Total	64.35	0.00	0.00	140,540	140,540

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.516610	0.060517	0.179979	0.140587	0.041566	0.006616	0.015092	0.027587	0.001923	0.002530	0.004314	0.000602	0.002075

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	18.7947	2.0000e-005	1.7600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Mitigated	18.7947	2.0000e-005	1.7600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.5635					0.0000	0.0000		0.0000	0.0000						
Consumer Products	14.2311					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.8000e-004	2.0000e-005	1.7600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**18.7947**	**2.0000e-005**	**1.7600e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.5635					0.0000	0.0000		0.0000	0.0000						
Consumer Products	14.2311					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.8000e-004	2.0000e-005	1.7600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**18.7947**	**2.0000e-005**	**1.7600e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Existing Wkdy Game Day - Pitzer Fields

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	16.50	Acre	16.50	718,740.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblVehicleTrips	CC_TTP	48.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	ST_TR	1.59	0.00
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	WD_TR	1.59	3.90
tblWater	IndoorWaterUseRate	0.00	197,100.00
tblWater	OutdoorWaterUseRate	19,659,442.27	1,251,269.50

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	18.7947	2.0000e-005	1.7600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.2911	0.8081	3.1382	5.8800e-003	0.4169	0.0122	0.4292	0.1114	0.0112	0.1226						
Total	**19.0859**	**0.8081**	**3.1400**	**5.8800e-003**	**0.4169**	**0.0122**	**0.4292**	**0.1114**	**0.0112**	**0.1226**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	18.7947	2.0000e-005	1.7600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.2911	0.8081	3.1382	5.8800e-003	0.4169	0.0122	0.4292	0.1114	0.0112	0.1226						
Total	**19.0859**	**0.8081**	**3.1400**	**5.8800e-003**	**0.4169**	**0.0122**	**0.4292**	**0.1114**	**0.0112**	**0.1226**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.2911	0.8081	3.1382	5.8800e-003	0.4169	0.0122	0.4292	0.1114	0.0112	0.1226						
Mitigated	0.2911	0.8081	3.1382	5.8800e-003	0.4169	0.0122	0.4292	0.1114	0.0112	0.1226						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	64.35	0.00	0.00	140,540	140,540
Total	64.35	0.00	0.00	140,540	140,540

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.516610	0.060517	0.179979	0.140587	0.041566	0.006616	0.015092	0.027587	0.001923	0.002530	0.004314	0.000602	0.002075

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	18.7947	2.0000e-005	1.7600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Mitigated	18.7947	2.0000e-005	1.7600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.5635					0.0000	0.0000		0.0000	0.0000						
Consumer Products	14.2311					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.8000e-004	2.0000e-005	1.7600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**18.7947**	**2.0000e-005**	**1.7600e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.5635					0.0000	0.0000		0.0000	0.0000						
Consumer Products	14.2311					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.8000e-004	2.0000e-005	1.7600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**18.7947**	**2.0000e-005**	**1.7600e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Existing Wkdy Game Day - Track Practice

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	5.45	Acre	5.45	237,184.20	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblLandUse	LandUseSquareFeet	237,402.00	237,184.20
tblVehicleTrips	CC_TTP	48.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	ST_TR	1.59	0.00
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	WD_TR	1.59	4.59
tblWater	OutdoorWaterUseRate	6,493,573.36	1,045,983.10

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.2023	1.0000e-005	5.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.1089	0.2984	1.2411	2.4100e-003	0.1621	4.7100e-003	0.1668	0.0433	4.3300e-003	0.0476						
Total	**6.3111**	**0.2984**	**1.2417**	**2.4100e-003**	**0.1621**	**4.7100e-003**	**0.1668**	**0.0433**	**4.3300e-003**	**0.0476**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.2023	1.0000e-005	5.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.1089	0.2984	1.2411	2.4100e-003	0.1621	4.7100e-003	0.1668	0.0433	4.3300e-003	0.0476						
Total	**6.3111**	**0.2984**	**1.2417**	**2.4100e-003**	**0.1621**	**4.7100e-003**	**0.1668**	**0.0433**	**4.3300e-003**	**0.0476**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.1089	0.2984	1.2411	2.4100e-003	0.1621	4.7100e-003	0.1668	0.0433	4.3300e-003	0.0476						
Mitigated	0.1089	0.2984	1.2411	2.4100e-003	0.1621	4.7100e-003	0.1668	0.0433	4.3300e-003	0.0476						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	25.02	0.00	0.00	54,634	54,634
Total	25.02	0.00	0.00	54,634	54,634

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.516610	0.060517	0.179979	0.140587	0.041566	0.006616	0.015092	0.027587	0.001923	0.002530	0.004314	0.000602	0.002075

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	6.2023	1.0000e-005	5.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Mitigated	6.2023	1.0000e-005	5.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.5060					0.0000	0.0000		0.0000	0.0000						
Consumer Products	4.6963					0.0000	0.0000		0.0000	0.0000						
Landscaping	6.0000e-005	1.0000e-005	5.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**6.2023**	**1.0000e-005**	**5.8000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.5060					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.6963					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.0000e-005	1.0000e-005	5.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.1900e-003	1.1900e-003	0.0000		1.2700e-003
Total	**6.2023**	**1.0000e-005**	**5.8000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.1900e-003**	**1.1900e-003**	**0.0000**		**1.2700e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Existing Wkdy Game Day - Track Practice

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	5.45	Acre	5.45	237,184.20	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblLandUse	LandUseSquareFeet	237,402.00	237,184.20
tblVehicleTrips	CC_TTP	48.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	ST_TR	1.59	0.00
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	WD_TR	1.59	4.59
tblWater	OutdoorWaterUseRate	6,493,573.36	1,045,983.10

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.2023	1.0000e-005	5.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.1132	0.3141	1.2200	2.2900e-003	0.1621	4.7400e-003	0.1668	0.0433	4.3600e-003	0.0477						
Total	**6.3154**	**0.3142**	**1.2205**	**2.2900e-003**	**0.1621**	**4.7400e-003**	**0.1668**	**0.0433**	**4.3600e-003**	**0.0477**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.2023	1.0000e-005	5.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.1132	0.3141	1.2200	2.2900e-003	0.1621	4.7400e-003	0.1668	0.0433	4.3600e-003	0.0477						
Total	**6.3154**	**0.3142**	**1.2205**	**2.2900e-003**	**0.1621**	**4.7400e-003**	**0.1668**	**0.0433**	**4.3600e-003**	**0.0477**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.1132	0.3141	1.2200	2.2900e-003	0.1621	4.7400e-003	0.1668	0.0433	4.3600e-003	0.0477						
Mitigated	0.1132	0.3141	1.2200	2.2900e-003	0.1621	4.7400e-003	0.1668	0.0433	4.3600e-003	0.0477						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	25.02	0.00	0.00	54,634	54,634
Total	25.02	0.00	0.00	54,634	54,634

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.516610	0.060517	0.179979	0.140587	0.041566	0.006616	0.015092	0.027587	0.001923	0.002530	0.004314	0.000602	0.002075

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	6.2023	1.0000e-005	5.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Mitigated	6.2023	1.0000e-005	5.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.5060					0.0000	0.0000		0.0000	0.0000						
Consumer Products	4.6963					0.0000	0.0000		0.0000	0.0000						
Landscaping	6.0000e-005	1.0000e-005	5.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**6.2023**	**1.0000e-005**	**5.8000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.5060					0.0000	0.0000		0.0000	0.0000						
Consumer Products	4.6963					0.0000	0.0000		0.0000	0.0000						
Landscaping	6.0000e-005	1.0000e-005	5.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**6.2023**	**1.0000e-005**	**5.8000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Existing Weekday Practice Day

CMS Fields

	ROG	NOX	CO	SO2	PM10	PM2.5
Summer						
Area Sources	44.0822	0.00004	0.00413	0	0.00002	0.00002
Energy Demand	0	0	0	0	0	0
Mobile Sources	0.33	0.9047	3.7632	0.0073	0.5058	0.1444
Summer Total	44.4122	0.9048	3.7673	0.0073	0.5058	0.1444
Winter						
Area Sources	44.0822	0.00004	0.00413	0	0.00002	0.00002
Energy Demand	0	0	0	0	0	0
Mobile Sources	0.3432	0.9525	3.6991	0.00693	0.5059	0.1445
Winter Total	44.4254	0.9526	3.7033	0.00693	0.5059	0.1445

Pitzer Fields

	ROG	NOX	CO	SO2	PM10	PM2.5
Summer						
Area Sources	18.3961	0.00002	0.00172	0	0.00001	0.00001
Energy Demand	0	0	0	0	0	0
Mobile Sources	0.2741	0.7512	3.1248	0.00606	0.42	0.1199
Summer Total	18.6701	0.7513	3.1265	0.00606	0.42	0.1199
Winter						
Area Sources	18.3961	0.00002	0.00172	0	0.00001	0.00001
Energy Demand	0	0	0	0	0	0
Mobile Sources	0.285	0.791	3.0716	0.00576	0.42	0.12
Winter Total	18.681	0.791	3.0734	0.00576	0.4201	0.12

Total Weekday Practice Day

	ROG	NOX	CO	SO2	PM10	PM2.5
Summer						
Area Sources	62.48	0.00	0.01	0.00	0.00	0.00
Energy Demand	0.00	0.00	0.00	0.00	0.00	0.00
Mobile Sources	0.60	1.66	6.89	0.01	0.93	0.26
Summer Total	63.08	1.66	6.89	0.01	0.93	0.26
Winter						
Area Sources	62.48	0.00	0.01	0.00	0.00	0.00
Energy Demand	0.00	0.00	0.00	0.00	0.00	0.00
Mobile Sources	0.63	1.74	6.77	0.01	0.93	0.26
Winter Total	63.11	1.74	6.78	0.01	0.93	0.26

Existing Wkdy Practice - CMS Fields

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	38.70	Acre	38.70	1,685,772.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	30.00	0.00
tblTripsAndVMT	WorkerVehicleClass	LD_Mix	EMFAC_Mix
tblVehicleTrips	CC_TTP	48.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	ST_TR	1.59	0.00
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	WD_TR	1.59	1.96
tblWater	IndoorWaterUseRate	0.00	350,400.00
tblWater	OutdoorWaterUseRate	46,110,328.23	1,045,983.10

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	44.0822	4.0000e-005	4.1300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.3300	0.9047	3.7632	7.3000e-003	0.4915	0.0143	0.5058	0.1313	0.0131	0.1444						
Total	**44.4122**	**0.9048**	**3.7673**	**7.3000e-003**	**0.4915**	**0.0143**	**0.5058**	**0.1313**	**0.0131**	**0.1444**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	44.0822	4.0000e-005	4.1300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.3300	0.9047	3.7632	7.3000e-003	0.4915	0.0143	0.5058	0.1313	0.0131	0.1444						
Total	**44.4122**	**0.9048**	**3.7673**	**7.3000e-003**	**0.4915**	**0.0143**	**0.5058**	**0.1313**	**0.0131**	**0.1444**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.3300	0.9047	3.7632	7.3000e-003	0.4915	0.0143	0.5058	0.1313	0.0131	0.1444						
Mitigated	0.3300	0.9047	3.7632	7.3000e-003	0.4915	0.0143	0.5058	0.1313	0.0131	0.1444						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	75.85	0.00	0.00	165,661	165,661
Total	75.85	0.00	0.00	165,661	165,661

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.516610	0.060517	0.179979	0.140587	0.041566	0.006616	0.015092	0.027587	0.001923	0.002530	0.004314	0.000602	0.002075

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	44.0822	4.0000e-005	4.1300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005						
Mitigated	44.0822	4.0000e-005	4.1300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	10.7035					0.0000	0.0000		0.0000	0.0000						
Consumer Products	33.3783					0.0000	0.0000		0.0000	0.0000						
Landscaping	4.2000e-004	4.0000e-005	4.1300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005						
Total	**44.0822**	**4.0000e-005**	**4.1300e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	10.7035					0.0000	0.0000		0.0000	0.0000						
Consumer Products	33.3783					0.0000	0.0000		0.0000	0.0000						
Landscaping	4.2000e-004	4.0000e-005	4.1300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005						
Total	**44.0822**	**4.0000e-005**	**4.1300e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Existing Wkdy Practice - CMS Fields

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	38.70	Acre	38.70	1,685,772.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	30.00	0.00
tblTripsAndVMT	WorkerVehicleClass	LD_Mix	EMFAC_Mix
tblVehicleTrips	CC_TTP	48.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	ST_TR	1.59	0.00
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	WD_TR	1.59	1.96
tblWater	IndoorWaterUseRate	0.00	350,400.00
tblWater	OutdoorWaterUseRate	46,110,328.23	1,045,983.10

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	44.0822	4.0000e-005	4.1300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.3432	0.9525	3.6991	6.9300e-003	0.4915	0.0144	0.5059	0.1313	0.0132	0.1445						
Total	**44.4254**	**0.9526**	**3.7033**	**6.9300e-003**	**0.4915**	**0.0144**	**0.5059**	**0.1313**	**0.0132**	**0.1445**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	44.0822	4.0000e-005	4.1300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.3432	0.9525	3.6991	6.9300e-003	0.4915	0.0144	0.5059	0.1313	0.0132	0.1445						
Total	**44.4254**	**0.9526**	**3.7033**	**6.9300e-003**	**0.4915**	**0.0144**	**0.5059**	**0.1313**	**0.0132**	**0.1445**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.3432	0.9525	3.6991	6.9300e-003	0.4915	0.0144	0.5059	0.1313	0.0132	0.1445						
Mitigated	0.3432	0.9525	3.6991	6.9300e-003	0.4915	0.0144	0.5059	0.1313	0.0132	0.1445						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	75.85	0.00	0.00	165,661	165,661
Total	75.85	0.00	0.00	165,661	165,661

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.516610	0.060517	0.179979	0.140587	0.041566	0.006616	0.015092	0.027587	0.001923	0.002530	0.004314	0.000602	0.002075

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	44.0822	4.0000e-005	4.1300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005						
Mitigated	44.0822	4.0000e-005	4.1300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	10.7035					0.0000	0.0000		0.0000	0.0000						
Consumer Products	33.3783					0.0000	0.0000		0.0000	0.0000						
Landscaping	4.2000e-004	4.0000e-005	4.1300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005						
Total	**44.0822**	**4.0000e-005**	**4.1300e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	10.7035					0.0000	0.0000		0.0000	0.0000						
Consumer Products	33.3783					0.0000	0.0000		0.0000	0.0000						
Landscaping	4.2000e-004	4.0000e-005	4.1300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005						
Total	**44.0822**	**4.0000e-005**	**4.1300e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Existing Wkdy Practice - Pitzer Fields

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	16.15	Acre	16.15	703,494.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT - Trips based on size of work area

Grading -

Architectural Coating -

Vehicle Trips - Weekday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblVehicleTrips	CC_TTP	48.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	ST_TR	1.59	0.00
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	WD_TR	1.59	3.90
tblWater	IndoorWaterUseRate	0.00	197,100.00
tblWater	OutdoorWaterUseRate	19,242,423.80	1,251,269.50

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	18.3961	2.0000e-005	1.7200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.2741	0.7512	3.1248	6.0600e-003	0.4081	0.0119	0.4200	0.1090	0.0109	0.1199						
Total	**18.6701**	**0.7513**	**3.1265**	**6.0600e-003**	**0.4081**	**0.0119**	**0.4200**	**0.1090**	**0.0109**	**0.1199**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	18.3961	2.0000e-005	1.7200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.2741	0.7512	3.1248	6.0600e-003	0.4081	0.0119	0.4200	0.1090	0.0109	0.1199						
Total	**18.6701**	**0.7513**	**3.1265**	**6.0600e-003**	**0.4081**	**0.0119**	**0.4200**	**0.1090**	**0.0109**	**0.1199**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.2741	0.7512	3.1248	6.0600e-003	0.4081	0.0119	0.4200	0.1090	0.0109	0.1199						
Mitigated	0.2741	0.7512	3.1248	6.0600e-003	0.4081	0.0119	0.4200	0.1090	0.0109	0.1199						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	62.99	0.00	0.00	137,559	137,559
Total	62.99	0.00	0.00	137,559	137,559

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.516610	0.060517	0.179979	0.140587	0.041566	0.006616	0.015092	0.027587	0.001923	0.002530	0.004314	0.000602	0.002075

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	18.3961	2.0000e-005	1.7200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Mitigated	18.3961	2.0000e-005	1.7200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.4667					0.0000	0.0000		0.0000	0.0000						
Consumer Products	13.9292					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.7000e-004	2.0000e-005	1.7200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**18.3961**	**2.0000e-005**	**1.7200e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.4667					0.0000	0.0000		0.0000	0.0000						
Consumer Products	13.9292					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.7000e-004	2.0000e-005	1.7200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**18.3961**	**2.0000e-005**	**1.7200e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Existing Wkdy Practice - Pitzer Fields

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	16.15	Acre	16.15	703,494.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT - Trips based on size of work area

Grading -

Architectural Coating -

Vehicle Trips - Weekday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblVehicleTrips	CC_TTP	48.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	ST_TR	1.59	0.00
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	WD_TR	1.59	3.90
tblWater	IndoorWaterUseRate	0.00	197,100.00
tblWater	OutdoorWaterUseRate	19,242,423.80	1,251,269.50

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	18.3961	2.0000e-005	1.7200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.2850	0.7910	3.0716	5.7600e-003	0.4081	0.0120	0.4200	0.1090	0.0110	0.1200						
Total	**18.6810**	**0.7910**	**3.0734**	**5.7600e-003**	**0.4081**	**0.0120**	**0.4201**	**0.1090**	**0.0110**	**0.1200**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	18.3961	2.0000e-005	1.7200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.2850	0.7910	3.0716	5.7600e-003	0.4081	0.0120	0.4200	0.1090	0.0110	0.1200						
Total	**18.6810**	**0.7910**	**3.0734**	**5.7600e-003**	**0.4081**	**0.0120**	**0.4201**	**0.1090**	**0.0110**	**0.1200**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.2850	0.7910	3.0716	5.7600e-003	0.4081	0.0120	0.4200	0.1090	0.0110	0.1200						
Mitigated	0.2850	0.7910	3.0716	5.7600e-003	0.4081	0.0120	0.4200	0.1090	0.0110	0.1200						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	62.99	0.00	0.00	137,559	137,559
Total	62.99	0.00	0.00	137,559	137,559

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.516610	0.060517	0.179979	0.140587	0.041566	0.006616	0.015092	0.027587	0.001923	0.002530	0.004314	0.000602	0.002075

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	18.3961	2.0000e-005	1.7200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Mitigated	18.3961	2.0000e-005	1.7200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.4667					0.0000	0.0000		0.0000	0.0000						
Consumer Products	13.9292					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.7000e-004	2.0000e-005	1.7200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**18.3961**	**2.0000e-005**	**1.7200e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.4667					0.0000	0.0000		0.0000	0.0000						
Consumer Products	13.9292					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.7000e-004	2.0000e-005	1.7200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**18.3961**	**2.0000e-005**	**1.7200e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Existing Weekend Game Fall

Baseball Game

	ROG	NOX	CO	SO2	PM10	PM2.5
Summer						
Area Sources	17.8493	0.00002	0.00167	0	0.00001	0.00001
Energy Demand	0.3993	3.6302	3.0494	0.0218	0.2759	0.2759
Mobile Sources	1.1223	3.0764	12.7963	0.0248	1.7198	0.491
Summer Total	19.3709	6.7066	15.8474	0.0466	1.9957	0.7669
Winter						
Area Sources	17.8493	0.00002	0.00167	0	0.00001	0.00001
Energy Demand	0.3993	3.6302	3.0494	0.0218	0.2759	0.2759
Mobile Sources	1.1669	3.239	12.5786	0.0236	1.7201	0.4913
Winter Total	19.4156	6.8692	15.6296	0.0454	1.996	0.7672

Pitzer Fields

Summer						
Area Sources	18.3961	0.00002	0.00172	0	0.00001	0.00001
Energy Demand	0	0	0	0	0	0
Mobile Sources	0.4786	1.3118	5.4564	0.0106	0.7333	0.2094
Summer Total	18.8746	1.3118	5.4581	0.0106	0.7333	0.2094
Winter						
Area Sources	18.3961	0.00002	0.00172	0	0.00001	0.00001
Energy Demand	0	0	0	0	0	0
Mobile Sources	0.4976	1.3811	5.3636	0.0101	0.7335	0.2095
Winter Total	18.8936	1.3811	5.3653	0.0101	0.4335	0.2095

Softball Game

Summer						
Area Sources	13.817	0.00001	0.00129	0	0	0
Energy Demand	0.3091	2.8101	2.3605	0.0169	0.2136	0.2136
Mobile Sources	1.0704	2.9341	12.2044	0.0237	1.6402	0.4683
Summer Total	15.1965	5.7442	14.5661	0.0405	1.8538	0.6819
Winter						
Area Sources	13.817	0.00001	0.00129	0	0	0
Energy Demand	0.3091	2.8101	2.3605	0.0169	0.2136	0.2136
Mobile Sources	1.113	3.0891	11.9967	0.0225	1.6405	0.4686
Winter Total	15.239	5.8992	14.3585	0.0393	1.8541	0.6822

Total Weekend Game Fall

	ROG	NOX	CO	SO2	PM10	PM2.5
Summer						
Area Sources	50.06	0.00	0.00	0.00	0.00	0.00
Energy Demand	0.71	6.44	5.41	0.04	0.49	0.49
Mobile Sources	2.67	7.32	30.46	0.06	4.09	1.17
Summer Total	53.44	13.76	35.87	0.10	4.58	1.66
Winter						
Area Sources	50.06	0.00	0.00	0.00	0.00	0.00
Energy Demand	0.71	6.44	5.41	0.04	0.49	0.49
Mobile Sources	2.78	7.71	29.94	0.06	4.09	1.17
Winter Total	53.55	14.15	35.35	0.09	4.28	1.66

Ex Weekend Game Fall - Football Game

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Arena	10.89	Acre	10.89	474,368.40	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Saturday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblVehicleTrips	CC_TTP	81.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	DV_TP	0.28	0.00
tblVehicleTrips	PB_TP	0.60	0.00
tblVehicleTrips	PR_TP	0.66	100.00
tblVehicleTrips	ST_TR	0.00	129.29
tblVehicleTrips	WD_TR	33.33	0.00
tblWater	IndoorWaterUseRate	14,659,645.56	0.00
tblWater	OutdoorWaterUseRate	935,722.06	1,045,983.10

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	12.4045	1.0000e-005	1.1600e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.2775	2.5228	2.1192	0.0151		0.1917	0.1917		0.1917	0.1917						
Mobile	6.1263	16.7932	69.8521	0.1355	9.1227	0.2652	9.3879	2.4369	0.2435	2.6804						
Total	**18.8083**	**19.3160**	**71.9724**	**0.1506**	**9.1227**	**0.4570**	**9.5796**	**2.4369**	**0.4353**	**2.8721**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	12.4045	1.0000e-005	1.1600e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.2775	2.5228	2.1192	0.0151		0.1917	0.1917		0.1917	0.1917						
Mobile	6.1263	16.7932	69.8521	0.1355	9.1227	0.2652	9.3879	2.4369	0.2435	2.6804						
Total	**18.8083**	**19.3160**	**71.9724**	**0.1506**	**9.1227**	**0.4570**	**9.5796**	**2.4369**	**0.4353**	**2.8721**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	6.1263	16.7932	69.8521	0.1355	9.1227	0.2652	9.3879	2.4369	0.2435	2.6804						
Mitigated	6.1263	16.7932	69.8521	0.1355	9.1227	0.2652	9.3879	2.4369	0.2435	2.6804						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	0.00	1,407.97	0.00	615,000	615,000
Total	0.00	1,407.97	0.00	615,000	615,000

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Arena	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.516610	0.060517	0.179979	0.140587	0.041566	0.006616	0.015092	0.027587	0.001923	0.002530	0.004314	0.000602	0.002075

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.2775	2.5228	2.1192	0.0151		0.1917	0.1917		0.1917	0.1917						
NaturalGas Unmitigated	0.2775	2.5228	2.1192	0.0151		0.1917	0.1917		0.1917	0.1917						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	25732.9	0.2775	2.5228	2.1192	0.0151		0.1917	0.1917		0.1917	0.1917						
Total		**0.2775**	**2.5228**	**2.1192**	**0.0151**		**0.1917**	**0.1917**		**0.1917**	**0.1917**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	25.7329	0.2775	2.5228	2.1192	0.0151		0.1917	0.1917		0.1917	0.1917						
Total		**0.2775**	**2.5228**	**2.1192**	**0.0151**		**0.1917**	**0.1917**		**0.1917**	**0.1917**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	12.4045	1.0000e-005	1.1600e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Mitigated	12.4045	1.0000e-005	1.1600e-003	0.0000		0.0000	0.0000		0.0000	0.0000						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.0119					0.0000	0.0000		0.0000	0.0000						
Consumer Products	9.3925					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.2000e-004	1.0000e-005	1.1600e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**12.4045**	**1.0000e-005**	**1.1600e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.0119					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	9.3925					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.2000e-004	1.0000e-005	1.1600e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.3800e-003	2.3800e-003	1.0000e-005		2.5300e-003
Total	**12.4045**	**1.0000e-005**	**1.1600e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.3800e-003**	**2.3800e-003**	**1.0000e-005**		**2.5300e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Ex Weekend Game Fall - Football Game

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Arena	10.89	Acre	10.89	474,368.40	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Saturday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblVehicleTrips	CC_TTP	81.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	DV_TP	0.28	0.00
tblVehicleTrips	PB_TP	0.60	0.00
tblVehicleTrips	PR_TP	0.66	100.00
tblVehicleTrips	ST_TR	0.00	129.29
tblVehicleTrips	WD_TR	33.33	0.00
tblWater	IndoorWaterUseRate	14,659,645.56	0.00
tblWater	OutdoorWaterUseRate	935,722.06	1,045,983.10

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	12.4045	1.0000e-005	1.1600e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.2775	2.5228	2.1192	0.0151		0.1917	0.1917		0.1917	0.1917						
Mobile	6.3700	17.6808	68.6634	0.1287	9.1227	0.2670	9.3897	2.4369	0.2452	2.6820						
Total	**19.0520**	**20.2037**	**70.7838**	**0.1438**	**9.1227**	**0.4588**	**9.5814**	**2.4369**	**0.4369**	**2.8738**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	12.4045	1.0000e-005	1.1600e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.2775	2.5228	2.1192	0.0151		0.1917	0.1917		0.1917	0.1917						
Mobile	6.3700	17.6808	68.6634	0.1287	9.1227	0.2670	9.3897	2.4369	0.2452	2.6820						
Total	**19.0520**	**20.2037**	**70.7838**	**0.1438**	**9.1227**	**0.4588**	**9.5814**	**2.4369**	**0.4369**	**2.8738**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	6.3700	17.6808	68.6634	0.1287	9.1227	0.2670	9.3897	2.4369	0.2452	2.6820						
Mitigated	6.3700	17.6808	68.6634	0.1287	9.1227	0.2670	9.3897	2.4369	0.2452	2.6820						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	0.00	1,407.97	0.00	615,000	615,000
Total	0.00	1,407.97	0.00	615,000	615,000

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Arena	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.516610	0.060517	0.179979	0.140587	0.041566	0.006616	0.015092	0.027587	0.001923	0.002530	0.004314	0.000602	0.002075

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.2775	2.5228	2.1192	0.0151		0.1917	0.1917		0.1917	0.1917						
NaturalGas Unmitigated	0.2775	2.5228	2.1192	0.0151		0.1917	0.1917		0.1917	0.1917						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	25732.9	0.2775	2.5228	2.1192	0.0151		0.1917	0.1917		0.1917	0.1917						
Total		**0.2775**	**2.5228**	**2.1192**	**0.0151**		**0.1917**	**0.1917**		**0.1917**	**0.1917**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	25.7329	0.2775	2.5228	2.1192	0.0151		0.1917	0.1917		0.1917	0.1917						
Total		**0.2775**	**2.5228**	**2.1192**	**0.0151**		**0.1917**	**0.1917**		**0.1917**	**0.1917**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	12.4045	1.0000e-005	1.1600e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Mitigated	12.4045	1.0000e-005	1.1600e-003	0.0000		0.0000	0.0000		0.0000	0.0000						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.0119					0.0000	0.0000		0.0000	0.0000						
Consumer Products	9.3925					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.2000e-004	1.0000e-005	1.1600e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**12.4045**	**1.0000e-005**	**1.1600e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.0119					0.0000	0.0000		0.0000	0.0000						
Consumer Products	9.3925					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.2000e-004	1.0000e-005	1.1600e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**12.4045**	**1.0000e-005**	**1.1600e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Existing Weekend Game Fall - Pitzer Fields

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	16.15	Acre	16.15	703,494.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Saturday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblVehicleTrips	CC_TTP	48.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	ST_TR	1.59	6.81
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	WD_TR	1.59	0.00
tblWater	IndoorWaterUseRate	0.00	197,199.00
tblWater	OutdoorWaterUseRate	19,242,423.80	1,251,269.50

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	18.3961	2.0000e-005	1.7200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.4786	1.3118	5.4564	0.0106	0.7126	0.0207	0.7333	0.1904	0.0190	0.2094						
Total	**18.8746**	**1.3118**	**5.4581**	**0.0106**	**0.7126**	**0.0207**	**0.7333**	**0.1904**	**0.0190**	**0.2094**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	18.3961	2.0000e-005	1.7200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.4786	1.3118	5.4564	0.0106	0.7126	0.0207	0.7333	0.1904	0.0190	0.2094						
Total	**18.8746**	**1.3118**	**5.4581**	**0.0106**	**0.7126**	**0.0207**	**0.7333**	**0.1904**	**0.0190**	**0.2094**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.4786	1.3118	5.4564	0.0106	0.7126	0.0207	0.7333	0.1904	0.0190	0.2094						
Mitigated	0.4786	1.3118	5.4564	0.0106	0.7126	0.0207	0.7333	0.1904	0.0190	0.2094						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	109.98	0.00	48,040	48,040
Total	0.00	109.98	0.00	48,040	48,040

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.516610	0.060517	0.179979	0.140587	0.041566	0.006616	0.015092	0.027587	0.001923	0.002530	0.004314	0.000602	0.002075

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	18.3961	2.0000e-005	1.7200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Mitigated	18.3961	2.0000e-005	1.7200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.4667					0.0000	0.0000		0.0000	0.0000						
Consumer Products	13.9292					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.7000e-004	2.0000e-005	1.7200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**18.3961**	**2.0000e-005**	**1.7200e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.4667					0.0000	0.0000		0.0000	0.0000						
Consumer Products	13.9292					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.7000e-004	2.0000e-005	1.7200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**18.3961**	**2.0000e-005**	**1.7200e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Existing Weekend Game Fall - Pitzer Fields

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	16.15	Acre	16.15	703,494.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Saturday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblVehicleTrips	CC_TTP	48.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	ST_TR	1.59	6.81
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	WD_TR	1.59	0.00
tblWater	IndoorWaterUseRate	0.00	197,199.00
tblWater	OutdoorWaterUseRate	19,242,423.80	1,251,269.50

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	18.3961	2.0000e-005	1.7200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.4976	1.3811	5.3636	0.0101	0.7126	0.0209	0.7335	0.1904	0.0192	0.2095						
Total	**18.8936**	**1.3811**	**5.3653**	**0.0101**	**0.7126**	**0.0209**	**0.7335**	**0.1904**	**0.0192**	**0.2095**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	18.3961	2.0000e-005	1.7200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.4976	1.3811	5.3636	0.0101	0.7126	0.0209	0.7335	0.1904	0.0192	0.2095						
Total	**18.8936**	**1.3811**	**5.3653**	**0.0101**	**0.7126**	**0.0209**	**0.7335**	**0.1904**	**0.0192**	**0.2095**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.4976	1.3811	5.3636	0.0101	0.7126	0.0209	0.7335	0.1904	0.0192	0.2095						
Mitigated	0.4976	1.3811	5.3636	0.0101	0.7126	0.0209	0.7335	0.1904	0.0192	0.2095						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	109.98	0.00	48,040	48,040
Total	0.00	109.98	0.00	48,040	48,040

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.516610	0.060517	0.179979	0.140587	0.041566	0.006616	0.015092	0.027587	0.001923	0.002530	0.004314	0.000602	0.002075

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	18.3961	2.0000e-005	1.7200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Mitigated	18.3961	2.0000e-005	1.7200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.4667					0.0000	0.0000		0.0000	0.0000						
Consumer Products	13.9292					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.7000e-004	2.0000e-005	1.7200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**18.3961**	**2.0000e-005**	**1.7200e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.4667					0.0000	0.0000		0.0000	0.0000						
Consumer Products	13.9292					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.7000e-004	2.0000e-005	1.7200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**18.3961**	**2.0000e-005**	**1.7200e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Existing Weekend Game Spring

Baseball Game

	ROG	NOX	CO	SO2	PM10	PM2.5
Summer						
Area Sources	17.8493	0.00002	0.00167	0	0.00001	0.00001
Energy Demand	0.3993	3.6302	3.0494	0.0218	0.2759	0.2759
Mobile Sources	1.1223	3.0764	12.7963	0.0248	1.7198	0.491
Summer Total	19.3709	6.7066	15.8474	0.0466	1.9957	0.7669
Winter						
Area Sources	17.8493	0.00002	0.00167	0	0.00001	0.00001
Energy Demand	0.3993	3.6302	3.0494	0.0218	0.2759	0.2759
Mobile Sources	1.1669	3.239	12.5786	0.0236	0.7201	0.4913
Winter Total	19.4156	6.8692	15.6296	0.0454	1.996	0.7672

Pitzer Fields

	ROG	NOX	CO	SO2	PM10	PM2.5
Summer						
Area Sources	18.3961	0.00002	0.00172	0	0.00001	0.00001
Energy Demand	0	0	0	0	0	0
Mobile Sources	0.4786	1.3118	5.4564	0.0106	0.7333	0.2094
Summer Total	18.8746	1.3118	5.4581	0.0106	0.7333	0.2094
Winter						
Area Sources	18.3961	0.00002	0.00172	0	0.00001	0.00001
Energy Demand	0	0	0	0	0	0
Mobile Sources	0.4976	1.3811	5.3636	0.0101	0.7335	0.2095
Winter Total	18.8936	1.3811	5.3653	0.0101	0.7335	0.2095

Softball Game

	ROG	NOX	CO	SO2	PM10	PM2.5
Summer						
Area Sources	13.817	0.00001	0.00129	0	0	0
Energy Demand	0.3091	2.8101	2.3605	0.0169	0.2136	0.2136
Mobile Sources	1.0704	2.9341	12.2044	0.0237	1.6402	0.4683
Summer Total	15.1965	5.7442	14.5661	0.0405	1.8538	0.6819
Winter						
Area Sources	13.817	0.00001	0.00129	0	0	0
Energy Demand	0.3091	2.8101	2.3605	0.0169	0.2136	0.2136
Mobile Sources	1.113	3.0891	11.9967	0.0225	1.6405	0.4686
Winter Total	15.239	5.8992	14.3585	0.0393	1.8541	0.6822

Total Weekend Game Spring

	ROG	NOX	CO	SO2	PM10	PM2.5
Summer						
Area Sources	50.06	0.00	0.00	0.00	0.00	0.00
Energy Demand	0.71	6.44	5.41	0.04	0.49	0.49
Mobile Sources	2.67	7.32	30.46	0.06	4.09	1.17
Summer Total	53.44	13.76	35.87	0.10	4.58	1.66
Winter						
Area Sources	50.06	0.00	0.00	0.00	0.00	0.00
Energy Demand	0.71	6.44	5.41	0.04	0.49	0.49
Mobile Sources	2.78	7.71	29.94	0.06	3.09	1.17
Winter Total	53.55	14.15	35.35	0.09	4.58	1.66

Ex Weekend Game Spring - BB Game

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Arena	15.67	Acre	15.67	682,585.20	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Saturday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblVehicleTrips	CC_TTP	81.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	DV_TP	0.28	0.00
tblVehicleTrips	PB_TP	0.60	0.00
tblVehicleTrips	PR_TP	0.66	100.00
tblVehicleTrips	ST_TR	0.00	16.46
tblVehicleTrips	WD_TR	33.33	0.00
tblWater	IndoorWaterUseRate	21,094,274.20	350,400.00
tblWater	OutdoorWaterUseRate	1,346,443.03	1,045,983.10

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	17.8493	2.0000e-005	1.6700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.3993	3.6302	3.0494	0.0218		0.2759	0.2759		0.2759	0.2759						
Mobile	1.1223	3.0764	12.7963	0.0248	1.6712	0.0486	1.7198	0.4464	0.0446	0.4910						
Total	**19.3709**	**6.7066**	**15.8474**	**0.0466**	**1.6712**	**0.3245**	**1.9957**	**0.4464**	**0.3205**	**0.7669**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	17.8493	2.0000e-005	1.6700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.3993	3.6302	3.0494	0.0218		0.2759	0.2759		0.2759	0.2759						
Mobile	1.1223	3.0764	12.7963	0.0248	1.6712	0.0486	1.7198	0.4464	0.0446	0.4910						
Total	**19.3709**	**6.7066**	**15.8474**	**0.0466**	**1.6712**	**0.3245**	**1.9957**	**0.4464**	**0.3205**	**0.7669**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	1.1223	3.0764	12.7963	0.0248	1.6712	0.0486	1.7198	0.4464	0.0446	0.4910						
Mitigated	1.1223	3.0764	12.7963	0.0248	1.6712	0.0486	1.7198	0.4464	0.0446	0.4910						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	0.00	257.93	0.00	112,663	112,663
Total	0.00	257.93	0.00	112,663	112,663

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Arena	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.516610	0.060517	0.179979	0.140587	0.041566	0.006616	0.015092	0.027587	0.001923	0.002530	0.004314	0.000602	0.002075

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.3993	3.6302	3.0494	0.0218		0.2759	0.2759		0.2759	0.2759						
NaturalGas Unmitigated	0.3993	3.6302	3.0494	0.0218		0.2759	0.2759		0.2759	0.2759						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	37027.9	0.3993	3.6302	3.0494	0.0218		0.2759	0.2759		0.2759	0.2759						
Total		**0.3993**	**3.6302**	**3.0494**	**0.0218**		**0.2759**	**0.2759**		**0.2759**	**0.2759**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	37.0279	0.3993	3.6302	3.0494	0.0218		0.2759	0.2759		0.2759	0.2759						
Total		**0.3993**	**3.6302**	**3.0494**	**0.0218**		**0.2759**	**0.2759**		**0.2759**	**0.2759**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	17.8493	2.0000e-005	1.6700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Mitigated	17.8493	2.0000e-005	1.6700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.3340					0.0000	0.0000		0.0000	0.0000						
Consumer Products	13.5152					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.7000e-004	2.0000e-005	1.6700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**17.8493**	**2.0000e-005**	**1.6700e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.3340					0.0000	0.0000		0.0000	0.0000						
Consumer Products	13.5152					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.7000e-004	2.0000e-005	1.6700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**17.8493**	**2.0000e-005**	**1.6700e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Ex Weekend Game Spring - BB Game

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Arena	15.67	Acre	15.67	682,585.20	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Saturday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblVehicleTrips	CC_TTP	81.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	DV_TP	0.28	0.00
tblVehicleTrips	PB_TP	0.60	0.00
tblVehicleTrips	PR_TP	0.66	100.00
tblVehicleTrips	ST_TR	0.00	16.46
tblVehicleTrips	WD_TR	33.33	0.00
tblWater	IndoorWaterUseRate	21,094,274.20	350,400.00
tblWater	OutdoorWaterUseRate	1,346,443.03	1,045,983.10

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	17.8493	2.0000e-005	1.6700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.3993	3.6302	3.0494	0.0218		0.2759	0.2759		0.2759	0.2759						
Mobile	1.1669	3.2390	12.5786	0.0236	1.6712	0.0489	1.7201	0.4464	0.0449	0.4913						
Total	**19.4156**	**6.8692**	**15.6296**	**0.0454**	**1.6712**	**0.3248**	**1.9960**	**0.4464**	**0.3208**	**0.7672**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	17.8493	2.0000e-005	1.6700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.3993	3.6302	3.0494	0.0218		0.2759	0.2759		0.2759	0.2759						
Mobile	1.1669	3.2390	12.5786	0.0236	1.6712	0.0489	1.7201	0.4464	0.0449	0.4913						
Total	**19.4156**	**6.8692**	**15.6296**	**0.0454**	**1.6712**	**0.3248**	**1.9960**	**0.4464**	**0.3208**	**0.7672**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	1.1669	3.2390	12.5786	0.0236	1.6712	0.0489	1.7201	0.4464	0.0449	0.4913						
Mitigated	1.1669	3.2390	12.5786	0.0236	1.6712	0.0489	1.7201	0.4464	0.0449	0.4913						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	0.00	257.93	0.00	112,663	112,663
Total	0.00	257.93	0.00	112,663	112,663

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Arena	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.516610	0.060517	0.179979	0.140587	0.041566	0.006616	0.015092	0.027587	0.001923	0.002530	0.004314	0.000602	0.002075

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.3993	3.6302	3.0494	0.0218		0.2759	0.2759		0.2759	0.2759						
NaturalGas Unmitigated	0.3993	3.6302	3.0494	0.0218		0.2759	0.2759		0.2759	0.2759						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	37027.9	0.3993	3.6302	3.0494	0.0218		0.2759	0.2759		0.2759	0.2759						
Total		**0.3993**	**3.6302**	**3.0494**	**0.0218**		**0.2759**	**0.2759**		**0.2759**	**0.2759**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	37.0279	0.3993	3.6302	3.0494	0.0218		0.2759	0.2759		0.2759	0.2759						
Total		**0.3993**	**3.6302**	**3.0494**	**0.0218**		**0.2759**	**0.2759**		**0.2759**	**0.2759**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	17.8493	2.0000e-005	1.6700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Mitigated	17.8493	2.0000e-005	1.6700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.3340					0.0000	0.0000		0.0000	0.0000						
Consumer Products	13.5152					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.7000e-004	2.0000e-005	1.6700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**17.8493**	**2.0000e-005**	**1.6700e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.3340					0.0000	0.0000		0.0000	0.0000						
Consumer Products	13.5152					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.7000e-004	2.0000e-005	1.6700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**17.8493**	**2.0000e-005**	**1.6700e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Ex Weekend Game Spring - Pitzer

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	16.15	Acre	16.15	703,494.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Saturday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblVehicleTrips	CC_TTP	48.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	ST_TR	1.59	6.81
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	WD_TR	1.59	0.00
tblWater	IndoorWaterUseRate	0.00	197,100.00
tblWater	OutdoorWaterUseRate	19,242,423.80	1,251,269.50

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	18.3961	2.0000e-005	1.7200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.4786	1.3118	5.4564	0.0106	0.7126	0.0207	0.7333	0.1904	0.0190	0.2094						
Total	**18.8746**	**1.3118**	**5.4581**	**0.0106**	**0.7126**	**0.0207**	**0.7333**	**0.1904**	**0.0190**	**0.2094**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	18.3961	2.0000e-005	1.7200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.4786	1.3118	5.4564	0.0106	0.7126	0.0207	0.7333	0.1904	0.0190	0.2094						
Total	**18.8746**	**1.3118**	**5.4581**	**0.0106**	**0.7126**	**0.0207**	**0.7333**	**0.1904**	**0.0190**	**0.2094**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.4786	1.3118	5.4564	0.0106	0.7126	0.0207	0.7333	0.1904	0.0190	0.2094						
Mitigated	0.4786	1.3118	5.4564	0.0106	0.7126	0.0207	0.7333	0.1904	0.0190	0.2094						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	109.98	0.00	48,040	48,040
Total	0.00	109.98	0.00	48,040	48,040

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.516610	0.060517	0.179979	0.140587	0.041566	0.006616	0.015092	0.027587	0.001923	0.002530	0.004314	0.000602	0.002075

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	18.3961	2.0000e-005	1.7200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Mitigated	18.3961	2.0000e-005	1.7200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.4667					0.0000	0.0000		0.0000	0.0000						
Consumer Products	13.9292					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.7000e-004	2.0000e-005	1.7200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**18.3961**	**2.0000e-005**	**1.7200e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.4667					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	13.9292					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.7000e-004	2.0000e-005	1.7200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.5300e-003	3.5300e-003	1.0000e-005		3.7600e-003
Total	**18.3961**	**2.0000e-005**	**1.7200e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**3.5300e-003**	**3.5300e-003**	**1.0000e-005**		**3.7600e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Ex Weekend Game Spring - Pitzer

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	16.15	Acre	16.15	703,494.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Saturday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblVehicleTrips	CC_TTP	48.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	ST_TR	1.59	6.81
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	WD_TR	1.59	0.00
tblWater	IndoorWaterUseRate	0.00	197,100.00
tblWater	OutdoorWaterUseRate	19,242,423.80	1,251,269.50

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	18.3961	2.0000e-005	1.7200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.4976	1.3811	5.3636	0.0101	0.7126	0.0209	0.7335	0.1904	0.0192	0.2095						
Total	**18.8936**	**1.3811**	**5.3653**	**0.0101**	**0.7126**	**0.0209**	**0.7335**	**0.1904**	**0.0192**	**0.2095**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	18.3961	2.0000e-005	1.7200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.4976	1.3811	5.3636	0.0101	0.7126	0.0209	0.7335	0.1904	0.0192	0.2095						
Total	**18.8936**	**1.3811**	**5.3653**	**0.0101**	**0.7126**	**0.0209**	**0.7335**	**0.1904**	**0.0192**	**0.2095**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.4976	1.3811	5.3636	0.0101	0.7126	0.0209	0.7335	0.1904	0.0192	0.2095						
Mitigated	0.4976	1.3811	5.3636	0.0101	0.7126	0.0209	0.7335	0.1904	0.0192	0.2095						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	109.98	0.00	48,040	48,040
Total	0.00	109.98	0.00	48,040	48,040

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.516610	0.060517	0.179979	0.140587	0.041566	0.006616	0.015092	0.027587	0.001923	0.002530	0.004314	0.000602	0.002075

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	18.3961	2.0000e-005	1.7200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Mitigated	18.3961	2.0000e-005	1.7200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.4667					0.0000	0.0000		0.0000	0.0000						
Consumer Products	13.9292					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.7000e-004	2.0000e-005	1.7200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**18.3961**	**2.0000e-005**	**1.7200e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.4667					0.0000	0.0000		0.0000	0.0000						
Consumer Products	13.9292					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.7000e-004	2.0000e-005	1.7200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**18.3961**	**2.0000e-005**	**1.7200e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Ex Weekend Game Spring - SB Game

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Arena	12.13	Acre	12.13	528,382.80	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Saturday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblVehicleTrips	CC_TTP	81.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	DV_TP	0.28	0.00
tblVehicleTrips	PB_TP	0.60	0.00
tblVehicleTrips	PR_TP	0.66	100.00
tblVehicleTrips	ST_TR	0.00	20.28
tblVehicleTrips	WD_TR	33.33	0.00
tblWater	IndoorWaterUseRate	16,328,879.77	0.00
tblWater	OutdoorWaterUseRate	1,042,268.92	1,045,983.10

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	13.8170	1.0000e-005	1.2900e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.3091	2.8101	2.3605	0.0169		0.2136	0.2136		0.2136	0.2136						
Mobile	1.0704	2.9341	12.2044	0.0237	1.5939	0.0463	1.6402	0.4258	0.0426	0.4683						
Total	**15.1965**	**5.7442**	**14.5661**	**0.0405**	**1.5939**	**0.2599**	**1.8538**	**0.4258**	**0.2561**	**0.6819**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	13.8170	1.0000e-005	1.2900e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.3091	2.8101	2.3605	0.0169		0.2136	0.2136		0.2136	0.2136						
Mobile	1.0704	2.9341	12.2044	0.0237	1.5939	0.0463	1.6402	0.4258	0.0426	0.4683						
Total	**15.1965**	**5.7442**	**14.5661**	**0.0405**	**1.5939**	**0.2599**	**1.8538**	**0.4258**	**0.2561**	**0.6819**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	1.0704	2.9341	12.2044	0.0237	1.5939	0.0463	1.6402	0.4258	0.0426	0.4683						
Mitigated	1.0704	2.9341	12.2044	0.0237	1.5939	0.0463	1.6402	0.4258	0.0426	0.4683						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	0.00	246.00	0.00	107,451	107,451
Total	0.00	246.00	0.00	107,451	107,451

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Arena	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.516610	0.060517	0.179979	0.140587	0.041566	0.006616	0.015092	0.027587	0.001923	0.002530	0.004314	0.000602	0.002075

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.3091	2.8101	2.3605	0.0169		0.2136	0.2136		0.2136	0.2136						
NaturalGas Unmitigated	0.3091	2.8101	2.3605	0.0169		0.2136	0.2136		0.2136	0.2136						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	28663	0.3091	2.8101	2.3605	0.0169		0.2136	0.2136		0.2136	0.2136						
Total		**0.3091**	**2.8101**	**2.3605**	**0.0169**		**0.2136**	**0.2136**		**0.2136**	**0.2136**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	28.663	0.3091	2.8101	2.3605	0.0169		0.2136	0.2136		0.2136	0.2136						
Total		**0.3091**	**2.8101**	**2.3605**	**0.0169**		**0.2136**	**0.2136**		**0.2136**	**0.2136**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	13.8170	1.0000e-005	1.2900e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Mitigated	13.8170	1.0000e-005	1.2900e-003	0.0000		0.0000	0.0000		0.0000	0.0000						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.3549					0.0000	0.0000		0.0000	0.0000						
Consumer Products	10.4620					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.3000e-004	1.0000e-005	1.2900e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**13.8170**	**1.0000e-005**	**1.2900e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.3549					0.0000	0.0000		0.0000	0.0000						
Consumer Products	10.4620					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.3000e-004	1.0000e-005	1.2900e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**13.8170**	**1.0000e-005**	**1.2900e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Ex Weekend Game Spring - SB Game

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Arena	12.13	Acre	12.13	528,382.80	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Saturday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblVehicleTrips	CC_TTP	81.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	DV_TP	0.28	0.00
tblVehicleTrips	PB_TP	0.60	0.00
tblVehicleTrips	PR_TP	0.66	100.00
tblVehicleTrips	ST_TR	0.00	20.28
tblVehicleTrips	WD_TR	33.33	0.00
tblWater	IndoorWaterUseRate	16,328,879.77	0.00
tblWater	OutdoorWaterUseRate	1,042,268.92	1,045,983.10

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	13.8170	1.0000e-005	1.2900e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.3091	2.8101	2.3605	0.0169		0.2136	0.2136		0.2136	0.2136						
Mobile	1.1130	3.0891	11.9967	0.0225	1.5939	0.0467	1.6405	0.4258	0.0428	0.4686						
Total	**15.2390**	**5.8992**	**14.3585**	**0.0393**	**1.5939**	**0.2602**	**1.8541**	**0.4258**	**0.2564**	**0.6822**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	13.8170	1.0000e-005	1.2900e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.3091	2.8101	2.3605	0.0169		0.2136	0.2136		0.2136	0.2136						
Mobile	1.1130	3.0891	11.9967	0.0225	1.5939	0.0467	1.6405	0.4258	0.0428	0.4686						
Total	**15.2390**	**5.8992**	**14.3585**	**0.0393**	**1.5939**	**0.2602**	**1.8541**	**0.4258**	**0.2564**	**0.6822**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	1.1130	3.0891	11.9967	0.0225	1.5939	0.0467	1.6405	0.4258	0.0428	0.4686						
Mitigated	1.1130	3.0891	11.9967	0.0225	1.5939	0.0467	1.6405	0.4258	0.0428	0.4686						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	0.00	246.00	0.00	107,451	107,451
Total	0.00	246.00	0.00	107,451	107,451

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Arena	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.516610	0.060517	0.179979	0.140587	0.041566	0.006616	0.015092	0.027587	0.001923	0.002530	0.004314	0.000602	0.002075

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.3091	2.8101	2.3605	0.0169		0.2136	0.2136		0.2136	0.2136						
NaturalGas Unmitigated	0.3091	2.8101	2.3605	0.0169		0.2136	0.2136		0.2136	0.2136						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	28663	0.3091	2.8101	2.3605	0.0169		0.2136	0.2136		0.2136	0.2136						
Total		**0.3091**	**2.8101**	**2.3605**	**0.0169**		**0.2136**	**0.2136**		**0.2136**	**0.2136**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	28.663	0.3091	2.8101	2.3605	0.0169		0.2136	0.2136		0.2136	0.2136						
Total		**0.3091**	**2.8101**	**2.3605**	**0.0169**		**0.2136**	**0.2136**		**0.2136**	**0.2136**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	13.8170	1.0000e-005	1.2900e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Mitigated	13.8170	1.0000e-005	1.2900e-003	0.0000		0.0000	0.0000		0.0000	0.0000						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.3549					0.0000	0.0000		0.0000	0.0000						
Consumer Products	10.4620					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.3000e-004	1.0000e-005	1.2900e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**13.8170**	**1.0000e-005**	**1.2900e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.3549					0.0000	0.0000		0.0000	0.0000						
Consumer Products	10.4620					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.3000e-004	1.0000e-005	1.2900e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**13.8170**	**1.0000e-005**	**1.2900e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Annual Project

South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Arena	54.85	Acre	54.85	2,389,266.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	40.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2025
tblVehicleTrips	CC_TTP	81.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	DV_TP	0.28	0.00
tblVehicleTrips	PB_TP	0.60	0.00
tblVehicleTrips	PR_TP	0.66	100.00
tblVehicleTrips	ST_TR	0.00	0.85
tblVehicleTrips	WD_TR	33.33	1.42
tblWater	IndoorWaterUseRate	73,836,690.47	547,500.00
tblWater	OutdoorWaterUseRate	4,712,980.24	4,389,218.80

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction											**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											0.0000	1.3600e-003	1.3600e-003	0.0000	0.0000	1.4400e-003
Energy											0.0000	10,637.2136	10,637.2136	0.4247	0.1223	10,684.0523
Mobile											0.0000	71.9111	71.9111	2.2300e-003	0.0000	71.9580
Waste											0.9581	0.0000	0.9581	0.0566	0.0000	2.1472
Water											0.1737	15.9948	16.1685	0.0186	5.7000e-004	16.7363
Total											**1.1318**	**10,725.1208**	**10,726.2526**	**0.5021**	**0.1229**	**10,774.8952**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											0.0000	1.3600e-003	1.3600e-003	0.0000	0.0000	1.4400e-003
Energy											0.0000	10,637.2136	10,637.2136	0.4247	0.1223	10,684.0523
Mobile											0.0000	71.9111	71.9111	2.2300e-003	0.0000	71.9580
Waste											0.9581	0.0000	0.9581	0.0566	0.0000	2.1472
Water											0.1737	15.9948	16.1685	0.0186	5.7000e-004	16.7360
Total											**1.1318**	**10,725.1208**	**10,726.2526**	**0.5021**	**0.1229**	**10,774.8950**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction											**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	71.9111	71.9111	2.2300e-003	0.0000	71.9580
Unmitigated											0.0000	71.9111	71.9111	2.2300e-003	0.0000	71.9580

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	77.89	46.62	0.00	190,470	190,470
Total	77.89	46.62	0.00	190,470	190,470

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Arena	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.500116	0.060136	0.182997	0.141937	0.043982	0.006974	0.016541	0.035595	0.002005	0.002529	0.004193	0.000558	0.002437

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
NaturalGas Mitigated											0.0000	2,398.2813	2,398.2813	0.0460	0.0440	2,412.8768
NaturalGas Unmitigated											0.0000	2,398.2813	2,398.2813	0.0460	0.0440	2,412.8768
Electricity Mitigated											0.0000	8,238.9323	8,238.9323	0.3787	0.0784	8,271.1755
Electricity Unmitigated											0.0000	8,238.9323	8,238.9323	0.3787	0.0784	8,271.1755

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Arena	4.49421e+007											0.0000	2,398.2813	2,398.2813	0.0460	0.0440	2,412.8768
Total												**0.0000**	**2,398.2813**	**2,398.2813**	**0.0460**	**0.0440**	**2,412.8768**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Arena	4.49421e+007											0.0000	2,398.2813	2,398.2813	0.0460	0.0440	2,412.8768
Total												**0.0000**	**2,398.2813**	**2,398.2813**	**0.0460**	**0.0440**	**2,412.8768**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Arena	2.87907e+007	8,238.9323	0.3787	0.0784	8,271.1755
Total		**8,238.9323**	**0.3787**	**0.0784**	**8,271.1755**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Arena	2.87907e+007	8,238.9323	0.3787	0.0784	8,271.1755
Total		**8,238.9323**	**0.3787**	**0.0784**	**8,271.1755**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	1.3600e-003	1.3600e-003	0.0000	0.0000	1.4400e-003
Unmitigated											0.0000	1.3600e-003	1.3600e-003	0.0000	0.0000	1.4400e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping											0.0000	1.3600e-003	1.3600e-003	0.0000	0.0000	1.4400e-003
Total											**0.0000**	**1.3600e-003**	**1.3600e-003**	**0.0000**	**0.0000**	**1.4400e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping											0.0000	1.3600e-003	1.3600e-003	0.0000	0.0000	1.4400e-003
Total											**0.0000**	**1.3600e-003**	**1.3600e-003**	**0.0000**	**0.0000**	**1.4400e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Unmitigated	16.1685	0.0186	5.7000e-004	16.7363
Mitigated	16.1685	0.0186	5.7000e-004	16.7360

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Arena	0.5475 / 4.38922	16.1685	0.0186	5.7000e-004	16.7363
Total		**16.1685**	**0.0186**	**5.7000e-004**	**16.7363**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Arena	0.5475 / 4.38922	16.1685	0.0186	5.7000e-004	16.7360
Total		**16.1685**	**0.0186**	**5.7000e-004**	**16.7360**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.9581	0.0566	0.0000	2.1472
Unmitigated	0.9581	0.0566	0.0000	2.1472

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Arena	4.72	0.9581	0.0566	0.0000	2.1472
Total		**0.9581**	**0.0566**	**0.0000**	**2.1472**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Arena	4.72	0.9581	0.0566	0.0000	2.1472
Total		**0.9581**	**0.0566**	**0.0000**	**2.1472**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Roadway Improvement - Arrow Route

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	15.60	1000sqft	0.36	15,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase -

Table Name	Column Name	Default Value	New Value
tblProjectCharacteristics	OperationalYear	2014	2018

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	1.2881	12.7087	8.2999	0.0137	0.5861	0.7709	1.3571	0.0721	0.7093	0.7813						
Total	**1.2881**	**12.7087**	**8.2999**	**0.0137**	**0.5861**	**0.7709**	**1.3571**	**0.0721**	**0.7093**	**0.7813**						

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	1.2881	12.7087	8.2999	0.0137	0.5861	0.7709	1.3571	0.0721	0.7093	0.7813						
Total	**1.2881**	**12.7087**	**8.2999**	**0.0137**	**0.5861**	**0.7709**	**1.3571**	**0.0721**	**0.7093**	**0.7813**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/10/2017	1/10/2017	5	1	
2	Paving	Paving	1/11/2017	1/17/2017	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	174	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573						
Off-Road	1.2694	12.6852	7.2319	9.3300e-003		0.7705	0.7705		0.7089	0.7089						
Total	**1.2694**	**12.6852**	**7.2319**	**9.3300e-003**	**0.5303**	**0.7705**	**1.3007**	**0.0573**	**0.7089**	**0.7661**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0187	0.0235	0.2935	7.1000e-004	0.0559	4.5000e-004	0.0563	0.0148	4.1000e-004	0.0152						
Total	**0.0187**	**0.0235**	**0.2935**	**7.1000e-004**	**0.0559**	**4.5000e-004**	**0.0563**	**0.0148**	**4.1000e-004**	**0.0152**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573						
Off-Road	1.2694	12.6852	7.2319	9.3300e-003		0.7705	0.7705		0.7089	0.7089						
Total	**1.2694**	**12.6852**	**7.2319**	**9.3300e-003**	**0.5303**	**0.7705**	**1.3007**	**0.0573**	**0.7089**	**0.7661**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0187	0.0235	0.2935	7.1000e-004	0.0559	4.5000e-004	0.0563	0.0148	4.1000e-004	0.0152						
Total	**0.0187**	**0.0235**	**0.2935**	**7.1000e-004**	**0.0559**	**4.5000e-004**	**0.0563**	**0.0148**	**4.1000e-004**	**0.0152**						

3.3 Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0406	9.8344	7.2432	0.0111		0.6018	0.6018		0.5572	0.5572						
Paving	0.0000					0.0000	0.0000		0.0000	0.0000						
Total	**1.0406**	**9.8344**	**7.2432**	**0.0111**		**0.6018**	**0.6018**		**0.5572**	**0.5572**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0674	0.0846	1.0567	2.5500e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549						
Total	**0.0674**	**0.0846**	**1.0567**	**2.5500e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0406	9.8344	7.2432	0.0111		0.6018	0.6018		0.5572	0.5572						
Paving	0.0000					0.0000	0.0000		0.0000	0.0000						
Total	**1.0406**	**9.8344**	**7.2432**	**0.0111**		**0.6018**	**0.6018**		**0.5572**	**0.5572**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0674	0.0846	1.0567	2.5500e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549						
Total	**0.0674**	**0.0846**	**1.0567**	**2.5500e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**						

Roadway Improvement - Arrow Route

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	15.60	1000sqft	0.36	15,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase -

Table Name	Column Name	Default Value	New Value
tblProjectCharacteristics	OperationalYear	2014	2018

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	1.2885	12.7110	8.2138	0.0135	0.5861	0.7709	1.3571	0.0721	0.7093	0.7813						
Total	**1.2885**	**12.7110**	**8.2138**	**0.0135**	**0.5861**	**0.7709**	**1.3571**	**0.0721**	**0.7093**	**0.7813**						

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	1.2885	12.7110	8.2138	0.0135	0.5861	0.7709	1.3571	0.0721	0.7093	0.7813						
Total	**1.2885**	**12.7110**	**8.2138**	**0.0135**	**0.5861**	**0.7709**	**1.3571**	**0.0721**	**0.7093**	**0.7813**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/10/2017	1/10/2017	5	1	
2	Paving	Paving	1/11/2017	1/17/2017	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	174	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573						
Off-Road	1.2694	12.6852	7.2319	9.3300e-003		0.7705	0.7705		0.7089	0.7089						
Total	**1.2694**	**12.6852**	**7.2319**	**9.3300e-003**	**0.5303**	**0.7705**	**1.3007**	**0.0573**	**0.7089**	**0.7661**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0191	0.0258	0.2696	6.6000e-004	0.0559	4.5000e-004	0.0563	0.0148	4.1000e-004	0.0152						
Total	**0.0191**	**0.0258**	**0.2696**	**6.6000e-004**	**0.0559**	**4.5000e-004**	**0.0563**	**0.0148**	**4.1000e-004**	**0.0152**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573						
Off-Road	1.2694	12.6852	7.2319	9.3300e-003		0.7705	0.7705		0.7089	0.7089						
Total	**1.2694**	**12.6852**	**7.2319**	**9.3300e-003**	**0.5303**	**0.7705**	**1.3007**	**0.0573**	**0.7089**	**0.7661**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0191	0.0258	0.2696	6.6000e-004	0.0559	4.5000e-004	0.0563	0.0148	4.1000e-004	0.0152						
Total	**0.0191**	**0.0258**	**0.2696**	**6.6000e-004**	**0.0559**	**4.5000e-004**	**0.0563**	**0.0148**	**4.1000e-004**	**0.0152**						

3.3 Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0406	9.8344	7.2432	0.0111		0.6018	0.6018		0.5572	0.5572						
Paving	0.0000					0.0000	0.0000		0.0000	0.0000						
Total	**1.0406**	**9.8344**	**7.2432**	**0.0111**		**0.6018**	**0.6018**		**0.5572**	**0.5572**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0687	0.0929	0.9706	2.3900e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549						
Total	**0.0687**	**0.0929**	**0.9706**	**2.3900e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0406	9.8344	7.2432	0.0111		0.6018	0.6018		0.5572	0.5572						
Paving	0.0000					0.0000	0.0000		0.0000	0.0000						
Total	**1.0406**	**9.8344**	**7.2432**	**0.0111**		**0.6018**	**0.6018**		**0.5572**	**0.5572**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0687	0.0929	0.9706	2.3900e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549						
Total	**0.0687**	**0.0929**	**0.9706**	**2.3900e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**						

Roadway Improvement - Arrow Route

South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	15.60	1000sqft	0.36	15,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase -

Table Name	Column Name	Default Value	New Value
tblProjectCharacteristics	OperationalYear	2014	2018

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017											0.0000	3.3274	3.3274	8.3000e-004	0.0000	3.3448
Total											**0.0000**	**3.3274**	**3.3274**	**8.3000e-004**	**0.0000**	**3.3448**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017											0.0000	3.3274	3.3274	8.3000e-004	0.0000	3.3448
Total											**0.0000**	**3.3274**	**3.3274**	**8.3000e-004**	**0.0000**	**3.3448**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction											**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/10/2017	1/10/2017	5	1	
2	Paving	Paving	1/11/2017	1/17/2017	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	174	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	0.4336	0.4336	1.3000e-004	0.0000	0.4364
Total											**0.0000**	**0.4336**	**0.4336**	**1.3000e-004**	**0.0000**	**0.4364**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0247	0.0247	0.0000	0.0000	0.0247
Total											**0.0000**	**0.0247**	**0.0247**	**0.0000**	**0.0000**	**0.0247**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	0.4336	0.4336	1.3000e-004	0.0000	0.4364
Total											**0.0000**	**0.4336**	**0.4336**	**1.3000e-004**	**0.0000**	**0.4364**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0247	0.0247	0.0000	0.0000	0.0247
Total											**0.0000**	**0.0247**	**0.0247**	**0.0000**	**0.0000**	**0.0247**

3.3 Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	2.4243	2.4243	6.7000e-004	0.0000	2.4384
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**2.4243**	**2.4243**	**6.7000e-004**	**0.0000**	**2.4384**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.4448	0.4448	2.0000e-005	0.0000	0.4453
Total											**0.0000**	**0.4448**	**0.4448**	**2.0000e-005**	**0.0000**	**0.4453**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	2.4243	2.4243	6.7000e-004	0.0000	2.4384
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**2.4243**	**2.4243**	**6.7000e-004**	**0.0000**	**2.4384**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.4448	0.4448	2.0000e-005	0.0000	0.4453
Total											**0.0000**	**0.4448**	**0.4448**	**2.0000e-005**	**0.0000**	**0.4453**

Roadway Improvement - Claremont Blvd

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	33.25	1000sqft	0.76	33,252.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase -

Table Name	Column Name	Default Value	New Value

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	1.2881	12.7087	8.2999	0.0137	0.5861	0.7709	1.3571	0.0721	0.7093	0.7813						
Total	**1.2881**	**12.7087**	**8.2999**	**0.0137**	**0.5861**	**0.7709**	**1.3571**	**0.0721**	**0.7093**	**0.7813**						

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	1.2881	12.7087	8.2999	0.0137	0.5861	0.7709	1.3571	0.0721	0.7093	0.7813						
Total	**1.2881**	**12.7087**	**8.2999**	**0.0137**	**0.5861**	**0.7709**	**1.3571**	**0.0721**	**0.7093**	**0.7813**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/2/2017	1/2/2017	5	1	
2	Paving	Paving	1/3/2017	1/9/2017	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	174	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573						
Off-Road	1.2694	12.6852	7.2319	9.3300e-003		0.7705	0.7705		0.7089	0.7089						
Total	**1.2694**	**12.6852**	**7.2319**	**9.3300e-003**	**0.5303**	**0.7705**	**1.3007**	**0.0573**	**0.7089**	**0.7661**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0187	0.0235	0.2935	7.1000e-004	0.0559	4.5000e-004	0.0563	0.0148	4.1000e-004	0.0152						
Total	**0.0187**	**0.0235**	**0.2935**	**7.1000e-004**	**0.0559**	**4.5000e-004**	**0.0563**	**0.0148**	**4.1000e-004**	**0.0152**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573						
Off-Road	1.2694	12.6852	7.2319	9.3300e-003		0.7705	0.7705		0.7089	0.7089						
Total	**1.2694**	**12.6852**	**7.2319**	**9.3300e-003**	**0.5303**	**0.7705**	**1.3007**	**0.0573**	**0.7089**	**0.7661**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0187	0.0235	0.2935	7.1000e-004	0.0559	4.5000e-004	0.0563	0.0148	4.1000e-004	0.0152						
Total	**0.0187**	**0.0235**	**0.2935**	**7.1000e-004**	**0.0559**	**4.5000e-004**	**0.0563**	**0.0148**	**4.1000e-004**	**0.0152**						

3.3 Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0406	9.8344	7.2432	0.0111		0.6018	0.6018		0.5572	0.5572						
Paving	0.0000					0.0000	0.0000		0.0000	0.0000						
Total	**1.0406**	**9.8344**	**7.2432**	**0.0111**		**0.6018**	**0.6018**		**0.5572**	**0.5572**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0674	0.0846	1.0567	2.5500e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549						
Total	**0.0674**	**0.0846**	**1.0567**	**2.5500e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0406	9.8344	7.2432	0.0111		0.6018	0.6018		0.5572	0.5572						
Paving	0.0000					0.0000	0.0000		0.0000	0.0000						
Total	**1.0406**	**9.8344**	**7.2432**	**0.0111**		**0.6018**	**0.6018**		**0.5572**	**0.5572**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0674	0.0846	1.0567	2.5500e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549						
Total	**0.0674**	**0.0846**	**1.0567**	**2.5500e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**						

Roadway Improvement - Claremont Blvd

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	33.25	1000sqft	0.76	33,252.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase -

Table Name	Column Name	Default Value	New Value

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	1.2885	12.7110	8.2138	0.0135	0.5861	0.7709	1.3571	0.0721	0.7093	0.7813						
Total	**1.2885**	**12.7110**	**8.2138**	**0.0135**	**0.5861**	**0.7709**	**1.3571**	**0.0721**	**0.7093**	**0.7813**						

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	1.2885	12.7110	8.2138	0.0135	0.5861	0.7709	1.3571	0.0721	0.7093	0.7813						
Total	**1.2885**	**12.7110**	**8.2138**	**0.0135**	**0.5861**	**0.7709**	**1.3571**	**0.0721**	**0.7093**	**0.7813**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/2/2017	1/2/2017	5	1	
2	Paving	Paving	1/3/2017	1/9/2017	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	174	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573						
Off-Road	1.2694	12.6852	7.2319	9.3300e-003		0.7705	0.7705		0.7089	0.7089						
Total	**1.2694**	**12.6852**	**7.2319**	**9.3300e-003**	**0.5303**	**0.7705**	**1.3007**	**0.0573**	**0.7089**	**0.7661**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0191	0.0258	0.2696	6.6000e-004	0.0559	4.5000e-004	0.0563	0.0148	4.1000e-004	0.0152						
Total	**0.0191**	**0.0258**	**0.2696**	**6.6000e-004**	**0.0559**	**4.5000e-004**	**0.0563**	**0.0148**	**4.1000e-004**	**0.0152**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573						
Off-Road	1.2694	12.6852	7.2319	9.3300e-003		0.7705	0.7705		0.7089	0.7089						
Total	**1.2694**	**12.6852**	**7.2319**	**9.3300e-003**	**0.5303**	**0.7705**	**1.3007**	**0.0573**	**0.7089**	**0.7661**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0191	0.0258	0.2696	6.6000e-004	0.0559	4.5000e-004	0.0563	0.0148	4.1000e-004	0.0152						
Total	**0.0191**	**0.0258**	**0.2696**	**6.6000e-004**	**0.0559**	**4.5000e-004**	**0.0563**	**0.0148**	**4.1000e-004**	**0.0152**						

3.3 Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0406	9.8344	7.2432	0.0111		0.6018	0.6018		0.5572	0.5572						
Paving	0.0000					0.0000	0.0000		0.0000	0.0000						
Total	**1.0406**	**9.8344**	**7.2432**	**0.0111**		**0.6018**	**0.6018**		**0.5572**	**0.5572**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0687	0.0929	0.9706	2.3900e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549						
Total	**0.0687**	**0.0929**	**0.9706**	**2.3900e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0406	9.8344	7.2432	0.0111		0.6018	0.6018		0.5572	0.5572						
Paving	0.0000					0.0000	0.0000		0.0000	0.0000						
Total	**1.0406**	**9.8344**	**7.2432**	**0.0111**		**0.6018**	**0.6018**		**0.5572**	**0.5572**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0687	0.0929	0.9706	2.3900e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549						
Total	**0.0687**	**0.0929**	**0.9706**	**2.3900e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**						

Roadway Improvement - Claremont Blvd

South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	33.25	1000sqft	0.76	33,252.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase -

Table Name	Column Name	Default Value	New Value

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017											0.0000	3.3274	3.3274	8.3000e-004	0.0000	3.3448
Total											**0.0000**	**3.3274**	**3.3274**	**8.3000e-004**	**0.0000**	**3.3448**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017											0.0000	3.3274	3.3274	8.3000e-004	0.0000	3.3448
Total											**0.0000**	**3.3274**	**3.3274**	**8.3000e-004**	**0.0000**	**3.3448**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction											**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/2/2017	1/2/2017	5	1	
2	Paving	Paving	1/3/2017	1/9/2017	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	174	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	0.4336	0.4336	1.3000e-004	0.0000	0.4364
Total											**0.0000**	**0.4336**	**0.4336**	**1.3000e-004**	**0.0000**	**0.4364**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0247	0.0247	0.0000	0.0000	0.0247
Total											**0.0000**	**0.0247**	**0.0247**	**0.0000**	**0.0000**	**0.0247**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	0.4336	0.4336	1.3000e-004	0.0000	0.4364
Total											**0.0000**	**0.4336**	**0.4336**	**1.3000e-004**	**0.0000**	**0.4364**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0247	0.0247	0.0000	0.0000	0.0247
Total											**0.0000**	**0.0247**	**0.0247**	**0.0000**	**0.0000**	**0.0247**

3.3 Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	2.4243	2.4243	6.7000e-004	0.0000	2.4384
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**2.4243**	**2.4243**	**6.7000e-004**	**0.0000**	**2.4384**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.4448	0.4448	2.0000e-005	0.0000	0.4453
Total											**0.0000**	**0.4448**	**0.4448**	**2.0000e-005**	**0.0000**	**0.4453**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	2.4243	2.4243	6.7000e-004	0.0000	2.4384
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**2.4243**	**2.4243**	**6.7000e-004**	**0.0000**	**2.4384**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.4448	0.4448	2.0000e-005	0.0000	0.4453
Total											**0.0000**	**0.4448**	**0.4448**	**2.0000e-005**	**0.0000**	**0.4453**

Roadway Improvement - Foothill Boulevard

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	15.00	1000sqft	0.34	15,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase -

Table Name	Column Name	Default Value	New Value
tblProjectCharacteristics	OperationalYear	2014	2020

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	1.0144	9.9233	7.9325	0.0136	0.5861	0.5799	1.1660	0.0721	0.5335	0.6056						
Total	**1.0144**	**9.9233**	**7.9325**	**0.0136**	**0.5861**	**0.5799**	**1.1660**	**0.0721**	**0.5335**	**0.6056**						

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	1.0144	9.9233	7.9325	0.0136	0.5861	0.5799	1.1660	0.0721	0.5335	0.6056						
Total	**1.0144**	**9.9233**	**7.9325**	**0.0136**	**0.5861**	**0.5799**	**1.1660**	**0.0721**	**0.5335**	**0.6056**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/2/2019	1/2/2019	5	1	
2	Paving	Paving	1/3/2019	1/9/2019	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	174	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573						
Off-Road	0.9988	9.9037	6.9026	9.3100e-003		0.5794	0.5794		0.5331	0.5331						
Total	**0.9988**	**9.9037**	**6.9026**	**9.3100e-003**	**0.5303**	**0.5794**	**1.1097**	**0.0573**	**0.5331**	**0.5903**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0155	0.0196	0.2451	7.1000e-004	0.0559	4.3000e-004	0.0563	0.0148	4.0000e-004	0.0152						
Total	**0.0155**	**0.0196**	**0.2451**	**7.1000e-004**	**0.0559**	**4.3000e-004**	**0.0563**	**0.0148**	**4.0000e-004**	**0.0152**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573						
Off-Road	0.9988	9.9037	6.9026	9.3100e-003		0.5794	0.5794		0.5331	0.5331						
Total	**0.9988**	**9.9037**	**6.9026**	**9.3100e-003**	**0.5303**	**0.5794**	**1.1097**	**0.0573**	**0.5331**	**0.5903**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0155	0.0196	0.2451	7.1000e-004	0.0559	4.3000e-004	0.0563	0.0148	4.0000e-004	0.0152						
Total	**0.0155**	**0.0196**	**0.2451**	**7.1000e-004**	**0.0559**	**4.3000e-004**	**0.0563**	**0.0148**	**4.0000e-004**	**0.0152**						

3.3 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8203	7.7394	7.0501	0.0111		0.4374	0.4374		0.4059	0.4059						
Paving	0.0000					0.0000	0.0000		0.0000	0.0000						
Total	**0.8203**	**7.7394**	**7.0501**	**0.0111**		**0.4374**	**0.4374**		**0.4059**	**0.4059**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0559	0.0704	0.8824	2.5400e-003	0.2012	1.5500e-003	0.2028	0.0534	1.4300e-003	0.0548						
Total	**0.0559**	**0.0704**	**0.8824**	**2.5400e-003**	**0.2012**	**1.5500e-003**	**0.2028**	**0.0534**	**1.4300e-003**	**0.0548**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8203	7.7394	7.0501	0.0111		0.4374	0.4374		0.4059	0.4059						
Paving	0.0000					0.0000	0.0000		0.0000	0.0000						
Total	**0.8203**	**7.7394**	**7.0501**	**0.0111**		**0.4374**	**0.4374**		**0.4059**	**0.4059**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0559	0.0704	0.8824	2.5400e-003	0.2012	1.5500e-003	0.2028	0.0534	1.4300e-003	0.0548						
Total	**0.0559**	**0.0704**	**0.8824**	**2.5400e-003**	**0.2012**	**1.5500e-003**	**0.2028**	**0.0534**	**1.4300e-003**	**0.0548**						

Roadway Improvement - Foothill Boulevard

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	15.00	1000sqft	0.34	15,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase -

Table Name	Column Name	Default Value	New Value
tblProjectCharacteristics	OperationalYear	2014	2020

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	1.0146	9.9252	7.8552	0.0135	0.5861	0.5799	1.1660	0.0721	0.5335	0.6056						
Total	**1.0146**	**9.9252**	**7.8552**	**0.0135**	**0.5861**	**0.5799**	**1.1660**	**0.0721**	**0.5335**	**0.6056**						

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	1.0146	9.9252	7.8552	0.0135	0.5861	0.5799	1.1660	0.0721	0.5335	0.6056						
Total	**1.0146**	**9.9252**	**7.8552**	**0.0135**	**0.5861**	**0.5799**	**1.1660**	**0.0721**	**0.5335**	**0.6056**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/2/2019	1/2/2019	5	1	
2	Paving	Paving	1/3/2019	1/9/2019	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	174	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573						
Off-Road	0.9988	9.9037	6.9026	9.3100e-003		0.5794	0.5794		0.5331	0.5331						
Total	**0.9988**	**9.9037**	**6.9026**	**9.3100e-003**	**0.5303**	**0.5794**	**1.1097**	**0.0573**	**0.5331**	**0.5903**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0158	0.0215	0.2236	6.6000e-004	0.0559	4.3000e-004	0.0563	0.0148	4.0000e-004	0.0152						
Total	**0.0158**	**0.0215**	**0.2236**	**6.6000e-004**	**0.0559**	**4.3000e-004**	**0.0563**	**0.0148**	**4.0000e-004**	**0.0152**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573						
Off-Road	0.9988	9.9037	6.9026	9.3100e-003		0.5794	0.5794		0.5331	0.5331						
Total	**0.9988**	**9.9037**	**6.9026**	**9.3100e-003**	**0.5303**	**0.5794**	**1.1097**	**0.0573**	**0.5331**	**0.5903**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0158	0.0215	0.2236	6.6000e-004	0.0559	4.3000e-004	0.0563	0.0148	4.0000e-004	0.0152						
Total	**0.0158**	**0.0215**	**0.2236**	**6.6000e-004**	**0.0559**	**4.3000e-004**	**0.0563**	**0.0148**	**4.0000e-004**	**0.0152**						

3.3 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8203	7.7394	7.0501	0.0111		0.4374	0.4374		0.4059	0.4059						
Paving	0.0000					0.0000	0.0000		0.0000	0.0000						
Total	**0.8203**	**7.7394**	**7.0501**	**0.0111**		**0.4374**	**0.4374**		**0.4059**	**0.4059**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0568	0.0773	0.8050	2.3800e-003	0.2012	1.5500e-003	0.2028	0.0534	1.4300e-003	0.0548						
Total	**0.0568**	**0.0773**	**0.8050**	**2.3800e-003**	**0.2012**	**1.5500e-003**	**0.2028**	**0.0534**	**1.4300e-003**	**0.0548**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8203	7.7394	7.0501	0.0111		0.4374	0.4374		0.4059	0.4059						
Paving	0.0000					0.0000	0.0000		0.0000	0.0000						
Total	**0.8203**	**7.7394**	**7.0501**	**0.0111**		**0.4374**	**0.4374**		**0.4059**	**0.4059**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0568	0.0773	0.8050	2.3800e-003	0.2012	1.5500e-003	0.2028	0.0534	1.4300e-003	0.0548						
Total	**0.0568**	**0.0773**	**0.8050**	**2.3800e-003**	**0.2012**	**1.5500e-003**	**0.2028**	**0.0534**	**1.4300e-003**	**0.0548**						

Roadway Improvement - Foothill Boulevard

South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	15.00	1000sqft	0.34	15,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase -

Table Name	Column Name	Default Value	New Value
tblProjectCharacteristics	OperationalYear	2014	2020

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019											0.0000	3.2110	3.2110	8.3000e-004	0.0000	3.2283
Total											**0.0000**	**3.2110**	**3.2110**	**8.3000e-004**	**0.0000**	**3.2283**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019											0.0000	3.2110	3.2110	8.3000e-004	0.0000	3.2283
Total											**0.0000**	**3.2110**	**3.2110**	**8.3000e-004**	**0.0000**	**3.2283**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction											**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/2/2019	1/2/2019	5	1	
2	Paving	Paving	1/3/2019	1/9/2019	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	174	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	0.4186	0.4186	1.3000e-004	0.0000	0.4214
Total											**0.0000**	**0.4186**	**0.4186**	**1.3000e-004**	**0.0000**	**0.4214**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0229	0.0229	0.0000	0.0000	0.0229
Total											**0.0000**	**0.0229**	**0.0229**	**0.0000**	**0.0000**	**0.0229**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	0.4186	0.4186	1.3000e-004	0.0000	0.4214
Total											**0.0000**	**0.4186**	**0.4186**	**1.3000e-004**	**0.0000**	**0.4214**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0229	0.0229	0.0000	0.0000	0.0229
Total											**0.0000**	**0.0229**	**0.0229**	**0.0000**	**0.0000**	**0.0229**

3.3 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	2.3576	2.3576	6.7000e-004	0.0000	2.3717
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**2.3576**	**2.3576**	**6.7000e-004**	**0.0000**	**2.3717**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.4119	0.4119	2.0000e-005	0.0000	0.4123
Total											**0.0000**	**0.4119**	**0.4119**	**2.0000e-005**	**0.0000**	**0.4123**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	2.3576	2.3576	6.7000e-004	0.0000	2.3717
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**2.3576**	**2.3576**	**6.7000e-004**	**0.0000**	**2.3717**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.4119	0.4119	2.0000e-005	0.0000	0.4123
Total											**0.0000**	**0.4119**	**0.4119**	**2.0000e-005**	**0.0000**	**0.4123**

Roadway Improvement - Monte Vista

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	19.78	1000sqft	0.45	19,776.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase -

Table Name	Column Name	Default Value	New Value

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	0.7318	6.8816	7.6664	0.0137	0.5861	0.3790	0.9652	0.0721	0.3487	0.4208						
Total	**0.7318**	**6.8816**	**7.6664**	**0.0137**	**0.5861**	**0.3790**	**0.9652**	**0.0721**	**0.3487**	**0.4208**						

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	0.7318	6.8816	7.6664	0.0137	0.5861	0.3790	0.9652	0.0721	0.3487	0.4208						
Total	**0.7318**	**6.8816**	**7.6664**	**0.0137**	**0.5861**	**0.3790**	**0.9652**	**0.0721**	**0.3487**	**0.4208**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/2/2022	1/3/2022	5	1	
2	Paving	Paving	1/4/2022	1/10/2022	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	174	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573						
Off-Road	0.7187	6.8657	6.6327	9.3200e-003		0.3786	0.3786		0.3483	0.3483						
Total	**0.7187**	**6.8657**	**6.6327**	**9.3200e-003**	**0.5303**	**0.3786**	**0.9089**	**0.0573**	**0.3483**	**0.4056**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0131	0.0159	0.2024	7.1000e-004	0.0559	4.3000e-004	0.0563	0.0148	4.0000e-004	0.0152						
Total	**0.0131**	**0.0159**	**0.2024**	**7.1000e-004**	**0.0559**	**4.3000e-004**	**0.0563**	**0.0148**	**4.0000e-004**	**0.0152**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573						
Off-Road	0.7187	6.8657	6.6327	9.3200e-003		0.3786	0.3786		0.3483	0.3483						
Total	**0.7187**	**6.8657**	**6.6327**	**9.3200e-003**	**0.5303**	**0.3786**	**0.9089**	**0.0573**	**0.3483**	**0.4056**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0131	0.0159	0.2024	7.1000e-004	0.0559	4.3000e-004	0.0563	0.0148	4.0000e-004	0.0152						
Total	**0.0131**	**0.0159**	**0.2024**	**7.1000e-004**	**0.0559**	**4.3000e-004**	**0.0563**	**0.0148**	**4.0000e-004**	**0.0152**						

3.3 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6400	5.8468	6.9377	0.0111		0.2927	0.2927		0.2727	0.2727						
Paving	0.0000					0.0000	0.0000		0.0000	0.0000						
Total	**0.6400**	**5.8468**	**6.9377**	**0.0111**		**0.2927**	**0.2927**		**0.2727**	**0.2727**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0470	0.0573	0.7287	2.5500e-003	0.2012	1.5400e-003	0.2027	0.0534	1.4300e-003	0.0548						
Total	**0.0470**	**0.0573**	**0.7287**	**2.5500e-003**	**0.2012**	**1.5400e-003**	**0.2027**	**0.0534**	**1.4300e-003**	**0.0548**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6400	5.8468	6.9377	0.0111		0.2927	0.2927		0.2727	0.2727						
Paving	0.0000					0.0000	0.0000		0.0000	0.0000						
Total	**0.6400**	**5.8468**	**6.9377**	**0.0111**		**0.2927**	**0.2927**		**0.2727**	**0.2727**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0470	0.0573	0.7287	2.5500e-003	0.2012	1.5400e-003	0.2027	0.0534	1.4300e-003	0.0548						
Total	**0.0470**	**0.0573**	**0.7287**	**2.5500e-003**	**0.2012**	**1.5400e-003**	**0.2027**	**0.0534**	**1.4300e-003**	**0.0548**						

Roadway Improvement - Monte Vista

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	19.78	1000sqft	0.45	19,776.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase -

Table Name	Column Name	Default Value	New Value

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	0.7320	6.8831	7.5989	0.0135	0.5861	0.3790	0.9652	0.0721	0.3487	0.4208						
Total	**0.7320**	**6.8831**	**7.5989**	**0.0135**	**0.5861**	**0.3790**	**0.9652**	**0.0721**	**0.3487**	**0.4208**						

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	0.7320	6.8831	7.5989	0.0135	0.5861	0.3790	0.9652	0.0721	0.3487	0.4208						
Total	**0.7320**	**6.8831**	**7.5989**	**0.0135**	**0.5861**	**0.3790**	**0.9652**	**0.0721**	**0.3487**	**0.4208**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/2/2022	1/3/2022	5	1	
2	Paving	Paving	1/4/2022	1/10/2022	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	174	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573						
Off-Road	0.7187	6.8657	6.6327	9.3200e-003		0.3786	0.3786		0.3483	0.3483						
Total	**0.7187**	**6.8657**	**6.6327**	**9.3200e-003**	**0.5303**	**0.3786**	**0.9089**	**0.0573**	**0.3483**	**0.4056**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0133	0.0174	0.1837	6.6000e-004	0.0559	4.3000e-004	0.0563	0.0148	4.0000e-004	0.0152						
Total	**0.0133**	**0.0174**	**0.1837**	**6.6000e-004**	**0.0559**	**4.3000e-004**	**0.0563**	**0.0148**	**4.0000e-004**	**0.0152**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573						
Off-Road	0.7187	6.8657	6.6327	9.3200e-003		0.3786	0.3786		0.3483	0.3483						
Total	**0.7187**	**6.8657**	**6.6327**	**9.3200e-003**	**0.5303**	**0.3786**	**0.9089**	**0.0573**	**0.3483**	**0.4056**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0133	0.0174	0.1837	6.6000e-004	0.0559	4.3000e-004	0.0563	0.0148	4.0000e-004	0.0152						
Total	**0.0133**	**0.0174**	**0.1837**	**6.6000e-004**	**0.0559**	**4.3000e-004**	**0.0563**	**0.0148**	**4.0000e-004**	**0.0152**						

3.3 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6400	5.8468	6.9377	0.0111		0.2927	0.2927		0.2727	0.2727						
Paving	0.0000					0.0000	0.0000		0.0000	0.0000						
Total	**0.6400**	**5.8468**	**6.9377**	**0.0111**		**0.2927**	**0.2927**		**0.2727**	**0.2727**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0477	0.0628	0.6611	2.3800e-003	0.2012	1.5400e-003	0.2027	0.0534	1.4300e-003	0.0548						
Total	**0.0477**	**0.0628**	**0.6611**	**2.3800e-003**	**0.2012**	**1.5400e-003**	**0.2027**	**0.0534**	**1.4300e-003**	**0.0548**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6400	5.8468	6.9377	0.0111		0.2927	0.2927		0.2727	0.2727						
Paving	0.0000					0.0000	0.0000		0.0000	0.0000						
Total	**0.6400**	**5.8468**	**6.9377**	**0.0111**		**0.2927**	**0.2927**		**0.2727**	**0.2727**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0477	0.0628	0.6611	2.3800e-003	0.2012	1.5400e-003	0.2027	0.0534	1.4300e-003	0.0548		166.0875	166.0875	7.6400e-003		166.2480
Total	**0.0477**	**0.0628**	**0.6611**	**2.3800e-003**	**0.2012**	**1.5400e-003**	**0.2027**	**0.0534**	**1.4300e-003**	**0.0548**		**166.0875**	**166.0875**	**7.6400e-003**		**166.2480**

Roadway Improvement - Monte Vista

South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	19.78	1000sqft	0.45	19,776.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase -

Table Name	Column Name	Default Value	New Value

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022											0.0000	3.1281	3.1281	8.2000e-004	0.0000	3.1454
Total											**0.0000**	**3.1281**	**3.1281**	**8.2000e-004**	**0.0000**	**3.1454**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022											0.0000	3.1281	3.1281	8.2000e-004	0.0000	3.1454
Total											**0.0000**	**3.1281**	**3.1281**	**8.2000e-004**	**0.0000**	**3.1454**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/2/2022	1/3/2022	5	1	
2	Paving	Paving	1/4/2022	1/10/2022	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	174	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	0.4098	0.4098	1.3000e-004	0.0000	0.4126
Total											**0.0000**	**0.4098**	**0.4098**	**1.3000e-004**	**0.0000**	**0.4126**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0213	0.0213	0.0000	0.0000	0.0213
Total											**0.0000**	**0.0213**	**0.0213**	**0.0000**	**0.0000**	**0.0213**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	0.4098	0.4098	1.3000e-004	0.0000	0.4126
Total											**0.0000**	**0.4098**	**0.4098**	**1.3000e-004**	**0.0000**	**0.4126**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0213	0.0213	0.0000	0.0000	0.0213
Total											**0.0000**	**0.0213**	**0.0213**	**0.0000**	**0.0000**	**0.0213**

3.3 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	2.3145	2.3145	6.7000e-004	0.0000	2.3286
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**2.3145**	**2.3145**	**6.7000e-004**	**0.0000**	**2.3286**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.3826	0.3826	2.0000e-005	0.0000	0.3829
Total											**0.0000**	**0.3826**	**0.3826**	**2.0000e-005**	**0.0000**	**0.3829**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	2.3145	2.3145	6.7000e-004	0.0000	2.3286
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**2.3145**	**2.3145**	**6.7000e-004**	**0.0000**	**2.3286**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.3826	0.3826	2.0000e-005	0.0000	0.3829
Total											**0.0000**	**0.3826**	**0.3826**	**2.0000e-005**	**0.0000**	**0.3829**

CUC - Construction Phase 2

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Educational	5,000.00	User Defined Unit	0.12	5,000.00	0
Other Asphalt Surfaces	16.88	1000sqft	0.39	16,875.00	0
Other Non-Asphalt Surfaces	444.75	1000sqft	10.09	444,750.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - User Defined Educational - Restroom

Construction Phase - Total Days based on acreage of work area

Off-road Equipment - Based on defaults for size of work area

Off-road Equipment -

Off-road Equipment - Based on defaults for size of work area

Off-road Equipment - Based on defaults for size of work area

Grading -

Trips and VMT - Based on defaults for size of work area

Architectural Coating - Architectural coating of 5,000 SF restroom building

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	233,313.00	2,500.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	699,938.00	7,500.00
tblAreaCoating	Area_Nonresidential_Interior	699938	693188
tblConstructionPhase	NumDays	20.00	5.00
tblConstructionPhase	NumDays	300.00	100.00
tblConstructionPhase	NumDays	30.00	20.00
tblConstructionPhase	PhaseEndDate	8/8/2017	8/9/2017
tblConstructionPhase	PhaseStartDate	8/2/2017	8/3/2017
tblLandUse	LandUseSquareFeet	16,880.00	16,875.00
tblLandUse	LandUseSquareFeet	0.00	5,000.00
tblLandUse	LotAcreage	0.00	0.12
tblLandUse	LotAcreage	10.21	10.09
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2018
tblTripsAndVMT	VendorTripNumber	76.00	3.00
tblTripsAndVMT	WorkerTripNumber	196.00	8.00
tblTripsAndVMT	WorkerTripNumber	18.00	15.00
tblTripsAndVMT	WorkerTripNumber	39.00	2.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	23.5148	51.8381	40.4537	0.0417	18.2675	2.7558	21.0233	9.9840	2.5354	12.5194						
Total	**23.5148**	**51.8381**	**40.4537**	**0.0417**	**18.2675**	**2.7558**	**21.0233**	**9.9840**	**2.5354**	**12.5194**						

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	23.5148	51.8381	40.4537	0.0417	18.2675	2.7558	21.0233	9.9840	2.5354	12.5194						
Total	**23.5148**	**51.8381**	**40.4537**	**0.0417**	**18.2675**	**2.7558**	**21.0233**	**9.9840**	**2.5354**	**12.5194**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	2/1/2017	2/14/2017	5	10	
2	Grading	Grading	2/15/2017	3/14/2017	5	20	
3	Building Construction	Building Construction	3/15/2017	8/1/2017	5	100	
4	Architectural Coating	Architectural Coating	8/3/2017	8/9/2017	5	5	
5	Paving	Paving	8/10/2017	9/6/2017	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 7,500; Non-Residential Outdoor: 2,500 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Generator Sets	0	0.00	84	0.74
Paving	Pavers	1	7.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Graders	1	8.00	174	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	0	0.00	130	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Grading	Scrapers	0	8.00	361	0.48
Building Construction	Welders	0	0.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	8.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307						
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339						
Total	**4.8382**	**51.7535**	**39.3970**	**0.0391**	**18.0663**	**2.7542**	**20.8205**	**9.9307**	**2.5339**	**12.4646**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0674	0.0846	1.0567	2.5500e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549						
Total	**0.0674**	**0.0846**	**1.0567**	**2.5500e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307						
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339						
Total	**4.8382**	**51.7535**	**39.3970**	**0.0391**	**18.0663**	**2.7542**	**20.8205**	**9.9307**	**2.5339**	**12.4646**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0674	0.0846	1.0567	2.5500e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549						
Total	**0.0674**	**0.0846**	**1.0567**	**2.5500e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**						

3.3 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675						
Off-Road	3.4555	35.9825	25.3812	0.0297		2.0388	2.0388		1.8757	1.8757						
Total	**3.4555**	**35.9825**	**25.3812**	**0.0297**	**6.5523**	**2.0388**	**8.5912**	**3.3675**	**1.8757**	**5.2432**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0561	0.0705	0.8806	2.1200e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457						
Total	**0.0561**	**0.0705**	**0.8806**	**2.1200e-003**	**0.1677**	**1.3500e-003**	**0.1690**	**0.0445**	**1.2400e-003**	**0.0457**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675						
Off-Road	3.4555	35.9825	25.3812	0.0297		2.0388	2.0388		1.8757	1.8757						
Total	**3.4555**	**35.9825**	**25.3812**	**0.0297**	**6.5523**	**2.0388**	**8.5912**	**3.3675**	**1.8757**	**5.2432**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0561	0.0705	0.8806	2.1200e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457						
Total	**0.0561**	**0.0705**	**0.8806**	**2.1200e-003**	**0.1677**	**1.3500e-003**	**0.1690**	**0.0445**	**1.2400e-003**	**0.0457**						

3.4 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2740	12.6738	8.0395	0.0113		0.8553	0.8553		0.7869	0.7869						
Total	**1.2740**	**12.6738**	**8.0395**	**0.0113**		**0.8553**	**0.8553**		**0.7869**	**0.7869**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0230	0.2372	0.2814	6.5000e-004	0.0188	3.7800e-003	0.0225	5.3400e-003	3.4700e-003	8.8100e-003						
Worker	0.0299	0.0376	0.4696	1.1300e-003	0.0894	7.2000e-004	0.0901	0.0237	6.6000e-004	0.0244						
Total	**0.0529**	**0.2748**	**0.7511**	**1.7800e-003**	**0.1082**	**4.5000e-003**	**0.1127**	**0.0291**	**4.1300e-003**	**0.0332**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2740	12.6738	8.0395	0.0113		0.8553	0.8553		0.7869	0.7869						
Total	**1.2740**	**12.6738**	**8.0395**	**0.0113**		**0.8553**	**0.8553**		**0.7869**	**0.7869**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0230	0.2372	0.2814	6.5000e-004	0.0188	3.7800e-003	0.0225	5.3400e-003	3.4700e-003	8.8100e-003						
Worker	0.0299	0.0376	0.4696	1.1300e-003	0.0894	7.2000e-004	0.0901	0.0237	6.6000e-004	0.0244						
Total	**0.0529**	**0.2748**	**0.7511**	**1.7800e-003**	**0.1082**	**4.5000e-003**	**0.1127**	**0.0291**	**4.1300e-003**	**0.0332**						

3.5 Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	23.1750					0.0000	0.0000		0.0000	0.0000						
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733						
Total	**23.5073**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	7.4900e-003	9.4000e-003	0.1174	2.8000e-004	0.0224	1.8000e-004	0.0225	5.9300e-003	1.7000e-004	6.0900e-003						
Total	**7.4900e-003**	**9.4000e-003**	**0.1174**	**2.8000e-004**	**0.0224**	**1.8000e-004**	**0.0225**	**5.9300e-003**	**1.7000e-004**	**6.0900e-003**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	23.1750					0.0000	0.0000		0.0000	0.0000						
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733						
Total	**23.5073**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	7.4900e-003	9.4000e-003	0.1174	2.8000e-004	0.0224	1.8000e-004	0.0225	5.9300e-003	1.7000e-004	6.0900e-003						
Total	**7.4900e-003**	**9.4000e-003**	**0.1174**	**2.8000e-004**	**0.0224**	**1.8000e-004**	**0.0225**	**5.9300e-003**	**1.7000e-004**	**6.0900e-003**						

3.6 Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0406	9.8344	7.2432	0.0111		0.6018	0.6018		0.5572	0.5572						
Paving	0.0511					0.0000	0.0000		0.0000	0.0000						
Total	**1.0917**	**9.8344**	**7.2432**	**0.0111**		**0.6018**	**0.6018**		**0.5572**	**0.5572**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0561	0.0705	0.8806	2.1200e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457						
Total	**0.0561**	**0.0705**	**0.8806**	**2.1200e-003**	**0.1677**	**1.3500e-003**	**0.1690**	**0.0445**	**1.2400e-003**	**0.0457**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0406	9.8344	7.2432	0.0111		0.6018	0.6018		0.5572	0.5572						
Paving	0.0511					0.0000	0.0000		0.0000	0.0000						
Total	**1.0917**	**9.8344**	**7.2432**	**0.0111**		**0.6018**	**0.6018**		**0.5572**	**0.5572**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0561	0.0705	0.8806	2.1200e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457						
Total	**0.0561**	**0.0705**	**0.8806**	**2.1200e-003**	**0.1677**	**1.3500e-003**	**0.1690**	**0.0445**	**1.2400e-003**	**0.0457**						

CUC - Construction Phase 2

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Educational	5,000.00	User Defined Unit	0.12	5,000.00	0
Other Asphalt Surfaces	16.88	1000sqft	0.39	16,875.00	0
Other Non-Asphalt Surfaces	444.75	1000sqft	10.09	444,750.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - User Defined Educational - Restroom

Construction Phase - Total Days based on acreage of work area

Off-road Equipment - Based on defaults for size of work area

Off-road Equipment -

Off-road Equipment - Based on defaults for size of work area

Off-road Equipment - Based on defaults for size of work area

Grading -

Trips and VMT - Based on defaults for size of work area

Architectural Coating - Architectural coating of 5,000 SF restroom building

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	233,313.00	2,500.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	699,938.00	7,500.00
tblAreaCoating	Area_Nonresidential_Interior	699938	693188
tblConstructionPhase	NumDays	20.00	5.00
tblConstructionPhase	NumDays	300.00	100.00
tblConstructionPhase	NumDays	30.00	20.00
tblConstructionPhase	PhaseEndDate	8/8/2017	8/9/2017
tblConstructionPhase	PhaseStartDate	8/2/2017	8/3/2017
tblLandUse	LandUseSquareFeet	16,880.00	16,875.00
tblLandUse	LandUseSquareFeet	0.00	5,000.00
tblLandUse	LotAcreage	0.00	0.12
tblLandUse	LotAcreage	10.21	10.09
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2018
tblTripsAndVMT	VendorTripNumber	76.00	3.00
tblTripsAndVMT	WorkerTripNumber	196.00	8.00
tblTripsAndVMT	WorkerTripNumber	18.00	15.00
tblTripsAndVMT	WorkerTripNumber	39.00	2.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	23.5150	51.8464	40.3676	0.0415	18.2675	2.7558	21.0233	9.9840	2.5354	12.5194						
Total	**23.5150**	**51.8464**	**40.3676**	**0.0415**	**18.2675**	**2.7558**	**21.0233**	**9.9840**	**2.5354**	**12.5194**						

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	23.5150	51.8464	40.3676	0.0415	18.2675	2.7558	21.0233	9.9840	2.5354	12.5194						
Total	**23.5150**	**51.8464**	**40.3676**	**0.0415**	**18.2675**	**2.7558**	**21.0233**	**9.9840**	**2.5354**	**12.5194**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	2/1/2017	2/14/2017	5	10	
2	Grading	Grading	2/15/2017	3/14/2017	5	20	
3	Building Construction	Building Construction	3/15/2017	8/1/2017	5	100	
4	Architectural Coating	Architectural Coating	8/3/2017	8/9/2017	5	5	
5	Paving	Paving	8/10/2017	9/6/2017	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 7,500; Non-Residential Outdoor: 2,500 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Generator Sets	0	0.00	84	0.74
Paving	Pavers	1	7.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Graders	1	8.00	174	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	0	0.00	130	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Grading	Scrapers	0	8.00	361	0.48
Building Construction	Welders	0	0.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	8.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307						
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339						
Total	**4.8382**	**51.7535**	**39.3970**	**0.0391**	**18.0663**	**2.7542**	**20.8205**	**9.9307**	**2.5339**	**12.4646**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0687	0.0929	0.9706	2.3900e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549						
Total	**0.0687**	**0.0929**	**0.9706**	**2.3900e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307						
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339						
Total	**4.8382**	**51.7535**	**39.3970**	**0.0391**	**18.0663**	**2.7542**	**20.8205**	**9.9307**	**2.5339**	**12.4646**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0687	0.0929	0.9706	2.3900e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549						
Total	**0.0687**	**0.0929**	**0.9706**	**2.3900e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**						

3.3 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675						
Off-Road	3.4555	35.9825	25.3812	0.0297		2.0388	2.0388		1.8757	1.8757						
Total	**3.4555**	**35.9825**	**25.3812**	**0.0297**	**6.5523**	**2.0388**	**8.5912**	**3.3675**	**1.8757**	**5.2432**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0573	0.0775	0.8088	1.9900e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457						
Total	**0.0573**	**0.0775**	**0.8088**	**1.9900e-003**	**0.1677**	**1.3500e-003**	**0.1690**	**0.0445**	**1.2400e-003**	**0.0457**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675						
Off-Road	3.4555	35.9825	25.3812	0.0297		2.0388	2.0388		1.8757	1.8757						
Total	**3.4555**	**35.9825**	**25.3812**	**0.0297**	**6.5523**	**2.0388**	**8.5912**	**3.3675**	**1.8757**	**5.2432**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0573	0.0775	0.8088	1.9900e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457						
Total	**0.0573**	**0.0775**	**0.8088**	**1.9900e-003**	**0.1677**	**1.3500e-003**	**0.1690**	**0.0445**	**1.2400e-003**	**0.0457**						

3.4 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2740	12.6738	8.0395	0.0113		0.8553	0.8553		0.7869	0.7869						
Total	**1.2740**	**12.6738**	**8.0395**	**0.0113**		**0.8553**	**0.8553**		**0.7869**	**0.7869**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0251	0.2431	0.3410	6.5000e-004	0.0188	3.8100e-003	0.0226	5.3400e-003	3.5100e-003	8.8500e-003						
Worker	0.0305	0.0413	0.4314	1.0600e-003	0.0894	7.2000e-004	0.0901	0.0237	6.6000e-004	0.0244						
Total	**0.0556**	**0.2844**	**0.7724**	**1.7100e-003**	**0.1082**	**4.5300e-003**	**0.1127**	**0.0291**	**4.1700e-003**	**0.0332**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2740	12.6738	8.0395	0.0113		0.8553	0.8553		0.7869	0.7869						
Total	**1.2740**	**12.6738**	**8.0395**	**0.0113**		**0.8553**	**0.8553**		**0.7869**	**0.7869**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0251	0.2431	0.3410	6.5000e-004	0.0188	3.8100e-003	0.0226	5.3400e-003	3.5100e-003	8.8500e-003						
Worker	0.0305	0.0413	0.4314	1.0600e-003	0.0894	7.2000e-004	0.0901	0.0237	6.6000e-004	0.0244						
Total	**0.0556**	**0.2844**	**0.7724**	**1.7100e-003**	**0.1082**	**4.5300e-003**	**0.1127**	**0.0291**	**4.1700e-003**	**0.0332**						

3.5 Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	23.1750					0.0000	0.0000		0.0000	0.0000						
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733						
Total	**23.5073**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	7.6400e-003	0.0103	0.1078	2.7000e-004	0.0224	1.8000e-004	0.0225	5.9300e-003	1.7000e-004	6.0900e-003						
Total	**7.6400e-003**	**0.0103**	**0.1078**	**2.7000e-004**	**0.0224**	**1.8000e-004**	**0.0225**	**5.9300e-003**	**1.7000e-004**	**6.0900e-003**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	23.1750					0.0000	0.0000		0.0000	0.0000						
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733						
Total	**23.5073**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	7.6400e-003	0.0103	0.1078	2.7000e-004	0.0224	1.8000e-004	0.0225	5.9300e-003	1.7000e-004	6.0900e-003						
Total	**7.6400e-003**	**0.0103**	**0.1078**	**2.7000e-004**	**0.0224**	**1.8000e-004**	**0.0225**	**5.9300e-003**	**1.7000e-004**	**6.0900e-003**						

3.6 Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0406	9.8344	7.2432	0.0111		0.6018	0.6018		0.5572	0.5572						
Paving	0.0511					0.0000	0.0000		0.0000	0.0000						
Total	**1.0917**	**9.8344**	**7.2432**	**0.0111**		**0.6018**	**0.6018**		**0.5572**	**0.5572**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0573	0.0775	0.8088	1.9900e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457						
Total	**0.0573**	**0.0775**	**0.8088**	**1.9900e-003**	**0.1677**	**1.3500e-003**	**0.1690**	**0.0445**	**1.2400e-003**	**0.0457**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0406	9.8344	7.2432	0.0111		0.6018	0.6018		0.5572	0.5572						
Paving	0.0511					0.0000	0.0000		0.0000	0.0000						
Total	**1.0917**	**9.8344**	**7.2432**	**0.0111**		**0.6018**	**0.6018**		**0.5572**	**0.5572**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0573	0.0775	0.8088	1.9900e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457						
Total	**0.0573**	**0.0775**	**0.8088**	**1.9900e-003**	**0.1677**	**1.3500e-003**	**0.1690**	**0.0445**	**1.2400e-003**	**0.0457**						

CUC - Construction Phase 2

South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Educational	5,000.00	User Defined Unit	0.12	5,000.00	0
Other Asphalt Surfaces	16.88	1000sqft	0.39	16,875.00	0
Other Non-Asphalt Surfaces	444.75	1000sqft	10.09	444,750.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - User Defined Educational - Restroom

Construction Phase - Total Days based on acreage of work area

Off-road Equipment - Based on defaults for size of work area

Off-road Equipment -

Off-road Equipment - Based on defaults for size of work area

Off-road Equipment - Based on defaults for size of work area

Grading -

Trips and VMT - Based on defaults for size of work area

Architectural Coating - Architectural coating of 5,000 SF restroom building

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	233,313.00	2,500.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	699,938.00	7,500.00
tblAreaCoating	Area_Nonresidential_Interior	699938	693188
tblConstructionPhase	NumDays	20.00	5.00
tblConstructionPhase	NumDays	300.00	100.00
tblConstructionPhase	NumDays	30.00	20.00
tblConstructionPhase	PhaseEndDate	8/8/2017	8/9/2017
tblConstructionPhase	PhaseStartDate	8/2/2017	8/3/2017
tblLandUse	LandUseSquareFeet	16,880.00	16,875.00
tblLandUse	LandUseSquareFeet	0.00	5,000.00
tblLandUse	LotAcreage	0.00	0.12
tblLandUse	LotAcreage	10.21	10.09
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2018
tblTripsAndVMT	VendorTripNumber	76.00	3.00
tblTripsAndVMT	WorkerTripNumber	196.00	8.00
tblTripsAndVMT	WorkerTripNumber	18.00	15.00
tblTripsAndVMT	WorkerTripNumber	39.00	2.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017											0.0000	119.4693	119.4693	0.0333	0.0000	120.1691
Total											**0.0000**	**119.4693**	**119.4693**	**0.0333**	**0.0000**	**120.1691**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017											0.0000	119.4691	119.4691	0.0333	0.0000	120.1690
Total											**0.0000**	**119.4691**	**119.4691**	**0.0333**	**0.0000**	**120.1690**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction											**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	2/1/2017	2/14/2017	5	10	
2	Grading	Grading	2/15/2017	3/14/2017	5	20	
3	Building Construction	Building Construction	3/15/2017	8/1/2017	5	100	
4	Architectural Coating	Architectural Coating	8/3/2017	8/9/2017	5	5	
5	Paving	Paving	8/10/2017	9/6/2017	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 7,500; Non-Residential Outdoor: 2,500 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Generator Sets	0	0.00	84	0.74
Paving	Pavers	1	7.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Graders	1	8.00	174	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	0	0.00	130	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Grading	Scrapers	0	8.00	361	0.48
Building Construction	Welders	0	0.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	8.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	18.1577	18.1577	5.5600e-003	0.0000	18.2745
Total											**0.0000**	**18.1577**	**18.1577**	**5.5600e-003**	**0.0000**	**18.2745**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.8896	0.8896	5.0000e-005	0.0000	0.8906
Total											**0.0000**	**0.8896**	**0.8896**	**5.0000e-005**	**0.0000**	**0.8906**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	18.1577	18.1577	5.5600e-003	0.0000	18.2745
Total											**0.0000**	**18.1577**	**18.1577**	**5.5600e-003**	**0.0000**	**18.2745**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.8896	0.8896	5.0000e-005	0.0000	0.8906
Total											**0.0000**	**0.8896**	**0.8896**	**5.0000e-005**	**0.0000**	**0.8906**

3.3 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	27.6117	27.6117	8.4600e-003	0.0000	27.7893
Total											**0.0000**	**27.6117**	**27.6117**	**8.4600e-003**	**0.0000**	**27.7893**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.4827	1.4827	8.0000e-005	0.0000	1.4843
Total											**0.0000**	**1.4827**	**1.4827**	**8.0000e-005**	**0.0000**	**1.4843**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	27.6117	27.6117	8.4600e-003	0.0000	27.7893
Total											**0.0000**	**27.6117**	**27.6117**	**8.4600e-003**	**0.0000**	**27.7893**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.4827	1.4827	8.0000e-005	0.0000	1.4843
Total											**0.0000**	**1.4827**	**1.4827**	**8.0000e-005**	**0.0000**	**1.4843**

3.4 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	52.5954	52.5954	0.0161	0.0000	52.9339
Total											**0.0000**	**52.5954**	**52.5954**	**0.0161**	**0.0000**	**52.9339**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	2.9108	2.9108	2.0000e-005	0.0000	2.9113
Worker											0.0000	3.9538	3.9538	2.0000e-004	0.0000	3.9580
Total											**0.0000**	**6.8646**	**6.8646**	**2.2000e-004**	**0.0000**	**6.8693**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	52.5954	52.5954	0.0161	0.0000	52.9338
Total											**0.0000**	**52.5954**	**52.5954**	**0.0161**	**0.0000**	**52.9338**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	2.9108	2.9108	2.0000e-005	0.0000	2.9113
Worker											0.0000	3.9538	3.9538	2.0000e-004	0.0000	3.9580
Total											**0.0000**	**6.8646**	**6.8646**	**2.2000e-004**	**0.0000**	**6.8693**

3.5 Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	0.6383	0.6383	7.0000e-005	0.0000	0.6397
Total											**0.0000**	**0.6383**	**0.6383**	**7.0000e-005**	**0.0000**	**0.6397**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0494	0.0494	0.0000	0.0000	0.0495
Total											**0.0000**	**0.0494**	**0.0494**	**0.0000**	**0.0000**	**0.0495**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	0.6383	0.6383	7.0000e-005	0.0000	0.6397
Total											**0.0000**	**0.6383**	**0.6383**	**7.0000e-005**	**0.0000**	**0.6397**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0494	0.0494	0.0000	0.0000	0.0495
Total											**0.0000**	**0.0494**	**0.0494**	**0.0000**	**0.0000**	**0.0495**

3.6 Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	9.6972	9.6972	2.6900e-003	0.0000	9.7538
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**9.6972**	**9.6972**	**2.6900e-003**	**0.0000**	**9.7538**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.4827	1.4827	8.0000e-005	0.0000	1.4843
Total											**0.0000**	**1.4827**	**1.4827**	**8.0000e-005**	**0.0000**	**1.4843**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	9.6972	9.6972	2.6900e-003	0.0000	9.7538
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**9.6972**	**9.6972**	**2.6900e-003**	**0.0000**	**9.7538**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.4827	1.4827	8.0000e-005	0.0000	1.4843
Total											**0.0000**	**1.4827**	**1.4827**	**8.0000e-005**	**0.0000**	**1.4843**

CUC - Construction Phase 3

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	239.00	1000sqft	5.49	239,000.00	0
Other Non-Asphalt Surfaces	139.83	1000sqft	3.21	139,827.60	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Grading -

Trips and VMT -

Architectural Coating -

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	PhaseStartDate	2/16/2019	2/18/2019
tblConstructionPhase	PhaseStartDate	3/16/2019	3/18/2019
tblLandUse	LandUseSquareFeet	139,828.00	139,827.60
tblProjectCharacteristics	OperationalYear	2014	2020

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.0747	42.5750	35.6911	0.0417	18.2675	2.1520	20.4195	9.9840	1.9799	11.9639						
Total	**4.0747**	**42.5750**	**35.6911**	**0.0417**	**18.2675**	**2.1520**	**20.4195**	**9.9840**	**1.9799**	**11.9639**						

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.0747	42.5750	35.6911	0.0417	18.2675	2.1520	20.4195	9.9840	1.9799	11.9639						
Total	**4.0747**	**42.5750**	**35.6911**	**0.0417**	**18.2675**	**2.1520**	**20.4195**	**9.9840**	**1.9799**	**11.9639**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	2/4/2019	2/15/2019	5	10	
2	Grading	Grading	2/18/2019	3/15/2019	5	20	
3	Paving	Paving	3/18/2019	4/12/2019	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	1	8.00	162	0.38
Paving	Pavers	2	8.00	125	0.42
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Graders	1	8.00	174	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	130	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307						
Off-Road	4.0188	42.5046	34.8088	0.0391		2.1505	2.1505		1.9784	1.9784						
Total	**4.0188**	**42.5046**	**34.8088**	**0.0391**	**18.0663**	**2.1505**	**20.2167**	**9.9307**	**1.9784**	**11.9091**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0559	0.0704	0.8824	2.5400e-003	0.2012	1.5500e-003	0.2028	0.0534	1.4300e-003	0.0548						
Total	**0.0559**	**0.0704**	**0.8824**	**2.5400e-003**	**0.2012**	**1.5500e-003**	**0.2028**	**0.0534**	**1.4300e-003**	**0.0548**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307						
Off-Road	4.0188	42.5046	34.8088	0.0391		2.1505	2.1505		1.9784	1.9784						
Total	**4.0188**	**42.5046**	**34.8088**	**0.0391**	**18.0663**	**2.1505**	**20.2167**	**9.9307**	**1.9784**	**11.9091**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0559	0.0704	0.8824	2.5400e-003	0.2012	1.5500e-003	0.2028	0.0534	1.4300e-003	0.0548						
Total	**0.0559**	**0.0704**	**0.8824**	**2.5400e-003**	**0.2012**	**1.5500e-003**	**0.2028**	**0.0534**	**1.4300e-003**	**0.0548**						

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675						
Off-Road	2.7610	28.3800	23.3864	0.0297		1.5329	1.5329		1.4103	1.4103						
Total	**2.7610**	**28.3800**	**23.3864**	**0.0297**	**6.5523**	**1.5329**	**8.0852**	**3.3675**	**1.4103**	**4.7778**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0466	0.0587	0.7353	2.1200e-003	0.1677	1.2900e-003	0.1690	0.0445	1.2000e-003	0.0457						
Total	**0.0466**	**0.0587**	**0.7353**	**2.1200e-003**	**0.1677**	**1.2900e-003**	**0.1690**	**0.0445**	**1.2000e-003**	**0.0457**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675						
Off-Road	2.7610	28.3800	23.3864	0.0297		1.5329	1.5329		1.4103	1.4103						
Total	**2.7610**	**28.3800**	**23.3864**	**0.0297**	**6.5523**	**1.5329**	**8.0852**	**3.3675**	**1.4103**	**4.7778**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0466	0.0587	0.7353	2.1200e-003	0.1677	1.2900e-003	0.1690	0.0445	1.2000e-003	0.0457						
Total	**0.0466**	**0.0587**	**0.7353**	**2.1200e-003**	**0.1677**	**1.2900e-003**	**0.1690**	**0.0445**	**1.2000e-003**	**0.0457**						

3.4 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4259	14.9353	14.3652	0.0223		0.8094	0.8094		0.7447	0.7447						
Paving	0.7192					0.0000	0.0000		0.0000	0.0000						
Total	**2.1450**	**14.9353**	**14.3652**	**0.0223**		**0.8094**	**0.8094**		**0.7447**	**0.7447**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0466	0.0587	0.7353	2.1200e-003	0.1677	1.2900e-003	0.1690	0.0445	1.2000e-003	0.0457						
Total	**0.0466**	**0.0587**	**0.7353**	**2.1200e-003**	**0.1677**	**1.2900e-003**	**0.1690**	**0.0445**	**1.2000e-003**	**0.0457**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4259	14.9353	14.3652	0.0223		0.8094	0.8094		0.7447	0.7447						
Paving	0.7192					0.0000	0.0000		0.0000	0.0000						
Total	**2.1450**	**14.9353**	**14.3652**	**0.0223**		**0.8094**	**0.8094**		**0.7447**	**0.7447**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0466	0.0587	0.7353	2.1200e-003	0.1677	1.2900e-003	0.1690	0.0445	1.2000e-003	0.0457						
Total	**0.0466**	**0.0587**	**0.7353**	**2.1200e-003**	**0.1677**	**1.2900e-003**	**0.1690**	**0.0445**	**1.2000e-003**	**0.0457**						

CUC - Construction Phase 3

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	239.00	1000sqft	5.49	239,000.00	0
Other Non-Asphalt Surfaces	139.83	1000sqft	3.21	139,827.60	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Grading -

Trips and VMT -

Architectural Coating -

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	PhaseStartDate	2/16/2019	2/18/2019
tblConstructionPhase	PhaseStartDate	3/16/2019	3/18/2019
tblLandUse	LandUseSquareFeet	139,828.00	139,827.60
tblProjectCharacteristics	OperationalYear	2014	2020

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.0756	42.5819	35.6138	0.0415	18.2675	2.1520	20.4195	9.9840	1.9799	11.9639						
Total	**4.0756**	**42.5819**	**35.6138**	**0.0415**	**18.2675**	**2.1520**	**20.4195**	**9.9840**	**1.9799**	**11.9639**						

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.0756	42.5819	35.6138	0.0415	18.2675	2.1520	20.4195	9.9840	1.9799	11.9639						
Total	**4.0756**	**42.5819**	**35.6138**	**0.0415**	**18.2675**	**2.1520**	**20.4195**	**9.9840**	**1.9799**	**11.9639**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	2/4/2019	2/15/2019	5	10	
2	Grading	Grading	2/18/2019	3/15/2019	5	20	
3	Paving	Paving	3/18/2019	4/12/2019	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	1	8.00	162	0.38
Paving	Pavers	2	8.00	125	0.42
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Graders	1	8.00	174	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	130	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307						
Off-Road	4.0188	42.5046	34.8088	0.0391		2.1505	2.1505		1.9784	1.9784						
Total	**4.0188**	**42.5046**	**34.8088**	**0.0391**	**18.0663**	**2.1505**	**20.2167**	**9.9307**	**1.9784**	**11.9091**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0568	0.0773	0.8050	2.3800e-003	0.2012	1.5500e-003	0.2028	0.0534	1.4300e-003	0.0548						
Total	**0.0568**	**0.0773**	**0.8050**	**2.3800e-003**	**0.2012**	**1.5500e-003**	**0.2028**	**0.0534**	**1.4300e-003**	**0.0548**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307						
Off-Road	4.0188	42.5046	34.8088	0.0391		2.1505	2.1505		1.9784	1.9784						
Total	**4.0188**	**42.5046**	**34.8088**	**0.0391**	**18.0663**	**2.1505**	**20.2167**	**9.9307**	**1.9784**	**11.9091**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0568	0.0773	0.8050	2.3800e-003	0.2012	1.5500e-003	0.2028	0.0534	1.4300e-003	0.0548						
Total	**0.0568**	**0.0773**	**0.8050**	**2.3800e-003**	**0.2012**	**1.5500e-003**	**0.2028**	**0.0534**	**1.4300e-003**	**0.0548**						

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675						
Off-Road	2.7610	28.3800	23.3864	0.0297		1.5329	1.5329		1.4103	1.4103						
Total	**2.7610**	**28.3800**	**23.3864**	**0.0297**	**6.5523**	**1.5329**	**8.0852**	**3.3675**	**1.4103**	**4.7778**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0474	0.0644	0.6709	1.9800e-003	0.1677	1.2900e-003	0.1690	0.0445	1.2000e-003	0.0457						
Total	**0.0474**	**0.0644**	**0.6709**	**1.9800e-003**	**0.1677**	**1.2900e-003**	**0.1690**	**0.0445**	**1.2000e-003**	**0.0457**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675						
Off-Road	2.7610	28.3800	23.3864	0.0297		1.5329	1.5329		1.4103	1.4103						
Total	**2.7610**	**28.3800**	**23.3864**	**0.0297**	**6.5523**	**1.5329**	**8.0852**	**3.3675**	**1.4103**	**4.7778**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0474	0.0644	0.6709	1.9800e-003	0.1677	1.2900e-003	0.1690	0.0445	1.2000e-003	0.0457						
Total	**0.0474**	**0.0644**	**0.6709**	**1.9800e-003**	**0.1677**	**1.2900e-003**	**0.1690**	**0.0445**	**1.2000e-003**	**0.0457**						

3.4 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4259	14.9353	14.3652	0.0223		0.8094	0.8094		0.7447	0.7447						
Paving	0.7192					0.0000	0.0000		0.0000	0.0000						
Total	**2.1450**	**14.9353**	**14.3652**	**0.0223**		**0.8094**	**0.8094**		**0.7447**	**0.7447**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0474	0.0644	0.6709	1.9800e-003	0.1677	1.2900e-003	0.1690	0.0445	1.2000e-003	0.0457						
Total	**0.0474**	**0.0644**	**0.6709**	**1.9800e-003**	**0.1677**	**1.2900e-003**	**0.1690**	**0.0445**	**1.2000e-003**	**0.0457**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4259	14.9353	14.3652	0.0223		0.8094	0.8094		0.7447	0.7447						
Paving	0.7192					0.0000	0.0000		0.0000	0.0000						
Total	**2.1450**	**14.9353**	**14.3652**	**0.0223**		**0.8094**	**0.8094**		**0.7447**	**0.7447**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0474	0.0644	0.6709	1.9800e-003	0.1677	1.2900e-003	0.1690	0.0445	1.2000e-003	0.0457						
Total	**0.0474**	**0.0644**	**0.6709**	**1.9800e-003**	**0.1677**	**1.2900e-003**	**0.1690**	**0.0445**	**1.2000e-003**	**0.0457**						

CUC - Construction Phase 3

South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	239.00	1000sqft	5.49	239,000.00	0
Other Non-Asphalt Surfaces	139.83	1000sqft	3.21	139,827.60	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Grading -

Trips and VMT -

Architectural Coating -

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	PhaseStartDate	2/16/2019	2/18/2019
tblConstructionPhase	PhaseStartDate	3/16/2019	3/18/2019
tblLandUse	LandUseSquareFeet	139,828.00	139,827.60
tblProjectCharacteristics	OperationalYear	2014	2020

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019											0.0000	67.9031	67.9031	0.0205	0.0000	68.3342
Total											**0.0000**	**67.9031**	**67.9031**	**0.0205**	**0.0000**	**68.3342**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019											0.0000	67.9030	67.9030	0.0205	0.0000	68.3341
Total											**0.0000**	**67.9030**	**67.9030**	**0.0205**	**0.0000**	**68.3341**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction											**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	2/4/2019	2/15/2019	5	10	
2	Grading	Grading	2/18/2019	3/15/2019	5	20	
3	Paving	Paving	3/18/2019	4/12/2019	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	1	8.00	162	0.38
Paving	Pavers	2	8.00	125	0.42
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Graders	1	8.00	174	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	130	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	17.5845	17.5845	5.5600e-003	0.0000	17.7014
Total											**0.0000**	**17.5845**	**17.5845**	**5.5600e-003**	**0.0000**	**17.7014**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.8238	0.8238	4.0000e-005	0.0000	0.8246
Total											**0.0000**	**0.8238**	**0.8238**	**4.0000e-005**	**0.0000**	**0.8246**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	17.5845	17.5845	5.5600e-003	0.0000	17.7013
Total											**0.0000**	**17.5845**	**17.5845**	**5.5600e-003**	**0.0000**	**17.7013**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.8238	0.8238	4.0000e-005	0.0000	0.8246
Total											**0.0000**	**0.8238**	**0.8238**	**4.0000e-005**	**0.0000**	**0.8246**

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	26.7093	26.7093	8.4500e-003	0.0000	26.8868
Total											**0.0000**	**26.7093**	**26.7093**	**8.4500e-003**	**0.0000**	**26.8868**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.3730	1.3730	7.0000e-005	0.0000	1.3744
Total											**0.0000**	**1.3730**	**1.3730**	**7.0000e-005**	**0.0000**	**1.3744**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	26.7093	26.7093	8.4500e-003	0.0000	26.8868
Total											**0.0000**	**26.7093**	**26.7093**	**8.4500e-003**	**0.0000**	**26.8868**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.3730	1.3730	7.0000e-005	0.0000	1.3744
Total											**0.0000**	**1.3730**	**1.3730**	**7.0000e-005**	**0.0000**	**1.3744**

3.4 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	20.0395	20.0395	6.3400e-003	0.0000	20.1726
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**20.0395**	**20.0395**	**6.3400e-003**	**0.0000**	**20.1726**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.3730	1.3730	7.0000e-005	0.0000	1.3744
Total											**0.0000**	**1.3730**	**1.3730**	**7.0000e-005**	**0.0000**	**1.3744**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	20.0394	20.0394	6.3400e-003	0.0000	20.1726
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**20.0394**	**20.0394**	**6.3400e-003**	**0.0000**	**20.1726**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.3730	1.3730	7.0000e-005	0.0000	1.3744
Total											**0.0000**	**1.3730**	**1.3730**	**7.0000e-005**	**0.0000**	**1.3744**

CUC - Construction Phase 4

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Educational	5,625.00	User Defined Unit	0.13	5,625.00	0
Other Asphalt Surfaces	81.46	1000sqft	1.87	81,457.20	0
Other Non-Asphalt Surfaces	1,284.19	1000sqft	29.48	1,284,186.60	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - User Defined Educational - Restroom

Construction Phase - Total days based on CalEEMod defaults for work area

Off-road Equipment -

Off-road Equipment - Based on defaults for size of work area

Off-road Equipment -

Off-road Equipment - Based on size of work area

Off-road Equipment -

Trips and VMT - Based on size of work area

Grading -

Architectural Coating - Based on 5,625 SF building

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	685,634.00	2,813.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,056,903.00	8,438.00
tblConstructionPhase	NumDays	35.00	5.00
tblConstructionPhase	NumDays	500.00	100.00
tblConstructionPhase	NumDays	45.00	110.00
tblConstructionPhase	NumDays	35.00	40.00
tblConstructionPhase	NumDays	20.00	40.00
tblLandUse	LandUseSquareFeet	0.00	5,625.00
tblLandUse	LandUseSquareFeet	81,460.00	81,457.20
tblLandUse	LandUseSquareFeet	1,284,190.00	1,284,186.60
tblLandUse	LotAcreage	0.00	0.13
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2024
tblTripsAndVMT	VendorTripNumber	225.00	1.00
tblTripsAndVMT	WorkerTripNumber	576.00	8.00
tblTripsAndVMT	WorkerTripNumber	115.00	2.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	3.8165	38.4925	35.9053	0.0646	18.2675	1.7291	19.8163	9.9840	1.5908	11.4090						
2023	26.2708	6.4373	9.1770	0.0152	0.1453	0.3201	0.4511	0.0385	0.2945	0.3208						
Total	**30.0873**	**44.9298**	**45.0824**	**0.0798**	**18.4128**	**2.0492**	**20.2675**	**10.0226**	**1.8853**	**11.7298**						

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	3.8165	38.4925	35.9053	0.0646	18.2675	1.7291	19.8163	9.9840	1.5908	11.4090						
2023	26.2708	6.4373	9.1770	0.0152	0.1453	0.3201	0.4511	0.0385	0.2945	0.3208						
Total	**30.0873**	**44.9298**	**45.0824**	**0.0798**	**18.4128**	**2.0492**	**20.2675**	**10.0226**	**1.8853**	**11.7298**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	2/1/2022	3/28/2022	5	40	
2	Grading	Grading	3/29/2022	8/29/2022	5	110	
3	Building Construction	Building Construction	8/30/2022	1/16/2023	5	100	
4	Architectural Coating	Architectural Coating	1/17/2023	1/23/2023	5	5	
5	Paving	Paving	1/24/2023	3/20/2023	5	40	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 275

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 8,438; Non-Residential Outdoor: 2,813 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Generator Sets	0	0.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Welders	0	0.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	8.00	1.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307						
Off-Road	3.2212	32.6496	29.9722	0.0391		1.5473	1.5473		1.4236	1.4236						
Total	**3.2212**	**32.6496**	**29.9722**	**0.0391**	**18.0663**	**1.5473**	**19.6136**	**9.9307**	**1.4236**	**11.3542**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0470	0.0573	0.7287	2.5500e-003	0.2012	1.5400e-003	0.2027	0.0534	1.4300e-003	0.0548						
Total	**0.0470**	**0.0573**	**0.7287**	**2.5500e-003**	**0.2012**	**1.5400e-003**	**0.2027**	**0.0534**	**1.4300e-003**	**0.0548**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307						
Off-Road	3.2212	32.6496	29.9722	0.0391		1.5473	1.5473		1.4236	1.4236						
Total	**3.2212**	**32.6496**	**29.9722**	**0.0391**	**18.0663**	**1.5473**	**19.6136**	**9.9307**	**1.4236**	**11.3542**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0470	0.0573	0.7287	2.5500e-003	0.2012	1.5400e-003	0.2027	0.0534	1.4300e-003	0.0548						
Total	**0.0470**	**0.0573**	**0.7287**	**2.5500e-003**	**0.2012**	**1.5400e-003**	**0.2027**	**0.0534**	**1.4300e-003**	**0.0548**						

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965						
Off-Road	3.7643	38.4288	35.0957	0.0618		1.7274	1.7274		1.5892	1.5892						
Total	**3.7643**	**38.4288**	**35.0957**	**0.0618**	**8.6733**	**1.7274**	**10.4007**	**3.5965**	**1.5892**	**5.1857**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0522	0.0637	0.8097	2.8300e-003	0.2236	1.7100e-003	0.2253	0.0593	1.5900e-003	0.0609						
Total	**0.0522**	**0.0637**	**0.8097**	**2.8300e-003**	**0.2236**	**1.7100e-003**	**0.2253**	**0.0593**	**1.5900e-003**	**0.0609**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965						
Off-Road	3.7643	38.4288	35.0957	0.0618		1.7274	1.7274		1.5892	1.5892						
Total	**3.7643**	**38.4288**	**35.0957**	**0.0618**	**8.6733**	**1.7274**	**10.4007**	**3.5965**	**1.5892**	**5.1857**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0522	0.0637	0.8097	2.8300e-003	0.2236	1.7100e-003	0.2253	0.0593	1.5900e-003	0.0609						
Total	**0.0522**	**0.0637**	**0.8097**	**2.8300e-003**	**0.2236**	**1.7100e-003**	**0.2253**	**0.0593**	**1.5900e-003**	**0.0609**						

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6823	6.9805	7.1322	0.0113		0.3700	0.3700		0.3404	0.3404						
Total	**0.6823**	**6.9805**	**7.1322**	**0.0113**		**0.3700**	**0.3700**		**0.3404**	**0.3404**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	6.1200e-003	0.0451	0.0790	2.2000e-004	6.2500e-003	9.3000e-004	7.1800e-003	1.7800e-003	8.5000e-004	2.6300e-003						
Worker	0.0209	0.0255	0.3239	1.1300e-003	0.0894	6.8000e-004	0.0901	0.0237	6.3000e-004	0.0244						
Total	**0.0270**	**0.0706**	**0.4028**	**1.3500e-003**	**0.0957**	**1.6100e-003**	**0.0973**	**0.0255**	**1.4800e-003**	**0.0270**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6823	6.9805	7.1322	0.0113		0.3700	0.3700		0.3404	0.3404						
Total	**0.6823**	**6.9805**	**7.1322**	**0.0113**		**0.3700**	**0.3700**		**0.3404**	**0.3404**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	6.1200e-003	0.0451	0.0790	2.2000e-004	6.2500e-003	9.3000e-004	7.1800e-003	1.7800e-003	8.5000e-004	2.6300e-003						
Worker	0.0209	0.0255	0.3239	1.1300e-003	0.0894	6.8000e-004	0.0901	0.0237	6.3000e-004	0.0244						
Total	**0.0270**	**0.0706**	**0.4028**	**1.3500e-003**	**0.0957**	**1.6100e-003**	**0.0973**	**0.0255**	**1.4800e-003**	**0.0270**						

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6284	6.3773	7.0772	0.0114		0.3185	0.3185		0.2930	0.2930						
Total	**0.6284**	**6.3773**	**7.0772**	**0.0114**		**0.3185**	**0.3185**		**0.2930**	**0.2930**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	5.6700e-003	0.0360	0.0758	2.1000e-004	6.2500e-003	9.2000e-004	7.1700e-003	1.7800e-003	8.4000e-004	2.6200e-003						
Worker	0.0198	0.0240	0.3056	1.1300e-003	0.0894	6.8000e-004	0.0901	0.0237	6.3000e-004	0.0244						
Total	**0.0255**	**0.0599**	**0.3813**	**1.3400e-003**	**0.0957**	**1.6000e-003**	**0.0973**	**0.0255**	**1.4700e-003**	**0.0270**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6284	6.3773	7.0772	0.0114		0.3185	0.3185		0.2930	0.2930						
Total	**0.6284**	**6.3773**	**7.0772**	**0.0114**		**0.3185**	**0.3185**		**0.2930**	**0.2930**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	5.6700e-003	0.0360	0.0758	2.1000e-004	6.2500e-003	9.2000e-004	7.1700e-003	1.7800e-003	8.4000e-004	2.6200e-003						
Worker	0.0198	0.0240	0.3056	1.1300e-003	0.0894	6.8000e-004	0.0901	0.0237	6.3000e-004	0.0244						
Total	**0.0255**	**0.0599**	**0.3813**	**1.3400e-003**	**0.0957**	**1.6000e-003**	**0.0973**	**0.0255**	**1.4700e-003**	**0.0270**						

3.5 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	26.0742					0.0000	0.0000		0.0000	0.0000						
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708						
Total	**26.2659**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	4.9400e-003	6.0000e-003	0.0764	2.8000e-004	0.0224	1.7000e-004	0.0225	5.9300e-003	1.6000e-004	6.0900e-003						
Total	**4.9400e-003**	**6.0000e-003**	**0.0764**	**2.8000e-004**	**0.0224**	**1.7000e-004**	**0.0225**	**5.9300e-003**	**1.6000e-004**	**6.0900e-003**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	26.0742					0.0000	0.0000		0.0000	0.0000						
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708						
Total	**26.2659**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	4.9400e-003	6.0000e-003	0.0764	2.8000e-004	0.0224	1.7000e-004	0.0225	5.9300e-003	1.6000e-004	6.0900e-003						
Total	**4.9400e-003**	**6.0000e-003**	**0.0764**	**2.8000e-004**	**0.0224**	**1.7000e-004**	**0.0225**	**5.9300e-003**	**1.6000e-004**	**6.0900e-003**						

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6365	6.1571	8.6805	0.0134		0.3047	0.3047		0.2812	0.2812						
Paving	0.1225					0.0000	0.0000		0.0000	0.0000						
Total	**0.7590**	**6.1571**	**8.6805**	**0.0134**		**0.3047**	**0.3047**		**0.2812**	**0.2812**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0321	0.0390	0.4966	1.8400e-003	0.1453	1.1100e-003	0.1464	0.0385	1.0300e-003	0.0396						
Total	**0.0321**	**0.0390**	**0.4966**	**1.8400e-003**	**0.1453**	**1.1100e-003**	**0.1464**	**0.0385**	**1.0300e-003**	**0.0396**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6365	6.1571	8.6805	0.0134		0.3047	0.3047		0.2812	0.2812						
Paving	0.1225					0.0000	0.0000		0.0000	0.0000						
Total	**0.7590**	**6.1571**	**8.6805**	**0.0134**		**0.3047**	**0.3047**		**0.2812**	**0.2812**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0321	0.0390	0.4966	1.8400e-003	0.1453	1.1100e-003	0.1464	0.0385	1.0300e-003	0.0396						
Total	**0.0321**	**0.0390**	**0.4966**	**1.8400e-003**	**0.1453**	**1.1100e-003**	**0.1464**	**0.0385**	**1.0300e-003**	**0.0396**						

CUC - Construction Phase 4

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Educational	5,625.00	User Defined Unit	0.13	5,625.00	0
Other Asphalt Surfaces	81.46	1000sqft	1.87	81,457.20	0
Other Non-Asphalt Surfaces	1,284.19	1000sqft	29.48	1,284,186.60	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - User Defined Educational - Restroom

Construction Phase - Total days based on CalEEMod defaults for work area

Off-road Equipment -

Off-road Equipment - Based on defaults for size of work area

Off-road Equipment -

Off-road Equipment - Based on size of work area

Off-road Equipment -

Trips and VMT - Based on size of work area

Grading -

Architectural Coating - Based on 5,625 SF building

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	685,634.00	2,813.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,056,903.00	8,438.00
tblConstructionPhase	NumDays	35.00	5.00
tblConstructionPhase	NumDays	500.00	100.00
tblConstructionPhase	NumDays	45.00	110.00
tblConstructionPhase	NumDays	35.00	40.00
tblConstructionPhase	NumDays	20.00	40.00
tblLandUse	LandUseSquareFeet	0.00	5,625.00
tblLandUse	LandUseSquareFeet	81,460.00	81,457.20
tblLandUse	LandUseSquareFeet	1,284,190.00	1,284,186.60
tblLandUse	LotAcreage	0.00	0.13
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2024
tblTripsAndVMT	VendorTripNumber	225.00	1.00
tblTripsAndVMT	WorkerTripNumber	576.00	8.00
tblTripsAndVMT	WorkerTripNumber	115.00	2.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	3.8174	38.4986	35.8303	0.0645	18.2675	1.7291	19.8163	9.9840	1.5908	11.4090						
2023	26.2709	6.4402	9.1301	0.0151	0.1453	0.3201	0.4511	0.0385	0.2945	0.3208						
Total	**30.0883**	**44.9388**	**44.9604**	**0.0795**	**18.4128**	**2.0492**	**20.2675**	**10.0226**	**1.8853**	**11.7298**						

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	3.8174	38.4986	35.8303	0.0645	18.2675	1.7291	19.8163	9.9840	1.5908	11.4090						
2023	26.2709	6.4402	9.1301	0.0151	0.1453	0.3201	0.4511	0.0385	0.2945	0.3208						
Total	**30.0883**	**44.9388**	**44.9604**	**0.0795**	**18.4128**	**2.0492**	**20.2675**	**10.0226**	**1.8853**	**11.7298**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	2/1/2022	3/28/2022	5	40	
2	Grading	Grading	3/29/2022	8/29/2022	5	110	
3	Building Construction	Building Construction	8/30/2022	1/16/2023	5	100	
4	Architectural Coating	Architectural Coating	1/17/2023	1/23/2023	5	5	
5	Paving	Paving	1/24/2023	3/20/2023	5	40	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 275

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 8,438; Non-Residential Outdoor: 2,813 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Generator Sets	0	0.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Welders	0	0.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	8.00	1.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307						
Off-Road	3.2212	32.6496	29.9722	0.0391		1.5473	1.5473		1.4236	1.4236						
Total	**3.2212**	**32.6496**	**29.9722**	**0.0391**	**18.0663**	**1.5473**	**19.6136**	**9.9307**	**1.4236**	**11.3542**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0477	0.0628	0.6611	2.3800e-003	0.2012	1.5400e-003	0.2027	0.0534	1.4300e-003	0.0548						
Total	**0.0477**	**0.0628**	**0.6611**	**2.3800e-003**	**0.2012**	**1.5400e-003**	**0.2027**	**0.0534**	**1.4300e-003**	**0.0548**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307						
Off-Road	3.2212	32.6496	29.9722	0.0391		1.5473	1.5473		1.4236	1.4236						
Total	**3.2212**	**32.6496**	**29.9722**	**0.0391**	**18.0663**	**1.5473**	**19.6136**	**9.9307**	**1.4236**	**11.3542**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0477	0.0628	0.6611	2.3800e-003	0.2012	1.5400e-003	0.2027	0.0534	1.4300e-003	0.0548						
Total	**0.0477**	**0.0628**	**0.6611**	**2.3800e-003**	**0.2012**	**1.5400e-003**	**0.2027**	**0.0534**	**1.4300e-003**	**0.0548**						

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965						
Off-Road	3.7643	38.4288	35.0957	0.0618		1.7274	1.7274		1.5892	1.5892						
Total	**3.7643**	**38.4288**	**35.0957**	**0.0618**	**8.6733**	**1.7274**	**10.4007**	**3.5965**	**1.5892**	**5.1857**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0530	0.0698	0.7346	2.6500e-003	0.2236	1.7100e-003	0.2253	0.0593	1.5900e-003	0.0609						
Total	**0.0530**	**0.0698**	**0.7346**	**2.6500e-003**	**0.2236**	**1.7100e-003**	**0.2253**	**0.0593**	**1.5900e-003**	**0.0609**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965						
Off-Road	3.7643	38.4288	35.0957	0.0618		1.7274	1.7274		1.5892	1.5892						
Total	**3.7643**	**38.4288**	**35.0957**	**0.0618**	**8.6733**	**1.7274**	**10.4007**	**3.5965**	**1.5892**	**5.1857**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0530	0.0698	0.7346	2.6500e-003	0.2236	1.7100e-003	0.2253	0.0593	1.5900e-003	0.0609						
Total	**0.0530**	**0.0698**	**0.7346**	**2.6500e-003**	**0.2236**	**1.7100e-003**	**0.2253**	**0.0593**	**1.5900e-003**	**0.0609**						

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6823	6.9805	7.1322	0.0113		0.3700	0.3700		0.3404	0.3404						
Total	**0.6823**	**6.9805**	**7.1322**	**0.0113**		**0.3700**	**0.3700**		**0.3404**	**0.3404**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	6.6100e-003	0.0461	0.0976	2.1000e-004	6.2500e-003	9.3000e-004	7.1900e-003	1.7800e-003	8.6000e-004	2.6400e-003						
Worker	0.0212	0.0279	0.2938	1.0600e-003	0.0894	6.8000e-004	0.0901	0.0237	6.3000e-004	0.0244						
Total	**0.0278**	**0.0740**	**0.3915**	**1.2700e-003**	**0.0957**	**1.6100e-003**	**0.0973**	**0.0255**	**1.4900e-003**	**0.0270**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6823	6.9805	7.1322	0.0113		0.3700	0.3700		0.3404	0.3404						
Total	**0.6823**	**6.9805**	**7.1322**	**0.0113**		**0.3700**	**0.3700**		**0.3404**	**0.3404**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	6.6100e-003	0.0461	0.0976	2.1000e-004	6.2500e-003	9.3000e-004	7.1900e-003	1.7800e-003	8.6000e-004	2.6400e-003						
Worker	0.0212	0.0279	0.2938	1.0600e-003	0.0894	6.8000e-004	0.0901	0.0237	6.3000e-004	0.0244						
Total	**0.0278**	**0.0740**	**0.3915**	**1.2700e-003**	**0.0957**	**1.6100e-003**	**0.0973**	**0.0255**	**1.4900e-003**	**0.0270**						

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6284	6.3773	7.0772	0.0114		0.3185	0.3185		0.2930	0.2930						
Total	**0.6284**	**6.3773**	**7.0772**	**0.0114**		**0.3185**	**0.3185**		**0.2930**	**0.2930**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	6.1400e-003	0.0366	0.0940	2.1000e-004	6.2500e-003	9.2000e-004	7.1800e-003	1.7800e-003	8.5000e-004	2.6300e-003						
Worker	0.0201	0.0263	0.2767	1.0600e-003	0.0894	6.8000e-004	0.0901	0.0237	6.3000e-004	0.0244						
Total	**0.0262**	**0.0629**	**0.3707**	**1.2700e-003**	**0.0957**	**1.6000e-003**	**0.0973**	**0.0255**	**1.4800e-003**	**0.0270**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6284	6.3773	7.0772	0.0114		0.3185	0.3185		0.2930	0.2930						
Total	**0.6284**	**6.3773**	**7.0772**	**0.0114**		**0.3185**	**0.3185**		**0.2930**	**0.2930**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	6.1400e-003	0.0366	0.0940	2.1000e-004	6.2500e-003	9.2000e-004	7.1800e-003	1.7800e-003	8.5000e-004	2.6300e-003						
Worker	0.0201	0.0263	0.2767	1.0600e-003	0.0894	6.8000e-004	0.0901	0.0237	6.3000e-004	0.0244						
Total	**0.0262**	**0.0629**	**0.3707**	**1.2700e-003**	**0.0957**	**1.6000e-003**	**0.0973**	**0.0255**	**1.4800e-003**	**0.0270**						

3.5 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	26.0742					0.0000	0.0000		0.0000	0.0000						
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708						
Total	**26.2659**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	5.0200e-003	6.5700e-003	0.0692	2.6000e-004	0.0224	1.7000e-004	0.0225	5.9300e-003	1.6000e-004	6.0900e-003						
Total	**5.0200e-003**	**6.5700e-003**	**0.0692**	**2.6000e-004**	**0.0224**	**1.7000e-004**	**0.0225**	**5.9300e-003**	**1.6000e-004**	**6.0900e-003**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	26.0742					0.0000	0.0000		0.0000	0.0000						
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708						
Total	**26.2659**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	5.0200e-003	6.5700e-003	0.0692	2.6000e-004	0.0224	1.7000e-004	0.0225	5.9300e-003	1.6000e-004	6.0900e-003						
Total	**5.0200e-003**	**6.5700e-003**	**0.0692**	**2.6000e-004**	**0.0224**	**1.7000e-004**	**0.0225**	**5.9300e-003**	**1.6000e-004**	**6.0900e-003**						

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6365	6.1571	8.6805	0.0134		0.3047	0.3047		0.2812	0.2812						
Paving	0.1225					0.0000	0.0000		0.0000	0.0000						
Total	**0.7590**	**6.1571**	**8.6805**	**0.0134**		**0.3047**	**0.3047**		**0.2812**	**0.2812**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0327	0.0427	0.4497	1.7200e-003	0.1453	1.1100e-003	0.1464	0.0385	1.0300e-003	0.0396						
Total	**0.0327**	**0.0427**	**0.4497**	**1.7200e-003**	**0.1453**	**1.1100e-003**	**0.1464**	**0.0385**	**1.0300e-003**	**0.0396**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6365	6.1571	8.6805	0.0134		0.3047	0.3047		0.2812	0.2812						
Paving	0.1225					0.0000	0.0000		0.0000	0.0000						
Total	**0.7590**	**6.1571**	**8.6805**	**0.0134**		**0.3047**	**0.3047**		**0.2812**	**0.2812**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0327	0.0427	0.4497	1.7200e-003	0.1453	1.1100e-003	0.1464	0.0385	1.0300e-003	0.0396						
Total	**0.0327**	**0.0427**	**0.4497**	**1.7200e-003**	**0.1453**	**1.1100e-003**	**0.1464**	**0.0385**	**1.0300e-003**	**0.0396**						

CUC - Construction Phase 4

South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Educational	5,625.00	User Defined Unit	0.13	5,625.00	0
Other Asphalt Surfaces	81.46	1000sqft	1.87	81,457.20	0
Other Non-Asphalt Surfaces	1,284.19	1000sqft	29.48	1,284,186.60	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - User Defined Educational - Restroom

Construction Phase - Total days based on CalEEMod defaults for work area

Off-road Equipment -

Off-road Equipment - Based on defaults for size of work area

Off-road Equipment -

Off-road Equipment - Based on size of work area

Off-road Equipment -

Trips and VMT - Based on size of work area

Grading -

Architectural Coating - Based on 5,625 SF building

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	685,634.00	2,813.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,056,903.00	8,438.00
tblConstructionPhase	NumDays	35.00	5.00
tblConstructionPhase	NumDays	500.00	100.00
tblConstructionPhase	NumDays	45.00	110.00
tblConstructionPhase	NumDays	35.00	40.00
tblConstructionPhase	NumDays	20.00	40.00
tblLandUse	LandUseSquareFeet	0.00	5,625.00
tblLandUse	LandUseSquareFeet	81,460.00	81,457.20
tblLandUse	LandUseSquareFeet	1,284,190.00	1,284,186.60
tblLandUse	LotAcreage	0.00	0.13
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2024
tblTripsAndVMT	VendorTripNumber	225.00	1.00
tblTripsAndVMT	WorkerTripNumber	576.00	8.00
tblTripsAndVMT	WorkerTripNumber	115.00	2.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022											0.0000	427.9798	427.9798	0.1339	0.0000	430.7910
2023											0.0000	32.0043	32.0043	9.2800e-003	0.0000	32.1991
Total											**0.0000**	**459.9841**	**459.9841**	**0.1432**	**0.0000**	**462.9902**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022											0.0000	427.9793	427.9793	0.1339	0.0000	430.7905
2023											0.0000	32.0043	32.0043	9.2800e-003	0.0000	32.1991
Total											**0.0000**	**459.9836**	**459.9836**	**0.1432**	**0.0000**	**462.9896**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction											**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	2/1/2022	3/28/2022	5	40	
2	Grading	Grading	3/29/2022	8/29/2022	5	110	
3	Building Construction	Building Construction	8/30/2022	1/16/2023	5	100	
4	Architectural Coating	Architectural Coating	1/17/2023	1/23/2023	5	5	
5	Paving	Paving	1/24/2023	3/20/2023	5	40	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 275

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 8,438; Non-Residential Outdoor: 2,813 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Generator Sets	0	0.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Welders	0	0.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	8.00	1.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	68.7965	68.7965	0.0223	0.0000	69.2637
Total											**0.0000**	**68.7965**	**68.7965**	**0.0223**	**0.0000**	**69.2637**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	3.0606	3.0606	1.4000e-004	0.0000	3.0635
Total											**0.0000**	**3.0606**	**3.0606**	**1.4000e-004**	**0.0000**	**3.0635**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	68.7964	68.7964	0.0223	0.0000	69.2636
Total											**0.0000**	**68.7964**	**68.7964**	**0.0223**	**0.0000**	**69.2636**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	3.0606	3.0606	1.4000e-004	0.0000	3.0635
Total											**0.0000**	**3.0606**	**3.0606**	**1.4000e-004**	**0.0000**	**3.0635**

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	298.6100	298.6100	0.0966	0.0000	300.6381
Total											**0.0000**	**298.6100**	**298.6100**	**0.0966**	**0.0000**	**300.6381**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	9.3519	9.3519	4.2000e-004	0.0000	9.3608
Total											**0.0000**	**9.3519**	**9.3519**	**4.2000e-004**	**0.0000**	**9.3608**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	298.6096	298.6096	0.0966	0.0000	300.6377
Total											**0.0000**	**298.6096**	**298.6096**	**0.0966**	**0.0000**	**300.6377**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	9.3519	9.3519	4.2000e-004	0.0000	9.3608
Total											**0.0000**	**9.3519**	**9.3519**	**4.2000e-004**	**0.0000**	**9.3608**

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	44.3216	44.3216	0.0143	0.0000	44.6226
Total											**0.0000**	**44.3216**	**44.3216**	**0.0143**	**0.0000**	**44.6226**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.8127	0.8127	1.0000e-005	0.0000	0.8128
Worker											0.0000	3.0266	3.0266	1.4000e-004	0.0000	3.0295
Total											**0.0000**	**3.8393**	**3.8393**	**1.5000e-004**	**0.0000**	**3.8423**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	44.3215	44.3215	0.0143	0.0000	44.6225
Total											**0.0000**	**44.3215**	**44.3215**	**0.0143**	**0.0000**	**44.6225**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.8127	0.8127	1.0000e-005	0.0000	0.8128
Worker											0.0000	3.0266	3.0266	1.4000e-004	0.0000	3.0295
Total											**0.0000**	**3.8393**	**3.8393**	**1.5000e-004**	**0.0000**	**3.8423**

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	5.4813	5.4813	1.7700e-003	0.0000	5.5185
Total											**0.0000**	**5.4813**	**5.4813**	**1.7700e-003**	**0.0000**	**5.5185**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.1000	0.1000	0.0000	0.0000	0.1000
Worker											0.0000	0.3683	0.3683	2.0000e-005	0.0000	0.3687
Total											**0.0000**	**0.4683**	**0.4683**	**2.0000e-005**	**0.0000**	**0.4686**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	5.4813	5.4813	1.7700e-003	0.0000	5.5185
Total											**0.0000**	**5.4813**	**5.4813**	**1.7700e-003**	**0.0000**	**5.5185**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.1000	0.1000	0.0000	0.0000	0.1000
Worker											0.0000	0.3683	0.3683	2.0000e-005	0.0000	0.3687
Total											**0.0000**	**0.4683**	**0.4683**	**2.0000e-005**	**0.0000**	**0.4686**

3.5 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6391
Total											**0.0000**	**0.6383**	**0.6383**	**4.0000e-005**	**0.0000**	**0.6391**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0419	0.0419	0.0000	0.0000	0.0419
Total											**0.0000**	**0.0419**	**0.0419**	**0.0000**	**0.0000**	**0.0419**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6391
Total											**0.0000**	**0.6383**	**0.6383**	**4.0000e-005**	**0.0000**	**0.6391**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0419	0.0419	0.0000	0.0000	0.0419
Total											**0.0000**	**0.0419**	**0.0419**	**0.0000**	**0.0000**	**0.0419**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	23.1982	23.1982	7.3500e-003	0.0000	23.3526
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**23.1982**	**23.1982**	**7.3500e-003**	**0.0000**	**23.3526**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	2.1764	2.1764	1.0000e-004	0.0000	2.1784
Total											**0.0000**	**2.1764**	**2.1764**	**1.0000e-004**	**0.0000**	**2.1784**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	23.1981	23.1981	7.3500e-003	0.0000	23.3525
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**23.1981**	**23.1981**	**7.3500e-003**	**0.0000**	**23.3525**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	2.1764	2.1764	1.0000e-004	0.0000	2.1784
Total											**0.0000**	**2.1764**	**2.1764**	**1.0000e-004**	**0.0000**	**2.1784**

CUC - Construction Phase 5

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Commercial	30,000.00	User Defined Unit	0.69	30,000.00	0
Other Asphalt Surfaces	37.46	1000sqft	0.86	37,461.60	0
Other Non-Asphalt Surfaces	575.43	1000sqft	13.21	575,427.60	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - User Defined Commercial - CMC Support Building

Construction Phase - Total days based on CalEEMod defaults for work area

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Based on size of work area

Off-road Equipment -

Trips and VMT - Based on size of work area

Grading -

Architectural Coating - Based on 30,000 building

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	321,445.00	15,000.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	964,334.00	45,000.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblConstructionPhase	NumDays	20.00	5.00
tblConstructionPhase	NumDays	300.00	100.00
tblConstructionPhase	NumDays	20.00	5.00
tblConstructionPhase	PhaseEndDate	7/18/2025	10/31/2025
tblConstructionPhase	PhaseStartDate	11/8/2025	11/10/2025
tblConstructionPhase	PhaseStartDate	3/1/2025	6/16/2025
tblConstructionPhase	PhaseStartDate	11/1/2025	11/3/2025
tblLandUse	LandUseSquareFeet	0.00	30,000.00
tblLandUse	LandUseSquareFeet	37,460.00	37,461.60
tblLandUse	LandUseSquareFeet	575,430.00	575,427.60
tblLandUse	LotAcreage	0.00	0.69
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblProjectCharacteristics	OperationalYear	2014	2025
tblTripsAndVMT	VendorTripNumber	105.00	3.00
tblTripsAndVMT	WorkerTripNumber	267.00	8.00
tblTripsAndVMT	WorkerTripNumber	20.00	15.00
tblTripsAndVMT	WorkerTripNumber	53.00	2.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2025	55.7954	27.3147	32.0462	0.0646	18.2675	1.1884	19.2983	9.9840	1.0934	10.9324						
Total	**55.7954**	**27.3147**	**32.0462**	**0.0646**	**18.2675**	**1.1884**	**19.2983**	**9.9840**	**1.0934**	**10.9324**						

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2025	55.7954	27.3147	32.0462	0.0646	18.2675	1.1884	19.2983	9.9840	1.0934	10.9324						
Total	**55.7954**	**27.3147**	**32.0462**	**0.0646**	**18.2675**	**1.1884**	**19.2983**	**9.9840**	**1.0934**	**10.9324**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/5/2025	1/17/2025	5	10	
2	Grading	Grading	1/18/2025	2/28/2025	5	30	
3	Building Construction	Building Construction	6/16/2025	10/31/2025	5	100	
4	Paving	Paving	11/3/2025	11/7/2025	5	5	
5	Architectural Coating	Architectural Coating	11/10/2025	11/14/2025	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 45,000; Non-Residential Outdoor: 15,000 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	125	0.42
Paving	Paving Equipment	0	0.00	130	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	8.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307						
Off-Road	2.5083	23.5257	24.8879	0.0392		1.0293	1.0293		0.9470	0.9470						
Total	**2.5083**	**23.5257**	**24.8879**	**0.0392**	**18.0663**	**1.0293**	**19.0956**	**9.9307**	**0.9470**	**10.8776**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0404	0.0486	0.6252	2.5600e-003	0.2012	1.5600e-003	0.2028	0.0534	1.4500e-003	0.0548						
Total	**0.0404**	**0.0486**	**0.6252**	**2.5600e-003**	**0.2012**	**1.5600e-003**	**0.2028**	**0.0534**	**1.4500e-003**	**0.0548**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307						
Off-Road	2.5083	23.5257	24.8879	0.0392		1.0293	1.0293		0.9470	0.9470						
Total	**2.5083**	**23.5257**	**24.8879**	**0.0392**	**18.0663**	**1.0293**	**19.0956**	**9.9307**	**0.9470**	**10.8776**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0404	0.0486	0.6252	2.5600e-003	0.2012	1.5600e-003	0.2028	0.0534	1.4500e-003	0.0548						
Total	**0.0404**	**0.0486**	**0.6252**	**2.5600e-003**	**0.2012**	**1.5600e-003**	**0.2028**	**0.0534**	**1.4500e-003**	**0.0548**						

3.3 Grading - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965						
Off-Road	3.0022	27.2606	31.3515	0.0618		1.1867	1.1867		1.0918	1.0918						
Total	**3.0022**	**27.2606**	**31.3515**	**0.0618**	**8.6733**	**1.1867**	**9.8600**	**3.5965**	**1.0918**	**4.6883**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0449	0.0540	0.6947	2.8400e-003	0.2236	1.7300e-003	0.2253	0.0593	1.6100e-003	0.0609						
Total	**0.0449**	**0.0540**	**0.6947**	**2.8400e-003**	**0.2236**	**1.7300e-003**	**0.2253**	**0.0593**	**1.6100e-003**	**0.0609**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965						
Off-Road	3.0022	27.2606	31.3515	0.0618		1.1867	1.1867		1.0918	1.0918						
Total	**3.0022**	**27.2606**	**31.3515**	**0.0618**	**8.6733**	**1.1867**	**9.8600**	**3.5965**	**1.0918**	**4.6883**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0449	0.0540	0.6947	2.8400e-003	0.2236	1.7300e-003	0.2253	0.0593	1.6100e-003	0.0609						
Total	**0.0449**	**0.0540**	**0.6947**	**2.8400e-003**	**0.2236**	**1.7300e-003**	**0.2253**	**0.0593**	**1.6100e-003**	**0.0609**						

3.4 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939						
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0165	0.1066	0.2192	6.5000e-004	0.0188	2.7600e-003	0.0215	5.3400e-003	2.5400e-003	7.8900e-003						
Worker	0.0180	0.0216	0.2779	1.1400e-003	0.0894	6.9000e-004	0.0901	0.0237	6.4000e-004	0.0244						
Total	**0.0344**	**0.1282**	**0.4971**	**1.7900e-003**	**0.1082**	**3.4500e-003**	**0.1116**	**0.0291**	**3.1800e-003**	**0.0323**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939						
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0165	0.1066	0.2192	6.5000e-004	0.0188	2.7600e-003	0.0215	5.3400e-003	2.5400e-003	7.8900e-003						
Worker	0.0180	0.0216	0.2779	1.1400e-003	0.0894	6.9000e-004	0.0901	0.0237	6.4000e-004	0.0244						
Total	**0.0344**	**0.1282**	**0.4971**	**1.7900e-003**	**0.1082**	**3.4500e-003**	**0.1116**	**0.0291**	**3.1800e-003**	**0.0323**						

3.5 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7288	6.0128	8.7374	0.0141		0.2677	0.2677		0.2538	0.2538						
Paving	0.4506					0.0000	0.0000		0.0000	0.0000						
Total	**1.1795**	**6.0128**	**8.7374**	**0.0141**		**0.2677**	**0.2677**		**0.2538**	**0.2538**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0337	0.0405	0.5210	2.1300e-003	0.1677	1.3000e-003	0.1690	0.0445	1.2100e-003	0.0457						
Total	**0.0337**	**0.0405**	**0.5210**	**2.1300e-003**	**0.1677**	**1.3000e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7288	6.0128	8.7374	0.0141		0.2677	0.2677		0.2538	0.2538						
Paving	0.4506					0.0000	0.0000		0.0000	0.0000						
Total	**1.1795**	**6.0128**	**8.7374**	**0.0141**		**0.2677**	**0.2677**		**0.2538**	**0.2538**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0337	0.0405	0.5210	2.1300e-003	0.1677	1.3000e-003	0.1690	0.0445	1.2100e-003	0.0457						
Total	**0.0337**	**0.0405**	**0.5210**	**2.1300e-003**	**0.1677**	**1.3000e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**						

3.6 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	55.6200					0.0000	0.0000		0.0000	0.0000						
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515						
Total	**55.7909**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	4.4900e-003	5.4000e-003	0.0695	2.8000e-004	0.0224	1.7000e-004	0.0225	5.9300e-003	1.6000e-004	6.0900e-003						
Total	**4.4900e-003**	**5.4000e-003**	**0.0695**	**2.8000e-004**	**0.0224**	**1.7000e-004**	**0.0225**	**5.9300e-003**	**1.6000e-004**	**6.0900e-003**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	55.6200					0.0000	0.0000		0.0000	0.0000						
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515						
Total	**55.7909**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	4.4900e-003	5.4000e-003	0.0695	2.8000e-004	0.0224	1.7000e-004	0.0225	5.9300e-003	1.6000e-004	6.0900e-003						
Total	**4.4900e-003**	**5.4000e-003**	**0.0695**	**2.8000e-004**	**0.0224**	**1.7000e-004**	**0.0225**	**5.9300e-003**	**1.6000e-004**	**6.0900e-003**						

CUC - Construction Phase 5

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Commercial	30,000.00	User Defined Unit	0.69	30,000.00	0
Other Asphalt Surfaces	37.46	1000sqft	0.86	37,461.60	0
Other Non-Asphalt Surfaces	575.43	1000sqft	13.21	575,427.60	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - User Defined Commercial - CMC Support Building

Construction Phase - Total days based on CalEEMod defaults for work area

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Based on size of work area

Off-road Equipment -

Trips and VMT - Based on size of work area

Grading -

Architectural Coating - Based on 30,000 building

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	321,445.00	15,000.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	964,334.00	45,000.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblConstructionPhase	NumDays	20.00	5.00
tblConstructionPhase	NumDays	300.00	100.00
tblConstructionPhase	NumDays	20.00	5.00
tblConstructionPhase	PhaseEndDate	7/18/2025	10/31/2025
tblConstructionPhase	PhaseStartDate	11/8/2025	11/10/2025
tblConstructionPhase	PhaseStartDate	3/1/2025	6/16/2025
tblConstructionPhase	PhaseStartDate	11/1/2025	11/3/2025
tblLandUse	LandUseSquareFeet	0.00	30,000.00
tblLandUse	LandUseSquareFeet	37,460.00	37,461.60
tblLandUse	LandUseSquareFeet	575,430.00	575,427.60
tblLandUse	LotAcreage	0.00	0.69
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblProjectCharacteristics	OperationalYear	2014	2025
tblTripsAndVMT	VendorTripNumber	105.00	3.00
tblTripsAndVMT	WorkerTripNumber	267.00	8.00
tblTripsAndVMT	WorkerTripNumber	20.00	15.00
tblTripsAndVMT	WorkerTripNumber	53.00	2.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2025	55.7954	27.3197	31.9783	0.0645	18.2675	1.1884	19.2983	9.9840	1.0934	10.9324						
Total	**55.7954**	**27.3197**	**31.9783**	**0.0645**	**18.2675**	**1.1884**	**19.2983**	**9.9840**	**1.0934**	**10.9324**						

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2025	55.7954	27.3197	31.9783	0.0645	18.2675	1.1884	19.2983	9.9840	1.0934	10.9324	0.0000	6,160.1569	6,160.1569	1.9425	0.0000	6,200.9495
Total	**55.7954**	**27.3197**	**31.9783**	**0.0645**	**18.2675**	**1.1884**	**19.2983**	**9.9840**	**1.0934**	**10.9324**	**0.0000**	**6,160.1569**	**6,160.1569**	**1.9425**	**0.0000**	**6,200.9495**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/5/2025	1/17/2025	5	10	
2	Grading	Grading	1/18/2025	2/28/2025	5	30	
3	Building Construction	Building Construction	6/16/2025	10/31/2025	5	100	
4	Paving	Paving	11/3/2025	11/7/2025	5	5	
5	Architectural Coating	Architectural Coating	11/10/2025	11/14/2025	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 45,000; Non-Residential Outdoor: 15,000 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	125	0.42
Paving	Paving Equipment	0	0.00	130	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	8.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307						
Off-Road	2.5083	23.5257	24.8879	0.0392		1.0293	1.0293		0.9470	0.9470						
Total	**2.5083**	**23.5257**	**24.8879**	**0.0392**	**18.0663**	**1.0293**	**19.0956**	**9.9307**	**0.9470**	**10.8776**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0411	0.0532	0.5641	2.4000e-003	0.2012	1.5600e-003	0.2028	0.0534	1.4500e-003	0.0548						
Total	**0.0411**	**0.0532**	**0.5641**	**2.4000e-003**	**0.2012**	**1.5600e-003**	**0.2028**	**0.0534**	**1.4500e-003**	**0.0548**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307						
Off-Road	2.5083	23.5257	24.8879	0.0392		1.0293	1.0293		0.9470	0.9470						
Total	**2.5083**	**23.5257**	**24.8879**	**0.0392**	**18.0663**	**1.0293**	**19.0956**	**9.9307**	**0.9470**	**10.8776**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0411	0.0532	0.5641	2.4000e-003	0.2012	1.5600e-003	0.2028	0.0534	1.4500e-003	0.0548						
Total	**0.0411**	**0.0532**	**0.5641**	**2.4000e-003**	**0.2012**	**1.5600e-003**	**0.2028**	**0.0534**	**1.4500e-003**	**0.0548**						

3.3 Grading - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965						
Off-Road	3.0022	27.2606	31.3515	0.0618		1.1867	1.1867		1.0918	1.0918						
Total	**3.0022**	**27.2606**	**31.3515**	**0.0618**	**8.6733**	**1.1867**	**9.8600**	**3.5965**	**1.0918**	**4.6883**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0456	0.0591	0.6268	2.6600e-003	0.2236	1.7300e-003	0.2253	0.0593	1.6100e-003	0.0609						
Total	**0.0456**	**0.0591**	**0.6268**	**2.6600e-003**	**0.2236**	**1.7300e-003**	**0.2253**	**0.0593**	**1.6100e-003**	**0.0609**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965						
Off-Road	3.0022	27.2606	31.3515	0.0618		1.1867	1.1867		1.0918	1.0918						
Total	**3.0022**	**27.2606**	**31.3515**	**0.0618**	**8.6733**	**1.1867**	**9.8600**	**3.5965**	**1.0918**	**4.6883**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0456	0.0591	0.6268	2.6600e-003	0.2236	1.7300e-003	0.2253	0.0593	1.6100e-003	0.0609						
Total	**0.0456**	**0.0591**	**0.6268**	**2.6600e-003**	**0.2236**	**1.7300e-003**	**0.2253**	**0.0593**	**1.6100e-003**	**0.0609**						

3.4 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939						
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0178	0.1085	0.2715	6.4000e-004	0.0188	2.7800e-003	0.0215	5.3400e-003	2.5600e-003	7.9000e-003						
Worker	0.0183	0.0236	0.2507	1.0600e-003	0.0894	6.9000e-004	0.0901	0.0237	6.4000e-004	0.0244						
Total	**0.0360**	**0.1322**	**0.5222**	**1.7000e-003**	**0.1082**	**3.4700e-003**	**0.1117**	**0.0291**	**3.2000e-003**	**0.0323**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3615	12.4097	16.0518	0.0269		0.5250	0.5250		0.4939	0.4939						
Total	**1.3615**	**12.4097**	**16.0518**	**0.0269**		**0.5250**	**0.5250**		**0.4939**	**0.4939**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0178	0.1085	0.2715	6.4000e-004	0.0188	2.7800e-003	0.0215	5.3400e-003	2.5600e-003	7.9000e-003						
Worker	0.0183	0.0236	0.2507	1.0600e-003	0.0894	6.9000e-004	0.0901	0.0237	6.4000e-004	0.0244						
Total	**0.0360**	**0.1322**	**0.5222**	**1.7000e-003**	**0.1082**	**3.4700e-003**	**0.1117**	**0.0291**	**3.2000e-003**	**0.0323**						

3.5 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7288	6.0128	8.7374	0.0141		0.2677	0.2677		0.2538	0.2538						
Paving	0.4506					0.0000	0.0000		0.0000	0.0000						
Total	**1.1795**	**6.0128**	**8.7374**	**0.0141**		**0.2677**	**0.2677**		**0.2538**	**0.2538**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0342	0.0443	0.4701	2.0000e-003	0.1677	1.3000e-003	0.1690	0.0445	1.2100e-003	0.0457						
Total	**0.0342**	**0.0443**	**0.4701**	**2.0000e-003**	**0.1677**	**1.3000e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7288	6.0128	8.7374	0.0141		0.2677	0.2677		0.2538	0.2538						
Paving	0.4506					0.0000	0.0000		0.0000	0.0000						
Total	**1.1795**	**6.0128**	**8.7374**	**0.0141**		**0.2677**	**0.2677**		**0.2538**	**0.2538**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0342	0.0443	0.4701	2.0000e-003	0.1677	1.3000e-003	0.1690	0.0445	1.2100e-003	0.0457						
Total	**0.0342**	**0.0443**	**0.4701**	**2.0000e-003**	**0.1677**	**1.3000e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**						

3.6 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	55.6200					0.0000	0.0000		0.0000	0.0000						
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515						
Total	**55.7909**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	4.5600e-003	5.9100e-003	0.0627	2.7000e-004	0.0224	1.7000e-004	0.0225	5.9300e-003	1.6000e-004	6.0900e-003						
Total	**4.5600e-003**	**5.9100e-003**	**0.0627**	**2.7000e-004**	**0.0224**	**1.7000e-004**	**0.0225**	**5.9300e-003**	**1.6000e-004**	**6.0900e-003**						

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	55.6200					0.0000	0.0000		0.0000	0.0000						
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515						
Total	**55.7909**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	4.5600e-003	5.9100e-003	0.0627	2.7000e-004	0.0224	1.7000e-004	0.0225	5.9300e-003	1.6000e-004	6.0900e-003						
Total	**4.5600e-003**	**5.9100e-003**	**0.0627**	**2.7000e-004**	**0.0224**	**1.7000e-004**	**0.0225**	**5.9300e-003**	**1.6000e-004**	**6.0900e-003**						

CUC - Construction Phase 4

South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Commercial	30,000.00	User Defined Unit	0.69	30,000.00	0
Other Asphalt Surfaces	37.46	1000sqft	0.86	37,461.60	0
Other Non-Asphalt Surfaces	575.43	1000sqft	13.21	575,427.60	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - User Defined Commercial - CMC Support Building

Construction Phase - Total days based on CalEEMod defaults for work area

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Based on size of work area

Grading -

Trips and VMT - Based on size of work area

Architectural Coating - Based on 30,000 building

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	321,445.00	15,000.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	964,334.00	45,000.00
tblConstructionPhase	NumDays	300.00	100.00
tblConstructionPhase	NumDays	20.00	5.00
tblConstructionPhase	NumDays	20.00	5.00
tblConstructionPhase	PhaseEndDate	7/18/2025	10/31/2025
tblConstructionPhase	PhaseStartDate	3/1/2025	6/16/2025
tblConstructionPhase	PhaseStartDate	11/8/2025	11/10/2025
tblConstructionPhase	PhaseStartDate	11/1/2025	11/3/2025
tblLandUse	LandUseSquareFeet	37,460.00	37,461.60
tblLandUse	LandUseSquareFeet	0.00	30,000.00
tblLandUse	LandUseSquareFeet	575,430.00	575,427.60
tblLandUse	LotAcreage	0.00	0.69
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers

tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2025
tblTripsAndVMT	VendorTripNumber	105.00	3.00
tblTripsAndVMT	WorkerTripNumber	20.00	15.00
tblTripsAndVMT	WorkerTripNumber	53.00	2.00
tblTripsAndVMT	WorkerTripNumber	267.00	8.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2025											0.0000	227.2379	227.2379	0.0601	0.0000	228.4989
Total											**0.0000**	**227.2379**	**227.2379**	**0.0601**	**0.0000**	**228.4989**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2025											0.0000	227.2376	227.2376	0.0601	0.0000	228.4986
Total											**0.0000**	**227.2376**	**227.2376**	**0.0601**	**0.0000**	**228.4986**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction											**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/5/2025	1/17/2025	5	10	
2	Grading	Grading	1/18/2025	2/28/2025	5	30	
3	Building Construction	Building Construction	6/16/2025	10/31/2025	5	100	
4	Paving	Paving	11/3/2025	11/7/2025	5	5	
5	Architectural Coating	Architectural Coating	11/10/2025	11/14/2025	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 45,000; Non-Residential Outdoor: 15,000 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Scrapers	2	8.00	361	0.48
Architectural Coating	Air Compressors	1	6.00	78	0.48
Building Construction	Cranes	1	7.00	226	0.29
Grading	Excavators	2	8.00	162	0.38
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Paving	Pavers	1	7.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Building Construction	Welders	1	8.00	46	0.45
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Paving	Air Compressors	1	6.00	78	0.48
Grading	Graders	1	8.00	174	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	0	0.00	130	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	2.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	8.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	17.2086	17.2086	5.5700e-003	0.0000	17.3255
Total											**0.0000**	**17.2086**	**17.2086**	**5.5700e-003**	**0.0000**	**17.3255**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.7373	0.7373	3.0000e-005	0.0000	0.7379
Total											**0.0000**	**0.7373**	**0.7373**	**3.0000e-005**	**0.0000**	**0.7379**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	17.2086	17.2086	5.5700e-003	0.0000	17.3254
Total											**0.0000**	**17.2086**	**17.2086**	**5.5700e-003**	**0.0000**	**17.3254**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.7373	0.7373	3.0000e-005	0.0000	0.7379
Total											**0.0000**	**0.7373**	**0.7373**	**3.0000e-005**	**0.0000**	**0.7379**

3.3 Grading - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	81.4065	81.4065	0.0263	0.0000	81.9594
Total											**0.0000**	**81.4065**	**81.4065**	**0.0263**	**0.0000**	**81.9594**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	2.4576	2.4576	1.0000e-004	0.0000	2.4598
Total											**0.0000**	**2.4576**	**2.4576**	**1.0000e-004**	**0.0000**	**2.4598**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	81.4064	81.4064	0.0263	0.0000	81.9593
Total											**0.0000**	**81.4064**	**81.4064**	**0.0263**	**0.0000**	**81.9593**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	2.4576	2.4576	1.0000e-004	0.0000	2.4598
Total											**0.0000**	**2.4576**	**2.4576**	**1.0000e-004**	**0.0000**	**2.4598**

3.4 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	115.4797	115.4797	0.0271	0.0000	116.0488
Total											**0.0000**	**115.4797**	**115.4797**	**0.0271**	**0.0000**	**116.0488**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	2.7336	2.7336	2.0000e-005	0.0000	2.7340
Worker											0.0000	3.2768	3.2768	1.4000e-004	0.0000	3.2797
Total											**0.0000**	**6.0104**	**6.0104**	**1.6000e-004**	**0.0000**	**6.0138**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	115.4795	115.4795	0.0271	0.0000	116.0487
Total											**0.0000**	**115.4795**	**115.4795**	**0.0271**	**0.0000**	**116.0487**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	2.7336	2.7336	2.0000e-005	0.0000	2.7340
Worker											0.0000	3.2768	3.2768	1.4000e-004	0.0000	3.2797
Total											**0.0000**	**6.0104**	**6.0104**	**1.6000e-004**	**0.0000**	**6.0138**

3.5 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	2.9514	2.9514	7.1000e-004	0.0000	2.9662
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**2.9514**	**2.9514**	**7.1000e-004**	**0.0000**	**2.9662**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.3072	0.3072	1.0000e-005	0.0000	0.3075
Total											**0.0000**	**0.3072**	**0.3072**	**1.0000e-005**	**0.0000**	**0.3075**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	2.9514	2.9514	7.1000e-004	0.0000	2.9662
Paving											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total											**0.0000**	**2.9514**	**2.9514**	**7.1000e-004**	**0.0000**	**2.9662**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.3072	0.3072	1.0000e-005	0.0000	0.3075
Total											**0.0000**	**0.3072**	**0.3072**	**1.0000e-005**	**0.0000**	**0.3075**

3.6 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	0.6383	0.6383	3.0000e-005	0.0000	0.6390
Total											**0.0000**	**0.6383**	**0.6383**	**3.0000e-005**	**0.0000**	**0.6390**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0410	0.0410	0.0000	0.0000	0.0410
Total											**0.0000**	**0.0410**	**0.0410**	**0.0000**	**0.0000**	**0.0410**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road											0.0000	0.6383	0.6383	3.0000e-005	0.0000	0.6390
Total											**0.0000**	**0.6383**	**0.6383**	**3.0000e-005**	**0.0000**	**0.6390**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.0410	0.0410	0.0000	0.0000	0.0410
Total											**0.0000**	**0.0410**	**0.0410**	**0.0000**	**0.0000**	**0.0410**

Proposed Weekday Game Day

CMS Baseball

	ROG	NOX	CO	SO2	PM10	PM2.5
Summer						
Area Sources	17.8607	0.00001	0.0016	0.00001	0.00001	0.00001
Energy Demand	0.3796	3.4509	2.8987	0.0207	0.2623	0.2623
Mobile Sources	0.3158	0.703	3.3879	0.0132	0.8871	0.2483
Summer Total	18.5561	4.1539	6.2882	0.034	1.1494	0.5105
Winter						
Area Sources	17.8607	0.00001	0.0016	0	0.00001	0.00001
Energy Demand	0.3796	3.4509	2.8987	0.0207	0.2623	0.2623
Mobile Sources	0.3251	0.7377	3.3709	0.0126	0.8871	0.2483
Winter Total	18.5654	4.1886	6.2713	0.0333	1.1494	0.5106

CMS Building

	ROG	NOX	CO	SO2	PM10	PM2.5
Summer						
Area Sources	0.7848	0.00003	0.00306	0	0.00001	0.00001
Energy Demand	0.00969	0.0881	0.074	0.00053	0.00669	0.00669
Mobile Sources	0.1979	0.4405	2.1227	0.0083	0.5558	0.1556
Summer Total	0.9923	0.5286	2.1998	0.00883	0.5625	0.1623
Winter						
Area Sources	0.7848	0.00003	0.00306	0	0.00001	0.00001
Energy Demand	0.00969	0.0881	0.074	0.00053	0.0669	0.00669
Mobile Sources	0.2037	0.4622	2.1121	0.00788	0.5558	0.1556
Winter Total	0.9982	0.5503	2.1892	0.00841	0.5625	0.1623

CMS Softball

	ROG	NOX	CO	SO2	PM10	PM2.5
Summer						
Area Sources	13.817	0.00001	0.00124	0	0	0
Energy Demand	0.2937	2.6696	2.2425	0.016	0.2029	0.2029
Mobile Sources	0.292	0.6501	3.1328	0.0122	0.8203	0.2296
Summer Total	14.4027	3.3197	5.3765	0.0283	1.0232	0.4325
Winter						
Area Sources	13.817	0.00001	0.00124	0	0	0
Energy Demand	0.2937	2.6696	2.2425	0.016	0.2029	0.2029
Mobile Sources	0.3006	0.6821	3.1171	0.0116	0.8203	0.2296
Winter Total	14.4113	3.3517	5.3608	0.0277	1.0232	0.4325

Football Practice

	ROG	NOX	CO	SO2	PM10	PM2.5
Summer						
Area Sources	6.2023	0.00001	0.00055	0	0	0
Energy Demand	0	0	0	0	0	0
Mobile Sources	0.0588	0.1308	0.6302	0.00246	0.165	0.0462

Summer Total	6.261	0.1308	0.6308	0.00246	0.165	0.0462
Winter						
Area Sources	6.2023	0.00001	0.00055	0	0	0
Energy Demand	0	0	0	0	0	0
Mobile Sources	0.0605	0.1372	0.6271	0.00234	0.165	0.0462
Winter Total	6.2627	0.1372	0.6276	0.00234	0.165	0.0462

Golf

	ROG	NOX	CO	SO2	PM10	PM2.5
Summer						
Area Sources	2.7566	0	0.00025	0	0	0
Energy Demand	0	0	0	0	0	0
Mobile Sources	0.0212	0.0472	0.2275	0.00089	0.0596	0.0167
Summer Total	2.7778	0.0472	0.2278	0.00089	0.0596	0.0167
Winter						
Area Sources	2.7566	0	0.00025	0	0	0
Energy Demand	0	0	0	0	0	0
Mobile Sources	0.0218	0.0495	0.2264	0.00084	0.0596	0.0167
Winter Total	2.7784	0.0495	0.2266	0.00084	0.0596	0.0167

Pitzer Fields

	ROG	NOX	CO	SO2	PM10	PM2.5
Summer						
Area Sources	18.396	0.00001	0.00164	0	0.00001	0.00001
Energy Demand	0	0	0	0	0	0
Mobile Sources	0.1484	0.3303	1.5917	0.00622	0.4168	0.1166
Summer Total	18.5444	0.3303	1.5933	0.00622	0.4168	0.1167
Winter						
Area Sources	18.396	0.00001	0.00164	0	0.00001	0.00001
Energy Demand	0	0	0	0	0	0
Mobile Sources	0.1527	0.3466	1.5837	0.00591	0.4168	0.1167
Winter Total	18.5488	0.3466	1.5853	0.00591	0.4168	0.1167

Rugby

	ROG	NOX	CO	SO2	PM10	PM2.5
Summer						
Area Sources	8.6342	0.00001	0.00077	0	0	0
Energy Demand	0	0	0	0	0	0
Mobile Sources	0.0943	0.2099	1.0114	0.00395	0.2648	0.0741
Summer Total	8.7285	0.2099	1.0122	0.00395	0.2648	0.0741
Winter						
Area Sources	8.6342	0.00001	0.00077	0	0	0
Energy Demand	0	0	0	0	0	0
Mobile Sources	0.0971	0.2202	1.0063	0.00375	0.2648	0.0741
Winter Total						

Track Practice

	ROG	NOX	CO	SO2	PM10	PM2.5
Summer						
Area Sources	6.2023	0.00001	0.00056	0	0	0
Energy Demand	0	0	0	0	0	0
Mobile Sources	0.0588	0.1309	0.6308	0.00247	0.1652	0.0462
Summer Total	6.2611	0.1309	0.6313	0.00247	0.1652	0.0462
Winter						
Area Sources	6.2023	0.00001	0.00056	0	0	0
Energy Demand	0	0	0	0	0	0
Mobile Sources	0.0605	0.1374	0.6276	0.00234	0.1652	0.0462
Winter Total	6.2628	0.1374	0.6282	0.00234	0.1652	0.0462

Total Weekday Game Day

	ROG	NOX	CO	SO2	PM10	PM2.5
Summer						
Area Sources	74.65	0.00	0.01	0.00	0.00	0.00
Energy Demand	0.68	6.21	5.22	0.04	0.47	0.47
Mobile Sources	1.19	2.64	12.74	0.05	3.33	0.93
Summer Total	76.52	8.85	17.96	0.09	3.81	1.41
Winter						
Area Sources	74.65	0.00	0.01	0.00	0.00	0.00
Energy Demand	0.68	6.21	5.22	0.04	0.53	0.47
Mobile Sources	1.22	2.77	12.67	0.05	3.33	0.93
Winter Total	67.83	8.76	16.89	0.08	3.54	1.33

Op Wkday Game - Baseball

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Arena	15.68	Acre	15.68	683,020.80	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2025
tblVehicleTrips	CC_TTP	81.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	DV_TP	0.28	0.00
tblVehicleTrips	PB_TP	0.60	0.00
tblVehicleTrips	PR_TP	0.66	100.00
tblVehicleTrips	WD_TR	33.33	8.55
tblWater	IndoorWaterUseRate	21,107,735.76	350,400.00
tblWater	OutdoorWaterUseRate	1,347,302.28	1,045,983.10

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	17.8607	1.0000e-005	1.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.3796	3.4509	2.8987	0.0207		0.2623	0.2623		0.2623	0.2623						
Mobile	0.3158	0.7030	3.3879	0.0132	0.8700	0.0171	0.8871	0.2325	0.0157	0.2483						
Total	**18.5561**	**4.1539**	**6.2882**	**0.0340**	**0.8700**	**0.2793**	**1.1494**	**0.2325**	**0.2780**	**0.5105**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	17.8607	1.0000e-005	1.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.3796	3.4509	2.8987	0.0207		0.2623	0.2623		0.2623	0.2623						
Mobile	0.3158	0.7030	3.3879	0.0132	0.8700	0.0171	0.8871	0.2325	0.0157	0.2483						
Total	**18.5561**	**4.1539**	**6.2882**	**0.0340**	**0.8700**	**0.2793**	**1.1494**	**0.2325**	**0.2780**	**0.5105**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.3158	0.7030	3.3879	0.0132	0.8700	0.0171	0.8871	0.2325	0.0157	0.2483						
Mitigated	0.3158	0.7030	3.3879	0.0132	0.8700	0.0171	0.8871	0.2325	0.0157	0.2483						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	134.06	0.00	0.00	292,796	292,796
Total	134.06	0.00	0.00	292,796	292,796

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Arena	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.500116	0.060136	0.182997	0.141937	0.043982	0.006974	0.016541	0.035595	0.002005	0.002529	0.004193	0.000558	0.002437

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.3796	3.4509	2.8987	0.0207		0.2623	0.2623		0.2623	0.2623						
NaturalGas Unmitigated	0.3796	3.4509	2.8987	0.0207		0.2623	0.2623		0.2623	0.2623						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	35199	0.3796	3.4509	2.8987	0.0207		0.2623	0.2623		0.2623	0.2623						
Total		**0.3796**	**3.4509**	**2.8987**	**0.0207**		**0.2623**	**0.2623**		**0.2623**	**0.2623**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	35.199	0.3796	3.4509	2.8987	0.0207		0.2623	0.2623		0.2623	0.2623						
Total		**0.3796**	**3.4509**	**2.8987**	**0.0207**		**0.2623**	**0.2623**		**0.2623**	**0.2623**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	17.8607	1.0000e-005	1.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Mitigated	17.8607	1.0000e-005	1.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.3367					0.0000	0.0000		0.0000	0.0000						
Consumer Products	13.5238					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.5000e-004	1.0000e-005	1.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**17.8607**	**1.0000e-005**	**1.6000e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.3367					0.0000	0.0000		0.0000	0.0000						
Consumer Products	13.5238					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.5000e-004	1.0000e-005	1.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**17.8607**	**1.0000e-005**	**1.6000e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Op Wkday Game - Baseball

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Arena	15.68	Acre	15.68	683,020.80	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2025
tblVehicleTrips	CC_TTP	81.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	DV_TP	0.28	0.00
tblVehicleTrips	PB_TP	0.60	0.00
tblVehicleTrips	PR_TP	0.66	100.00
tblVehicleTrips	WD_TR	33.33	8.55
tblWater	IndoorWaterUseRate	21,107,735.76	350,400.00
tblWater	OutdoorWaterUseRate	1,347,302.28	1,045,983.10

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	17.8607	1.0000e-005	1.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.3796	3.4509	2.8987	0.0207		0.2623	0.2623		0.2623	0.2623						
Mobile	0.3251	0.7377	3.3709	0.0126	0.8700	0.0171	0.8871	0.2325	0.0158	0.2483						
Total	**18.5654**	**4.1886**	**6.2713**	**0.0333**	**0.8700**	**0.2794**	**1.1494**	**0.2325**	**0.2781**	**0.5106**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	17.8607	1.0000e-005	1.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.3796	3.4509	2.8987	0.0207		0.2623	0.2623		0.2623	0.2623						
Mobile	0.3251	0.7377	3.3709	0.0126	0.8700	0.0171	0.8871	0.2325	0.0158	0.2483						
Total	**18.5654**	**4.1886**	**6.2713**	**0.0333**	**0.8700**	**0.2794**	**1.1494**	**0.2325**	**0.2781**	**0.5106**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.3251	0.7377	3.3709	0.0126	0.8700	0.0171	0.8871	0.2325	0.0158	0.2483						
Mitigated	0.3251	0.7377	3.3709	0.0126	0.8700	0.0171	0.8871	0.2325	0.0158	0.2483						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	134.06	0.00	0.00	292,796	292,796
Total	134.06	0.00	0.00	292,796	292,796

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Arena	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.500116	0.060136	0.182997	0.141937	0.043982	0.006974	0.016541	0.035595	0.002005	0.002529	0.004193	0.000558	0.002437

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.3796	3.4509	2.8987	0.0207		0.2623	0.2623		0.2623	0.2623						
NaturalGas Unmitigated	0.3796	3.4509	2.8987	0.0207		0.2623	0.2623		0.2623	0.2623						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	35199	0.3796	3.4509	2.8987	0.0207		0.2623	0.2623		0.2623	0.2623						
Total		**0.3796**	**3.4509**	**2.8987**	**0.0207**		**0.2623**	**0.2623**		**0.2623**	**0.2623**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	35.199	0.3796	3.4509	2.8987	0.0207		0.2623	0.2623		0.2623	0.2623						
Total		**0.3796**	**3.4509**	**2.8987**	**0.0207**		**0.2623**	**0.2623**		**0.2623**	**0.2623**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	17.8607	1.0000e-005	1.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Mitigated	17.8607	1.0000e-005	1.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.3367					0.0000	0.0000		0.0000	0.0000						
Consumer Products	13.5238					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.5000e-004	1.0000e-005	1.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**17.8607**	**1.0000e-005**	**1.6000e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.3367					0.0000	0.0000		0.0000	0.0000						
Consumer Products	13.5238					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.5000e-004	1.0000e-005	1.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**17.8607**	**1.0000e-005**	**1.6000e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Op Wkday Game - CMS Building

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	30.00	1000sqft	0.69	30,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2025
tblVehicleTrips	CC_TTP	48.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PR_TP	77.00	100.00
tblVehicleTrips	ST_TR	2.37	0.00
tblVehicleTrips	SU_TR	0.98	0.00
tblVehicleTrips	WD_TR	11.01	2.80
tblWater	IndoorWaterUseRate	5,332,012.44	771,975.00
tblWater	OutdoorWaterUseRate	3,268,007.62	0.00

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.7848	3.0000e-005	3.0600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	9.6900e-003	0.0881	0.0740	5.3000e-004		6.6900e-003	6.6900e-003		6.6900e-003	6.6900e-003						
Mobile	0.1979	0.4405	2.1227	8.3000e-003	0.5451	0.0107	0.5558	0.1457	9.8600e-003	0.1556						
Total	**0.9923**	**0.5286**	**2.1998**	**8.8300e-003**	**0.5451**	**0.0174**	**0.5625**	**0.1457**	**0.0166**	**0.1623**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.7848	3.0000e-005	3.0600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	9.6900e-003	0.0881	0.0740	5.3000e-004		6.6900e-003	6.6900e-003		6.6900e-003	6.6900e-003						
Mobile	0.1979	0.4405	2.1227	8.3000e-003	0.5451	0.0107	0.5558	0.1457	9.8600e-003	0.1556						
Total	**0.9923**	**0.5286**	**2.1998**	**8.8300e-003**	**0.5451**	**0.0174**	**0.5625**	**0.1457**	**0.0166**	**0.1623**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.1979	0.4405	2.1227	8.3000e-003	0.5451	0.0107	0.5558	0.1457	9.8600e-003	0.1556						
Mitigated	0.1979	0.4405	2.1227	8.3000e-003	0.5451	0.0107	0.5558	0.1457	9.8600e-003	0.1556						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	84.00	0.00	0.00	183,456	183,456
Total	84.00	0.00	0.00	183,456	183,456

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.500116	0.060136	0.182997	0.141937	0.043982	0.006974	0.016541	0.035595	0.002005	0.002529	0.004193	0.000558	0.002437

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	9.6900e-003	0.0881	0.0740	5.3000e-004		6.6900e-003	6.6900e-003		6.6900e-003	6.6900e-003						
NaturalGas Unmitigated	9.6900e-003	0.0881	0.0740	5.3000e-004		6.6900e-003	6.6900e-003		6.6900e-003	6.6900e-003						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	898.356	9.6900e-003	0.0881	0.0740	5.3000e-004		6.6900e-003	6.6900e-003		6.6900e-003	6.6900e-003						
Total		**9.6900e-003**	**0.0881**	**0.0740**	**5.3000e-004**		**6.6900e-003**	**6.6900e-003**		**6.6900e-003**	**6.6900e-003**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	0.898356	9.6900e-003	0.0881	0.0740	5.3000e-004		6.6900e-003	6.6900e-003		6.6900e-003	6.6900e-003						
Total		**9.6900e-003**	**0.0881**	**0.0740**	**5.3000e-004**		**6.6900e-003**	**6.6900e-003**		**6.6900e-003**	**6.6900e-003**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.7848	3.0000e-005	3.0600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Mitigated	0.7848	3.0000e-005	3.0600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1905					0.0000	0.0000		0.0000	0.0000						
Consumer Products	0.5940					0.0000	0.0000		0.0000	0.0000						
Landscaping	2.8000e-004	3.0000e-005	3.0600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**0.7848**	**3.0000e-005**	**3.0600e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1905					0.0000	0.0000		0.0000	0.0000						
Consumer Products	0.5940					0.0000	0.0000		0.0000	0.0000						
Landscaping	2.8000e-004	3.0000e-005	3.0600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**0.7848**	**3.0000e-005**	**3.0600e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Op Wkday Game - CMS Building

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	30.00	1000sqft	0.69	30,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2025
tblVehicleTrips	CC_TTP	48.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PR_TP	77.00	100.00
tblVehicleTrips	ST_TR	2.37	0.00
tblVehicleTrips	SU_TR	0.98	0.00
tblVehicleTrips	WD_TR	11.01	2.80
tblWater	IndoorWaterUseRate	5,332,012.44	771,975.00
tblWater	OutdoorWaterUseRate	3,268,007.62	0.00

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.7848	3.0000e-005	3.0600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	9.6900e-003	0.0881	0.0740	5.3000e-004		6.6900e-003	6.6900e-003		6.6900e-003	6.6900e-003						
Mobile	0.2037	0.4622	2.1121	7.8800e-003	0.5451	0.0107	0.5558	0.1457	9.8900e-003	0.1556						
Total	**0.9982**	**0.5503**	**2.1892**	**8.4100e-003**	**0.5451**	**0.0174**	**0.5625**	**0.1457**	**0.0166**	**0.1623**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.7848	3.0000e-005	3.0600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	9.6900e-003	0.0881	0.0740	5.3000e-004		6.6900e-003	6.6900e-003		6.6900e-003	6.6900e-003						
Mobile	0.2037	0.4622	2.1121	7.8800e-003	0.5451	0.0107	0.5558	0.1457	9.8900e-003	0.1556						
Total	**0.9982**	**0.5503**	**2.1892**	**8.4100e-003**	**0.5451**	**0.0174**	**0.5625**	**0.1457**	**0.0166**	**0.1623**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.2037	0.4622	2.1121	7.8800e-003	0.5451	0.0107	0.5558	0.1457	9.8900e-003	0.1556						
Mitigated	0.2037	0.4622	2.1121	7.8800e-003	0.5451	0.0107	0.5558	0.1457	9.8900e-003	0.1556						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	84.00	0.00	0.00	183,456	183,456
Total	84.00	0.00	0.00	183,456	183,456

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.500116	0.060136	0.182997	0.141937	0.043982	0.006974	0.016541	0.035595	0.002005	0.002529	0.004193	0.000558	0.002437

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	9.6900e-003	0.0881	0.0740	5.3000e-004		6.6900e-003	6.6900e-003		6.6900e-003	6.6900e-003						
NaturalGas Unmitigated	9.6900e-003	0.0881	0.0740	5.3000e-004		6.6900e-003	6.6900e-003		6.6900e-003	6.6900e-003						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	898.356	9.6900e-003	0.0881	0.0740	5.3000e-004		6.6900e-003	6.6900e-003		6.6900e-003	6.6900e-003						
Total		**9.6900e-003**	**0.0881**	**0.0740**	**5.3000e-004**		**6.6900e-003**	**6.6900e-003**		**6.6900e-003**	**6.6900e-003**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	0.898356	9.6900e-003	0.0881	0.0740	5.3000e-004		6.6900e-003	6.6900e-003		6.6900e-003	6.6900e-003						
Total		**9.6900e-003**	**0.0881**	**0.0740**	**5.3000e-004**		**6.6900e-003**	**6.6900e-003**		**6.6900e-003**	**6.6900e-003**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.7848	3.0000e-005	3.0600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Mitigated	0.7848	3.0000e-005	3.0600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1905					0.0000	0.0000		0.0000	0.0000						
Consumer Products	0.5940					0.0000	0.0000		0.0000	0.0000						
Landscaping	2.8000e-004	3.0000e-005	3.0600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**0.7848**	**3.0000e-005**	**3.0600e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1905					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.5940					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.8000e-004	3.0000e-005	3.0600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.5700e-003	6.5700e-003	2.0000e-005		6.9200e-003
Total	**0.7848**	**3.0000e-005**	**3.0600e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**6.5700e-003**	**6.5700e-003**	**2.0000e-005**		**6.9200e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Op Wkday Game - Softball

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Arena	12.13	Acre	12.13	528,382.80	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2025
tblVehicleTrips	CC_TTP	81.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	DV_TP	0.28	0.00
tblVehicleTrips	PB_TP	0.60	0.00
tblVehicleTrips	PR_TP	0.66	100.00
tblVehicleTrips	WD_TR	33.33	10.22
tblWater	IndoorWaterUseRate	16,328,879.77	0.00
tblWater	OutdoorWaterUseRate	1,042,268.92	1,045,983.10

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	13.8170	1.0000e-005	1.2400e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.2937	2.6696	2.2425	0.0160		0.2029	0.2029		0.2029	0.2029						
Mobile	0.2920	0.6501	3.1328	0.0122	0.8045	0.0158	0.8203	0.2150	0.0146	0.2296						
Total	**14.4027**	**3.3197**	**5.3765**	**0.0283**	**0.8045**	**0.2187**	**1.0232**	**0.2150**	**0.2175**	**0.4325**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	13.8170	1.0000e-005	1.2400e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.2937	2.6696	2.2425	0.0160		0.2029	0.2029		0.2029	0.2029						
Mobile	0.2920	0.6501	3.1328	0.0122	0.8045	0.0158	0.8203	0.2150	0.0146	0.2296						
Total	**14.4027**	**3.3197**	**5.3765**	**0.0283**	**0.8045**	**0.2187**	**1.0232**	**0.2150**	**0.2175**	**0.4325**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**					

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.2920	0.6501	3.1328	0.0122	0.8045	0.0158	0.8203	0.2150	0.0146	0.2296						
Mitigated	0.2920	0.6501	3.1328	0.0122	0.8045	0.0158	0.8203	0.2150	0.0146	0.2296						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	123.97	0.00	0.00	270,747	270,747
Total	123.97	0.00	0.00	270,747	270,747

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Arena	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.500116	0.060136	0.182997	0.141937	0.043982	0.006974	0.016541	0.035595	0.002005	0.002529	0.004193	0.000558	0.002437

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.2937	2.6696	2.2425	0.0160		0.2029	0.2029		0.2029	0.2029						
NaturalGas Unmitigated	0.2937	2.6696	2.2425	0.0160		0.2029	0.2029		0.2029	0.2029						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	27229.8	0.2937	2.6696	2.2425	0.0160		0.2029	0.2029		0.2029	0.2029						
Total		**0.2937**	**2.6696**	**2.2425**	**0.0160**		**0.2029**	**0.2029**		**0.2029**	**0.2029**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	27.2298	0.2937	2.6696	2.2425	0.0160		0.2029	0.2029		0.2029	0.2029						
Total		**0.2937**	**2.6696**	**2.2425**	**0.0160**		**0.2029**	**0.2029**		**0.2029**	**0.2029**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	13.8170	1.0000e-005	1.2400e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Mitigated	13.8170	1.0000e-005	1.2400e-003	0.0000		0.0000	0.0000		0.0000	0.0000						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.3549					0.0000	0.0000		0.0000	0.0000						
Consumer Products	10.4620					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.1000e-004	1.0000e-005	1.2400e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**13.8170**	**1.0000e-005**	**1.2400e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.3549					0.0000	0.0000		0.0000	0.0000						
Consumer Products	10.4620					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.1000e-004	1.0000e-005	1.2400e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**13.8170**	**1.0000e-005**	**1.2400e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Op Wkday Game - Softball

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Arena	12.13	Acre	12.13	528,382.80	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2025
tblVehicleTrips	CC_TTP	81.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	DV_TP	0.28	0.00
tblVehicleTrips	PB_TP	0.60	0.00
tblVehicleTrips	PR_TP	0.66	100.00
tblVehicleTrips	WD_TR	33.33	10.22
tblWater	IndoorWaterUseRate	16,328,879.77	0.00
tblWater	OutdoorWaterUseRate	1,042,268.92	1,045,983.10

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	13.8170	1.0000e-005	1.2400e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.2937	2.6696	2.2425	0.0160		0.2029	0.2029		0.2029	0.2029						
Mobile	0.3006	0.6821	3.1171	0.0116	0.8045	0.0158	0.8203	0.2150	0.0146	0.2296						
Total	**14.4113**	**3.3517**	**5.3608**	**0.0277**	**0.8045**	**0.2187**	**1.0232**	**0.2150**	**0.2175**	**0.4325**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	13.8170	1.0000e-005	1.2400e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.2937	2.6696	2.2425	0.0160		0.2029	0.2029		0.2029	0.2029						
Mobile	0.3006	0.6821	3.1171	0.0116	0.8045	0.0158	0.8203	0.2150	0.0146	0.2296						
Total	**14.4113**	**3.3517**	**5.3608**	**0.0277**	**0.8045**	**0.2187**	**1.0232**	**0.2150**	**0.2175**	**0.4325**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.3006	0.6821	3.1171	0.0116	0.8045	0.0158	0.8203	0.2150	0.0146	0.2296						
Mitigated	0.3006	0.6821	3.1171	0.0116	0.8045	0.0158	0.8203	0.2150	0.0146	0.2296						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	123.97	0.00	0.00	270,747	270,747
Total	123.97	0.00	0.00	270,747	270,747

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Arena	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.500116	0.060136	0.182997	0.141937	0.043982	0.006974	0.016541	0.035595	0.002005	0.002529	0.004193	0.000558	0.002437

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.2937	2.6696	2.2425	0.0160		0.2029	0.2029		0.2029	0.2029						
NaturalGas Unmitigated	0.2937	2.6696	2.2425	0.0160		0.2029	0.2029		0.2029	0.2029						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	27229.8	0.2937	2.6696	2.2425	0.0160		0.2029	0.2029		0.2029	0.2029						
Total		**0.2937**	**2.6696**	**2.2425**	**0.0160**		**0.2029**	**0.2029**		**0.2029**	**0.2029**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	27.2298	0.2937	2.6696	2.2425	0.0160		0.2029	0.2029		0.2029	0.2029						
Total		**0.2937**	**2.6696**	**2.2425**	**0.0160**		**0.2029**	**0.2029**		**0.2029**	**0.2029**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	13.8170	1.0000e-005	1.2400e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Mitigated	13.8170	1.0000e-005	1.2400e-003	0.0000		0.0000	0.0000		0.0000	0.0000						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.3549					0.0000	0.0000		0.0000	0.0000						
Consumer Products	10.4620					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.1000e-004	1.0000e-005	1.2400e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**13.8170**	**1.0000e-005**	**1.2400e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.3549					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	10.4620					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.1000e-004	1.0000e-005	1.2400e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.6500e-003	2.6500e-003	1.0000e-005		2.8000e-003
Total	**13.8170**	**1.0000e-005**	**1.2400e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.6500e-003**	**2.6500e-003**	**1.0000e-005**		**2.8000e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Op Wkday Game - Football Practice

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	5.45	Acre	5.45	237,184.20	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2025
tblVehicleTrips	CC_TTP	48.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	ST_TR	1.59	0.00
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	WD_TR	1.59	4.58
tblWater	OutdoorWaterUseRate	6,493,573.36	1,045,983.10

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.2023	1.0000e-005	5.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.0588	0.1308	0.6302	2.4600e-003	0.1618	3.1700e-003	0.1650	0.0433	2.9300e-003	0.0462						
Total	**6.2610**	**0.1308**	**0.6308**	**2.4600e-003**	**0.1618**	**3.1700e-003**	**0.1650**	**0.0433**	**2.9300e-003**	**0.0462**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.2023	1.0000e-005	5.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.0588	0.1308	0.6302	2.4600e-003	0.1618	3.1700e-003	0.1650	0.0433	2.9300e-003	0.0462						
Total	**6.2610**	**0.1308**	**0.6308**	**2.4600e-003**	**0.1618**	**3.1700e-003**	**0.1650**	**0.0433**	**2.9300e-003**	**0.0462**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.0588	0.1308	0.6302	2.4600e-003	0.1618	3.1700e-003	0.1650	0.0433	2.9300e-003	0.0462						
Mitigated	0.0588	0.1308	0.6302	2.4600e-003	0.1618	3.1700e-003	0.1650	0.0433	2.9300e-003	0.0462						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	24.94	0.00	0.00	54,465	54,465
Total	24.94	0.00	0.00	54,465	54,465

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.500116	0.060136	0.182997	0.141937	0.043982	0.006974	0.016541	0.035595	0.002005	0.002529	0.004193	0.000558	0.002437

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	6.2023	1.0000e-005	5.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Mitigated	6.2023	1.0000e-005	5.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.5060					0.0000	0.0000		0.0000	0.0000						
Consumer Products	4.6963					0.0000	0.0000		0.0000	0.0000						
Landscaping	5.0000e-005	1.0000e-005	5.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**6.2023**	**1.0000e-005**	**5.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.5060					0.0000	0.0000		0.0000	0.0000						
Consumer Products	4.6963					0.0000	0.0000		0.0000	0.0000						
Landscaping	5.0000e-005	1.0000e-005	5.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**6.2023**	**1.0000e-005**	**5.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Op Wkday Game - Football Practice

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	5.45	Acre	5.45	237,184.20	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2025
tblVehicleTrips	CC_TTP	48.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	ST_TR	1.59	0.00
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	WD_TR	1.59	4.58
tblWater	OutdoorWaterUseRate	6,493,573.36	1,045,983.10

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.2023	1.0000e-005	5.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.0605	0.1372	0.6271	2.3400e-003	0.1618	3.1800e-003	0.1650	0.0433	2.9400e-003	0.0462						
Total	**6.2627**	**0.1372**	**0.6276**	**2.3400e-003**	**0.1618**	**3.1800e-003**	**0.1650**	**0.0433**	**2.9400e-003**	**0.0462**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.2023	1.0000e-005	5.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.0605	0.1372	0.6271	2.3400e-003	0.1618	3.1800e-003	0.1650	0.0433	2.9400e-003	0.0462						
Total	**6.2627**	**0.1372**	**0.6276**	**2.3400e-003**	**0.1618**	**3.1800e-003**	**0.1650**	**0.0433**	**2.9400e-003**	**0.0462**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.0605	0.1372	0.6271	2.3400e-003	0.1618	3.1800e-003	0.1650	0.0433	2.9400e-003	0.0462						
Mitigated	0.0605	0.1372	0.6271	2.3400e-003	0.1618	3.1800e-003	0.1650	0.0433	2.9400e-003	0.0462						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	24.94	0.00	0.00	54,465	54,465
Total	24.94	0.00	0.00	54,465	54,465

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.500116	0.060136	0.182997	0.141937	0.043982	0.006974	0.016541	0.035595	0.002005	0.002529	0.004193	0.000558	0.002437

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	6.2023	1.0000e-005	5.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Mitigated	6.2023	1.0000e-005	5.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.5060					0.0000	0.0000		0.0000	0.0000						
Consumer Products	4.6963					0.0000	0.0000		0.0000	0.0000						
Landscaping	5.0000e-005	1.0000e-005	5.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**6.2023**	**1.0000e-005**	**5.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.5060					0.0000	0.0000		0.0000	0.0000						
Consumer Products	4.6963					0.0000	0.0000		0.0000	0.0000						
Landscaping	5.0000e-005	1.0000e-005	5.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**6.2023**	**1.0000e-005**	**5.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Op Wkday Game - Golf

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	2.42	Acre	2.42	105,415.20	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	3.00	0.00
tblGrading	AcresOfGrading	0.00	4.50
tblProjectCharacteristics	OperationalYear	2014	2025
tblVehicleTrips	CC_TTP	48.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	ST_TR	1.59	0.00
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	WD_TR	1.59	3.72
tblWater	OutdoorWaterUseRate	2,883,384.87	1,045,983.10

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.7566	0.0000	2.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.0212	0.0472	0.2275	8.9000e-004	0.0584	1.1500e-003	0.0596	0.0156	1.0600e-003	0.0167						
Total	**2.7778**	**0.0472**	**0.2278**	**8.9000e-004**	**0.0584**	**1.1500e-003**	**0.0596**	**0.0156**	**1.0600e-003**	**0.0167**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.7566	0.0000	2.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.0212	0.0472	0.2275	8.9000e-004	0.0584	1.1500e-003	0.0596	0.0156	1.0600e-003	0.0167						
Total	**2.7778**	**0.0472**	**0.2278**	**8.9000e-004**	**0.0584**	**1.1500e-003**	**0.0596**	**0.0156**	**1.0600e-003**	**0.0167**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.0212	0.0472	0.2275	8.9000e-004	0.0584	1.1500e-003	0.0596	0.0156	1.0600e-003	0.0167						
Mitigated	0.0212	0.0472	0.2275	8.9000e-004	0.0584	1.1500e-003	0.0596	0.0156	1.0600e-003	0.0167						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	9.00	0.00	0.00	19,661	19,661
Total	9.00	0.00	0.00	19,661	19,661

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.500116	0.060136	0.182997	0.141937	0.043982	0.006974	0.016541	0.035595	0.002005	0.002529	0.004193	0.000558	0.002437

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	2.7566	0.0000	2.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Mitigated	2.7566	0.0000	2.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6693					0.0000	0.0000		0.0000	0.0000						
Consumer Products	2.0872					0.0000	0.0000		0.0000	0.0000						
Landscaping	2.0000e-005	0.0000	2.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**2.7566**	**0.0000**	**2.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6693					0.0000	0.0000		0.0000	0.0000						
Consumer Products	2.0872					0.0000	0.0000		0.0000	0.0000						
Landscaping	2.0000e-005	0.0000	2.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**2.7566**	**0.0000**	**2.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Op Wkday Game - Golf

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	2.42	Acre	2.42	105,415.20	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	3.00	0.00
tblGrading	AcresOfGrading	0.00	4.50
tblProjectCharacteristics	OperationalYear	2014	2025
tblVehicleTrips	CC_TTP	48.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	ST_TR	1.59	0.00
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	WD_TR	1.59	3.72
tblWater	OutdoorWaterUseRate	2,883,384.87	1,045,983.10

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.7566	0.0000	2.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.0218	0.0495	0.2264	8.4000e-004	0.0584	1.1500e-003	0.0596	0.0156	1.0600e-003	0.0167						
Total	**2.7784**	**0.0495**	**0.2266**	**8.4000e-004**	**0.0584**	**1.1500e-003**	**0.0596**	**0.0156**	**1.0600e-003**	**0.0167**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.7566	0.0000	2.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.0218	0.0495	0.2264	8.4000e-004	0.0584	1.1500e-003	0.0596	0.0156	1.0600e-003	0.0167						
Total	**2.7784**	**0.0495**	**0.2266**	**8.4000e-004**	**0.0584**	**1.1500e-003**	**0.0596**	**0.0156**	**1.0600e-003**	**0.0167**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.0218	0.0495	0.2264	8.4000e-004	0.0584	1.1500e-003	0.0596	0.0156	1.0600e-003	0.0167						
Mitigated	0.0218	0.0495	0.2264	8.4000e-004	0.0584	1.1500e-003	0.0596	0.0156	1.0600e-003	0.0167						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	9.00	0.00	0.00	19,661	19,661
Total	9.00	0.00	0.00	19,661	19,661

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.500116	0.060136	0.182997	0.141937	0.043982	0.006974	0.016541	0.035595	0.002005	0.002529	0.004193	0.000558	0.002437

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	2.7566	0.0000	2.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Mitigated	2.7566	0.0000	2.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6693					0.0000	0.0000		0.0000	0.0000						
Consumer Products	2.0872					0.0000	0.0000		0.0000	0.0000						
Landscaping	2.0000e-005	0.0000	2.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**2.7566**	**0.0000**	**2.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6693					0.0000	0.0000		0.0000	0.0000						
Consumer Products	2.0872					0.0000	0.0000		0.0000	0.0000						
Landscaping	2.0000e-005	0.0000	2.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**2.7566**	**0.0000**	**2.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Op Wkday Game - Pitzer Fields

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	16.15	Acre	16.15	703,494.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2025
tblVehicleTrips	CC_TTP	48.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	ST_TR	1.59	0.00
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	WD_TR	1.59	3.90
tblWater	IndoorWaterUseRate	0.00	197,100.00
tblWater	OutdoorWaterUseRate	19,242,423.80	1,251,269.50

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	18.3960	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.1484	0.3303	1.5917	6.2200e-003	0.4087	8.0200e-003	0.4168	0.1092	7.4000e-003	0.1166						
Total	**18.5444**	**0.3303**	**1.5933**	**6.2200e-003**	**0.4087**	**8.0300e-003**	**0.4168**	**0.1092**	**7.4100e-003**	**0.1167**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	18.3960	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.1484	0.3303	1.5917	6.2200e-003	0.4087	8.0200e-003	0.4168	0.1092	7.4000e-003	0.1166						
Total	**18.5444**	**0.3303**	**1.5933**	**6.2200e-003**	**0.4087**	**8.0300e-003**	**0.4168**	**0.1092**	**7.4100e-003**	**0.1167**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.1484	0.3303	1.5917	6.2200e-003	0.4087	8.0200e-003	0.4168	0.1092	7.4000e-003	0.1166						
Mitigated	0.1484	0.3303	1.5917	6.2200e-003	0.4087	8.0200e-003	0.4168	0.1092	7.4000e-003	0.1166						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	62.99	0.00	0.00	137,559	137,559
Total	62.99	0.00	0.00	137,559	137,559

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.500116	0.060136	0.182997	0.141937	0.043982	0.006974	0.016541	0.035595	0.002005	0.002529	0.004193	0.000558	0.002437

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	18.3960	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Mitigated	18.3960	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.4667					0.0000	0.0000		0.0000	0.0000						
Consumer Products	13.9292					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.5000e-004	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**18.3960**	**1.0000e-005**	**1.6400e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.4667					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	13.9292					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.5000e-004	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.5300e-003	3.5300e-003	1.0000e-005		3.7300e-003
Total	**18.3960**	**1.0000e-005**	**1.6400e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**3.5300e-003**	**3.5300e-003**	**1.0000e-005**		**3.7300e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Op Wkday Game - Pitzer Fields

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	16.15	Acre	16.15	703,494.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2025
tblVehicleTrips	CC_TTP	48.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	ST_TR	1.59	0.00
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	WD_TR	1.59	3.90
tblWater	IndoorWaterUseRate	0.00	197,100.00
tblWater	OutdoorWaterUseRate	19,242,423.80	1,251,269.50

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	18.3960	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.1527	0.3466	1.5837	5.9100e-003	0.4087	8.0400e-003	0.4168	0.1092	7.4200e-003	0.1167						
Total	**18.5488**	**0.3466**	**1.5853**	**5.9100e-003**	**0.4087**	**8.0500e-003**	**0.4168**	**0.1092**	**7.4300e-003**	**0.1167**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	18.3960	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.1527	0.3466	1.5837	5.9100e-003	0.4087	8.0400e-003	0.4168	0.1092	7.4200e-003	0.1167						
Total	**18.5488**	**0.3466**	**1.5853**	**5.9100e-003**	**0.4087**	**8.0500e-003**	**0.4168**	**0.1092**	**7.4300e-003**	**0.1167**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.1527	0.3466	1.5837	5.9100e-003	0.4087	8.0400e-003	0.4168	0.1092	7.4200e-003	0.1167						
Mitigated	0.1527	0.3466	1.5837	5.9100e-003	0.4087	8.0400e-003	0.4168	0.1092	7.4200e-003	0.1167						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	62.99	0.00	0.00	137,559	137,559
Total	62.99	0.00	0.00	137,559	137,559

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.500116	0.060136	0.182997	0.141937	0.043982	0.006974	0.016541	0.035595	0.002005	0.002529	0.004193	0.000558	0.002437

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	18.3960	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Mitigated	18.3960	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.4667					0.0000	0.0000		0.0000	0.0000						
Consumer Products	13.9292					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.5000e-004	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**18.3960**	**1.0000e-005**	**1.6400e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.4667					0.0000	0.0000		0.0000	0.0000						
Consumer Products	13.9292					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.5000e-004	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**18.3960**	**1.0000e-005**	**1.6400e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Op Wkday Game - Rugby

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	7.58	Acre	7.58	330,184.80	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2025
tblVehicleTrips	CC_TTP	48.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	ST_TR	1.59	0.00
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	WD_TR	1.59	5.28
tblWater	IndoorWaterUseRate	0.00	771,975.00
tblWater	OutdoorWaterUseRate	9,031,428.63	1,045,983.10

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.6342	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.0943	0.2099	1.0114	3.9500e-003	0.2597	5.0900e-003	0.2648	0.0694	4.7000e-003	0.0741						
Total	**8.7285**	**0.2099**	**1.0122**	**3.9500e-003**	**0.2597**	**5.0900e-003**	**0.2648**	**0.0694**	**4.7000e-003**	**0.0741**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.6342	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.0943	0.2099	1.0114	3.9500e-003	0.2597	5.0900e-003	0.2648	0.0694	4.7000e-003	0.0741						
Total	**8.7285**	**0.2099**	**1.0122**	**3.9500e-003**	**0.2597**	**5.0900e-003**	**0.2648**	**0.0694**	**4.7000e-003**	**0.0741**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**						
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.0943	0.2099	1.0114	3.9500e-003	0.2597	5.0900e-003	0.2648	0.0694	4.7000e-003	0.0741						
Mitigated	0.0943	0.2099	1.0114	3.9500e-003	0.2597	5.0900e-003	0.2648	0.0694	4.7000e-003	0.0741						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	40.02	0.00	0.00	87,409	87,409
Total	40.02	0.00	0.00	87,409	87,409

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.500116	0.060136	0.182997	0.141937	0.043982	0.006974	0.016541	0.035595	0.002005	0.002529	0.004193	0.000558	0.002437

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	8.6342	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Mitigated	8.6342	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.0965					0.0000	0.0000		0.0000	0.0000						
Consumer Products	6.5377					0.0000	0.0000		0.0000	0.0000						
Landscaping	7.0000e-005	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**8.6342**	**1.0000e-005**	**7.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.0965					0.0000	0.0000		0.0000	0.0000						
Consumer Products	6.5377					0.0000	0.0000		0.0000	0.0000						
Landscaping	7.0000e-005	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**8.6342**	**1.0000e-005**	**7.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Op Wkday Game - Rugby

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	7.58	Acre	7.58	330,184.80	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2025
tblVehicleTrips	CC_TTP	48.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	ST_TR	1.59	0.00
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	WD_TR	1.59	5.28
tblWater	IndoorWaterUseRate	0.00	771,975.00
tblWater	OutdoorWaterUseRate	9,031,428.63	1,045,983.10

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.6342	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.0971	0.2202	1.0063	3.7500e-003	0.2597	5.1100e-003	0.2648	0.0694	4.7100e-003	0.0741						
Total	**8.7312**	**0.2202**	**1.0071**	**3.7500e-003**	**0.2597**	**5.1100e-003**	**0.2648**	**0.0694**	**4.7100e-003**	**0.0741**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.6342	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.0971	0.2202	1.0063	3.7500e-003	0.2597	5.1100e-003	0.2648	0.0694	4.7100e-003	0.0741						
Total	**8.7312**	**0.2202**	**1.0071**	**3.7500e-003**	**0.2597**	**5.1100e-003**	**0.2648**	**0.0694**	**4.7100e-003**	**0.0741**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.0971	0.2202	1.0063	3.7500e-003	0.2597	5.1100e-003	0.2648	0.0694	4.7100e-003	0.0741						
Mitigated	0.0971	0.2202	1.0063	3.7500e-003	0.2597	5.1100e-003	0.2648	0.0694	4.7100e-003	0.0741						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	40.02	0.00	0.00	87,409	87,409
Total	40.02	0.00	0.00	87,409	87,409

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.500116	0.060136	0.182997	0.141937	0.043982	0.006974	0.016541	0.035595	0.002005	0.002529	0.004193	0.000558	0.002437

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	8.6342	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Mitigated	8.6342	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.0965					0.0000	0.0000		0.0000	0.0000						
Consumer Products	6.5377					0.0000	0.0000		0.0000	0.0000						
Landscaping	7.0000e-005	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**8.6342**	**1.0000e-005**	**7.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.0965					0.0000	0.0000		0.0000	0.0000						
Consumer Products	6.5377					0.0000	0.0000		0.0000	0.0000						
Landscaping	7.0000e-005	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**8.6342**	**1.0000e-005**	**7.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Op Wkday Game - Track Practice

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	5.45	Acre	5.45	237,184.20	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblLandUse	LandUseSquareFeet	237,402.00	237,184.20
tblProjectCharacteristics	OperationalYear	2014	2025
tblVehicleTrips	CC_TTP	48.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	ST_TR	1.59	0.00
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	WD_TR	1.59	4.58
tblWater	OutdoorWaterUseRate	6,493,573.36	1,045,983.10

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.2023	1.0000e-005	5.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.0588	0.1309	0.6308	2.4700e-003	0.1620	3.1800e-003	0.1652	0.0433	2.9300e-003	0.0462						
Total	**6.2611**	**0.1309**	**0.6313**	**2.4700e-003**	**0.1620**	**3.1800e-003**	**0.1652**	**0.0433**	**2.9300e-003**	**0.0462**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.2023	1.0000e-005	5.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.0588	0.1309	0.6308	2.4700e-003	0.1620	3.1800e-003	0.1652	0.0433	2.9300e-003	0.0462						
Total	**6.2611**	**0.1309**	**0.6313**	**2.4700e-003**	**0.1620**	**3.1800e-003**	**0.1652**	**0.0433**	**2.9300e-003**	**0.0462**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.0588	0.1309	0.6308	2.4700e-003	0.1620	3.1800e-003	0.1652	0.0433	2.9300e-003	0.0462						
Mitigated	0.0588	0.1309	0.6308	2.4700e-003	0.1620	3.1800e-003	0.1652	0.0433	2.9300e-003	0.0462						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	24.96	0.00	0.00	54,515	54,515
Total	24.96	0.00	0.00	54,515	54,515

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.500116	0.060136	0.182997	0.141937	0.043982	0.006974	0.016541	0.035595	0.002005	0.002529	0.004193	0.000558	0.002437

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	6.2023	1.0000e-005	5.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Mitigated	6.2023	1.0000e-005	5.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.5060					0.0000	0.0000		0.0000	0.0000						
Consumer Products	4.6963					0.0000	0.0000		0.0000	0.0000						
Landscaping	5.0000e-005	1.0000e-005	5.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**6.2023**	**1.0000e-005**	**5.6000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.5060					0.0000	0.0000		0.0000	0.0000						
Consumer Products	4.6963					0.0000	0.0000		0.0000	0.0000						
Landscaping	5.0000e-005	1.0000e-005	5.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**6.2023**	**1.0000e-005**	**5.6000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Op Wkday Game - Track Practice

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	5.45	Acre	5.45	237,184.20	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblLandUse	LandUseSquareFeet	237,402.00	237,184.20
tblProjectCharacteristics	OperationalYear	2014	2025
tblVehicleTrips	CC_TTP	48.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	ST_TR	1.59	0.00
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	WD_TR	1.59	4.58
tblWater	OutdoorWaterUseRate	6,493,573.36	1,045,983.10

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.2023	1.0000e-005	5.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.0605	0.1374	0.6276	2.3400e-003	0.1620	3.1900e-003	0.1652	0.0433	2.9400e-003	0.0462						
Total	**6.2628**	**0.1374**	**0.6282**	**2.3400e-003**	**0.1620**	**3.1900e-003**	**0.1652**	**0.0433**	**2.9400e-003**	**0.0462**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.2023	1.0000e-005	5.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.0605	0.1374	0.6276	2.3400e-003	0.1620	3.1900e-003	0.1652	0.0433	2.9400e-003	0.0462						
Total	**6.2628**	**0.1374**	**0.6282**	**2.3400e-003**	**0.1620**	**3.1900e-003**	**0.1652**	**0.0433**	**2.9400e-003**	**0.0462**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.0605	0.1374	0.6276	2.3400e-003	0.1620	3.1900e-003	0.1652	0.0433	2.9400e-003	0.0462						
Mitigated	0.0605	0.1374	0.6276	2.3400e-003	0.1620	3.1900e-003	0.1652	0.0433	2.9400e-003	0.0462						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	24.96	0.00	0.00	54,515	54,515
Total	24.96	0.00	0.00	54,515	54,515

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.500116	0.060136	0.182997	0.141937	0.043982	0.006974	0.016541	0.035595	0.002005	0.002529	0.004193	0.000558	0.002437

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	6.2023	1.0000e-005	5.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Mitigated	6.2023	1.0000e-005	5.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.5060					0.0000	0.0000		0.0000	0.0000						
Consumer Products	4.6963					0.0000	0.0000		0.0000	0.0000						
Landscaping	5.0000e-005	1.0000e-005	5.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**6.2023**	**1.0000e-005**	**5.6000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.5060					0.0000	0.0000		0.0000	0.0000						
Consumer Products	4.6963					0.0000	0.0000		0.0000	0.0000						
Landscaping	5.0000e-005	1.0000e-005	5.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**6.2023**	**1.0000e-005**	**5.6000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Proposed Weekday Practice Day

CMS Fields

	ROG	NOX	CO	SO2	PM10	PM2.5
Summer						
Area Sources	44.0821	0.00004	0.00394	0	0.00001	0.00001
Energy Demand	0	0	0	0	0	0
Mobile Sources	0.1787	0.3978	1.9168	0.00749	0.5019	0.1405
Summer Total	44.2608	0.3978	1.9208	0.00749	0.5019	0.1405
Winter						
Area Sources	44.0821	0.00004	0.00394	0	0.00001	0.00001
Energy Demand	0	0	0	0	0	0
Mobile Sources	0.1839	0.4174	1.9072	0.00711	0.5019	0.1405
Winter Total	44.2661	0.4174	1.9112	0.00711	0.5019	0.1405

CMS Building

	ROG	NOX	CO	SO2	PM10	PM2.5
Summer						
Area Sources	0.7848	0.00003	0.0032	0	0.00001	0.00001
Energy Demand	0.00969	0.0881	0.074	0.00053	0.00669	0.00669
Mobile Sources	0.3655	1.0019	4.1674	0.00808	0.5601	0.1599
Summer Total	1.16	1.09	4.2446	0.00861	0.5668	0.1666
Winter						
Area Sources	0.7848	0.00003	0.0032	0	0.00001	0.00001
Energy Demand	0.00969	0.0881	0.074	0.00053	0.00669	0.00669
Mobile Sources	0.38	1.0549	4.0965	0.00768	0.5602	0.16
Winter Total	1.1745	1.143	4.1737	0.00821	0.5669	0.1667

Golf

	ROG	NOX	CO	SO2	PM10	PM2.5
Summer						
Area Sources	2.7566	0	0.00025	0	0	0
Energy Demand	0	0	0	0	0	0
Mobile Sources	0.0212	0.0472	0.2275	0.00089	0.0596	0.0167
Summer Total	2.7778	0.0472	0.2278	0.00089	0.0596	0.0167
Winter						
Area Sources	2.7566	0	0.00025	0	0	0
Energy Demand	0	0	0	0	0	0
Mobile Sources	0.0218	0.0495	0.2264	0.00084	0.0596	0.0167
Winter Total	2.7784	0.0495	0.2266	0.00084	0.0596	0.0167

Pitzer Fields

	ROG	NOX	CO	SO2	PM10	PM2.5
Summer						
Area Sources	18.396	0.00001	0.00164	0	0.00001	0.00001
Energy Demand	0	0	0	0	0	0
Mobile Sources	0.1484	0.3303	1.5917	0.00622	0.4168	0.1166

Summer Total	18.5444	0.3303	1.5933	0.00622	0.4168	0.1167
Winter						
Area Sources	18.396	0.00001	0.00164	0	0.00001	0.00001
Energy Demand	0	0	0	0	0	0
Mobile Sources	0.1527	0.3466	1.5837	0.00591	0.4168	0.1167
Winter Total	18.5488	0.3466	1.5853	0.00591	0.4168	0.1167

Rugby

	ROG	NOX	CO	SO2	PM10	PM2.5
Summer						
Area Sources	8.6342	0.00001	0.00077	0	0	0
Energy Demand	0	0	0	0	0	0
Mobile Sources	0.0943	0.2099	1.0114	0.00395	0.2648	0.0741
Summer Total	8.7285	0.2099	1.0122	0.00395	0.2648	0.0741
Winter						
Area Sources	8.6342	0.00001	0.00077	0	0	0
Energy Demand	0	0	0	0	0	0
Mobile Sources	0.0971	0.2202	1.0063	0.00375	0.2648	0.0741
Winter Total	8.7312	0.2202	1.0071	0.00375	0.2648	0.0741

Total Weekday Practice Day

	ROG	NOX	CO	SO2	PM10	PM2.5
Summer						
Area Sources	74.65	0.00	0.01	0.00	0.00	0.00
Energy Demand	0.01	0.09	0.07	0.00	0.01	0.01
Mobile Sources	0.81	1.99	8.91	0.03	1.80	0.51
Summer Total	75.47	2.08	9.00	0.03	1.81	0.51
Winter						
Area Sources	74.65	0.00	0.01	0.00	0.00	0.00
Energy Demand	0.01	0.09	0.07	0.00	0.01	0.01
Mobile Sources	0.84	2.09	8.82	0.03	1.80	0.51
Winter Total	75.50	2.18	8.90	0.03	1.81	0.51

Op Wkday Practice - CMS Fields

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	38.70	Acre	38.70	1,685,772.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	30.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2025
tblVehicleTrips	CC_TTP	48.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	ST_TR	1.59	0.00
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	WD_TR	1.59	1.96
tblWater	IndoorWaterUseRate	0.00	350,400.00
tblWater	OutdoorWaterUseRate	46,110,328.23	1,045,983.10

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	44.0821	4.0000e-005	3.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.1787	0.3978	1.9168	7.4900e-003	0.4922	9.6500e-003	0.5019	0.1316	8.9100e-003	0.1405						
Total	**44.2608**	**0.3978**	**1.9208**	**7.4900e-003**	**0.4922**	**9.6600e-003**	**0.5019**	**0.1316**	**8.9200e-003**	**0.1405**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	44.0821	4.0000e-005	3.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.1787	0.3978	1.9168	7.4900e-003	0.4922	9.6500e-003	0.5019	0.1316	8.9100e-003	0.1405						
Total	**44.2608**	**0.3978**	**1.9208**	**7.4900e-003**	**0.4922**	**9.6600e-003**	**0.5019**	**0.1316**	**8.9200e-003**	**0.1405**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.1787	0.3978	1.9168	7.4900e-003	0.4922	9.6500e-003	0.5019	0.1316	8.9100e-003	0.1405						
Mitigated	0.1787	0.3978	1.9168	7.4900e-003	0.4922	9.6500e-003	0.5019	0.1316	8.9100e-003	0.1405						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	75.85	0.00	0.00	165,661	165,661
Total	75.85	0.00	0.00	165,661	165,661

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.500116	0.060136	0.182997	0.141937	0.043982	0.006974	0.016541	0.035595	0.002005	0.002529	0.004193	0.000558	0.002437

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	44.0821	4.0000e-005	3.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Mitigated	44.0821	4.0000e-005	3.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	10.7035					0.0000	0.0000		0.0000	0.0000						
Consumer Products	33.3783					0.0000	0.0000		0.0000	0.0000						
Landscaping	3.6000e-004	4.0000e-005	3.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**44.0821**	**4.0000e-005**	**3.9400e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	10.7035					0.0000	0.0000		0.0000	0.0000						
Consumer Products	33.3783					0.0000	0.0000		0.0000	0.0000						
Landscaping	3.6000e-004	4.0000e-005	3.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**44.0821**	**4.0000e-005**	**3.9400e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Op Wkday Practice - CMS Fields

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	38.70	Acre	38.70	1,685,772.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	30.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2025
tblVehicleTrips	CC_TTP	48.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	ST_TR	1.59	0.00
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	WD_TR	1.59	1.96
tblWater	IndoorWaterUseRate	0.00	350,400.00
tblWater	OutdoorWaterUseRate	46,110,328.23	1,045,983.10

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	44.0821	4.0000e-005	3.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.1839	0.4174	1.9072	7.1100e-003	0.4922	9.6800e-003	0.5019	0.1316	8.9300e-003	0.1405						
Total	**44.2661**	**0.4174**	**1.9112**	**7.1100e-003**	**0.4922**	**9.6900e-003**	**0.5019**	**0.1316**	**8.9400e-003**	**0.1405**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	44.0821	4.0000e-005	3.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.1839	0.4174	1.9072	7.1100e-003	0.4922	9.6800e-003	0.5019	0.1316	8.9300e-003	0.1405						
Total	**44.2661**	**0.4174**	**1.9112**	**7.1100e-003**	**0.4922**	**9.6900e-003**	**0.5019**	**0.1316**	**8.9400e-003**	**0.1405**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.1839	0.4174	1.9072	7.1100e-003	0.4922	9.6800e-003	0.5019	0.1316	8.9300e-003	0.1405						
Mitigated	0.1839	0.4174	1.9072	7.1100e-003	0.4922	9.6800e-003	0.5019	0.1316	8.9300e-003	0.1405						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	75.85	0.00	0.00	165,661	165,661
Total	75.85	0.00	0.00	165,661	165,661

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.500116	0.060136	0.182997	0.141937	0.043982	0.006974	0.016541	0.035595	0.002005	0.002529	0.004193	0.000558	0.002437

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	44.0821	4.0000e-005	3.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Mitigated	44.0821	4.0000e-005	3.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	10.7035					0.0000	0.0000		0.0000	0.0000						
Consumer Products	33.3783					0.0000	0.0000		0.0000	0.0000						
Landscaping	3.6000e-004	4.0000e-005	3.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**44.0821**	**4.0000e-005**	**3.9400e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	10.7035					0.0000	0.0000		0.0000	0.0000						
Consumer Products	33.3783					0.0000	0.0000		0.0000	0.0000						
Landscaping	3.6000e-004	4.0000e-005	3.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**44.0821**	**4.0000e-005**	**3.9400e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Op Wkday Practice - CMS Building

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	30.00	1000sqft	0.69	30,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Vechicle Emission Factors -

Vechicle Emission Factors -

Vechicle Emission Factors -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	1.00	0.00
tblVehicleTrips	CC_TTP	48.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PR_TP	77.00	100.00
tblVehicleTrips	ST_TR	2.37	0.00
tblVehicleTrips	SU_TR	0.98	0.00
tblVehicleTrips	WD_TR	11.01	2.80
tblWater	IndoorWaterUseRate	5,332,012.44	771,975.00
tblWater	OutdoorWaterUseRate	3,268,007.62	0.00

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.7848	3.0000e-005	3.2000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	9.6900e-003	0.0881	0.0740	5.3000e-004		6.6900e-003	6.6900e-003		6.6900e-003	6.6900e-003						
Mobile	0.3655	1.0019	4.1674	8.0800e-003	0.5443	0.0158	0.5601	0.1454	0.0145	0.1599						
Total	**1.1600**	**1.0900**	**4.2446**	**8.6100e-003**	**0.5443**	**0.0225**	**0.5668**	**0.1454**	**0.0212**	**0.1666**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.7848	3.0000e-005	3.2000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	9.6900e-003	0.0881	0.0740	5.3000e-004		6.6900e-003	6.6900e-003		6.6900e-003	6.6900e-003						
Mobile	0.3655	1.0019	4.1674	8.0800e-003	0.5443	0.0158	0.5601	0.1454	0.0145	0.1599						
Total	**1.1600**	**1.0900**	**4.2446**	**8.6100e-003**	**0.5443**	**0.0225**	**0.5668**	**0.1454**	**0.0212**	**0.1666**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.3655	1.0019	4.1674	8.0800e-003	0.5443	0.0158	0.5601	0.1454	0.0145	0.1599						
Mitigated	0.3655	1.0019	4.1674	8.0800e-003	0.5443	0.0158	0.5601	0.1454	0.0145	0.1599						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	84.00	0.00	0.00	183,456	183,456
Total	84.00	0.00	0.00	183,456	183,456

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.516610	0.060517	0.179979	0.140587	0.041566	0.006616	0.015092	0.027587	0.001923	0.002530	0.004314	0.000602	0.002075

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	9.6900e-003	0.0881	0.0740	5.3000e-004		6.6900e-003	6.6900e-003		6.6900e-003	6.6900e-003						
NaturalGas Unmitigated	9.6900e-003	0.0881	0.0740	5.3000e-004		6.6900e-003	6.6900e-003		6.6900e-003	6.6900e-003						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	898.356	9.6900e-003	0.0881	0.0740	5.3000e-004		6.6900e-003	6.6900e-003		6.6900e-003	6.6900e-003						
Total		**9.6900e-003**	**0.0881**	**0.0740**	**5.3000e-004**		**6.6900e-003**	**6.6900e-003**		**6.6900e-003**	**6.6900e-003**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	0.898356	9.6900e-003	0.0881	0.0740	5.3000e-004		6.6900e-003	6.6900e-003		6.6900e-003	6.6900e-003						
Total		**9.6900e-003**	**0.0881**	**0.0740**	**5.3000e-004**		**6.6900e-003**	**6.6900e-003**		**6.6900e-003**	**6.6900e-003**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.7848	3.0000e-005	3.2000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Mitigated	0.7848	3.0000e-005	3.2000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1905					0.0000	0.0000		0.0000	0.0000						
Consumer Products	0.5940					0.0000	0.0000		0.0000	0.0000						
Landscaping	3.2000e-004	3.0000e-005	3.2000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**0.7848**	**3.0000e-005**	**3.2000e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1905					0.0000	0.0000		0.0000	0.0000						
Consumer Products	0.5940					0.0000	0.0000		0.0000	0.0000						
Landscaping	3.2000e-004	3.0000e-005	3.2000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**0.7848**	**3.0000e-005**	**3.2000e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Op Wkday Practice - CMS Building

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	30.00	1000sqft	0.69	30,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Vechicle Emission Factors -

Vechicle Emission Factors -

Vechicle Emission Factors -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	1.00	0.00
tblVehicleTrips	CC_TTP	48.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PR_TP	77.00	100.00
tblVehicleTrips	ST_TR	2.37	0.00
tblVehicleTrips	SU_TR	0.98	0.00
tblVehicleTrips	WD_TR	11.01	2.80
tblWater	IndoorWaterUseRate	5,332,012.44	771,975.00
tblWater	OutdoorWaterUseRate	3,268,007.62	0.00

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.7848	3.0000e-005	3.2000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	9.6900e-003	0.0881	0.0740	5.3000e-004		6.6900e-003	6.6900e-003		6.6900e-003	6.6900e-003						
Mobile	0.3800	1.0549	4.0965	7.6800e-003	0.5443	0.0159	0.5602	0.1454	0.0146	0.1600						
Total	**1.1745**	**1.1430**	**4.1737**	**8.2100e-003**	**0.5443**	**0.0226**	**0.5669**	**0.1454**	**0.0213**	**0.1667**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.7848	3.0000e-005	3.2000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	9.6900e-003	0.0881	0.0740	5.3000e-004		6.6900e-003	6.6900e-003		6.6900e-003	6.6900e-003						
Mobile	0.3800	1.0549	4.0965	7.6800e-003	0.5443	0.0159	0.5602	0.1454	0.0146	0.1600						
Total	**1.1745**	**1.1430**	**4.1737**	**8.2100e-003**	**0.5443**	**0.0226**	**0.5669**	**0.1454**	**0.0213**	**0.1667**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.3800	1.0549	4.0965	7.6800e-003	0.5443	0.0159	0.5602	0.1454	0.0146	0.1600						
Mitigated	0.3800	1.0549	4.0965	7.6800e-003	0.5443	0.0159	0.5602	0.1454	0.0146	0.1600						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	84.00	0.00	0.00	183,456	183,456
Total	84.00	0.00	0.00	183,456	183,456

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.516610	0.060517	0.179979	0.140587	0.041566	0.006616	0.015092	0.027587	0.001923	0.002530	0.004314	0.000602	0.002075

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	9.6900e-003	0.0881	0.0740	5.3000e-004		6.6900e-003	6.6900e-003		6.6900e-003	6.6900e-003						
NaturalGas Unmitigated	9.6900e-003	0.0881	0.0740	5.3000e-004		6.6900e-003	6.6900e-003		6.6900e-003	6.6900e-003						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	898.356	9.6900e-003	0.0881	0.0740	5.3000e-004		6.6900e-003	6.6900e-003		6.6900e-003	6.6900e-003						
Total		**9.6900e-003**	**0.0881**	**0.0740**	**5.3000e-004**		**6.6900e-003**	**6.6900e-003**		**6.6900e-003**	**6.6900e-003**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	0.898356	9.6900e-003	0.0881	0.0740	5.3000e-004		6.6900e-003	6.6900e-003		6.6900e-003	6.6900e-003						
Total		**9.6900e-003**	**0.0881**	**0.0740**	**5.3000e-004**		**6.6900e-003**	**6.6900e-003**		**6.6900e-003**	**6.6900e-003**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.7848	3.0000e-005	3.2000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Mitigated	0.7848	3.0000e-005	3.2000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1905					0.0000	0.0000		0.0000	0.0000						
Consumer Products	0.5940					0.0000	0.0000		0.0000	0.0000						
Landscaping	3.2000e-004	3.0000e-005	3.2000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**0.7848**	**3.0000e-005**	**3.2000e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1905					0.0000	0.0000		0.0000	0.0000						
Consumer Products	0.5940					0.0000	0.0000		0.0000	0.0000						
Landscaping	3.2000e-004	3.0000e-005	3.2000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**0.7848**	**3.0000e-005**	**3.2000e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Op Wkday Practice - Golf

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	2.42	Acre	2.42	105,415.20	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	3.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2025
tblVehicleTrips	CC_TTP	48.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	ST_TR	1.59	0.00
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	WD_TR	1.59	3.72
tblWater	OutdoorWaterUseRate	2,883,384.87	1,045,983.10

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.7566	0.0000	2.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.0212	0.0472	0.2275	8.9000e-004	0.0584	1.1500e-003	0.0596	0.0156	1.0600e-003	0.0167						
Total	**2.7778**	**0.0472**	**0.2278**	**8.9000e-004**	**0.0584**	**1.1500e-003**	**0.0596**	**0.0156**	**1.0600e-003**	**0.0167**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.7566	0.0000	2.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.0212	0.0472	0.2275	8.9000e-004	0.0584	1.1500e-003	0.0596	0.0156	1.0600e-003	0.0167						
Total	**2.7778**	**0.0472**	**0.2278**	**8.9000e-004**	**0.0584**	**1.1500e-003**	**0.0596**	**0.0156**	**1.0600e-003**	**0.0167**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.0212	0.0472	0.2275	8.9000e-004	0.0584	1.1500e-003	0.0596	0.0156	1.0600e-003	0.0167						
Mitigated	0.0212	0.0472	0.2275	8.9000e-004	0.0584	1.1500e-003	0.0596	0.0156	1.0600e-003	0.0167						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	9.00	0.00	0.00	19,661	19,661
Total	9.00	0.00	0.00	19,661	19,661

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.500116	0.060136	0.182997	0.141937	0.043982	0.006974	0.016541	0.035595	0.002005	0.002529	0.004193	0.000558	0.002437

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	2.7566	0.0000	2.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Mitigated	2.7566	0.0000	2.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6693					0.0000	0.0000		0.0000	0.0000						
Consumer Products	2.0872					0.0000	0.0000		0.0000	0.0000						
Landscaping	2.0000e-005	0.0000	2.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**2.7566**	**0.0000**	**2.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6693					0.0000	0.0000		0.0000	0.0000						
Consumer Products	2.0872					0.0000	0.0000		0.0000	0.0000						
Landscaping	2.0000e-005	0.0000	2.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**2.7566**	**0.0000**	**2.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Op Wkday Practice - Golf

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	2.42	Acre	2.42	105,415.20	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	3.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2025
tblVehicleTrips	CC_TTP	48.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	ST_TR	1.59	0.00
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	WD_TR	1.59	3.72
tblWater	OutdoorWaterUseRate	2,883,384.87	1,045,983.10

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.7566	0.0000	2.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.0218	0.0495	0.2264	8.4000e-004	0.0584	1.1500e-003	0.0596	0.0156	1.0600e-003	0.0167						
Total	**2.7784**	**0.0495**	**0.2266**	**8.4000e-004**	**0.0584**	**1.1500e-003**	**0.0596**	**0.0156**	**1.0600e-003**	**0.0167**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.7566	0.0000	2.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.0218	0.0495	0.2264	8.4000e-004	0.0584	1.1500e-003	0.0596	0.0156	1.0600e-003	0.0167						
Total	**2.7784**	**0.0495**	**0.2266**	**8.4000e-004**	**0.0584**	**1.1500e-003**	**0.0596**	**0.0156**	**1.0600e-003**	**0.0167**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.0218	0.0495	0.2264	8.4000e-004	0.0584	1.1500e-003	0.0596	0.0156	1.0600e-003	0.0167						
Mitigated	0.0218	0.0495	0.2264	8.4000e-004	0.0584	1.1500e-003	0.0596	0.0156	1.0600e-003	0.0167						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	9.00	0.00	0.00	19,661	19,661
Total	9.00	0.00	0.00	19,661	19,661

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.500116	0.060136	0.182997	0.141937	0.043982	0.006974	0.016541	0.035595	0.002005	0.002529	0.004193	0.000558	0.002437

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	2.7566	0.0000	2.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Mitigated	2.7566	0.0000	2.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6693					0.0000	0.0000		0.0000	0.0000						
Consumer Products	2.0872					0.0000	0.0000		0.0000	0.0000						
Landscaping	2.0000e-005	0.0000	2.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**2.7566**	**0.0000**	**2.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6693					0.0000	0.0000		0.0000	0.0000						
Consumer Products	2.0872					0.0000	0.0000		0.0000	0.0000						
Landscaping	2.0000e-005	0.0000	2.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**2.7566**	**0.0000**	**2.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Op Wkday Practice - Pitzer Fields

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	16.15	Acre	16.15	703,494.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2025
tblVehicleTrips	CC_TTP	48.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	ST_TR	1.59	0.00
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	WD_TR	1.59	3.90
tblWater	IndoorWaterUseRate	0.00	197,100.00
tblWater	OutdoorWaterUseRate	19,242,423.80	1,251,269.50

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	18.3960	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.1484	0.3303	1.5917	6.2200e-003	0.4087	8.0200e-003	0.4168	0.1092	7.4000e-003	0.1166						
Total	**18.5444**	**0.3303**	**1.5933**	**6.2200e-003**	**0.4087**	**8.0300e-003**	**0.4168**	**0.1092**	**7.4100e-003**	**0.1167**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	18.3960	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.1484	0.3303	1.5917	6.2200e-003	0.4087	8.0200e-003	0.4168	0.1092	7.4000e-003	0.1166						
Total	**18.5444**	**0.3303**	**1.5933**	**6.2200e-003**	**0.4087**	**8.0300e-003**	**0.4168**	**0.1092**	**7.4100e-003**	**0.1167**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.1484	0.3303	1.5917	6.2200e-003	0.4087	8.0200e-003	0.4168	0.1092	7.4000e-003	0.1166						
Mitigated	0.1484	0.3303	1.5917	6.2200e-003	0.4087	8.0200e-003	0.4168	0.1092	7.4000e-003	0.1166						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	62.99	0.00	0.00	137,559	137,559
Total	62.99	0.00	0.00	137,559	137,559

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.500116	0.060136	0.182997	0.141937	0.043982	0.006974	0.016541	0.035595	0.002005	0.002529	0.004193	0.000558	0.002437

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	18.3960	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Mitigated	18.3960	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.4667					0.0000	0.0000		0.0000	0.0000						
Consumer Products	13.9292					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.5000e-004	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**18.3960**	**1.0000e-005**	**1.6400e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.4667					0.0000	0.0000		0.0000	0.0000						
Consumer Products	13.9292					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.5000e-004	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**18.3960**	**1.0000e-005**	**1.6400e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Op Wkday Practice - Pitzer Fields

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	16.15	Acre	16.15	703,494.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2025
tblVehicleTrips	CC_TTP	48.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	ST_TR	1.59	0.00
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	WD_TR	1.59	3.90
tblWater	IndoorWaterUseRate	0.00	197,100.00
tblWater	OutdoorWaterUseRate	19,242,423.80	1,251,269.50

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	18.3960	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.1527	0.3466	1.5837	5.9100e-003	0.4087	8.0400e-003	0.4168	0.1092	7.4200e-003	0.1167						
Total	**18.5488**	**0.3466**	**1.5853**	**5.9100e-003**	**0.4087**	**8.0500e-003**	**0.4168**	**0.1092**	**7.4300e-003**	**0.1167**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	18.3960	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.1527	0.3466	1.5837	5.9100e-003	0.4087	8.0400e-003	0.4168	0.1092	7.4200e-003	0.1167						
Total	**18.5488**	**0.3466**	**1.5853**	**5.9100e-003**	**0.4087**	**8.0500e-003**	**0.4168**	**0.1092**	**7.4300e-003**	**0.1167**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.1527	0.3466	1.5837	5.9100e-003	0.4087	8.0400e-003	0.4168	0.1092	7.4200e-003	0.1167						
Mitigated	0.1527	0.3466	1.5837	5.9100e-003	0.4087	8.0400e-003	0.4168	0.1092	7.4200e-003	0.1167						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	62.99	0.00	0.00	137,559	137,559
Total	62.99	0.00	0.00	137,559	137,559

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.500116	0.060136	0.182997	0.141937	0.043982	0.006974	0.016541	0.035595	0.002005	0.002529	0.004193	0.000558	0.002437

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	18.3960	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Mitigated	18.3960	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.4667					0.0000	0.0000		0.0000	0.0000						
Consumer Products	13.9292					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.5000e-004	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**18.3960**	**1.0000e-005**	**1.6400e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.4667					0.0000	0.0000		0.0000	0.0000						
Consumer Products	13.9292					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.5000e-004	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**18.3960**	**1.0000e-005**	**1.6400e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Op Wkday Practice - Rugby

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	7.58	Acre	7.58	330,184.80	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2025
tblVehicleTrips	CC_TTP	48.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	ST_TR	1.59	0.00
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	WD_TR	1.59	5.28
tblWater	IndoorWaterUseRate	0.00	771,975.00
tblWater	OutdoorWaterUseRate	9,031,428.63	1,045,983.10

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.6342	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.0943	0.2099	1.0114	3.9500e-003	0.2597	5.0900e-003	0.2648	0.0694	4.7000e-003	0.0741						
Total	**8.7285**	**0.2099**	**1.0122**	**3.9500e-003**	**0.2597**	**5.0900e-003**	**0.2648**	**0.0694**	**4.7000e-003**	**0.0741**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.6342	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.0943	0.2099	1.0114	3.9500e-003	0.2597	5.0900e-003	0.2648	0.0694	4.7000e-003	0.0741						
Total	**8.7285**	**0.2099**	**1.0122**	**3.9500e-003**	**0.2597**	**5.0900e-003**	**0.2648**	**0.0694**	**4.7000e-003**	**0.0741**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.0943	0.2099	1.0114	3.9500e-003	0.2597	5.0900e-003	0.2648	0.0694	4.7000e-003	0.0741						
Mitigated	0.0943	0.2099	1.0114	3.9500e-003	0.2597	5.0900e-003	0.2648	0.0694	4.7000e-003	0.0741						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	40.02	0.00	0.00	87,409	87,409
Total	40.02	0.00	0.00	87,409	87,409

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.500116	0.060136	0.182997	0.141937	0.043982	0.006974	0.016541	0.035595	0.002005	0.002529	0.004193	0.000558	0.002437

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	8.6342	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Mitigated	8.6342	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.0965					0.0000	0.0000		0.0000	0.0000						
Consumer Products	6.5377					0.0000	0.0000		0.0000	0.0000						
Landscaping	7.0000e-005	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**8.6342**	**1.0000e-005**	**7.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.0965					0.0000	0.0000		0.0000	0.0000						
Consumer Products	6.5377					0.0000	0.0000		0.0000	0.0000						
Landscaping	7.0000e-005	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**8.6342**	**1.0000e-005**	**7.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Op Wkday Practice - Rugby

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	7.58	Acre	7.58	330,184.80	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekday trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2025
tblVehicleTrips	CC_TTP	48.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	ST_TR	1.59	0.00
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	WD_TR	1.59	5.28
tblWater	IndoorWaterUseRate	0.00	771,975.00
tblWater	OutdoorWaterUseRate	9,031,428.63	1,045,983.10

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.6342	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.0971	0.2202	1.0063	3.7500e-003	0.2597	5.1100e-003	0.2648	0.0694	4.7100e-003	0.0741						
Total	**8.7312**	**0.2202**	**1.0071**	**3.7500e-003**	**0.2597**	**5.1100e-003**	**0.2648**	**0.0694**	**4.7100e-003**	**0.0741**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.6342	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.0971	0.2202	1.0063	3.7500e-003	0.2597	5.1100e-003	0.2648	0.0694	4.7100e-003	0.0741						
Total	**8.7312**	**0.2202**	**1.0071**	**3.7500e-003**	**0.2597**	**5.1100e-003**	**0.2648**	**0.0694**	**4.7100e-003**	**0.0741**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.0971	0.2202	1.0063	3.7500e-003	0.2597	5.1100e-003	0.2648	0.0694	4.7100e-003	0.0741						
Mitigated	0.0971	0.2202	1.0063	3.7500e-003	0.2597	5.1100e-003	0.2648	0.0694	4.7100e-003	0.0741						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	40.02	0.00	0.00	87,409	87,409
Total	40.02	0.00	0.00	87,409	87,409

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.500116	0.060136	0.182997	0.141937	0.043982	0.006974	0.016541	0.035595	0.002005	0.002529	0.004193	0.000558	0.002437

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	8.6342	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Mitigated	8.6342	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.0965					0.0000	0.0000		0.0000	0.0000						
Consumer Products	6.5377					0.0000	0.0000		0.0000	0.0000						
Landscaping	7.0000e-005	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**8.6342**	**1.0000e-005**	**7.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.0965					0.0000	0.0000		0.0000	0.0000						
Consumer Products	6.5377					0.0000	0.0000		0.0000	0.0000						
Landscaping	7.0000e-005	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**8.6342**	**1.0000e-005**	**7.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Proposed Weekend Game Fall

Football Game

	ROG	NOX	CO	SO2	PM10	PM2.5
Summer						
Area Sources	12.4045	0.00001	0.00111	0	0	0
Energy Demand	0.2636	2.3967	2.0132	0.0144	0.1822	0.1822
Mobile Sources	3.3167	7.3831	35.5802	0.1391	9.3162	2.6073
Summer Total	15.9849	9.7798	37.5945	0.1534	9.4983	2.7894
Winter						
Area Sources	12.4045	0.00001	0.00111	0	0	0
Energy Demand	0.2636	2.3967	2.0132	0.0144	0.1822	0.1822
Mobile Sources	3.4144	7.7473	35.4022	0.1321	9.3167	2.6078
Winter Total	16.0825	10.144	37.4165	0.1465	9.4989	2.79

Pitzer Fields

	ROG	NOX	CO	SO2	PM10	PM2.5
Summer						
Area Sources	18.396	0.00001	0.00164	0	0.00001	0.00001
Energy Demand	0	0	0	0	0	0
Mobile Sources	0.2591	0.5767	2.7793	0.0109	0.7277	0.2037
Summer Total	18.6551	0.5767	2.7809	0.0109	0.7277	0.2037
Winter						
Area Sources	18.396	0.00001	0.00164	0	0.00001	0.00001
Energy Demand	0	0	0	0	0	0
Mobile Sources	0.2667	0.6052	2.7654	0.0103	0.7278	0.2037
Winter Total	18.6628	0.6052	2.767	0.0103	0.7278	0.2037

Rugby

	ROG	NOX	CO	SO2	PM10	PM2.5
Summer						
Area Sources	8.6342	0.00001	0.00077	0	0	0
Energy Demand	0	0	0	0	0	0
Mobile Sources	0.0943	0.2099	1.0114	0.00395	0.2648	0.0741
Summer Total	8.7285	0.2099	1.0122	0.00395	0.2648	0.0741
Winter						
Area Sources	8.6342	0.00001	0.00077	0	0	0
Energy Demand	0	0	0	0	0	0
Mobile Sources	0.0971	0.2202	1.0063	0.00375	0.2648	0.0741
Winter Total	8.7312	0.2202	1.0071	0.00375	0.2648	0.0741

Total Weekend Game Fall

	ROG	NOX	CO	SO2	PM10	PM2.5
Summer						
Area Sources	39.43	0.00	0.00	0.00	0.00	0.00
Energy Demand	0.26	2.40	2.01	0.01	0.18	0.18
Mobile Sources	3.67	8.17	39.37	0.15	10.31	2.89
Summer Total	43.37	10.57	41.39	0.17	10.49	3.07
Winter						
Area Sources	39.43	0.00	0.00	0.00	0.00	0.00
Energy Demand	0.26	2.40	2.01	0.01	0.18	0.18
Mobile Sources	3.78	8.57	39.17	0.15	10.31	2.89
Winter Total	43.48	10.97	41.19	0.16	10.49	3.07

Op Wkend Game Fall - Football Game

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Arena	10.89	Acre	10.89	474,368.40	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekend trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2025
tblVehicleTrips	CC_TTP	81.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	DV_TP	0.28	0.00
tblVehicleTrips	PB_TP	0.60	0.00
tblVehicleTrips	PR_TP	0.66	100.00
tblVehicleTrips	ST_TR	0.00	129.29
tblVehicleTrips	WD_TR	33.33	0.00
tblWater	IndoorWaterUseRate	14,659,645.56	0.00
tblWater	OutdoorWaterUseRate	935,722.06	1,045,983.10

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	12.4045	1.0000e-005	1.1100e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.2636	2.3967	2.0132	0.0144		0.1822	0.1822		0.1822	0.1822						
Mobile	3.3167	7.3831	35.5802	0.1391	9.1370	0.1792	9.3162	2.4420	0.1653	2.6073						
Total	**15.9849**	**9.7798**	**37.5945**	**0.1534**	**9.1370**	**0.3613**	**9.4983**	**2.4420**	**0.3475**	**2.7894**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	12.4045	1.0000e-005	1.1100e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.2636	2.3967	2.0132	0.0144		0.1822	0.1822		0.1822	0.1822						
Mobile	3.3167	7.3831	35.5802	0.1391	9.1370	0.1792	9.3162	2.4420	0.1653	2.6073						
Total	**15.9849**	**9.7798**	**37.5945**	**0.1534**	**9.1370**	**0.3613**	**9.4983**	**2.4420**	**0.3475**	**2.7894**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**					

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	3.3167	7.3831	35.5802	0.1391	9.1370	0.1792	9.3162	2.4420	0.1653	2.6073						
Mitigated	3.3167	7.3831	35.5802	0.1391	9.1370	0.1792	9.3162	2.4420	0.1653	2.6073						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	0.00	1,407.97	0.00	615,000	615,000
Total	0.00	1,407.97	0.00	615,000	615,000

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Arena	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.500116	0.060136	0.182997	0.141937	0.043982	0.006974	0.016541	0.035595	0.002005	0.002529	0.004193	0.000558	0.002437

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.2636	2.3967	2.0132	0.0144		0.1822	0.1822		0.1822	0.1822						
NaturalGas Unmitigated	0.2636	2.3967	2.0132	0.0144		0.1822	0.1822		0.1822	0.1822						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	24446.2	0.2636	2.3967	2.0132	0.0144		0.1822	0.1822		0.1822	0.1822						
Total		**0.2636**	**2.3967**	**2.0132**	**0.0144**		**0.1822**	**0.1822**		**0.1822**	**0.1822**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	24.4462	0.2636	2.3967	2.0132	0.0144		0.1822	0.1822		0.1822	0.1822						
Total		**0.2636**	**2.3967**	**2.0132**	**0.0144**		**0.1822**	**0.1822**		**0.1822**	**0.1822**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	12.4045	1.0000e-005	1.1100e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Mitigated	12.4045	1.0000e-005	1.1100e-003	0.0000		0.0000	0.0000		0.0000	0.0000						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.0119					0.0000	0.0000		0.0000	0.0000						
Consumer Products	9.3925					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.0000e-004	1.0000e-005	1.1100e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**12.4045**	**1.0000e-005**	**1.1100e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.0119					0.0000	0.0000		0.0000	0.0000						
Consumer Products	9.3925					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.0000e-004	1.0000e-005	1.1100e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**12.4045**	**1.0000e-005**	**1.1100e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Op Wkend Game Fall - Football Game

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Arena	10.89	Acre	10.89	474,368.40	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekend trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2025
tblVehicleTrips	CC_TTP	81.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	DV_TP	0.28	0.00
tblVehicleTrips	PB_TP	0.60	0.00
tblVehicleTrips	PR_TP	0.66	100.00
tblVehicleTrips	ST_TR	0.00	129.29
tblVehicleTrips	WD_TR	33.33	0.00
tblWater	IndoorWaterUseRate	14,659,645.56	0.00
tblWater	OutdoorWaterUseRate	935,722.06	1,045,983.10

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	12.4045	1.0000e-005	1.1100e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.2636	2.3967	2.0132	0.0144		0.1822	0.1822		0.1822	0.1822						
Mobile	3.4144	7.7473	35.4022	0.1321	9.1370	0.1797	9.3167	2.4420	0.1659	2.6078						
Total	**16.0825**	**10.1440**	**37.4165**	**0.1465**	**9.1370**	**0.3619**	**9.4989**	**2.4420**	**0.3480**	**2.7900**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	12.4045	1.0000e-005	1.1100e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.2636	2.3967	2.0132	0.0144		0.1822	0.1822		0.1822	0.1822						
Mobile	3.4144	7.7473	35.4022	0.1321	9.1370	0.1797	9.3167	2.4420	0.1659	2.6078						
Total	**16.0825**	**10.1440**	**37.4165**	**0.1465**	**9.1370**	**0.3619**	**9.4989**	**2.4420**	**0.3480**	**2.7900**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	3.4144	7.7473	35.4022	0.1321	9.1370	0.1797	9.3167	2.4420	0.1659	2.6078						
Mitigated	3.4144	7.7473	35.4022	0.1321	9.1370	0.1797	9.3167	2.4420	0.1659	2.6078						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	0.00	1,407.97	0.00	615,000	615,000
Total	0.00	1,407.97	0.00	615,000	615,000

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Arena	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.500116	0.060136	0.182997	0.141937	0.043982	0.006974	0.016541	0.035595	0.002005	0.002529	0.004193	0.000558	0.002437

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.2636	2.3967	2.0132	0.0144		0.1822	0.1822		0.1822	0.1822						
NaturalGas Unmitigated	0.2636	2.3967	2.0132	0.0144		0.1822	0.1822		0.1822	0.1822						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	24446.2	0.2636	2.3967	2.0132	0.0144		0.1822	0.1822		0.1822	0.1822						
Total		**0.2636**	**2.3967**	**2.0132**	**0.0144**		**0.1822**	**0.1822**		**0.1822**	**0.1822**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	24.4462	0.2636	2.3967	2.0132	0.0144		0.1822	0.1822		0.1822	0.1822						
Total		**0.2636**	**2.3967**	**2.0132**	**0.0144**		**0.1822**	**0.1822**		**0.1822**	**0.1822**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	12.4045	1.0000e-005	1.1100e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Mitigated	12.4045	1.0000e-005	1.1100e-003	0.0000		0.0000	0.0000		0.0000	0.0000						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.0119					0.0000	0.0000		0.0000	0.0000						
Consumer Products	9.3925					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.0000e-004	1.0000e-005	1.1100e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**12.4045**	**1.0000e-005**	**1.1100e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.0119					0.0000	0.0000		0.0000	0.0000						
Consumer Products	9.3925					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.0000e-004	1.0000e-005	1.1100e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**12.4045**	**1.0000e-005**	**1.1100e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Op Wkend Game Fall - Pitzer

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	16.15	Acre	16.15	703,494.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekend trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2025
tblVehicleTrips	CC_TTP	48.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	ST_TR	1.59	6.81
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	WD_TR	1.59	0.00
tblWater	IndoorWaterUseRate	0.00	197,100.00
tblWater	OutdoorWaterUseRate	19,242,423.80	1,251,269.50

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	18.3960	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.2591	0.5767	2.7793	0.0109	0.7137	0.0140	0.7277	0.1908	0.0129	0.2037						
Total	**18.6551**	**0.5767**	**2.7809**	**0.0109**	**0.7137**	**0.0140**	**0.7277**	**0.1908**	**0.0129**	**0.2037**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	18.3960	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.2591	0.5767	2.7793	0.0109	0.7137	0.0140	0.7277	0.1908	0.0129	0.2037						
Total	**18.6551**	**0.5767**	**2.7809**	**0.0109**	**0.7137**	**0.0140**	**0.7277**	**0.1908**	**0.0129**	**0.2037**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.2591	0.5767	2.7793	0.0109	0.7137	0.0140	0.7277	0.1908	0.0129	0.2037						
Mitigated	0.2591	0.5767	2.7793	0.0109	0.7137	0.0140	0.7277	0.1908	0.0129	0.2037						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	109.98	0.00	48,040	48,040
Total	0.00	109.98	0.00	48,040	48,040

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.500116	0.060136	0.182997	0.141937	0.043982	0.006974	0.016541	0.035595	0.002005	0.002529	0.004193	0.000558	0.002437

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	18.3960	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Mitigated	18.3960	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.4667					0.0000	0.0000		0.0000	0.0000						
Consumer Products	13.9292					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.5000e-004	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**18.3960**	**1.0000e-005**	**1.6400e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.4667					0.0000	0.0000		0.0000	0.0000						
Consumer Products	13.9292					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.5000e-004	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**18.3960**	**1.0000e-005**	**1.6400e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Op Wkend Game Fall - Pitzer

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	16.15	Acre	16.15	703,494.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekend trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2025
tblVehicleTrips	CC_TTP	48.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	ST_TR	1.59	6.81
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	WD_TR	1.59	0.00
tblWater	IndoorWaterUseRate	0.00	197,100.00
tblWater	OutdoorWaterUseRate	19,242,423.80	1,251,269.50

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	18.3960	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.2667	0.6052	2.7654	0.0103	0.7137	0.0140	0.7278	0.1908	0.0130	0.2037						
Total	**18.6628**	**0.6052**	**2.7670**	**0.0103**	**0.7137**	**0.0141**	**0.7278**	**0.1908**	**0.0130**	**0.2037**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	18.3960	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.2667	0.6052	2.7654	0.0103	0.7137	0.0140	0.7278	0.1908	0.0130	0.2037						
Total	**18.6628**	**0.6052**	**2.7670**	**0.0103**	**0.7137**	**0.0141**	**0.7278**	**0.1908**	**0.0130**	**0.2037**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.2667	0.6052	2.7654	0.0103	0.7137	0.0140	0.7278	0.1908	0.0130	0.2037						
Mitigated	0.2667	0.6052	2.7654	0.0103	0.7137	0.0140	0.7278	0.1908	0.0130	0.2037		760.8857	760.8857	0.0239		761.3881

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	109.98	0.00	48,040	48,040
Total	0.00	109.98	0.00	48,040	48,040

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.500116	0.060136	0.182997	0.141937	0.043982	0.006974	0.016541	0.035595	0.002005	0.002529	0.004193	0.000558	0.002437

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	18.3960	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Mitigated	18.3960	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.4667					0.0000	0.0000		0.0000	0.0000						
Consumer Products	13.9292					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.5000e-004	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**18.3960**	**1.0000e-005**	**1.6400e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.4667					0.0000	0.0000		0.0000	0.0000						
Consumer Products	13.9292					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.5000e-004	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**18.3960**	**1.0000e-005**	**1.6400e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Op Wkend Game Fall - Rugby

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	7.58	Acre	7.58	330,184.80	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekend trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2025
tblVehicleTrips	CC_TTP	48.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	ST_TR	1.59	5.28
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	WD_TR	1.59	0.00
tblWater	ElectricityIntensityFactorToSupply	9,727.00	1,045,983.10
tblWater	OutdoorWaterUseRate	9,031,428.63	771,975.00

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.6342	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.0943	0.2099	1.0114	3.9500e-003	0.2597	5.0900e-003	0.2648	0.0694	4.7000e-003	0.0741						
Total	**8.7285**	**0.2099**	**1.0122**	**3.9500e-003**	**0.2597**	**5.0900e-003**	**0.2648**	**0.0694**	**4.7000e-003**	**0.0741**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.6342	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.0943	0.2099	1.0114	3.9500e-003	0.2597	5.0900e-003	0.2648	0.0694	4.7000e-003	0.0741						
Total	**8.7285**	**0.2099**	**1.0122**	**3.9500e-003**	**0.2597**	**5.0900e-003**	**0.2648**	**0.0694**	**4.7000e-003**	**0.0741**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.0943	0.2099	1.0114	3.9500e-003	0.2597	5.0900e-003	0.2648	0.0694	4.7000e-003	0.0741						
Mitigated	0.0943	0.2099	1.0114	3.9500e-003	0.2597	5.0900e-003	0.2648	0.0694	4.7000e-003	0.0741						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	40.02	0.00	17,482	17,482
Total	0.00	40.02	0.00	17,482	17,482

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.500116	0.060136	0.182997	0.141937	0.043982	0.006974	0.016541	0.035595	0.002005	0.002529	0.004193	0.000558	0.002437

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	8.6342	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Mitigated	8.6342	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.0965					0.0000	0.0000		0.0000	0.0000						
Consumer Products	6.5377					0.0000	0.0000		0.0000	0.0000						
Landscaping	7.0000e-005	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**8.6342**	**1.0000e-005**	**7.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.0965					0.0000	0.0000		0.0000	0.0000						
Consumer Products	6.5377					0.0000	0.0000		0.0000	0.0000						
Landscaping	7.0000e-005	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**8.6342**	**1.0000e-005**	**7.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Op Wkend Game Fall - Rugby

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	7.58	Acre	7.58	330,184.80	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekend trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2025
tblVehicleTrips	CC_TTP	48.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	ST_TR	1.59	5.28
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	WD_TR	1.59	0.00
tblWater	ElectricityIntensityFactorToSupply	9,727.00	1,045,983.10
tblWater	OutdoorWaterUseRate	9,031,428.63	771,975.00

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.6342	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.0971	0.2202	1.0063	3.7500e-003	0.2597	5.1100e-003	0.2648	0.0694	4.7100e-003	0.0741						
Total	**8.7312**	**0.2202**	**1.0071**	**3.7500e-003**	**0.2597**	**5.1100e-003**	**0.2648**	**0.0694**	**4.7100e-003**	**0.0741**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.6342	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.0971	0.2202	1.0063	3.7500e-003	0.2597	5.1100e-003	0.2648	0.0694	4.7100e-003	0.0741						
Total	**8.7312**	**0.2202**	**1.0071**	**3.7500e-003**	**0.2597**	**5.1100e-003**	**0.2648**	**0.0694**	**4.7100e-003**	**0.0741**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.0971	0.2202	1.0063	3.7500e-003	0.2597	5.1100e-003	0.2648	0.0694	4.7100e-003	0.0741						
Mitigated	0.0971	0.2202	1.0063	3.7500e-003	0.2597	5.1100e-003	0.2648	0.0694	4.7100e-003	0.0741						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	40.02	0.00	17,482	17,482
Total	0.00	40.02	0.00	17,482	17,482

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.500116	0.060136	0.182997	0.141937	0.043982	0.006974	0.016541	0.035595	0.002005	0.002529	0.004193	0.000558	0.002437

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	8.6342	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Mitigated	8.6342	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.0965					0.0000	0.0000		0.0000	0.0000						
Consumer Products	6.5377					0.0000	0.0000		0.0000	0.0000						
Landscaping	7.0000e-005	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**8.6342**	**1.0000e-005**	**7.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.0965					0.0000	0.0000		0.0000	0.0000						
Consumer Products	6.5377					0.0000	0.0000		0.0000	0.0000						
Landscaping	7.0000e-005	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**8.6342**	**1.0000e-005**	**7.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Proposed Weekend Game Spring

Baseball Game

	ROG	NOX	CO	SO2	PM10	PM2.5
Summer						
Area Sources	17.8493	0.00001	0.0016	0	0.00001	0.00001
Energy Demand	0.3794	3.4487	2.8969	0.0207	0.2621	0.2621
Mobile Sources	0.6076	1.3525	6.518	0.0255	1.7067	0.4776
Summer Total	18.8362	4.8012	9.4165	0.0462	1.9688	0.7397
Winter						
Area Sources	17.8493	0.00001	0.0016	0	0.00001	0.00001
Energy Demand	0.3794	3.4487	2.8969	0.0207	0.2621	0.2621
Mobile Sources	0.6255	1.4193	6.4854	0.0242	1.7068	0.4777
Winter Total	18.8541	4.8679	9.3839	0.0449	1.9689	0.7398

Pitzer Fields

	ROG	NOX	CO	SO2	PM10	PM2.5
Summer						
Area Sources	18.396	0.00001	0.00164	0	0.00001	0.00001
Energy Demand	0	0	0	0	0	0
Mobile Sources	0.2591	0.5767	2.7793	0.0109	0.7277	0.2037
Summer Total	18.6551	0.5767	2.7809	0.0109	0.7277	0.2037
Winter						
Area Sources	18.396	0.00001	0.00164	0	0.00001	0.00001
Energy Demand	0	0	0	0	0	0
Mobile Sources	0.2667	0.6052	2.7654	0.0103	0.7278	0.2037
Winter Total	18.6628	0.6052	2.767	0.0103	0.7278	0.2037

Rugby

	ROG	NOX	CO	SO2	PM10	PM2.5
Summer						
Area Sources	8.6342	0.00001	0.00077	0	0	0
Energy Demand	0	0	0	0	0	0
Mobile Sources	0.3439	0.7656	3.6893	0.0144	0.966	0.2704
Summer Total	8.9781	0.7656	3.69	0.0144	0.966	0.2704
Winter						
Area Sources	8.6342	0.00001	0.00077	0	0	0
Energy Demand	0	0	0	0	0	0
Mobile Sources	0.354	0.8033	3.6708	0.0137	0.966	0.2704
Winter Total	8.9882	0.8033	3.6716	0.0137	0.966	0.2704

Softball Game

	ROG	NOX	CO	SO2	PM10	PM2.5
Summer						
Area Sources	13.817	0.00001	0.00124	0	0	0
Energy Demand	0.2937	2.6696	2.2425	0.016	0.2029	0.2029
Mobile Sources	0.5795	1.29	6.2165	0.0243	1.6277	0.4555

Summer Total	14.6901	3.9596	8.4602	0.0403	1.8306	0.6584
Winter						
Area Sources	13.817	0.00001	0.00124	0	0	0
Energy Demand	0.2937	2.6696	2.2425	0.016	0.2029	0.2029
Mobile Sources	0.5966	1.3536	6.1854	0.0231	1.6278	0.4556
Winter Total	14.7072	4.0232	8.4291	0.0391	1.8307	0.6585

Total Weekend Game Spring

	ROG	NOX	CO	SO2	PM10	PM2.5
Summer						
Area Sources	58.70	0.00	0.01	0.00	0.00	0.00
Energy Demand	0.67	6.12	5.14	0.04	0.47	0.47
Mobile Sources	1.79	3.98	19.20	0.08	5.03	1.41
Summer Total	61.16	10.10	24.35	0.11	5.49	1.87
Winter						
Area Sources	58.70	0.00	0.01	0.00	0.00	0.00
Energy Demand	0.67	6.12	5.14	0.04	0.47	0.47
Mobile Sources	1.84	4.18	19.11	0.07	5.03	1.41
Winter Total	61.21	10.30	24.25	0.11	5.49	1.87

Op Wkend Game Spring - BB Game

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Arena	15.67	Acre	15.67	682,585.20	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekend trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2025
tblVehicleTrips	CC_TTP	81.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	DV_TP	0.28	0.00
tblVehicleTrips	PB_TP	0.60	0.00
tblVehicleTrips	PR_TP	0.66	100.00
tblVehicleTrips	ST_TR	0.00	16.46
tblVehicleTrips	WD_TR	33.33	0.00
tblWater	IndoorWaterUseRate	21,094,274.20	350,400.00
tblWater	OutdoorWaterUseRate	1,346,443.03	1,045,983.10

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	17.8493	1.0000e-005	1.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.3794	3.4487	2.8969	0.0207		0.2621	0.2621		0.2621	0.2621						
Mobile	0.6076	1.3525	6.5180	0.0255	1.6738	0.0328	1.7067	0.4474	0.0303	0.4776						
Total	**18.8362**	**4.8012**	**9.4165**	**0.0462**	**1.6738**	**0.2949**	**1.9688**	**0.4474**	**0.2924**	**0.7397**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	17.8493	1.0000e-005	1.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.3794	3.4487	2.8969	0.0207		0.2621	0.2621		0.2621	0.2621						
Mobile	0.6076	1.3525	6.5180	0.0255	1.6738	0.0328	1.7067	0.4474	0.0303	0.4776						
Total	**18.8362**	**4.8012**	**9.4165**	**0.0462**	**1.6738**	**0.2949**	**1.9688**	**0.4474**	**0.2924**	**0.7397**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.6076	1.3525	6.5180	0.0255	1.6738	0.0328	1.7067	0.4474	0.0303	0.4776						
Mitigated	0.6076	1.3525	6.5180	0.0255	1.6738	0.0328	1.7067	0.4474	0.0303	0.4776						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	0.00	257.93	0.00	112,663	112,663
Total	0.00	257.93	0.00	112,663	112,663

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Arena	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.500116	0.060136	0.182997	0.141937	0.043982	0.006974	0.016541	0.035595	0.002005	0.002529	0.004193	0.000558	0.002437

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.3794	3.4487	2.8969	0.0207		0.2621	0.2621		0.2621	0.2621						
NaturalGas Unmitigated	0.3794	3.4487	2.8969	0.0207		0.2621	0.2621		0.2621	0.2621						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	35176.5	0.3794	3.4487	2.8969	0.0207		0.2621	0.2621		0.2621	0.2621						
Total		**0.3794**	**3.4487**	**2.8969**	**0.0207**		**0.2621**	**0.2621**		**0.2621**	**0.2621**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	35.1765	0.3794	3.4487	2.8969	0.0207		0.2621	0.2621		0.2621	0.2621						
Total		**0.3794**	**3.4487**	**2.8969**	**0.0207**		**0.2621**	**0.2621**		**0.2621**	**0.2621**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	17.8493	1.0000e-005	1.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Mitigated	17.8493	1.0000e-005	1.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.3340					0.0000	0.0000		0.0000	0.0000						
Consumer Products	13.5152					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.5000e-004	1.0000e-005	1.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**17.8493**	**1.0000e-005**	**1.6000e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.3340					0.0000	0.0000		0.0000	0.0000						
Consumer Products	13.5152					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.5000e-004	1.0000e-005	1.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**17.8493**	**1.0000e-005**	**1.6000e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Op Wkend Game Spring - BB Game

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Arena	15.67	Acre	15.67	682,585.20	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekend trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2025
tblVehicleTrips	CC_TTP	81.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	DV_TP	0.28	0.00
tblVehicleTrips	PB_TP	0.60	0.00
tblVehicleTrips	PR_TP	0.66	100.00
tblVehicleTrips	ST_TR	0.00	16.46
tblVehicleTrips	WD_TR	33.33	0.00
tblWater	IndoorWaterUseRate	21,094,274.20	350,400.00
tblWater	OutdoorWaterUseRate	1,346,443.03	1,045,983.10

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	17.8493	1.0000e-005	1.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.3794	3.4487	2.8969	0.0207		0.2621	0.2621		0.2621	0.2621						
Mobile	0.6255	1.4193	6.4854	0.0242	1.6738	0.0329	1.7068	0.4474	0.0304	0.4777						
Total	**18.8541**	**4.8679**	**9.3839**	**0.0449**	**1.6738**	**0.2950**	**1.9689**	**0.4474**	**0.2925**	**0.7398**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	17.8493	1.0000e-005	1.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.3794	3.4487	2.8969	0.0207		0.2621	0.2621		0.2621	0.2621						
Mobile	0.6255	1.4193	6.4854	0.0242	1.6738	0.0329	1.7068	0.4474	0.0304	0.4777						
Total	**18.8541**	**4.8679**	**9.3839**	**0.0449**	**1.6738**	**0.2950**	**1.9689**	**0.4474**	**0.2925**	**0.7398**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.6255	1.4193	6.4854	0.0242	1.6738	0.0329	1.7068	0.4474	0.0304	0.4777						
Mitigated	0.6255	1.4193	6.4854	0.0242	1.6738	0.0329	1.7068	0.4474	0.0304	0.4777						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	0.00	257.93	0.00	112,663	112,663
Total	0.00	257.93	0.00	112,663	112,663

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Arena	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.500116	0.060136	0.182997	0.141937	0.043982	0.006974	0.016541	0.035595	0.002005	0.002529	0.004193	0.000558	0.002437

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.3794	3.4487	2.8969	0.0207		0.2621	0.2621		0.2621	0.2621						
NaturalGas Unmitigated	0.3794	3.4487	2.8969	0.0207		0.2621	0.2621		0.2621	0.2621						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	35176.5	0.3794	3.4487	2.8969	0.0207		0.2621	0.2621		0.2621	0.2621						
Total		**0.3794**	**3.4487**	**2.8969**	**0.0207**		**0.2621**	**0.2621**		**0.2621**	**0.2621**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	35.1765	0.3794	3.4487	2.8969	0.0207		0.2621	0.2621		0.2621	0.2621						
Total		**0.3794**	**3.4487**	**2.8969**	**0.0207**		**0.2621**	**0.2621**		**0.2621**	**0.2621**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	17.8493	1.0000e-005	1.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Mitigated	17.8493	1.0000e-005	1.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.3340					0.0000	0.0000		0.0000	0.0000						
Consumer Products	13.5152					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.5000e-004	1.0000e-005	1.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**17.8493**	**1.0000e-005**	**1.6000e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.3340					0.0000	0.0000		0.0000	0.0000						
Consumer Products	13.5152					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.5000e-004	1.0000e-005	1.6000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**17.8493**	**1.0000e-005**	**1.6000e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Op Wkend Game Spring - Pitzer

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	16.15	Acre	16.15	703,494.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekend trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2025
tblVehicleTrips	CC_TTP	48.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	ST_TR	1.59	6.81
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	WD_TR	1.59	0.00
tblWater	IndoorWaterUseRate	0.00	197,100.00
tblWater	OutdoorWaterUseRate	19,242,423.80	1,251,269.50

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	18.3960	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.2591	0.5767	2.7793	0.0109	0.7137	0.0140	0.7277	0.1908	0.0129	0.2037						
Total	**18.6551**	**0.5767**	**2.7809**	**0.0109**	**0.7137**	**0.0140**	**0.7277**	**0.1908**	**0.0129**	**0.2037**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	18.3960	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.2591	0.5767	2.7793	0.0109	0.7137	0.0140	0.7277	0.1908	0.0129	0.2037						
Total	**18.6551**	**0.5767**	**2.7809**	**0.0109**	**0.7137**	**0.0140**	**0.7277**	**0.1908**	**0.0129**	**0.2037**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.2591	0.5767	2.7793	0.0109	0.7137	0.0140	0.7277	0.1908	0.0129	0.2037						
Mitigated	0.2591	0.5767	2.7793	0.0109	0.7137	0.0140	0.7277	0.1908	0.0129	0.2037						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	109.98	0.00	48,040	48,040
Total	0.00	109.98	0.00	48,040	48,040

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.500116	0.060136	0.182997	0.141937	0.043982	0.006974	0.016541	0.035595	0.002005	0.002529	0.004193	0.000558	0.002437

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	18.3960	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Mitigated	18.3960	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.4667					0.0000	0.0000		0.0000	0.0000						
Consumer Products	13.9292					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.5000e-004	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**18.3960**	**1.0000e-005**	**1.6400e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.4667					0.0000	0.0000		0.0000	0.0000						
Consumer Products	13.9292					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.5000e-004	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**18.3960**	**1.0000e-005**	**1.6400e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Op Wkend Game Spring - Pitzer

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	16.15	Acre	16.15	703,494.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekend trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2025
tblVehicleTrips	CC_TTP	48.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	ST_TR	1.59	6.81
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	WD_TR	1.59	0.00
tblWater	IndoorWaterUseRate	0.00	197,100.00
tblWater	OutdoorWaterUseRate	19,242,423.80	1,251,269.50

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	18.3960	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.2667	0.6052	2.7654	0.0103	0.7137	0.0140	0.7278	0.1908	0.0130	0.2037						
Total	**18.6628**	**0.6052**	**2.7670**	**0.0103**	**0.7137**	**0.0141**	**0.7278**	**0.1908**	**0.0130**	**0.2037**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	18.3960	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.2667	0.6052	2.7654	0.0103	0.7137	0.0140	0.7278	0.1908	0.0130	0.2037						
Total	**18.6628**	**0.6052**	**2.7670**	**0.0103**	**0.7137**	**0.0141**	**0.7278**	**0.1908**	**0.0130**	**0.2037**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.2667	0.6052	2.7654	0.0103	0.7137	0.0140	0.7278	0.1908	0.0130	0.2037						
Mitigated	0.2667	0.6052	2.7654	0.0103	0.7137	0.0140	0.7278	0.1908	0.0130	0.2037						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	109.98	0.00	48,040	48,040
Total	0.00	109.98	0.00	48,040	48,040

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.500116	0.060136	0.182997	0.141937	0.043982	0.006974	0.016541	0.035595	0.002005	0.002529	0.004193	0.000558	0.002437

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	18.3960	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Mitigated	18.3960	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.4667					0.0000	0.0000		0.0000	0.0000						
Consumer Products	13.9292					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.5000e-004	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	**18.3960**	**1.0000e-005**	**1.6400e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.4667					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	13.9292					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.5000e-004	1.0000e-005	1.6400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.5300e-003	3.5300e-003	1.0000e-005		3.7300e-003
Total	**18.3960**	**1.0000e-005**	**1.6400e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**3.5300e-003**	**3.5300e-003**	**1.0000e-005**		**3.7300e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Op Wkend Game Spring - Rugby

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	7.58	Acre	7.58	330,184.80	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekend trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2025
tblVehicleTrips	CC_TTP	48.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	ST_TR	1.59	19.26
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	WD_TR	1.59	0.00
tblWater	IndoorWaterUseRate	0.00	771,975.00
tblWater	OutdoorWaterUseRate	9,031,428.63	1,045,983.10

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.6342	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.3439	0.7656	3.6893	0.0144	0.9474	0.0186	0.9660	0.2532	0.0171	0.2704						
Total	**8.9781**	**0.7656**	**3.6900**	**0.0144**	**0.9474**	**0.0186**	**0.9660**	**0.2532**	**0.0171**	**0.2704**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.6342	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.3439	0.7656	3.6893	0.0144	0.9474	0.0186	0.9660	0.2532	0.0171	0.2704						
Total	**8.9781**	**0.7656**	**3.6900**	**0.0144**	**0.9474**	**0.0186**	**0.9660**	**0.2532**	**0.0171**	**0.2704**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.3439	0.7656	3.6893	0.0144	0.9474	0.0186	0.9660	0.2532	0.0171	0.2704						
Mitigated	0.3439	0.7656	3.6893	0.0144	0.9474	0.0186	0.9660	0.2532	0.0171	0.2704						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	145.99	0.00	63,769	63,769
Total	0.00	145.99	0.00	63,769	63,769

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.500116	0.060136	0.182997	0.141937	0.043982	0.006974	0.016541	0.035595	0.002005	0.002529	0.004193	0.000558	0.002437

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	8.6342	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Mitigated	8.6342	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.0965					0.0000	0.0000		0.0000	0.0000						
Consumer Products	6.5377					0.0000	0.0000		0.0000	0.0000						
Landscaping	7.0000e-005	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**8.6342**	**1.0000e-005**	**7.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.0965					0.0000	0.0000		0.0000	0.0000						
Consumer Products	6.5377					0.0000	0.0000		0.0000	0.0000						
Landscaping	7.0000e-005	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**8.6342**	**1.0000e-005**	**7.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Op Wkend Game Spring - Rugby

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	7.58	Acre	7.58	330,184.80	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekend trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2025
tblVehicleTrips	CC_TTP	48.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	ST_TR	1.59	19.26
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	WD_TR	1.59	0.00
tblWater	IndoorWaterUseRate	0.00	771,975.00
tblWater	OutdoorWaterUseRate	9,031,428.63	1,045,983.10

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.6342	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.3540	0.8033	3.6708	0.0137	0.9474	0.0186	0.9660	0.2532	0.0172	0.2704						
Total	**8.9882**	**0.8033**	**3.6716**	**0.0137**	**0.9474**	**0.0186**	**0.9660**	**0.2532**	**0.0172**	**0.2704**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.6342	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Mobile	0.3540	0.8033	3.6708	0.0137	0.9474	0.0186	0.9660	0.2532	0.0172	0.2704						
Total	**8.9882**	**0.8033**	**3.6716**	**0.0137**	**0.9474**	**0.0186**	**0.9660**	**0.2532**	**0.0172**	**0.2704**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.3540	0.8033	3.6708	0.0137	0.9474	0.0186	0.9660	0.2532	0.0172	0.2704						
Mitigated	0.3540	0.8033	3.6708	0.0137	0.9474	0.0186	0.9660	0.2532	0.0172	0.2704						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	145.99	0.00	63,769	63,769
Total	0.00	145.99	0.00	63,769	63,769

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.500116	0.060136	0.182997	0.141937	0.043982	0.006974	0.016541	0.035595	0.002005	0.002529	0.004193	0.000558	0.002437

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	8.6342	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Mitigated	8.6342	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.0965					0.0000	0.0000		0.0000	0.0000						
Consumer Products	6.5377					0.0000	0.0000		0.0000	0.0000						
Landscaping	7.0000e-005	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**8.6342**	**1.0000e-005**	**7.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.0965					0.0000	0.0000		0.0000	0.0000						
Consumer Products	6.5377					0.0000	0.0000		0.0000	0.0000						
Landscaping	7.0000e-005	1.0000e-005	7.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**8.6342**	**1.0000e-005**	**7.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Op Wkend Game Spring - SB Game

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Arena	12.13	Acre	12.13	528,382.80	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekend trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2025
tblVehicleTrips	CC_TTP	81.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	DV_TP	0.28	0.00
tblVehicleTrips	PB_TP	0.60	0.00
tblVehicleTrips	PR_TP	0.66	100.00
tblVehicleTrips	ST_TR	0.00	20.28
tblVehicleTrips	WD_TR	33.33	0.00
tblWater	IndoorWaterUseRate	16,328,879.77	0.00
tblWater	OutdoorWaterUseRate	1,042,268.92	1,045,983.10

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	13.8170	1.0000e-005	1.2400e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.2937	2.6696	2.2425	0.0160		0.2029	0.2029		0.2029	0.2029						
Mobile	0.5795	1.2900	6.2165	0.0243	1.5964	0.0313	1.6277	0.4267	0.0289	0.4555						
Total	**14.6901**	**3.9596**	**8.4602**	**0.0403**	**1.5964**	**0.2342**	**1.8306**	**0.4267**	**0.2318**	**0.6584**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	13.8170	1.0000e-005	1.2400e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.2937	2.6696	2.2425	0.0160		0.2029	0.2029		0.2029	0.2029						
Mobile	0.5795	1.2900	6.2165	0.0243	1.5964	0.0313	1.6277	0.4267	0.0289	0.4555						
Total	**14.6901**	**3.9596**	**8.4602**	**0.0403**	**1.5964**	**0.2342**	**1.8306**	**0.4267**	**0.2318**	**0.6584**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.5795	1.2900	6.2165	0.0243	1.5964	0.0313	1.6277	0.4267	0.0289	0.4555						
Mitigated	0.5795	1.2900	6.2165	0.0243	1.5964	0.0313	1.6277	0.4267	0.0289	0.4555						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	0.00	246.00	0.00	107,451	107,451
Total	0.00	246.00	0.00	107,451	107,451

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Arena	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.500116	0.060136	0.182997	0.141937	0.043982	0.006974	0.016541	0.035595	0.002005	0.002529	0.004193	0.000558	0.002437

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.2937	2.6696	2.2425	0.0160		0.2029	0.2029		0.2029	0.2029						
NaturalGas Unmitigated	0.2937	2.6696	2.2425	0.0160		0.2029	0.2029		0.2029	0.2029						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	27229.8	0.2937	2.6696	2.2425	0.0160		0.2029	0.2029		0.2029	0.2029						
Total		**0.2937**	**2.6696**	**2.2425**	**0.0160**		**0.2029**	**0.2029**		**0.2029**	**0.2029**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	27.2298	0.2937	2.6696	2.2425	0.0160		0.2029	0.2029		0.2029	0.2029						
Total		**0.2937**	**2.6696**	**2.2425**	**0.0160**		**0.2029**	**0.2029**		**0.2029**	**0.2029**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	13.8170	1.0000e-005	1.2400e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Mitigated	13.8170	1.0000e-005	1.2400e-003	0.0000		0.0000	0.0000		0.0000	0.0000						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.3549					0.0000	0.0000		0.0000	0.0000						
Consumer Products	10.4620					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.1000e-004	1.0000e-005	1.2400e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**13.8170**	**1.0000e-005**	**1.2400e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.3549					0.0000	0.0000		0.0000	0.0000						
Consumer Products	10.4620					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.1000e-004	1.0000e-005	1.2400e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**13.8170**	**1.0000e-005**	**1.2400e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Op Wkend Game Spring - SB Game

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Arena	12.13	Acre	12.13	528,382.80	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - Weekend trips only, university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2025
tblVehicleTrips	CC_TTP	81.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	DV_TP	0.28	0.00
tblVehicleTrips	PB_TP	0.60	0.00
tblVehicleTrips	PR_TP	0.66	100.00
tblVehicleTrips	ST_TR	0.00	20.28
tblVehicleTrips	WD_TR	33.33	0.00
tblWater	IndoorWaterUseRate	16,328,879.77	0.00
tblWater	OutdoorWaterUseRate	1,042,268.92	1,045,983.10

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	13.8170	1.0000e-005	1.2400e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.2937	2.6696	2.2425	0.0160		0.2029	0.2029		0.2029	0.2029						
Mobile	0.5966	1.3536	6.1854	0.0231	1.5964	0.0314	1.6278	0.4267	0.0290	0.4556						
Total	**14.7072**	**4.0232**	**8.4291**	**0.0391**	**1.5964**	**0.2343**	**1.8307**	**0.4267**	**0.2319**	**0.6585**						

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	13.8170	1.0000e-005	1.2400e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	0.2937	2.6696	2.2425	0.0160		0.2029	0.2029		0.2029	0.2029						
Mobile	0.5966	1.3536	6.1854	0.0231	1.5964	0.0314	1.6278	0.4267	0.0290	0.4556						
Total	**14.7072**	**4.0232**	**8.4291**	**0.0391**	**1.5964**	**0.2343**	**1.8307**	**0.4267**	**0.2319**	**0.6585**						

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**						

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	0.5966	1.3536	6.1854	0.0231	1.5964	0.0314	1.6278	0.4267	0.0290	0.4556						
Mitigated	0.5966	1.3536	6.1854	0.0231	1.5964	0.0314	1.6278	0.4267	0.0290	0.4556						

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	0.00	246.00	0.00	107,451	107,451
Total	0.00	246.00	0.00	107,451	107,451

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Arena	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.500116	0.060136	0.182997	0.141937	0.043982	0.006974	0.016541	0.035595	0.002005	0.002529	0.004193	0.000558	0.002437

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.2937	2.6696	2.2425	0.0160		0.2029	0.2029		0.2029	0.2029						
NaturalGas Unmitigated	0.2937	2.6696	2.2425	0.0160		0.2029	0.2029		0.2029	0.2029						

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	27229.8	0.2937	2.6696	2.2425	0.0160		0.2029	0.2029		0.2029	0.2029						
Total		**0.2937**	**2.6696**	**2.2425**	**0.0160**		**0.2029**	**0.2029**		**0.2029**	**0.2029**						

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	27.2298	0.2937	2.6696	2.2425	0.0160		0.2029	0.2029		0.2029	0.2029						
Total		**0.2937**	**2.6696**	**2.2425**	**0.0160**		**0.2029**	**0.2029**		**0.2029**	**0.2029**						

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	13.8170	1.0000e-005	1.2400e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Mitigated	13.8170	1.0000e-005	1.2400e-003	0.0000		0.0000	0.0000		0.0000	0.0000						

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.3549					0.0000	0.0000		0.0000	0.0000						
Consumer Products	10.4620					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.1000e-004	1.0000e-005	1.2400e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**13.8170**	**1.0000e-005**	**1.2400e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.3549					0.0000	0.0000		0.0000	0.0000						
Consumer Products	10.4620					0.0000	0.0000		0.0000	0.0000						
Landscaping	1.1000e-004	1.0000e-005	1.2400e-003	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	**13.8170**	**1.0000e-005**	**1.2400e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Annual Project

South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	30.00	1000sqft	0.69	30,000.00	0
Arena	62.42	Acre	62.42	2,719,015.20	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating -

Vehicle Trips - university trip types and length

Energy Use -

Water And Wastewater - Indoor water use based on fixture counts; outdoor water use based on City irrigation estimates

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	40.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2025
tblVehicleTrips	CC_TTP	81.00	100.00
tblVehicleTrips	CC_TTP	48.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	0.28	0.00
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	PB_TP	0.60	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PR_TP	0.66	100.00
tblVehicleTrips	PR_TP	77.00	100.00
tblVehicleTrips	ST_TR	0.00	1.06

tblVehicleTrips	ST_TR	2.37	0.00
tblVehicleTrips	SU_TR	0.98	0.00
tblVehicleTrips	WD_TR	33.33	1.63
tblVehicleTrips	WD_TR	11.01	1.38
tblWater	IndoorWaterUseRate	84,027,096.06	782,925.00
tblWater	IndoorWaterUseRate	5,332,012.44	733,650.00
tblWater	OutdoorWaterUseRate	5,363,431.66	74,534,474.00
tblWater	OutdoorWaterUseRate	3,268,007.62	0.00

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction											**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											0.0000	2.2900e-003	2.2900e-003	1.0000e-005	0.0000	2.4200e-003
Energy											0.0000	12,247.5229	12,247.5229	0.4894	0.1407	12,301.4207
Mobile											0.0000	128.9427	128.9427	4.0000e-003	0.0000	129.0267
Waste											6.7535	0.0000	6.7535	0.3991	0.0000	15.1351
Water											0.4811	242.6195	243.1007	0.0606	3.4700e-003	245.4497
Total											**7.2347**	**12,619.0874**	**12,626.3221**	**0.9531**	**0.1442**	**12,691.0346**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											0.0000	2.2900e-003	2.2900e-003	1.0000e-005	0.0000	2.4200e-003
Energy											0.0000	12,247.5229	12,247.5229	0.4894	0.1407	12,301.4207
Mobile											0.0000	128.9427	128.9427	4.0000e-003	0.0000	129.0267
Waste											6.7535	0.0000	6.7535	0.3991	0.0000	15.1351
Water											0.4811	242.6195	243.1007	0.0606	3.4700e-003	245.4489
Total											**7.2347**	**12,619.0874**	**12,626.3221**	**0.9531**	**0.1442**	**12,691.0338**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction											**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0468	0.1141	0.5147	1.9300e-003	0.1295	2.5900e-003	0.1321	0.0347	2.3900e-003	0.0371	0.0000	128.9427	128.9427	4.0000e-003	0.0000	129.0267
Unmitigated	0.0468	0.1141	0.5147	1.9300e-003	0.1295	2.5900e-003	0.1321	0.0347	2.3900e-003	0.0371	0.0000	128.9427	128.9427	4.0000e-003	0.0000	129.0267

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	101.74	66.17	0.00	251,111	251,111
General Office Building	41.40	0.00	0.00	90,418	90,418
Total	143.14	66.17	0.00	341,529	341,529

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Arena	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0
General Office Building	0.00	8.40	0.00	0.00	100.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.500116	0.060136	0.182997	0.141937	0.043982	0.006974	0.016541	0.035595	0.002005	0.002529	0.004193	0.000558	0.002437

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
NaturalGas Mitigated											0.0000	2,746.7727	2,746.7727	0.0527	0.0504	2,763.4891
NaturalGas Unmitigated											0.0000	2,746.7727	2,746.7727	0.0527	0.0504	2,763.4891
Electricity Mitigated											0.0000	9,500.7503	9,500.7503	0.4367	0.0904	9,537.9316
Electricity Unmitigated											0.0000	9,500.7503	9,500.7503	0.4367	0.0904	9,537.9316

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Arena	5.11447e+007											0.0000	2,729.2747	2,729.2747	0.0523	0.0500	2,745.8846
General Office Building	327900											0.0000	17.4980	17.4980	3.4000e-004	3.2000e-004	17.6045
Total												**0.0000**	**2,746.7727**	**2,746.7727**	**0.0527**	**0.0504**	**2,763.4891**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Arena	5.11447e+007											0.0000	2,729.2747	2,729.2747	0.0523	0.0500	2,745.8846
General Office Building	327900											0.0000	17.4980	17.4980	3.4000e-004	3.2000e-004	17.6045
Total												**0.0000**	**2,746.7727**	**2,746.7727**	**0.0527**	**0.0504**	**2,763.4891**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Arena	3.27641e+007	9,376.0101	0.4310	0.0892	9,412.7033
General Office Building	435900	124.7402	5.7300e-003	1.1900e-003	125.2283
Total		**9,500.7503**	**0.4367**	**0.0904**	**9,537.9316**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Arena	3.27641e+007	9,376.0101	0.4310	0.0892	9,412.7033
General Office Building	435900	124.7402	5.7300e-003	1.1900e-003	125.2283
Total		**9,500.7503**	**0.4367**	**0.0904**	**9,537.9316**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	2.2900e-003	2.2900e-003	1.0000e-005	0.0000	2.4200e-003
Unmitigated											0.0000	2.2900e-003	2.2900e-003	1.0000e-005	0.0000	2.4200e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping											0.0000	2.2900e-003	2.2900e-003	1.0000e-005	0.0000	2.4200e-003
Total											**0.0000**	**2.2900e-003**	**2.2900e-003**	**1.0000e-005**	**0.0000**	**2.4200e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping											0.0000	2.2900e-003	2.2900e-003	1.0000e-005	0.0000	2.4200e-003
Total											**0.0000**	**2.2900e-003**	**2.2900e-003**	**1.0000e-005**	**0.0000**	**2.4200e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Unmitigated	243.1007	0.0606	3.4700e-003	245.4497
Mitigated	243.1007	0.0606	3.4700e-003	245.4489

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Arena	0.782925 / 74.5345	240.1342	0.0365	2.8800e-003	241.7955
General Office Building	0.73365 / 0	2.9665	0.0240	5.9000e-004	3.6542
Total		**243.1007**	**0.0606**	**3.4700e-003**	**245.4497**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Arena	0.782925 / 74.5345	240.1342	0.0365	2.8800e-003	241.7951
General Office Building	0.73365 / 0	2.9665	0.0240	5.9000e-004	3.6538
Total		**243.1007**	**0.0606**	**3.4700e-003**	**245.4489**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	6.7535	0.3991	0.0000	15.1351
Unmitigated	6.7535	0.3991	0.0000	15.1351

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Arena	5.37	1.0901	0.0644	0.0000	2.4429
General Office Building	27.9	5.6635	0.3347	0.0000	12.6922
Total		**6.7535**	**0.3991**	**0.0000**	**15.1351**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Arena	5.37	1.0901	0.0644	0.0000	2.4429
General Office Building	27.9	5.6635	0.3347	0.0000	12.6922
Total		**6.7535**	**0.3991**	**0.0000**	**15.1351**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

APPENDIX D

Updated Biological Inventory and Analysis

Biological Assessment

Claremont University Consortium

Sports Park Project

Claremont, California

Prepared for:

Claremont University Consortium
101 S. Mills Road
Claremont, California 91711

Prepared by:

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August 2014

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A Site Photographs
B Special-Status Plant Species Recorded from the Project Vicinity
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1 Report of Surveys for Special Status Plants for the Claremont University Consortium Sports Complex

2 Results of Focused California Gnatcatcher Surveys Associated with the Claremont University Consortium Sports Park Project

INTRODUCTION

This report summarizes the methods and results of field evaluations conducted by Impact Sciences, Inc., to identify biological resources existing or potentially occurring on the subject Claremont College campus property in Claremont, California. The purpose of this report is to provide the project applicant, lead agency, and appropriate regulatory agencies with information regarding current on-site biological resources and the suitability of on-site habitats to support sensitive biological resources such that future proposed development can minimize impacts to those resources.

This assessment includes focused, agency protocol surveys for rare plants and California gnatcatcher, as well as, a general field assessment where all plant and wildlife species were recorded. Assessments of this level represent an analysis of a site resources and the best judgment of the biologist doing the review based on the existing conditions on site and the available background literature available at the time of the survey. It is not intended to be an exhaustive analysis of every resource occurring on site at any given time, but rather a tool for assisting the lead and responsible agencies with determining potential impacts to biological resources resulting from proposed project implementation. This level of evaluation is consistent with the requirements of the California Environmental Quality Act (CEQA).

PROJECT LOCATION AND DESCRIPTION

The property subject to this study is located on Claremont College property situated northeast of the intersection of North Claremont Boulevard and West Arrow Route in Claremont, California (**Figure 1**). Specifically, the property is situated within Township 1 South, Range 8 West in Section 10 of the Ontario, California 7.5-minute US Geological Survey (USGS) quadrangle map (**Figure 2**). The property is an active quarry and totals approximately 75 acres. Institutional and commercial/industrial development surrounds the subject parcel.

Elevations of the site are illustrated on the USGS 7.5-minute quadrangle map as ranging from about 1,220 feet in the south to approximately 1,320 feet in elevation in the northern portion of the property. However, the existing topography has been altered over the years as it is an active quarry where rock and gravel are deposited and removed. As such, nearly all of the areas on site are highly disturbed. The outer boundaries along the eastern and southern boundary have been terraced in the past, but now support a relatively healthy stand of coastal sage scrub. An excavated pit in the southern portion of the property in the past now allows water to collect during rain events and has resulted in the growth of willow trees (*Salix* spp.) and mule fat (*Baccharis salicifolia*). Most of the remaining portions of the site have either been cleared of vegetation or support non-native, ruderal associations.

METHODOLOGY

Literature Search

Documentation pertinent to the biological resources on and near the site was reviewed and analyzed. Information reviewed included: (1) the Federal Register listing package for the federally listed species known to occur in the area[1]; (2) literature pertaining to habitat requirements of sensitive species potentially occurring on the project site; (3) the most recent updates of the California Natural Diversity Data Base[2] information regarding sensitive species potentially occurring on and near the project site, and (4), the California Native Plant Society (CNPS) database for rare plants potentially occurring in the project vicinity. The database queries included the Ontario, California USGS 7.5-minute quadrangle, in which the project site is located, as well as the following eight surrounding quadrangles: Mount Baldy, Glendora, San Dimas, Cucamonga Peak, Guasti, Corona North, Prado Dam, and Yorba Linda.

Field Surveys

On February 13, 2014, a field survey was conducted to assess the site and inventory wildlife species identifiable at that time. All wildlife detected during focused California gnatcatcher surveys was also recorded. Plant species were recorded during the rare plant surveys. The entire site was traversed along meandering transects in order to form a thorough impression of the various on-site habitats. Vegetation types were mapped in the field using aerial photographs and direct observation and photographs were taken to document habitats on the site. Site photos are provided in **Attachment A**.

Focused Rare Plant Surveys

Focused surveys for rare plants potentially occurring in the project area were conducted on March 25 and April 29, 2014. Due to the previous dry winter and site observations on April 29, it was determined that a third survey was not warranted.

Pursuant to rare plant survey protocols established by California Department of Fish and Wildlife (CDFW) and the CNPS, all plant species identifiable at the time of the field surveys were recorded.

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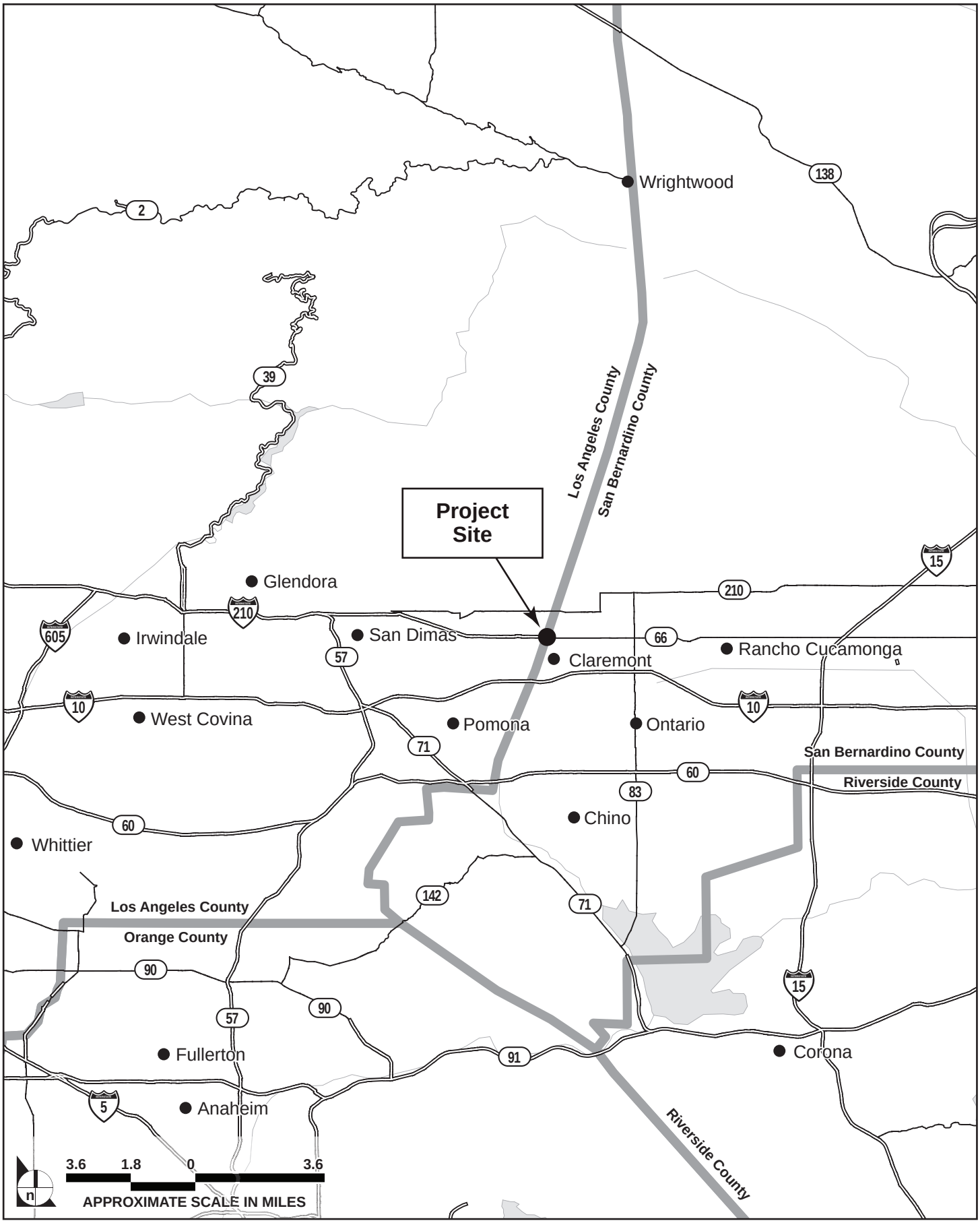
1 US Fish and Wildlife Service. *Endangered and Threatened Wildlife and Plants; Animal Candidate Review for Listing as Endangered or Threatened Species; Proposed Rule* Federal Register 50, CFR Part 17. US Department of the Interior. Washington, DC. 1996.

2 California Department of Fish and Game (CDFG). California Department of Fish and Game Natural Diversity Data Base. Commercial Version, Update July 7, 2012.

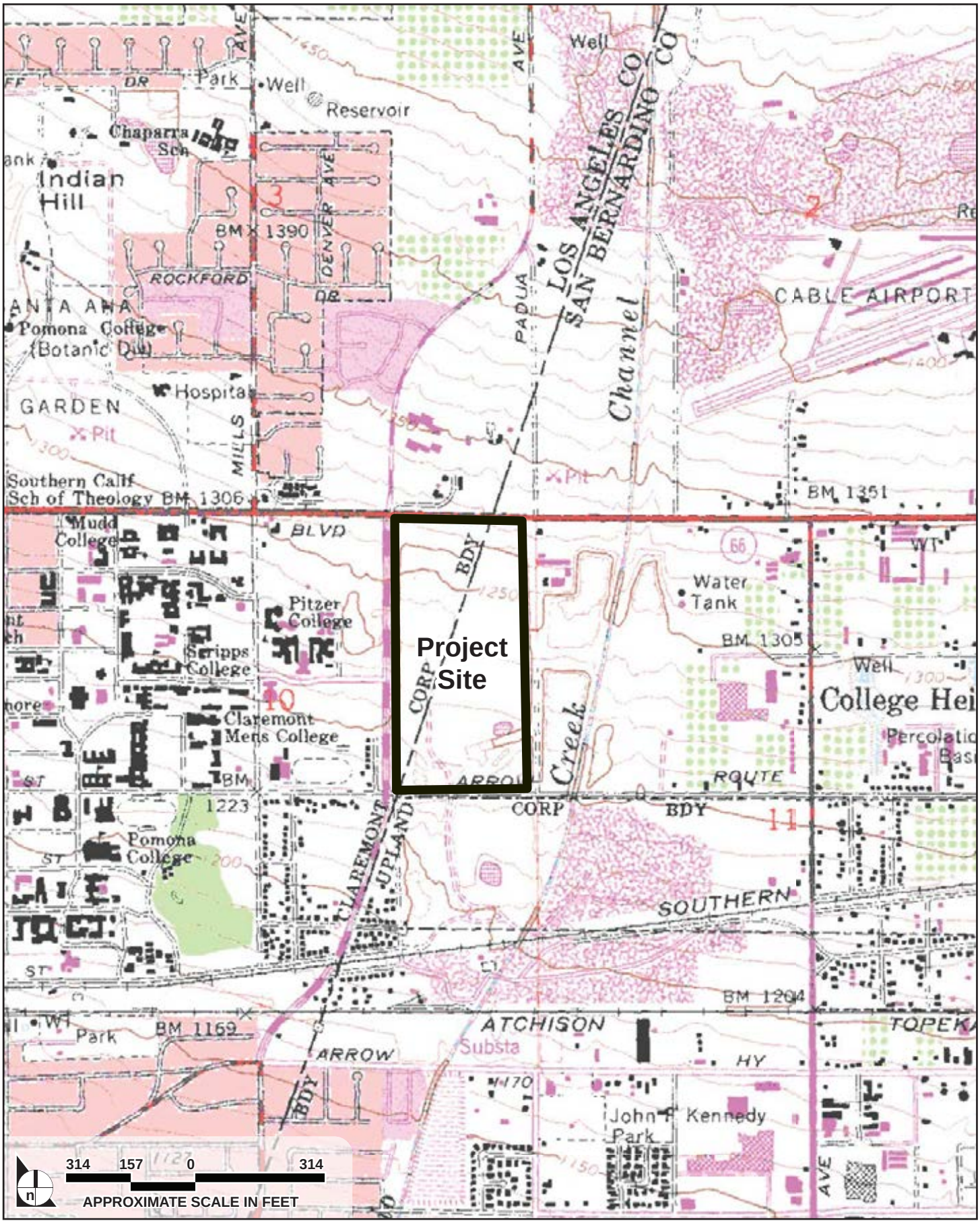


SOURCE: Impact Sciences, Inc., June 2014

FIGURE **1**

Regional Location

1210.001•06/14



SOURCE: Google, Inc., June 2014

FIGURE **2**

Project Vicinity

1210.001•06/14

Focused California Gnatcatcher Surveys

Focused surveys, following US Fish and Wildlife Service (FWS), were conducted on March 21, 28, and April 4, 11, 18 and 25, 2014 for the federally threatened California gnatcatcher (*Polioptila californica*). All potential habitat and adjacent buffer habitat areas were systematically surveyed on foot by walking slowly and methodically along random transect routes. The location of transects and survey points along each transect were based on the vegetation and topographic conditions (size, location, and shape of habitat) of the area to be surveyed to ensure complete coverage. A combination of taped vocalizations (played at 30 to 60 second increments) and "pishing" sounds were used at each calling point.

Nomenclature in this report is based on the following resources:

- **Plants:** *The Jepson Manual* (Hickman, 1993), as updated on the Jepson Online Interchange for California Floristics: http://ucjeps.berkeley.edu/interchange.html
- **Reptiles and amphibians:** The Center for North American Herpetology Academic Portal to North American Herpetology: http://www.cnah.org/index.asp
- **Birds:** The American Ornithologists' Union Check-list of North American Birds: http://www.aou.org/checklist/north/full.php
- **Mammals:** The Smithsonian National Museum of Natural History List of North American Mammals: http://www.mnh.si.edu/mna/main.cfm or CNDDB when specific subspecies are listed.

RESULTS

Literature Search

The literature search provided information regarding all special-status resources reported in the 9-quadrangle area of the parcel. **Attachment B** provides a list of all special-status plant species recorded and **Attachment C** lists all special-status wildlife recorded in the search area. Those species with a moderate or higher potential to occur on site are discussed in more detail in the Special-Status Resources section of this report.

Field Surveys

General Surveys

The site is located within an historical alluvial fan of San Antonio Creek. A narrow gully extends south from a culvert at the northeast corner of the site. An overlay on an historical topographic map indicates that this gully is a remnant of the San Antonio Creek wash that has become isolated from the main channel after many decades of development and aggregate mining in the area. Historic aerial photography indicates San Antonio Creek was channelized sometime between 1959 and 1965, which pre-dates federal and state streambed and wetland regulations. A 1972 aerial photograph shows the site to be an active open pit mine. Therefore, the vegetation types described below consist entirely of secondary growth and colonization, including intentional revegetation, after gravel mining ceased in those areas.

Vegetation Communities

The current vegetation classification system for California[3] is used where applicable. This system is based on species dominance. However, extensive disturbance of the site over many years and apparent attempts at revegetation have resulted in several transitional vegetation types that are not explicitly recognized in the California classification system. In these cases, the classification system's species-dominance method was used to create a new name for the vegetation type. Vegetation types and acreages are summarized in **Table 1**, below. The total acreage for the site as a whole is based on tax assessor's maps for parcels in Los Angeles and San Bernardino Counties. The soil survey for the project site describes the soils as very gravelly sandy quarry/pit soils.[4] Therefore the vegetation types described below consist entirely of secondary growth and colonization, including intentional revegetation, after gravel mining ceased.

Six categories of vegetation were identified on the subject property. Five can be described under the current California classification. Each of the vegetation associations, or "alliances" present are discussed below. **Figure 3** illustrates the distribution of vegetation types on site.

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3 Sawyer, J. O., T. keeler-Wolf, and J.M. Evens, 2009. *A Manual of California Vegetation*. Second Edition. California Native Plant Society and California Department of Fish and Game. Sacramento, California.

4 Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Available online at http://websoilsurvey.nrcs.usda.gov/ accessed July 2014.

SOURCE: E. Reed and Associates, 2014

FIGURE **3**

Vegetation Communities

1210.001•08/14

Table 1
Vegetation Community Acreages

Category	Acres
Native-Dominated	
Buckwheat Alliance	11.97
Buckwheat-Mulefat Alliance	5.12
Laurel Sumac Alliance	5.89
Scalebroom Alliance	2.76
Willow-Mulefat Alliance	1.75
Subtotal – Native Dominated	*27.49*
Transitional	
Non-Native/Native Transition	21.07
Non-Native/Native Transition (Mulefat)	1.83
Subtotal - Transitional	*22.90*
Non-Native Dominated	
Tree Tobacco Stand	0.60
Ornamental Landscaping	0.16
Subtotal – Non-Native Dominated	*0.76*
Graded	23.81
Total – All Categories	**74.96**

Buckwheat and Buckwheat-Mulefat Alliances

California buckwheat (*Eriogonum fasciculatum* var. *fasciculatum*) dominates an engineered west-facing slope below Monte Vista Avenue, and co-occurs with other native species elsewhere, especially mulefat (*Baccharis salicifolia*) on an engineered slope above the south side of the former gravel pit. Buckwheat is commonly used for revegetation and erosion control. Shrub cover in these alliances ranges from 50 to 100 percent.

Laurel Sumac Alliance

Laurel sumac (*Malosma laurina*) is the most common evergreen shrub on the site, occurring in all vegetation types as scattered individuals but forming concentrated stands on the north and south sides of the site. Shrub cover ranges from 80 to 100 percent in these areas.

Scalebroom Alliance

Scalebroom (*Lepidospartum squamatum*) co-occurs with California sagebrush (*Artemisia californica*) and laurel sumac on rubble piles and brush clearance zones on the north side of the site. Shrub cover ranges from 50 to 100 percent.

Willow-Mulefat Alliance

Gooding's (black) willow (*Salix goodingii*) and mulefat co-occur in the former gravel pit, at the lowest elevations on site. A western sycamore (*Platanus racemosa*) occurs adjacent to this vegetation. Plant cover is 100 percent in most of the area. Gooding's willow and mulefat also occur as individuals along a gully in the northeast part of the site.

Non-Native and Transition Vegetation Types

Non-native species dominate about one-third of the site area, with native shrub species such as laurel sumac present as scattered individuals. Examples of common non-native species include tree tobacco (*Nicotiana glauca*), summer mustard (*Hirschfeldia incana*), red-stemmed filaree (*Erodium cicutarium*), and red brome (*Bromus madritensis* ssp. *rubens*).

Wildlife

Weather during the surveys ranged from cool and breezy in February to warm and clear in spring during California gnatcatcher surveys, so wildlife potentially occurring on the site would have been active and observable. However, due to the relatively small size parcel, regular on-site quarry activities, and the presence of surrounding development, wildlife diversity on the site is relatively low. The only reptile observed on site was side-blotched lizard (*Uta stansburiana*). A resident coyote (*Canis latrans*) was also observed regularly. Tracks, scat, burrows, and other sign observed indicate the presence of California ground squirrel (*Spermophilus beecheyi*) and Botta's pocket gopher (*Thomomys bottae*). Several common avian species were observed over the course of the focused gnatcatcher surveys. A list of all vertebrate species observed or otherwise detected is included as part of the attached California gnatcatcher survey report**.**

Wildlife Movement

The subject parcel is essentially surrounded by existing institutional, commercial, and industrial development. It does not provide any link between two or more nearby open space areas. Further, the site itself is an active quarry, so wildlife use is limited to the outer edges of the site and other than a single coyote, there were no signs of large mammals that would likely travel from one site to another in this area. As such, the site is not considered part of a wildlife movement or migration corridor and development as planned would not alter wildlife movement in the area.

Special-Status Resources

Based upon the review of the California Natural Diversity Database (CNDDB) database for special-status plant species of the Ontario, California and adjacent quadrangles, 38 special-status plant and 53 wildlife species have been reported in the nine-quad region.

The evaluation of potential for special-status species to occur on the project site is based on the proximity of the project site to previously recorded occurrences in the CNDDB database, evaluation of on-site vegetation and habitat quality, topography, elevation, soils, surrounding land uses, habitat requirements, and geographic ranges of special-status plant and wildlife species known to occur in the region. The potential for special-status plant species to occur on site is summarized in **Attachment B, Special-Status Plant Species Recorded from the Project Vicinity.** Likewise, **Attachment C, Special-Status Wildlife Species Recorded from the Project Vicinity** summarizes the potential for special-status wildlife species to occur on the subject property.

The potential for occurrence described in **Appendix B** and **C** are classified according to the following:

> *Not Expected: There is no suitable habitat present on the property (i.e., habitats on the property are clearly unsuitable for the species requirements [e.g., foraging, breeding, cover, substrate, elevation hydrology, plant community, disturbance regime, etc.]). The species has an extremely low probability of being found on the property and no further surveys are required.*
>
> *Low Potential: Either significantly limited quantity and/or quality of suitable habitat is present on the property (i.e., not enough area of the habitat is present to support the species, few of the habitat components meeting the species requirements are present and/or the majority of habitat on the property is unsuitable or of very low quality). And, there are no or few recent known records of occurrence in the near vicinity of the property. The species has a low probability of being found on the property and no further surveys are required.*
>
> *Moderate Potential: Some suitable habitat is present on the property (i.e., some of the habitat components meeting the species requirements are present and/or the quantity the habitat on the property is marginal). Additionally, there are known records of occurrences in the region of the property, but not necessarily in the immediate vicinity. The species has a moderate probability of being found on the property and additional surveys may be required.*
>
> *High Potential: Suitable quantity and quality of habitat is present on the property (i.e., all habitat components meeting the species requirements are present and/or habitat(s) on the property is highly suitable or of high quality). Additionally, there are recent known records of occurrences in the vicinity of the property. This species has a high probability of being found on the property and additional surveys to fully determine presence/absence will likely be required.*
>
> *Present: Species was observed on the property during surveys associated with this report or by other persons.*

Based on the habitat conditions, vegetation types present, and quarry activities on site almost none of the special-status plant or wildlife species recorded from the region are expected to have more than a low potential for occurrence on the subject property.

The special-status wildlife species observed is Allen's hummingbird, a CDFW "Special Animal." This classification is not intended to afford any protection; rather CDFW is interested in tracking occurrences (particularly nesting occurrences) for data collection and further evaluation of the species in the future.

Allen's Hummingbird (*Selasphorus sasin*); ***California special animal***. Allen's hummingbirds locate their nest in shrubs and trees with dense vegetation (such as vines and thickets) anywhere from 0.5 to 15 meters off the ground. Nests are composed of grasses and leaves woven together with spider webs. On average two eggs are laid and incubated for 12 to 22 days. This species was observed each of the six surveys that were conducted. It is, therefore, assumed to be a resident and nesting on site.

Additionally, though individuals of the species are not afforded specific protection, an active red-tailed hawk nest was observed in the southeastern portion of the site. Two chicks were observed in the nest during the last few surveys.

No other special-status wildlife species are considered to have a moderate or higher potential for occurrence on the project site. As such, further discussion regarding other special-status resources in this report is limited to the information provided in **Attachments B** and **C**.

Focused Rare Plant Surveys

No rare plants were identified during the focused surveys. A complete report discussing the results of the focused rare plant surveys is attached as **Appendix 1**. A complete list of all plant species identified during the surveys is included in that report.

As the report discusses, suitable habitat is absent or of marginal quality for most of the rare plant species that were the focus of the surveys. The species with the highest potential for occurrence, mesa horkelia (*Horkelia cuneata* var. *puberula*; CNPS Rare Plant Rank 1B.1), was not observed. There is a record of occurrence of this species from 2009, "500 feet southwest of the intersection of Foothill Blvd. and Claremont Blvd."[5] If it were historically present on site, it would likely have been extirpated by aggregate mining activities.

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5 California Department of Fish and Wildlife, Rarefind. California Department of Fish and Game Natural Diversity Data Base. Commercial Version, Accessed February 2014.

Focused California Gnatcatcher Surveys

No California gnatcatchers were recorded during the protocol surveys. A total of 27 avian species was observed or detected on the subject property. Additionally, no other state or federally listed avian species were observed or detected during the survey effort. The final report discussing results of the focused surveys, including a complete list of all vertebrate species observed during the survey efforts, is included as **Appendix 2**.

CONSTRAINTS AND RECOMMENDATIONS

There are no sensitive vegetation associations on site. As such, direct impacts to vegetation would be less than significant.

Potential impacts to Allen's hummingbird would be considered less than significant since the inclusion on the CDFW Special Animals list is limited to tracking of nesting occurrences.

Active nests of most native bird species are protected by the Migratory Bird Treaty Act (16 USC. 704) and the California Fish and Game Code (Section 3503). If activities associated with construction or grading are planned during the bird nesting/breeding season, generally February 1 through August 30, it is recommended that a qualified biologist conduct surveys for active nests prior to any disturbance of on-site vegetation. To determine the presence/absence of active nests, CDFW typically requires pre-construction nesting bird surveys be conducted weekly beginning 30 days prior to initiation of ground-disturbing activities, with the last survey conducted no more than three days prior to the start of clearance/construction work. If ground-disturbing activities are delayed, additional pre-construction surveys should be conducted so that no more than three days have elapsed between the survey and ground-disturbing activities.

Bird nests that are found within or adjacent to the construction zone should be protected by a buffer deemed suitable by a qualified biologist, and verified by CDFW. Typically, a 300-foot buffer is required for most species and a 500-foot buffer for raptor species, but may be modified on a case-by-case basis with consultation with CDFW. Buffer areas should be delineated with highly visible construction fencing or other exclusionary material that would inhibit access within the buffer zone. Installation of the exclusionary material delineating the buffer zone should be verified by a qualified biologist prior to initiation of construction activities. The buffer zone should remain intact and maintained while the nest is active (i.e., occupied or being constructed by the adults bird(s) and until young birds have fledged and no continued use of the nest is observed, as determined by a qualified biologist.

ATTACHMENT A

Site Photographs

View west along southern boundary from southeast portion of site

View west-northwest from southeast portion of site

View northwest from southeastern portion of site

View north along eastern boundary from southeastern portion of site

ATTACHMENT B

Special-Status Plant Species Recorded From the Project Vicinity

Attachment B
Special Status Plant Species Recorded From the Project Vicinity

Scientific and Common Name	Status			Habitat Requirements	Elevation Range, Life Form, and Flowering Period	Potential Occurrence
	Federal	State	CNPS			
Chaparral sand-verbena *Abronia villosa* var. *aurita*	--	--	1B.1	Chaparral, coastal scrub, desert dunes/ sandy	75-1600m AH January-September	**Low Potential**; Not Observed. No occurrences reported for project quadrangle.
San Gabriel manzanita *Arctostaphylos glandulosa ssp. gabrielensis*	--	--	1B.2	Chaparral/ rocky	595-1500m S(e) March	**Not Expected**; Not Observed. No suitable habitat.
Coulter's saltbush *Atriplex coulteri*	--	--	1B.2	Coastal bluff scrub, coastal dunes, coastal scrub, and valley and foothill grassland/ alkaline or clay	3-460m PH March-October	**Not Expected**; Not Observed. No suitable habitat.
Nevin's barberry Berberis [Mahonia] nevinii	FE	CE	1B.1	Chaparral, cismontane woodland, coastal scrub, riparian scrub/ sandy or gravelly	274-825m S (e) March-June	**Low Potential**; Not Observed. No occurrences reported for project quadrangle.
Thread-leaved brodiaea Brodiaea filifolia	FT	CE	1B.1	Chaparral (openings), cismontane woodland, coastal scrub, playas, valley and foothill grassland, vernal pools/ often clay	25-1120m PH (b) March-June	**Low Potential**; Not Observed. No occurrences reported for project quadrangle.
Round-leaved filaree *Caliofornia macrophylla*	--	--	1B.1	Cismontane woodland, valley and foothill grassland/ glay soils	15-1200m AH March-May	**Not Expected**; Not Observed. No suitable habitat. No occurrences reported for project quadrangle.
Slender mariposa lily *Calochortus clavatus* var. *gracilis*	--	--	1B.2	Chaparral, coastal scrub, valley and foothill grassland	320-1000m PH(b) March-June	**Low Potential**; Not Observed. No occurrences reported for project quadrangle.
Intermediate mariposa lily *Calochortus weedii* var. *intermedius*	--	--	1B.2	Chaparral, coastal scrub, valley and foothill grassland/ rocky, calcareous.	105-855m PH (b) May-July	**Low Potential**; Not Observed. No occurrences reported for project quadrangle.
Santa Barbara morning-glory *Calystegia sepium* ssp. *binghamiae*	--	--	1B.1	Marshes and swamps (coastal), Riparian scrub (alluvial)/ possibly silty loam and alkaline	0-220m PH(r) April-May	**Not Expected**; Not Observed. No suitable habitat.
Smooth tarplant *Centromadia pungens* ssp. *laevis*	--	--	1B.1	Chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grassland/ alkaline	0-640m AH April-September	**Low Potential**; Not Observed. No occurrences reported for project quadrangle.

Attachment B (continued)
Special Status Plant Species Recorded From the Project Vicinity

Scientific and Common Name	Status			Habitat Requirements	Elevation Range, Life Form, and Flowering Period	Potential Occurrence
	Federal	State	CNPS			
Parry's spineflower *Chorizanthe parryi* ssp. *parryi*	--	--	1B.1	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland/ sandy or rocky, openings.	275-1220m AH April-June	**Low Potential**; Not Observed. No occurrences reported for project quadrangle.
California sawgrass *Cladium californicum*	--	--	2B.2	Meadows and seeps, marshes and swamps; alkaline or freshwater	60-865m PH(r) June-September	**Not Expected**; Not Observed. No suitable habitat.
Peirson's spring beauty *Claytonia lanceolata var. peirsonii*	--	--	3.1	Subalpine coniferous forest, upper montane coniferous forest/ scree	1510-2745m PH May-June	**Not Expected**; Not Observed. No suitable habitat.
Slender-horned spineflower *Dodecahema leptoceras*	FE	CE	1B.1	Chaparral, cismontane woodland, coastal scrub (alluvial fan)/ sandy	200-760m AH April-June	**Low Potential**; Not Observed.Only reported occurrence for the project quadrangle is from 1905.
San Gabriel Mountains dudleya *Dudleya densiflora*	--	--	1B.1	Chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, riparian woodland/ granitic, cliffs and canyon walls	244-610 PH March-June	**Low Potential**; Not Observed. No occurrences reported for project quadrangle.
Many-stemmed dudleya *Dudleya multicaulis*	--	--	1B.2	Chaparral, coastal scrub, valley and foothill grassland/ often clay.	15-790m PH April-July	**Not Expected**; Not Observed. No suitable habitat.
Santa Ana River woolystar *Eriastrum densifolium* ssp. *sanctorum*	FE	CE	1B.1	Chaparral, coastal scrub/ sandy or gravelly	91-610m PH April-September	**Not Expected**; Not Observed. All known populations are confined to the Santa Ana River.
Johnston's buckwheat *Eriogonum microthecum var. johnstonii*	--	--	1B.3	Subalpine coniferous forest, upper montane coniferous forest; rocky	1829-2926m S(d) July-September	**Not Expected**; Not Observed. No suitable habitat.
Hot springs fimbristylis *Fimbristylis thermalis*	--	--	2B.2	Meadows and seeps (alkaline, near hot springs)	110-1340m PH(r) July-September	**Not Expected**; Not Observed. No suitable habitat.

Attachment B (continued)
Special Status Plant Species Recorded From the Project Vicinity

Scientific and Common Name	Status			Habitat Requirements	Elevation Range, Life Form, and Flowering Period	Potential Occurrence
	Federal	State	CNPS			
Mesa horkelia *Horkelia cuneata var. puberula*	--	--	1B.1	Chaparral (maritime), cismontane woodland, coastal scrub/ sandy or gravelly	70-810m PH February-September	**High Potential**; Not Observed.Historical collection from west of the project site near Claremont Ave. Past gravel mining likely extirpated the population if present on site.
California satintail *Imperata brevifolia*	--	--	2B.1	Chaparral, coastal scrub, Mojavean desert scrub, meadows and seeps (often alkali), riparian scrub/ mesic	0-1215m PH(r) September-May	**Low Potential**; Not Observed. No occurrences reported for project quadrangle.
Lemon lily *Lilium parryi*	--	--	1B.2	Lower montane coniferous forest, meadows and seeps, riparian forest, upper montane coniferous forest/ mesic	1220-2745m PH(b) July-August	**Not Expected**; Not Observed. No suitable habitat.
San Gabriel linanthus *Linanthus concinnus*	--	--	1B.2	Chaparral, lower montane coniferous forest, upper montane coniferous forest/ rocky, openings	1520-2800m AH April-July	**Not Expected**; Not Observed. No suitable habitat.
Jokerst's monardella *Monardella australis* ssp. *jokerstii*	--	--	1B.1	Chaparral, lower montane coniferous forest/ steep scree or talus slopes between breccia, secondary alluvial benches along drainges and washes	1350-1750m PH(r) July-September	**Low Potential**; Not Observed. No occurrences reported for project quadrangle.
Hall's monardella *Monardella macrantha* ssp. *hallii*	--	--	1B.3	Broadleafed upland forest, chaparral, cismontane woodland, lower coniferous forest, valley and foothill grassland	730-2195m PH(r) June-October	**Not Expected**; Not Observed. No suitable habitat.
Prostrate vernal pool navarretia *Navarretia prostrata*	--	--	1B.1	Coastal scrub, meadows and seeps, valley and foothill grassland (alkaline), vernal pools	15-1210m AH April-July	**Not Expected**; Not Observed. No suitable habitat.
Chaparral nolina *Nolina cismontana*	--	--	1B.2	Chaparral, coastal scrub/ sandstone or gabbro	140-1275m S(e) March-July	**Low Potential**; Not Observed. No occurrences reported for project quadrangle.

Attachment B (continued)
Special Status Plant Species Recorded From the Project Vicinity

Scientific and Common Name	Status			Habitat Requirements	Elevation Range, Life Form, and Flowering Period	Potential Occurrence
	Federal	State	CNPS			
Woolly mountain-parsley *Oreonana vestita*	--	--	1B.3	Lower montane coniferous forest, subalpine coniferous forest, upper montane coniferous forest/ gravel or talus	1615-3500m PH March-September	**Not Expected**; Not Observed. No suitable habitat.
Rock Creek broomrape *Orobanche valida* ssp. *valida*	--	--	1B.2	Chaparral, pinyon and juniper woodland	1250-2000m PH(p) May-September	**Not Expected**; Not Observed. No suitable habitat.
Brand's star phacelia *Phacelia stellaris*	--	--	1B.1	Coastal dunes, coastal scrub	1-400m AH March-June	**Low Potential**; Not Observed. No occurrences reported for project quadrangle.
White rabbit-tobacco *Pseudognaphalium leucocephalum*	--	--	2B.2	Chaparral, cismontane woodland, coastal scrub, riparian woodland/ sandy, gravelly	0-2100m PH July-September	**Low Potential**; Not Observed. No occurrences reported for project quadrangle.
Sanford's arrowhead *Sagittaria sanfordii*	--	--	1B.2	Marshes and swamps (assorted shallow freshwater)	0-650m PH(r) May-October	**Not Expected**; Not Observed. No suitable habitat.
Chaparral ragwort *Senecio aphanactis*	--	--	2B.2	Chaparral, cismontane woodland, coastal scrub/ alkaline	15-800m AH January-April	**Low Potential**; Not Observed. No occurrences reported for project quadrangle.
Salt spring checkerbloom *Sidalcea neomexicana*	--	--	2B.2	Chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub, playas/ aklanie, mesic.	15-1530m PH March-June	**Moderate Potential**; Not Observed. Historical collection in 1909 in vicinity of project site, but site currently has no suitable habitat.
San Bernardino aster *Symphyotrichum defoliatum*	--	--	1B.2	Cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, valley and foothill grassland/ near neitches, streams, springs	2-2040m PH(r) July-November	**Moderate Potential**; Not Observed. Historical collections from early 1900s in the Ontario quadrangle, but site currently has no suitable habitat.
Greata's aster *Symphyotrichum greatae*	--	--	1B.3	Broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, riparian woodland/ mesic	300-2010m PH(r) June-October	**Low Potential**; Not Observed. No occurrences reported for project quadrangle.

Attachment B (continued)
Special Status Plant Species Recorded From the Project Vicinity

Scientific and Common Name	Status			Habitat Requirements	Elevation Range, Life Form, and Flowering Period	Potential Occurrence
	Federal	State	CNPS			
Sonoran maiden fern *Thelypteris puberula var. sonorensis*	--	--	2B.2	Meadows and seeps (seeps and streams)	50-610m PH(r) January-September	**Not Expected**; Not Observed. No suitable habitat.
Rigid fringepod *Thysanocarpus rigidus*	--	--	1B.2	Pinyon and juniper woodland/ dry rocky slopes	600-2200m AH February-May	**Not Expected**; Not Observed. No suitable habitat.

STATUS KEY:

Federal
FE: Federally Endangered
FT: Federally Threatened Species

State
CE: State Endangered

CNPS Rare Plant Rank
1B: Rare, threatened, or endangered in CA and elsewhere
2B: Rare, threatened, or endanged in CA, but more common elsewhere
3: More information needed to determine rarity

.1: Seriously threatened in California
.2: Moderately threatened in California
.3: Not very threatened in California

LIFE FORM KEY:

AH:	Annual Herb	(b):	bulb
AG:	Annual Grass	(d):	deciduous
PG:	Perennial Grass	(e):	evergreen
PH:	Perennial Herb	(p):	parasitic
PC:	Perennial Cactus	(r):	rhizomatous
S:	Shrub	(s):	stoloniferous
Ss:	Subshrub	*	No flowering period provided in available sources
T:	Tree		

ATTACHMENT C

Special-Status Wildlife Species Recorded From the Project Vicinity

Attachment C

Special-Status Wildlife Species Recorded From the Project Vicinity

Common Name *Scientific Name*	Status		Habitat Requirements	Potential Occurrence on the Project Site
	Federal	State		
INVERTEBRATES				
Insecta Order Diptera (flies)				
Delhi Sands flower-loving fly *Rhaphiomidas terminatus abdominalis*	FE	--	Semi arid sand dunes, intact, open, sparse, native habitat moderate vegetative cover; only found in Colton dunes complex in Delhi sands	Not Expected. No suitable Delhi series sands
Insecta Order Lepidoptera (butterflies and moths)				
San Gabriel Mountains elfin butterfly *Callophrys mossil hidakupa*	--	sa	Rocky outcrops, woody canyons, cliffs. Stonecrop (Sedum, Dudleya, Sedella) host plants required for caterpillar	Not Expected. No suitable habitat or host plants present, site highly disturbed.
Insecta Trichoptera (caddisflies)				
California diplectronan caddisfly *Diplectrona clifornica*	--	sa	Aquatic	Not Expected. No suitable habitat on site. Known only from Thurman Flats.
FISHES				
Santa Ana sucker *Catastomus santaanae*	FT	SSC	Occupies small-to medium-sized perennial streams with water ranging in depth from a few centimeters to a meter or more.	Not Expected. No suitable aquatic habitat on site.
Arroyo chub *Gila orcuttii*	--	SSC	Occupies small-to medium-sized perennial streams	Not Expected. No suitable aquatic habitat on site.
Santa Ana speckled dace *Rhinichthys osculus ssp. 3*	--	SSC	Headwaters of Los Angeles, Santa Ana, and San Gabriel Rivers.	Not Expected. No suitable aquatic habitat on site.

Attachment C (continued)
Special-Status Wildlife Species Recorded From the Project Vicinity

Common Name *Scientific Name*	Status		Habitat Requirements	Potential Occurrence on the Project Site
	Federal	State		
AMPHIBIANS				
Coast range newt *Taricha torosa torosa*	--	SSC	Grasslands and woodlands; breeds in ponds, reservoirs, and slow-moving streams.	Not Expected. No suitable aquatic or appropriate upland habitat on site.
Large-blotched salamander *Ensatina eschscholtzi klauberi*	--	SSC	Inhabits moist shaded evergreen and deciduous forests and oak woodlands. Found under rocks, logs, other debris.	Not Expected. No suitable habitat on site.
San Gabriel slender salamander *Batrachoseps gabrieli*	--	sa	Closely assosicated with extensive rock talus on forested slopes, often near a stream. At elevations from 2,800 - 7,800 ft. (850 - 2,380 m.) . (California herps.com)	Not Expected. No suitable habitat on site.
Arroyo toad *Anaxyrus californicus*	FE	SSC	Restricted to rivers that have shallow, gravely pools adjacent to sandy terraces that have a nearly complete closure of cottonwoods, oaks, or willows, and almost no herbaceous cover; require shallow pools with minimal current, little to no emergent vegetation, and a sand or pea gravel substrate overlain with flocculent silt for egg deposition.	Not Expected. No suitable habitat on site.

Attachment C (continued)
Special-Status Wildlife Species Recorded From the Project Vicinity

Common Name *Scientific Name*	Status		Habitat Requirements	Potential Occurrence on the Project Site
	Federal	State		
Northern leopard frog *Lithobates pipiens*	--	SSC	Cattail and sedge-filled marshes, weedy ponds, or other water with aquatic vegetation.	Not Expected. No suitable habitat on site.
Sierra Madre yellow-legged frog *Rana muscosa*	FE	CCE	Lakes, ponds, meadow streams, isolated pools, sunny riverbanks.	Not Expected. No suitable habitat on site.
REPTILES				
Western pond turtle *Emys marmorata*	--	SSC	Ponds, streams, lakes, rivers	Not Expected. No suitable aquatic habitat on site.
San Diego banded gecko *Coleonyx variegatus abbotii*	--	sa	Rocky areas in coastal sage and chaparral.	Not Expected. No suitable habitat on site.
Coast horned lizard *Phrynosoma blainvillii*	--	SSC	Relatively open grasslands, scrublands, and woodlands with fine, loose soil.	Low Potential. Very limited suitable habitat. Site likely too disturbed and isolated to support sustainable population. None observed during several site visits.
Orange-throated whiptail *Aspidoscelis hyperythrus*	--	SSC	Semi-arid brushy areas with loose soils and rocks including washes, streamsides, rocky hillsides, and coastal chaparral.	Low Potential. Very limited suitable habitat. Site likely too disturbed and isolated to support sustainable population. None observed during several site visits.
Coastal whiptail *Aspidoscelis tigris stejnegeri*	--	sa	Open areas in semiarid grasslands, scrublands, and woodlands.	Low Potential. Very limited suitable habitat. Site likely too disturbed and isolated to support sustainable population. None observed during several site visits.

Attachment C (continued)
Special-Status Wildlife Species Recorded From the Project Vicinity

Common Name *Scientific Name*	Status		Habitat Requirements	Potential Occurrence on the Project Site
	Federal	State		
Silvery legless lizard *Anniella pulchra pulchra*	--	SSC	Stabilized dunes, beaches, dry washes, pine, oak, and riparian woodlands, and chaparral; associated with sparse vegetation with sandy or loose, loamy soils.	Low Potential. Very limited suitable habitat. Site likely too disturbed and isolated to support sustainable population. None observed during several site visits.
San Diego mountain kingsnake *Lampropeltis zonata pulchra*	--	SSC	Mixed oak-coniferous forests; riparian woodlands and adjacent chaparral and coastal sage scrub vegetation; associated with rock outcrops.	Low Potential. Very limited suitable habitat. Site likely too disturbed and isolated to support sustainable population. None observed during several site visits.
Coast patch-nosed snake *Salvadora hexalepis virgultea*	--	SSC	Shrublands with low structure and minimum density. Generally occurs with whiptails (primary prey item)	Low Potential. Very limited suitable habitat. Site likely too disturbed and isolated to support sustainable population. None observed during several site visits.
Two-striped garter snake *Thamnophis hammondii*	--	SSC	Perennial and intermittent streams having rocky or sandy beds and artificially-created aquatic habitats (man-made lakes and stock ponds); requires dense riparian vegetation.	Not Expected. No suitable habitat on site.
Northern red-diamond rattlesnake *Crotalus ruber ruber*	--	SSC	Dense chaparral, coastal sage scrub, and desert slope scrub vegetation; frequents rock outcrops.	Low Potential. Very limited suitable habitat. Site likely too disturbed and isolated to support sustainable population. None observed during several site visits.

Attachment C (continued)
Special-Status Wildlife Species Recorded From the Project Vicinity

Common Name *Scientific Name*	Status		Habitat Requirements	Potential Occurrence on the Project Site
	Federal	State		
BIRDS				
Golden eagle (nesting & wintering) *Aquila chrysaetos*	--	CFP	Mountains, deserts, and open country.	Low Potential. Could possibly forage infrequently, but no sutiable nesting or wintering habitat.
Swainson's hawk (nesting) *Buteo swainsoni*	--	CT	Open riparian habitat, in scattered trees or small groves in sparsely vegetated flatlands; typical habitat is open desert, grassland, or cropland.	Low Potential. Could possibly stop by during migration, but site not suitable for overwintering or nesting.
White-tailed kite (nesting) *Elanus leucurus*	--	CFP	Open vegetation and uses dense woodlands for cover.	Low Potential. Could occur as infrequent forager, but no suitable nesting habitat with the exception of one tree that was occupied with a red-tailed hawk nest.
Merlin (wintering) *Falco columbarius*	--	WL	Coastlines, wetlands, woodlands, agricultural fields, and grasslands.	Low Potential. Could possibly stop by during migration, but site not suitable for overwintering or nesting.
Western yellow-billed cuckoo (nesting) *Coccyzus americanus occidentalis*	FC	CE	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, with understory of blackberry, nettles, or wild grape.	Not Expected. No suitable habitat on site.
Western burrowing owl (burrow sites) *Athene cunicularia hypugea*	--	SSC	Grasslands and open scrub.	Low Potential. Could possibly stop by during migration, but site not suitable for overwintering or nesting.

Attachment C (continued)
Special-Status Wildlife Species Recorded From the Project Vicinity

Common Name *Scientific Name*	Status		Habitat Requirements	Potential Occurrence on the Project Site
	Federal	State		
Southwestern willow flycatcher (nesting) *Empidonax traillii extimus*	FE	CE	Riparian woodlands that contain water and low willow thickets.	Not Expected. No suitable habitat on site.
Coastal cactus wren *Campylorhynchus brunneicapillus sandiegensis*	--	SSC	Coastal sage scrub vegetation with thickets of prickly pear or cholla cactus.	Not Expected. No suitable habitat on site.
California gnatcatcher *Polioptila californica*	FT	SSC	Coastal sage scrub in areas of flat or gently sloping terrain.	Considered absent. Focused surveys conducted following USFWS protocol methods. None detected.
Least Bell's vireo (nesting) *Vireo bellii pusillus*	FE	CE	Riparian vegetation with extensive willows below 2,000 ft.	Not Expected. No suitable habitat on site.
Yellow warbler (nesting) *Dendroica petechia brewsteri*	--	SSC	Riparian thickets and woodlands.	Not Expected. No suitable habitat on site.
Yellow-breasted chat (nesting) *Icteria virens*	--	SSC	Riparian thickets and riparian woodlands with a dense understory.	Not Expected. No suitable habitat on site.
S. California rufous-crowned sparrow *Aimophila ruficeps canescens*	--	WL	Coastal sage scrub.	Low Potential. Could potentially forage on site, but nesting habitat very limited and regular disturbance on site would likely dissuade this species from nesting.
Grasshopper sparrow (nesting) *Ammodramus savannarum*	--	SSC	Grasslands	Not Expected. No suitable habitat on site.
Bell's sage sparrow (nesting) *Amphispiza belli belli*	--	WL	Coastal sage scrub and chamise chaparral.	Low Potential. Could potentially forage on site, but nesting habitat very limited and regular disturbance on site would likely dissuade this species from nesting.
Tricolored blackbird (nesting colony) *Agelaius tricolor*	--	SSC	Freshwater marshes and riparian scrub.	Not Expected. No suitable habitat on site.

Attachment C (continued)
Special-Status Wildlife Species Recorded From the Project Vicinity

Common Name *Scientific Name*	Status		Habitat Requirements	Potential Occurrence on the Project Site
	Federal	State		
MAMMALS				
Hoary bat *Lasiurus cinereus*	--	sa	Deciduous Forest,Coniferous Forest,Desert,Canyons	Not Expected. No suitable habitat on site.
Western yellow bat *Lasiurus xanthinus*	--	SSC	Deciduous Forest,Coniferous Forest,Desert,Canyons	Not Expected. No suitable habitat on site.
Yuma myotis *Myotis yumanensis*	--	sa	Found in a variety of habitats; optimal habitats are open forests and woodlands with sources of water over within to feed.	Not Expected. No suitable foraging and very limited day roost habitat on site.
Pallid bat *Antrozous pallidus*	--	SSC	Arid habitats, including grasslands, shrublands, woodlands, and forests; prefers rocky outcrops, cliffs, and crevices with access to open habitats for foraging.	Low Potential. May occur as infrequent forager and very limited suitable roosting habitat present on site.
Western mastiff bat *Eumops perotis californicus*	--	SSC	Primarily arid lowlands and coastal basins with rugged, rocky terrain, along with suitable crevices for day-roosts.	Not Expected. No suitable habitat on site.
Big free-tailed bat *Nyctinomops macrotis*	--	SSC	Occurs in urban areas, as well as rugged, rocky terrain to 8,000 ft.	Low Potential. May occur as infrequent forager and very limited suitable roosting habitat present on site.

Attachment C (continued)
Special-Status Wildlife Species Recorded From the Project Vicinity

Common Name *Scientific Name*	Status		Habitat Requirements	Potential Occurrence on the Project Site
	Federal	State		
Pocketed free-tailed bat *Nyctinomops femorosaccus*	--	SSC	Pinyon-juniper woodland and a variety of desert habitats including riparian, wash, scrub, succulent shrub, alkali scrub, Joshua tree, and palm oasis.	Not Expected. No suitable habitat on site.
San Diego black-tailed jackrabbit *Lepus californicus bennettii*	--	SSC	Chaparral and coastal sage scrub.	Not Expected. Very limited suitable habitat and site too small and isolated to support a sustainable population.
Northwestern San Diego pocket mouse *Chaetodipus fallax fallax*	--	SSC	Coastal sage scrub, annual grasslands, and chaparral.	Not Expected. Very limited suitable habitat and site too small and isolated to support a sustainable population.
San Bernardino Merriam's kangaroo rat *Dipodomys merriami parvus*	FE	SSC	Early successional alluvial chaparral and sage scrub; generally associated with drainages. Sandy-sandy loam soils	Not Expected. Very limited suitable habitat and site too small and isolated to support a sustainable population.
Stephens' kangaroo rat *Dipodomys stephensi*	FE	CT	Sagebrush,Grassland (blm.gov)	Not Expected. Very limited suitable habitat and site too small and isolated to support a sustainable population.
Los Angeles pocket mouse *Perognathus longimembris brevinasus*	--	SSC	Grasslands and coastal sage scrub; prefers lower elevational areas with open ground and sandy soils.	Not Expected. No suitable habitat on site.
San Diego woodrat *Neotoma lepida intermedia*	--	SSC	Chaparral and coastal sage scrub.	Not Expected. Very limited suitable habitat and site too small and isolated to support a sustainable population.

Attachment C (continued)
Special-Status Wildlife Species Recorded From the Project Vicinity

Common Name *Scientific Name*	Status		Habitat Requirements	Potential Occurrence on the Project Site
	Federal	State		
American badger *Taxidea taxus*	--	SSC	Drier open stages of shrub, forest, and herbaceous habitats with friable soils.	Not Expected. No suitable habitat on site.
Nelson's bighorn sheep *Ovis canadensis nelsoni*	--	CFP	Desert, on or near mountainous terrain above the desert floor. Prefer visually open, as well as seep and rocky terrain. (blm.gov)	Not Expected. No suitable habitat on site.

KEY:

(nesting) = For most taxa the CNDDB is interested in sightings for the presence of resident populations. For some species (primarily birds), the CNDDB only tracks certain parts of the species range or life history (e.g., nesting locations). The area or life stage is indicated in parenthesis after the common name.

Status:

Federal -- U.S. Fish and Wildlife Service

FE: Federally Endangered
FT: Federally Threatened
FC: Federal Candidate for listing as threatened or endangered

State -- California Department of Fish and Game

CE: California Endangered
CT: California Threatened
CCE: Candidate for State listing as Endangered
CFP: California Fully Protected
SSC: State Species of Special Concern
WL: CDFW Watch List

sa : California Special Animal - species with no official federal or state protection status, but are included on CDFW's Special Animals list in order to track occurrences and distribution.

APPENDIX 1

Results of Focused Rare Plant Survey

Report of Surveys for Special Status Plants

for the Claremont University Consortium Sports Complex

August 6, 2014

Prepared For: Impact Sciences, Inc.
Camarillo, CA

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1 INTRODUCTION

The Claremont University Consortium proposes to construct a sports complex on a former aggregate quarry in the City of Claremont ("City"; Figure 1). Areas outside of the old quarry pit have an average elevation of about 1,250 feet above mean sea level. The site consists of 75 acres of vacant land surrounded by streets on all sides. The boundary between Los Angeles and San Bernardino Counties crosses diagonally across the center of the site.

2 METHODS

Reviews of the California Natural Diversity Database and California Native Plant Society Inventory of Rare and Endangered Plants ("CNPS") were conducted prior to field surveys. Field surveys were conducted by E. Read on March 25 and April 29, 2014. Due to the previous dry winter and site observations on April 29, it was determined that a third survey was not warranted.

Surveys documented all plant species observed, following protocols of the California Native Plant Society and California Department of Fish and Wildlife. Due to dry conditions following an unusually dry winter, particular care was taken with species that may have been drought-deciduous, past flowering, or otherwise difficult to detect at the time of the surveys. The taxonomic reference for all species was the current Jepson Manual (Baldwin et al., 2012). Vegetation types were mapped using the current classification system for California (Sawyer et al., 2009) where appropriate.

3 RESULTS

3.1 Vegetation and Site Conditions

Figure 2 shows vegetation types and other features observed during the surveys. Figure 3 shows photographs representing site conditions. Table 1 lists acreages and Table 2 lists the plant species observed.

The current vegetation classification system for California (Sawyer et al., 2009) is based on species dominance. However, extensive disturbance of the site over many years and apparent attempts at revegetation have resulted in several

transitional vegetation types that are not explicitly recognized in the California classification system. In these cases, the classification system's species-dominance method was used to create a new name for the vegetation type. Vegetation types and acreages are summarized in the table below. The total acreage for the site as a whole is based on tax assessor's maps for parcels in Los Angeles and San Bernardino Counties.

Overview

The site is located on the historical alluvial fan of San Antonio Creek. A narrow gully extends south from a culvert at the northeast corner of the site. An overlay on a historical topographic map indicates that this gully is a remnant of the San Antonio Creek wash that has become isolated from the main channel of San Antonio Creek after many decades of development and aggregate mining in the area. Aerial photographs indicate that San Antonio Creek was channelized sometime between 1959 and 1965, which pre-dates Federal and State streambed and wetland regulations. A 1972 aerial photograph shows the site to be completely graded as an open pit mine. Therefore the vegetation types described below consist entirely of secondary growth and colonization, including intentional revegetation, after gravel mining ceased.

Buckwheat and Buckwheat-Mulefat Alliances

California buckwheat (*Eriogonum fasciculatum* var. *fasciculatum*) dominates an engineered west-facing slope below Monte Vista Avenue, and co-occurs with other native species elsewhere, especially mulefat (*Baccharis salicifolia*) on an engineered slope above the south side of the former gravel pit. Buckwheat is commonly used for revegetation and erosion control. Shrub cover in these alliances ranges from 50 to 100 percent.

Laurel Sumac Alliance

Laurel sumac (*Malosma laurina*) is the most common evergreen shrub on the site, occurring in all vegetation types as scattered individuals but forming

concentrated stands on the north and south sides of the site. Shrub cover ranges from 80 to 100 percent in these areas.

Scalebroom Alliance

Scalebroom (*Lepidospartum squamatum*) co-occurs with California sagebrush (*Artemisia californica*) and laurel sumac on rubble piles and brush clearance zones on the north side of the site. Shrub cover ranges from 50 to 100 percent.

Willow-Mulefat Alliance

Gooding's willow (*Salix goodingii*) and mulefat co-occur in the former aggregate mining pit, at the lowest elevations on site. A western sycamore (*Platanus racemosa*) occurs adjacent to this vegetation. Plant cover is 100 percent in most of the area. Gooding's willow and mulefat also occur as individuals along a gully in the northeast part of the site.

Non-Native and Transition Vegetation Types

Non-native species dominate about one-third of the site area, with native shrub species such as laurel sumac present as scattered individuals. Examples of common non-native species include tree tobacco (*Nicotiana glauca*), summer mustard (*Hirschfeldia incana*), red-stemmed filaree (*Erodium cicutarium*), and red brome (*Bromus madritensis* ssp. *rubens*).

3.2 Special Status Plants

No special status plants were observed during the surveys. Table 3 lists all plant species evaluated based on data searches of the project quadrangle (Ontario) and nine surrounding quadrangles. As summarized in Table 3, suitable habitat is absent or of marginal quality for most of the species that were evaluated. The species with highest potential for occurrence, mesa horkelia (*Horkelia cuneata* var. *puberula*; CNPS 1B.1), was not observed. There is a record of occurrence of this species from 2009, "500 feet southwest of the

intersection of Foothill Blvd. and Claremont Blvd." If present on the site historically it was likely extirpated by aggregate mining activities.

We conclude that the proposed project would not be expected to impact special status plant species.

4 REFERENCES CITED

Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D.H. Wilken, editors. 2012. The Jepson manual: vascular plants of California, second edition. University of California Press, Berkeley.

Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens, 2009. A Manual of California Vegetation. Second Edition. California Native Plant Society and California Department of Fish and Game, Sacramento, California.

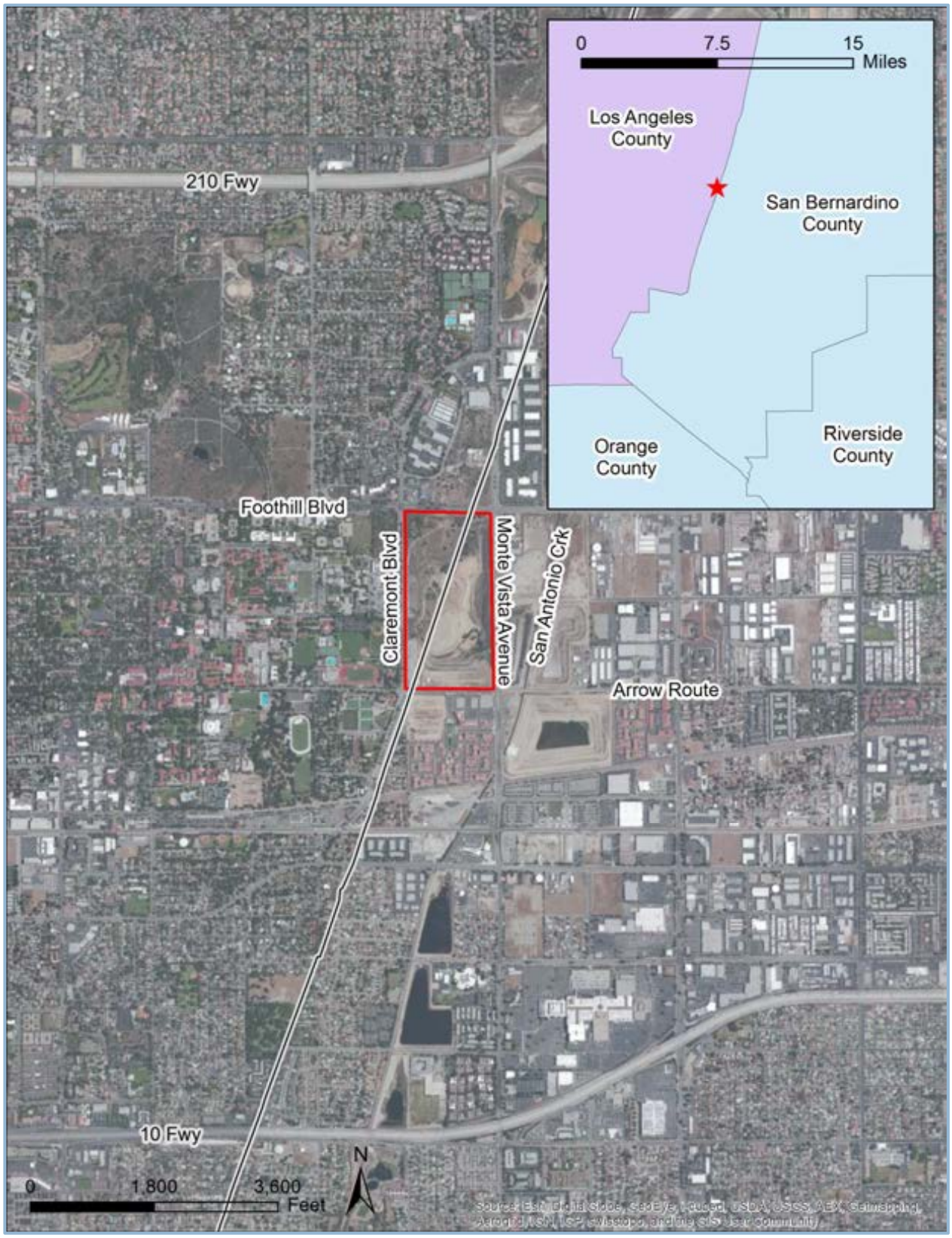

Figure 1. Project Location

Figure 2. Vegetation Types and Site Features

Above left: view from northeast corner of site, looking southwest. Above right: gully at northeast corner of site below a metal culvert at the intersection of Foothill Blvd and Monte Vista. Below left: roads and aggregate piles above the quarry pit. Below right: view looking northeast toward quarry pit below. Engineered slope below Monte Vista and dominated by buckwheat is in the background.

Figure 3. Site Conditions on March 25, 2014

Table 1. Acreages of Vegetation and Other Features

Category	Acres
Native-Dominated	
Buckwheat Alliance	11.97
Buckwheat-Mulefat Alliance	5.12
Laurel Sumac Alliance	5.89
Scalebroom Alliance	2.76
Willow-Mulefat Alliance	1.75
Subtotal – Native Dominated	*27.49*
Transitional	
Non-Native/Native Transition	21.07
Non-Native/Native Transition (Mulefat)	1.83
Subtotal – Transitional	*22.90*
Non-Native Dominated	
Tree Tobacco Stand	0.60
Ornamental Landscaping	0.16
Subtotal – Non-Native Dominated	*0.76*
Graded	23.81
Total – All Categories	**74.96**

Table 2. Plant Species Observed

Asterisk (*) indicates species not native to California.

Latin Name	Common Name
Eudicots	**Flowering Plants**
Adoxaceae	**Muskroot Family**
Sambucus nigra L.subsp. *caerulea* (Raf.) Bolli	blue elderberry
Anacardiaceae	**Sumac Family**
Malosma laurina (Nutt.) Abrams	laurel sumac
Schinus molle L.*	Peruvian pepper tree
Toxicodendron diversilobum (Torrey & A. Gray) E. Greene	poison oak
Asteraceae	**Sunflower Family**
Artemisia californica Less.	California sagebrush
Baccharis salicifolia (Ruiz Lopez & Pavon) Pers.	mule fat
*Centaurea solstitalis*L.*	yellow star-thistle
Cirsium vulgare (Savi) Ten.*	bull thistle
Cotula coronopifolia L.*	brass buttons
Encelia farinosa Torrey & A. Gray	brittlebush
Ericameria linearifolia (DC.) Urb. & J. Wussow	interior golden-bush
*Heterotheca grandiflora*Nutt.	telegraph weed
Lepidospartum squamatum (A. Gray) A. Gray	scale broom
Pseudognaphalium californicum (DC.) Anderb.	ladies' tobacco
Sonchus oleraceus L.*	common sow thistle
Stephanomeria virgata Benth.	twiggy wreath-plant
Stylocline gnaphaloides Nutt.	everlasting nest straw
Boraginaceae	**Borage Family**
Amsinkia menziesii (Lehm.) Nelson & J.F. Macbr. var. *intermedia*(Fischer & C. Meyer)	fiddleneck
Cryptantha intermedia (A.Gray) E. Greene	common cryptantha
Heliotropium amplexicaule M. Vahl*	clasping heliotrope
*Heliotropium curassavicum*L.	wild heliotrope
Nemophila pedunculata Benth.	meadow nemophila
Pectocarya setosa A. Gray	stiff stemmed comb bur
Brassicaceae	**Mustard Family**
Hirschfeldia incana (L.) Lagr.-Fossat*	wild mustard, shortpod mustard
Lepidium thurberi Wooton	Thurber's peppergrass
Thysanocarpus curvipes Hook.	lacepod
Chenopodiaceae	**Goosefoot Family**
Chenopodium album L. *	lamb's quarters
Salsola tragus L.*	Russian thistle, tumbleweed
Crassulaceae	**Stonecrop Family**
Crassula colligata Toelken ssp. *lamprosperma* Toelken*	non-native Crassula
Crassula connata (Ruiz & Pav.) A. Berger	pygmy stonecrop

Cucurbitaceae	**Cucumber Family**
Marah macrocarpa (Greene) Greene	chilicothe
Euphorbiaceae	**Spurge Family**
Chamaesyce maculata (L.) Small*	spotted spurge
Croton californicus Muell.	California croton
Ricinis communis L.*	castor bean
Fabaceae	**Legume Family**
Acmispon glaber (Vogel) Brouillet	deerweed, California broom
Acmispon maritimus (Nutt.) D.D. Sokoloff var. *maritimus*	coastal lotus
Lupinus bicolor Lindl.	miniature lupine
Lupinus hirsutissimus Benth.	stinging lupine
Geraniaceae	**Geranium Family**
Erodium cicutarium (L.) L'Her.*	red-stem filaree
Erodium botrys (Cav.) Bertol.*	broad leaf filaree
Hydrophyllaceae	**Water-Leaf Family**
Eriodictyon trichocalyx A. Heller	yerba santa
Phacelia ramosissima Lehm. var. *ramosissima*	branching phacelia
Lamiaceae	**Mint Family**
*Marrubium vulgare*L.*	horehound *
Salvia mellifera E. Greene	black sage
Onagraceae	**Evening-Primrose Family**
Camissonia bistorta(Torr. & A. Gray) P.H. Raven	sun-cups
Oxalidaceae	**Oxalis Family**
Oxalis pes-caprae L.*	Bermuda buttercup
Plantaginaceae	**Plantain Family**
Penstemon spectabilis Thurber	showy penstemon
Platanaceae	**Sycamore Family**
Platanus racemosa Nutt.	western sycamore
Polemoniaceae	**Phlox Family**
Eriastrum sapphirinum(Eastw.) H. Mason	sapphire eriastrum
Polygonaceae	**Buckwheat Family**
Eriogonum fasciculatum Benth. var. *fasciculatum*	California buckwheat
Salicaceae	**Willow Family**
*Salix exigua*Nutt.	narrow-leaf willow
*Salix goodingii*C. Ball	Gooding's willow
Scrophulariaceae	**Figwort Family**
Verbascum thapsus L. *	common mullein
Solanaceae	**Nightshade Family**
Nicotiana glauca Graham*	tree tobacco
Urticaceae	**Nettle Family**
Urtica dioica L.	stinging nettle
Monocots	**Grasses and Allies**
Poaceae	**Grass Family**
Bromus madritensis L. ssp. *rubens* (L.) Husnot*	red brome
*Cynodon dactylon**	Bermuda grass

Table 3. Special Status Plant Evaluation

See Notes at end of table for information sources and codes.

Latin and Common Name	Status			Habitat Requirements	Elevation Range, Life Form, and Flowering Period	Potential Occurrence
	Federal	State	CNPS			
Chaparral sand-verbena *Abronia villosa* var. *aurita*	--	--	1B.1	Chaparral, coastal scrub, desert dunes/ sandy	75-1600m AH January-September	**Low Potential; Not Observed**. No occurrences reported for project quadrangle.
San Gabriel manzanita *Arctostaphylos glandulosa ssp. gabrielensis*	--	--	1B.2	Chaparral/ rocky	595-1500m S(e) March	**Not Expected; Not Observed**. No suitable habitat.
Coulter's saltbush *Atriplex coulteri*	--	--	1B.2	Coastal bluff scrub, coastal dunes, coastal scrub, and valley and foothill grassland/ alkaline or clay	3-460m PH March-October	**Not Expected; Not Observed**. No suitable habitat.
Nevin's barberry Berberis [Mahonia] nevinii	FE	CE	1B.1	Chaparral, cismontane woodland, coastal scrub, riparian scrub/ sandy or gravelly	274-825m S (e) March-June	**Low Potential; Not Observed**. No occurrences reported for project quadrangle.
Thread-leaved brodiaea Brodiaea filifolia	FT	CE	1B.1	Chaparral (openings), cismontane woodland, coastal scrub, playas, valley and foothill grassland, vernal pools/ often clay	25-1120m PH (b) March-June	**Low Potential; Not Observed**. No occurrences reported for project quadrangle.
Round-leaved filaree *California macrophylla*	--	--	1B.1	Cismontane woodland, valley and foothill grassland/clay soils	15-1200m AH March-May	**Not Expected; Not Observed**. No suitable habitat. No occurrences reported for project quadrangle.

Latin and Common Name	Status			Habitat Requirements	Elevation Range, Life Form, and Flowering Period	Potential Occurrence
	Federal	State	CNPS			
Slender mariposa lily *Calochortus clavatus* var. *gracilis*	--	--	1B.2	Chaparral, coastal scrub, valley and foothill grassland	320-1000m PH(b) March-June	**Low Potential; Not Observed**. No occurrences reported for project quadrangle.
Intermediate mariposa lily *Calochortus weedii* var. *intermedius*	--	--	1B.2	Chaparral, coastal scrub, valley and foothill grassland/ rocky, calcareous.	105-855m PH (b) May-July	**Low Potential; Not Observed**. No occurrences reported for project quadrangle.
Santa Barbara morning-glory *Calystegia sepium* ssp. *binghamiae*	--	--	1B.1	Marshes and swamps (coastal), Riparian scrub (alluvial)/ possibly silty loam and alkaline	0-220m PH(r) April-May	**Not Expected; Not Observed**. No suitable habitat.
Smooth tarplant *Centromadia pungens* ssp. *laevis*	--	--	1B.1	Chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grassland/ alkaline	0-640m AH April-September	**Low Potential; Not Observed**. No occurrences reported for project quadrangle.
Parry's spineflower *Chorizanthe parryi* ssp. *parryi*	--	--	1B.1	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland/ sandy or rocky, openings.	275-1220m AH April-June	**Low Potential; Not Observed**. No occurrences reported for project quadrangle.
California sawgrass *Cladium californicum*	--	--	2B.2	Meadows and seeps, marshes and swamps; alkaline or freshwater	60-865m PH(r) June-September	**Not Expected; Not Observed**. No suitable habitat.
Peirson's spring beauty *Claytonia lanceolata var. peirsonii*	--	--	3.1	Subalpine coniferous forest, upper montane coniferous forest/ scree	1510-2745m PH May-June	**Not Expected; Not Observed**. No suitable habitat.

Latin and Common Name	Status			Habitat Requirements	Elevation Range, Life Form, and Flowering Period	Potential Occurrence
	Federal	State	CNPS			
Slender-horned spineflower *Dodecahema leptoceras*	FE	CE	1B.1	Chaparral, cismontane woodland, coastal scrub (alluvial fan)/ sandy, generally late successional sage scrub.	200-760m AH April-June	**Low Potential; Not Observed**. Only reported occurrence for the project quadrangle is from 1905. Exact location of the collection is unknown, plants are presumed extirpated due to extensive development of the area.
San Gabriel Mountains dudleya *Dudleya densiflora*	--	--	1B.1	Chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, riparian woodland/ granitic, crevices in cliffs and canyon walls	244-610 PH March-June	**Low Potential; Not Observed**. No occurrences reported for project quadrangle.
Many-stemmed dudleya *Dudleya multicaulis*	--	--	1B.2	Chaparral, coastal scrub, valley and foothill grassland/ often clay.	15-790m PH April-July	**Not Expected; Not Observed**. No suitable habitat.
Santa Ana River woolystar *Eriastrum densifolium* ssp. *sanctorum*	FE	CE	1B.1	Chaparral, coastal scrub/ sandy or gravelly	91-610m PH April-September	**Not Expected; Not Observed**. All known populations are confined to the Santa Ana River.
Johnston's buckwheat *Eriogonum microthecum var. johnstonii*	--	--	1B.3	Subalpine coniferous forest, upper montane coniferous forest; rocky	1829-2926m S(d) July-September	**Not Expected; Not Observed**. No suitable habitat.
Hot springs fimbristylis *Fimbristylis thermalis*	--	--	2B.2	Meadows and seeps (alkaline, near hot springs)	110-1340m PH(r) July-September	**Not Expected; Not Observed**. No suitable habitat.
Mesa horkelia *Horkelia cuneata var. puberula*	--	--	1B.1	Chaparral (maritime), cismontane woodland, coastal scrub/ sandy or gravelly	70-810m PH February-September	**High Potential; Not Observed.** Historical collection from west of the project site near Claremont Ave. Past gravel mining likely extirpated the population if present on site.

Latin and Common Name	Status			Habitat Requirements	Elevation Range, Life Form, and Flowering Period	Potential Occurrence
	Federal	State	CNPS			
California satintail *Imperata brevifolia*	--	--	2B.1	Chaparral, coastal scrub, Mojavean desert scrub, meadows and seeps (often alkali), riparian scrub/ mesic	0-1215m PH(r) September-May	**Low Potential; Not Observed**. No occurrences reported for project quadrangle.
Lemon lily *Lilium parryi*	--	--	1B.2	Lower montane coniferous forest, meadows and seeps, riparian forest, upper montane coniferous forest/ mesic	1220-2745m PH(b) July-August	**Not Expected; Not Observed**. No suitable habitat.
San Gabriel linanthus *Linanthus concinnus*	--	--	1B.2	Chaparral, lower montane coniferous forest, upper montane coniferous forest/ rocky, openings	1520-2800m AH April-July	**Not Expected; Not Observed**. No suitable habitat.
Jokerst's monardella *Monardella australis* ssp. *jokerstii*	--	--	1B.1	Chaparral, lower montane coniferous forest/ steep scree or talus slopes between breccia, secondary alluvial benches along drainges and washes	1350-1750m PH(r) July-September	**Low Potential; Not Observed**. No occurrences reported for project quadrangle.
Hall's monardella *Monardella macrantha* ssp. *hallii*	--	--	1B.3	Broadleafed upland forest, chaparral, cismontane woodland, lower coniferous forest, valley and foothill grassland	730-2195m PH(r) June-October	**Not Expected; Not Observed**. No suitable habitat.
Prostrate vernal pool navarretia *Navarretia prostrata*	--	--	1B.1	Coastal scrub, meadows and seeps, valley and foothill grassland (alkaline), vernal pools	15-1210m AH April-July	**Not Expected; Not Observed**. No suitable habitat.
Chaparral nolina *Nolina cismontana*	--	--	1B.2	Chaparral, coastal scrub/ sandstone or gabbro	140-1275m S(e) March-July	**Low Potential; Not Observed**. No occurrences reported for project quadrangle.

Latin and Common Name	Status			Habitat Requirements	Elevation Range, Life Form, and Flowering Period	Potential Occurrence
	Federal	State	CNPS			
Woolly mountain-parsley *Oreonana vestita*	--	--	1B.3	Lower montane coniferous forest, subalpine coniferous forest, upper montane coniferous forest/ gravel or talus	1615-3500m PH March-September	**Not Expected; Not Observed**. No suitable habitat.
Rock Creek broomrape *Orobanche valida* ssp. *valida*	--	--	1B.2	Chaparral, pinyon and juniper woodland	1250-2000m PH(p) May-September	**Not Expected; Not Observed**. No suitable habitat.
Brand's star phacelia *Phacelia stellaris*	--	--	1B.1	Coastal dunes, coastal scrub	1-400m AH March-June	**Low Potential; Not Observed**. No occurrences reported for project quadrangle.
White rabbit-tobacco *Pseudognaphalium leucocephalum*	--	--	2B.2	Chaparral, cismontane woodland, coastal scrub, riparian woodland/ sandy, gravelly	0-2100m PH July-September	**Low Potential; Not Observed**. No occurrences reported for project quadrangle.
Sanford's arrowhead *Sagittaria sanfordii*	--	--	1B.2	Marshes and swamps (assorted shallow freshwater)	0-650m PH(r) May-October	**Not Expected; Not Observed**. No suitable habitat.
Chaparral ragwort *Senecio aphanactis*	--	--	2B.2	Chaparral, cismontane woodland, coastal scrub/ alkaline	15-800m AH January-April	**Low Potential; Not Observed**. No occurrences reported for project quadrangle.
Salt spring checkerbloom *Sidalcea neomexicana*	--	--	2B.2	Chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub, playas/ alkaline springs and marshes.	15-1530m PH March-June	**Moderate Potential; Not Observed.** Historical collection in 1909, in vicinity of the project site, but site currently has no suitable habitat.

Latin and Common Name	Status			Habitat Requirements	Elevation Range, Life Form, and Flowering Period	Potential Occurrence
	Federal	State	CNPS			
San Bernardino aster *Symphyotrichum defoliatum*	--	--	1B.2	Cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, valley and foothill grassland/ near ditches, streams, springs	2-2040m PH(r) July-November	**Moderate Potential; Not Observed.** Historical collections from the early 1900s in the Ontario quadrangle, but site currently has no suitable habitat.
Greata's aster *Symphyotrichum greatae*	--	--	1B.3	Broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, riparian woodland/ mesic	300-2010m PH(r) June-October	**Low Potential; Not Observed**. No occurrences reported for project quadrangle.
Sonoran maiden fern *Thelypteris puberula var. sonorensis*	--	--	2B.2	Meadows and seeps (seeps and streams)	50-610m PH(r) January-September	**Not Expected; Not Observed**. No suitable habitat.
Rigid fringepod *Thysanocarpus rigidus*	--	--	1B.2	Pinyon and juniper woodland/ dry rocky slopes	600-2200m AH February-May	**Not Expected; Not Observed**. No suitable habitat.

LIFE FORM KEY:

AH:	Annual Herb	(b):	bulb
AG:	Annual Grass	(d):	deciduous
PG:	Perennial Grass	(e):	evergreen
PH:	Perennial Herb	(p):	parasitic
PC:	Perennial Cactus	(r):	rhizomatous

S:	Shrub	(s):	stoloniferous
Ss:	Subshrub		

Status abbreviations

Federal

FE: federally listed as Endangered

FT: federally listed as Threatened

FC: federal Candidate for listing as Endangered or Threatened

State

SE: state listed as Endangered

ST: state listed as Threatened

California Native Plant Society (CNPS)

1B: rare, threatened, or endangered in California and elsewhere

2: rare, threatened, or endangered in California but more common elsewhere

3: more information needed to determine rarity

CNPS threat ranks:

0.1: seriously threatened in California

0.2: fairly threatened in California

4: Plants of limited distribution

0.2: Moderately threatened in California

APPENDIX 2

Results of Focused Surveys for California Gnatcatcher

IMPACT SCIENCES
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Camarillo, California 93012
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www.impactsciences.com

June 26, 2014

Claremont University Consortium
Facilities and Planning
101 S. Mills
Claremont, CA 91711

Attn: Mr. Tim Morrison

Re: Results of Focused California Gnatcatcher Surveys Associated With the Claremont University Consortium, Sports Park Project

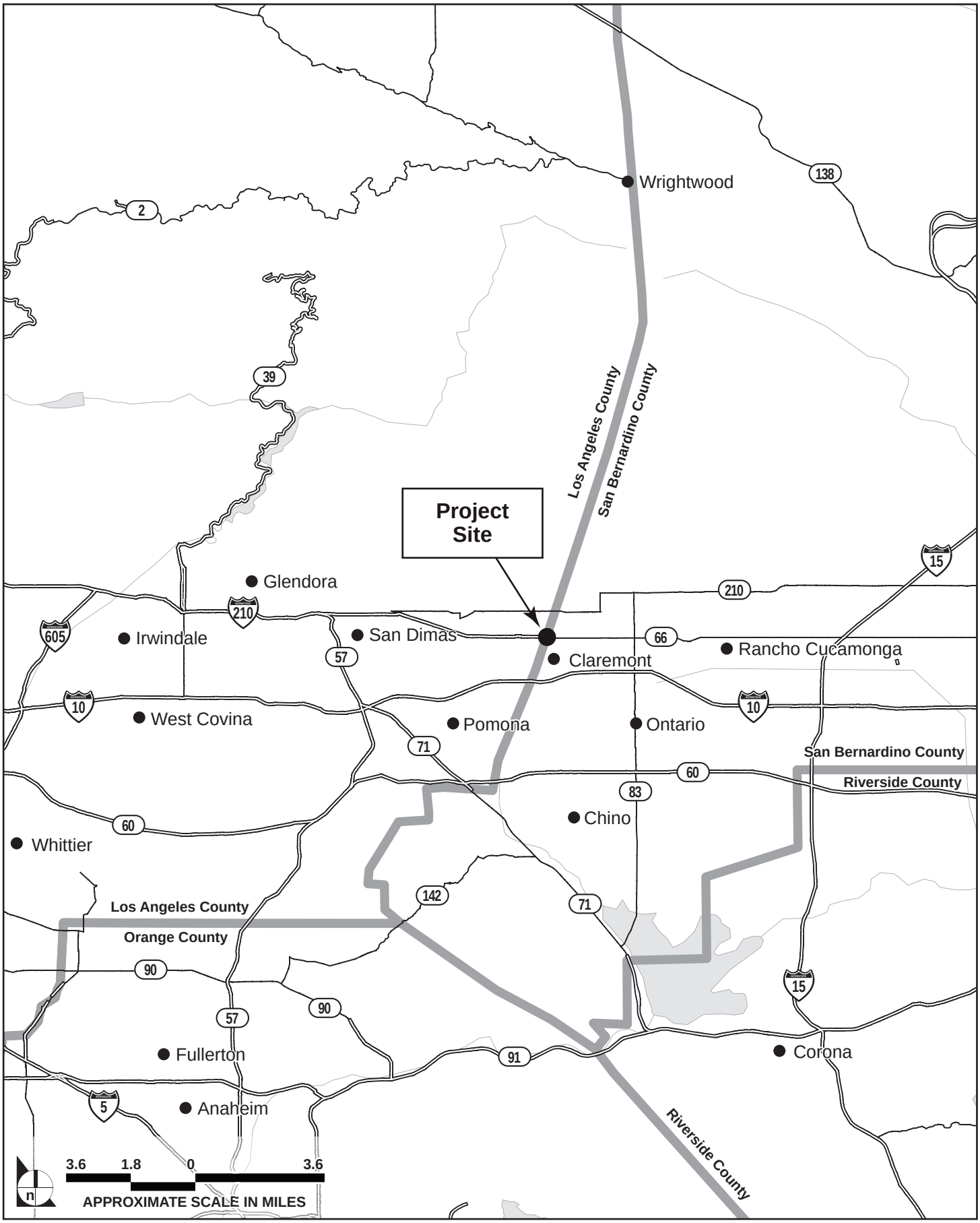
Dear Mr. Morrison:

This letter report summarizes the methodology and findings of surveys for the federally-listed Threatened California gnatcatcher (*Polioptila californica*) (herein CAGN) conducted by Compliance Biology, Inc. on the Claremont University Consortium (CUC) project site in Los Angeles and San Bernardino Counties (the site is bisected by the County boundary), California (**Figure 1**). The surveys were conducted for the purpose of determining the presence or absence of CAGN within the study area.

The subject property totals approximately 77 acres acres and supports approximately 25 acres of suitable coastal sage scrub and buffer habitat. The project site is located in Claremont, CA in a former rock quarry. The site is bordered by W. Arrow Route to the south, E. Foothill Blvd. to the north, and N. Claremont Blvd. and Monte Vista Ave. to the west and east respectively. The project is situated at T1S, R8W, in Section 10 of the Ontario, California USGS 7.5-minute quadrangle map (**Figure 2**).

SITE DESCRIPTION

The subject property is licensed and currently active dump site for rock, gravel and soil. The central area is characterized by dirt roads and various piles of excavated rock and soil. Vegetation on site is mostly limited to the edges and includes coastal scrub, chaparral, and a small area of willows near the south end of the site where the ground has been excavated to its deepest point and collects water temporarily after larger rain events. Coastal sage scrub occurs mostly on the eastern and southern boundaries on excavated and terraced slopes. Elevation at the project site ranges from approximately 1,190 feet at its deepest point up to approximately 1,265 feet above mean sea level along the edges. The parcel is gated and surrounded by roads among existing, developed CUC and commercial properties. There is also a small airport operating to the northeast.

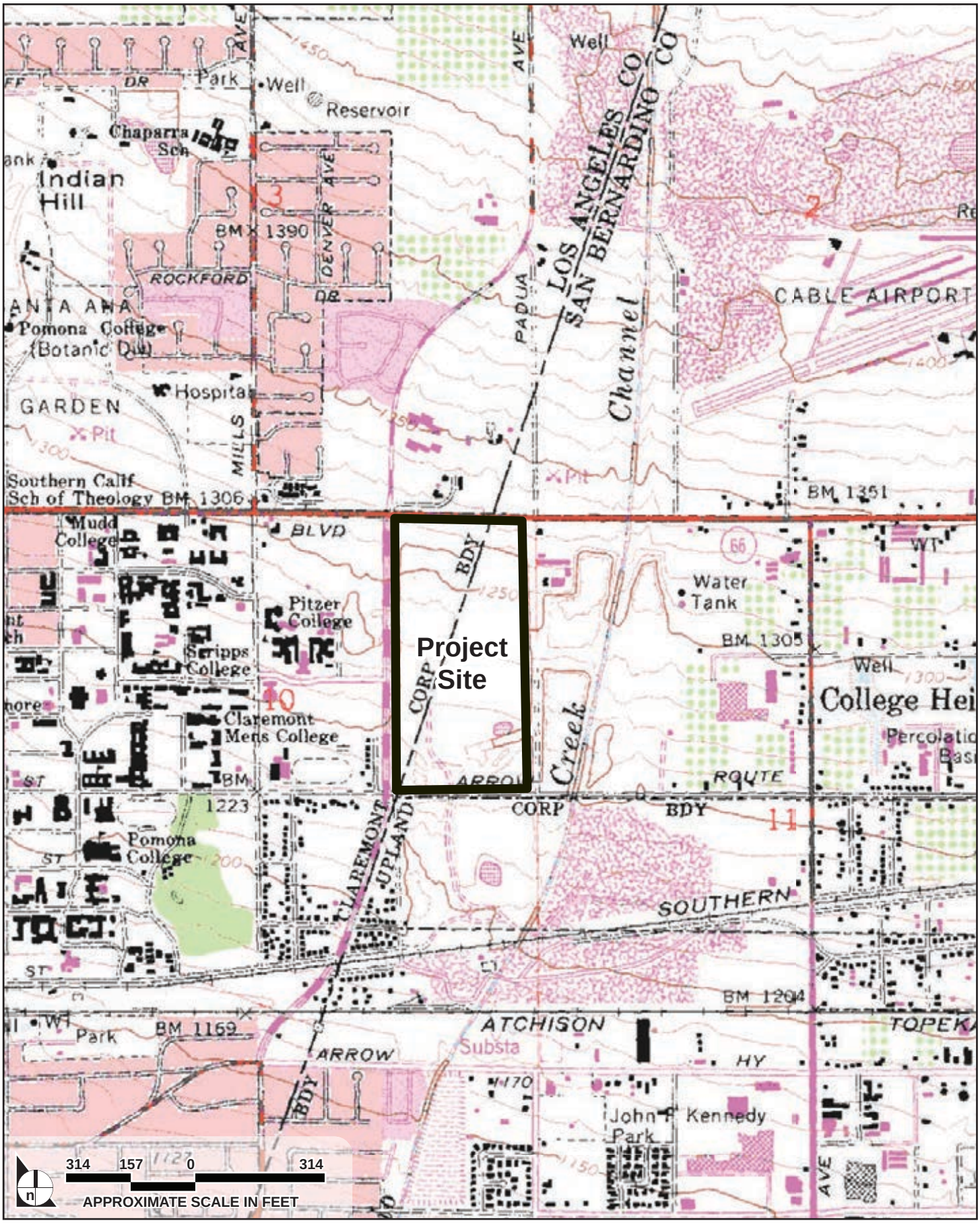


SOURCE: Impact Sciences, Inc., June 2014

FIGURE **1**

Regional Location

1210.001•06/14



SOURCE: Google, Inc., June 2014

FIGURE **2**

Project Vicinity

1210.001•06/14

VEGETATION

As described above much of the site is highly disturbed and supports only scattered annual weeds. Along the outer boundaries, coastal sage and chaparral scrub occur. Dominant species in the sage scrub association include California buckwheat (*Eriogonum fasciculatum*), black sage (*Salvia mellifera*), lemonade berry (*rhus integrifolia*), tree tobacco (*nicotian glauca*), chamise (*Adenostoma fasciculatum*), and non-native annuals including mustard (*Hirschfeldia* and *Brassica* spp.), and annual grasses (*Bromus* and *Avena* spp.). The excavated area at the south end of the parcel is dominated by yellow willow (*Salix lutea*), coyote brush (*Baccharis piluaris*), and mule fat (*Baccharis salicifolia*). The patchiness of the scrub may be a result of recovery from the past disturbances, and continued use as a dumping site for excavated rock and soil.

METHODOLOGY

Service recommended survey guidelines stipulate a minimum of six surveys shall be conducted at least one week apart between March 24 through June 30, and from July 1 through March 14, a minimum of nine surveys shall be conducted at least two weeks apart. Guidelines also recommend that surveys be completed between 6:00 a.m. and 12 p.m.; that they shall avoid periods of inclement weather or excessive heat, rain, wind, and fog; and the rate of coverage should be no more than 100 acres per day per permitted biologist.

Based on the aforementioned guidelines, 6 focused surveys were conducted within and adjacent to potentially suitable on-site coastal scrub and buffer habitats with at least a seven-day interval between surveys. All field surveys were performed by David Crawford under the authority of his individual Endangered Species Recovery Permit.

Focused surveys were conducted on March 21, 28, and April 4, 11, 18 and 25, 2014. All potential habitat and adjacent buffer habitat areas were systematically surveyed on foot by walking slowly and methodically along random transect routes. The location of transects and survey points along each transect were based on the vegetation and topographic conditions (size, location, and shape of habitat) of the area to be surveyed to ensure complete coverage. A combination of taped vocalizations (played at 30-60 second increments) and "pishing" sounds were used at each calling point.

Weather conditions during the surveys were generally conducive to a high level of bird activity. All surveys were conducted between the hours of about 6:00 a.m. and approximately 11:00 a.m. Temperatures varied from approximately 57 degrees Fahrenheit (F) to a maximum of about 80F. Wind speed ranged from 0 to 10 mph during the surveys and typically averaged less than 5 mph. Cloud cover varied from overcast to completely clear.

RESULTS

No California gnatcatchers were recorded during the protocol surveys. A total of 27 avian species was observed or detected on the subject property. A complete list of all vertebrate species observed during the survey efforts is included as **Attachment A**. Additionally, no other state or federally-listed avian species were observed or detected during the survey effort.

One avian species considered a 'special animal' by California Department of Fish and Wildlife (CDFW) was recorded during the surveys efforts and is described as follows.

Allen's Hummingbird (*Selasphorus sasin*); ***California special animal***. Allen's hummingbirds locate their nest in shrubs and trees with dense vegetation (such as vines and thickets) anywhere from 0.5-15 meters off the ground. Nests are composed of grasses and leaves woven together with spider webs. On average two eggs are laid and incubated for 12-22 days. This species was observed each of the six surveys that were conducted. It is, therefore, assumed to be a resident and nesting on site.

Additionally, though individuals of the species are not afforded specific protection, an active red-tailed hawk nest was observed in the southeastern portion of the site. Two chicks were observed in the nest during the last few surveys.

CONCLUSIONS

No CAGN were observed or detected during the series of six protocol surveys and are, therefore, considered to be absent from the project site at this time. Additionally, the patchy nature of the scrub habitat on site, the site's isolation from other suitable sage scrub habitat, as well as disturbances associated with on-going activities on and adjacent to the site, all contribute to the unlikelihood of CAGN utilizing on-site resources.

One bird species, considered 'special animals' by CDFW, was observed during the protocol surveys. The Allen's hummingbird was observed on each of the six surveys, so it is assumed they are residing and nesting on site. Assuming development on site is timed to avoid the nesting season, and because birds can leave during site preparation, they would be able to avoid direct loss.

Although most of the individual birds observed are not afforded any protection under state or federal laws, most avian species present on site are protected under the California Fish and Game Code and the Federal Migratory Bird Species Treaty Act while actively nesting. As such, grading and/or any other activity resulting in the removal of vegetation should be conducted outside the typical nesting season (February 1 through July 30). Should such activities be required during this period of time, it is recommended that nesting bird surveys be conducted consistent with Service and CDFW guidelines.

Thank you for the opportunity to provide the Claremont University Consortium with biological services. Please do not hesitate to contact me if you have any questions regarding the contents of this report.

Sincerely,

IMPACT SCIENCES, INC.

Dave Crawford
Managing Principal
Biological Services

Cc: Ms. Stacey Love; USFWS Carlsbad

Attachment A

Avian Species Observed or Detected On the Claremont College Property[1]

Scientific Name[2]	Common Name[2]	Status[3]
Birds		
Accipitridae	**Hawks**	
Buteo jamaicensis	Red-tailed hawk (nesting with chicks in nest)	
Odontophoridae	**Quails**	
Callipepla californica	California quail	
Columbidae	**Doves and Pigeons**	
Zenaida macroura	Mourning dove	
Trochilidae	**Hummingbirds**	
Calypte anna	Anna's hummingbird	
Selasphorus sasin	Allen's hummingbird	sa
Picidae	**Woodpeckers, Sapsuckers and Flickers**	
Picoides nuttallii	Nuttall's woodpecker	
Falconidae	**Falcons**	
Falco sparverius	American kestrel	
Tyranidae	**Flycatchers**	
Sayornis nigricans	Black Pheobe	
Myiarchus cinergascens	Ash-throated flycatcher	
Tyrannus verticalis	Western kingbird	
Corvidae	**Crows and Jays**	
Aphelocoma californica	Western scrub jay	
Corvus brachyrhynchos	American crow	
Corvus corax	Common raven	
Hirundinidae	**Swallows**	
Stelgiodopteryx serripennis	Northern rough-winged swallow	
Petrochelidon pyrrhonota	Cliff swallow	
Hirundo rustica	Barn swallow	
Aegithalidae	**Bushtits**	
Psaltriparus minimus	Bushtit	
Troglodytidae	**Wrens**	
Thryomanes bewickii	Bewick's Wren	
Mimidae	**Mockingbirds and Thrashers**	
Toxostoma redvivum	California Thrasher	
Mimus polyglottos	Northern Mockingbird	
Parulidae	**Wood Warblers**	
Setophaga coronata	Yellow-rumped warbler	
Embarizidae	**Sparrows**	
Pipilo maculatus	Spotted towhee	
Melozone crissalis	California towhee	
Zonotrichia leucophrys	White-crowned sparrow	
Icteridae	**Blackbirds and Orioles**	
Sturnella neglecta	Western meadowlark	
Fringillidae	**Finches**	
Haemorhous mexicanus	House finch	
Spinus psaltria	Lesser goldfinch	

Attachment A
Avian Species Observed or Detected On the Claremont College Property[1]

Scientific Name[2]	Common Name[2]	Status[3]
Non-Avian Vertebrate species observed		
Sceloporus occidentalis	Western fence lizard	
Uta stansburiana	Common side-blotched lizard	
Otospermophilus beecheyi	California ground squirrel	
Canas latrans	Coyote	
Sylvilagus audubonii	Desert cottontail	

1 Occurrences documented during focused CAGN surveys conducted on site from March 21 through April 25, 2014.

2 Scientific and common names are from the American Ornithologist's Union (54th supplement; 2013) for birds, Society for the Study of Amphibians and Reptiles (2000) for reptiles, and Jones et al. (1992) for mammals.

3 Status:
sa = California Special Animal - species with no official federal or state status, but are included on CDFG's Special Animals list as they are interested in tracking occurrences.

Special-status Species Information Update—Claremont University Consortium Quarry Site, Cities of Upland and Claremont, California

Prepared for

Claremont University Consortium
150 E. 8th Street
Claremont, California 91711

Prepared by

Impact Sciences, Inc.
234 East Colorado Boulevard, Suite 205
Pasadena, California 91101

June 2010

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Appendix B—Plant species observed at the Claremont University Consortium Quarry site; survey date May 13, 2010

Appendix C—Animal species observed at the Claremont University Consortium Quarry site, May – June, 2010

SUMMARY

A special-status plant survey and protocol-level survey for coastal California gnatcatcher (CAGN) were conducted during the spring of 2010. These surveys did not result in the detection of special-status plant species or CAGN at the project site, and it is assumed that special-status plant species and CAGN are not present on site. One special-status reptile (coastal whiptail) was observed on the site. One special-status bird species (California horned lark) is presumed to nest near the site. Two special-status bird species (Cooper's hawk and willow flycatcher) were observed during surveys but do not nest on site.

INTRODUCTION

This report updates special-status species information for the former quarry and active[1] landfill site located in the Cities of Upland and Claremont, within San Bernardino and Los Angeles Counties, respectively. The site is bound by Claremont Boulevard to the west, Arrow Route to the south, Monte Vista Avenue to the east, and Foothill Boulevard to the north. This Update is based on the findings of the 2007 Biological Inventory and Analysis, a May 2010 focused plant survey, a spring 2010 protocol-level coastal California gnatcatcher survey, and queries of the CDFG Natural Diversity Database and CNPS Inventory of Rare and Endangered Plants.

Surveys conducted for the preparation of the 2007 report did not result in the detection of any special-status plant species; however, it was determined that suitable habitat was present on site for 4 special-status species—Parry's spineflower (*Chorizanthe parryi* var. *parryi*), Robinson's pepper-grass (*Lepidium virginicum* var. *robinsonii*), Plummer's mariposa lily (*Calochortus plummerae*), and intermediate mariposa lily (*C. weedii* var. *intermedius*).

In May 2010, new queries of the California Natural Diversity Database and the California Native Plant Society Inventory of Rare and Endangered Plants were performed for the Ontario USGS 7.5 minute quadrangle and 8 surrounding quadrangles (Corona North, Prado Dam, San Dimas, Glendora, Yorba Linda, Guasti, Cucamonga Peak, and Mount Baldy). Query results included records for 39 special-status plant species, listed below:

1 Active since 1991.

chaparral sand-verbena (*Abronia villosa* var. *aurita*)
Coulter's saltbush (*Atriplex coulteri*)
Davidson's saltscale (*A. serenana* var. *davidsonii*)
Nevin's barberry (*Berberis nevinii*)
round-leaved filaree (*California macrophylla*)
southern tarplant (*Centromadia parryi* ssp. *australis*)
smooth tarplant (*C. pungens* ssp. *laevis*)
Parry's spineflower (*Chorizanthe parryi* var. *parryi*)
Peirson's spring beauty (*Claytonia lanceolata* var. *peirsonii*)
slender-horned spineflower (*Dodecahema leptoceras*)
San Gabriel Mountains dudleya (*Dudleya densiflora*)
many-stemmed dudleya (*D. multicaulis*)
Santa Ana River woollystar (*Eriastrum densifolium* ssp. *sanctorum*)
Johnston's buckwheat (*Eriogonum microthecum* var. *johnstonii*)
mesa horkelia (*Horkelia cuneata* ssp. *puberula*)
Robinson's pepper-grass (*Lepidium virginicum* var. *robinsonii*)
San Gabriel linanthus (*Linanthus concinnus*)
Hall's monardella (*Monardella macrantha* ssp. *hallii*)
prostrate vernal pool navarretia (*Navarretia prostrata*)
woolly mountain-parsley (*Oreonana vestita*)
Rock Creek broomrape (*Orobanche valida* ssp. *valida*)
San Bernardino grass-of-Parnassus (*Parnassia cirrata* var. *cirrata*)
white rabbit-tobacco (*Pseudognaphalium leucocephalum*)
chaparral ragwort (*Senecio aphanactis*)
Salt Spring checkerbloom (*Sidalcea neomexicana*)
Laguna Mountains jewel-flower (*Streptanthus bernardinus*)
San Bernardino aster (*Symphyotrichum defoliatum*)
Greata's aster (*S. greatae*)
thread-leaved brodiaea (*Brodiaea filifolia*)
slender mariposa-lily (*Calochortus clavatus* var. *gracilis*)
Palmer's mariposa lily (*C. palmeri* var. *palmeri*)
Plummer's mariposa-lily (*C. plummerae*)
intermediate mariposa-lily (*C. weedii* var. *intermedius*)
California saw-grass (*Cladium californicum*)
hot springs fimbristylis (*Fimbristylis thermalis*)
California satintail (*Imperata brevifolia*)
lemon lily (*Lilium parryi*)
California muhly (*Muhlenbergia californica*)
Peninsular nolina (*Nolina cismontana*)

METHODOLOGY

On May 13, 2010, Impact Sciences conducted a site visit to perform a focused survey for special-status plants identified as potentially occurring on the quarry site. All on-site habitat areas were surveyed on foot, and all plant species encountered were recorded.

An updated protocol-level survey for coastal California gnatcatcher (CAGN) was initiated May 6, 2010 and continued to June 15, 2010. The CAGN survey followed US Fish and Wildlife protocol and is further discussed in the report prepared by Cooper Ecological Monitoring, attached to this report as **Appendix A—Protocol-level Survey Report for coastal California gnatcatcher**.

RESULTS

Landforms within the quarry have been altered since 2007, with an area of level ground having been developed within the central portion of the site, and a generally greater extent of bare and barren ground within areas heavily trafficked by earthworking equipment.

Elsewhere, conditions on the site have not changed appreciably. Alluvial fan scrub in various stages of recovery from disturbance remains the predominant native vegetation type in the quarry site and vicinity, and dominant species remain California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), scalebroom (*Lepidospartum squamatum*), California yerba santa (*Eriodictyon californicum*), and laurel sumac (*Malosma laurina*). Sub-dominant species include deerweed (*Lotus scoparius*), California brickellbush (*Brickellia californica*), and sweet alyssum (*Lobularia maritima*).

The seasonal pond referred to in the 2007 report, located in the southern portion of the site, was inundated at the time of the May 13, 2010 plant survey and throughout most of the CAGN survey, and the area of willow scrub adjacent to the pond remains intact. The small patch of riparian vegetation to the southeast of the pond also remains.

Flora

No special-status plant species were detected in 2007 or 2010, and none are expected to occur since surveys were conducted at an appropriate time for their detection. Several non-special-status plant species were newly observed on the site in 2010 that were not observed in 2007. These are asthmaweed (*Conyza bonariensis*), smooth desert-dandelion (*Malacothrix glabrata*), slender wooly-marbles (*Psilocarphus tenellus*), Mexican sunflower (*Tithonia fruiticosa*), curve-nut combseed (*Pectocarya recurvata*), hairy rupturewort (*Herniaria hirsuta* var. *hirsuta*), ruby sand-spurrey (*Spergularia rubra*), henbit (*Lamium amplexicaule*), holly-leaf navarretia (*Navarretia atractyloides*), hooked navarretia (*N. hamata* ssp. *hamata*), pink knotweed (*Persicaria capitata*), and goldentop grass (*Lamarckia aurea*).

Please refer to **Appendix B—Plant species observed at the Claremont University Consortium Quarry site; survey date May 13, 2010** for the cumulative list of plant species observed.

Fauna

Metamorphosed juveniles of California toad (*Anaxyrus boreas halophilus*) and Pacific treefrog (*Pseudacris regillis*) were incidentally observed in association with the seasonal pond during the 2010 surveys. These were not observed in 2007, presumably due to prevailing dry conditions on site at that time, and are

mentioned here to provide greater completeness to the cumulative record of observations on site. These animals are not considered special-status species.

13 bird species were observed on 5 – 6 visits during the CAGN survey, none of which are considered special-status species, and all of which are presumed to breed on or near the site:

California quail (*Callipepla californica*)
Red-tailed hawk (*Buteo jamaicensis*)
Mourning dove (*Zenaida macroura*)
Anna's hummingbird (*Calypte anna*)
Allen's hummingbird (*Selasphorus sasin*)
Black phoebe (*Sayornis nigricans*)
Western scrub-jay (*Aphelocoma californica*)
Barn swallow (*Hirundo rustica*)
Bewick's wren (*Thryomanes bewickii*)
Northern mockingbird (*Mimus polyglottos*)
California towhee (*Pipilo crissalis*)
House finch (*Carpodacus mexicanus*)
Lesser goldfinch (*Carduelis psaltria*)

Coastal California gnatcatcher

For determination of presence/absence of coastal California gnatcatcher, U.S. Fish and Wildlife Service guidelines require a minimum of six surveys, conducted at least one week apart from March 15 through June 30.[2] In accordance with these guidelines a protocol-level survey for coastal California gnatcatcher was conducted by Cooper Ecological Monitoring. Surveys were performed by Daniel S. Cooper (USFWS Permit, TE# 100008-1) and Robert A. Hamilton (USFWS Permit, TE# 799557). Each survey visit covered the entire site, and survey dates and conditions were as follows:

Date	Time	Temperature [° F]	Wind [mph]	Personnel*
May 6, 2010	08:50 – 10:50	61 – 70	0	DSC/RAH
May 13, 2010	08:50 – 11:50	66 – 77	0	DSC/RAH
May 21, 2010	11:00 – 13:00	68 – 73	1 – 5	RAH
May 28, 2010	11:00 – 13:45	69 – 72	1 – 5	RAH
June 4, 2010	09:40 – 12:00	69 – 73	1 – 3	DSC
June 15, 2010	08:10 – 09:20	72 – 73	0	DSC

**: DSC = Daniel S. Cooper; RAH = Robert A. Hamilton.*

A total of 37 bird species was detected during the CAGN survey (see **Appendix C—Animal species observed at the Claremont University Consortium Quarry site, May – June, 2010**), and no coastal California gnatcatchers were detected during the six visits.

2 United States Fish and Wildlife Service, 1997. *Coastal California Gnatcatcher (*Polioptila californica californica*) Presence/Absence Survey Guidelines*. February 28, 1997.

Additional special-status wildlife

Of the bird species observed at least once during the CAGN survey, three are considered special-status species:

- California horned lark (*Eremophila alpestris actia*), CDFG Watch List
- Cooper's hawk (*Accipiter cooperi*), nesting birds included on CDFG Watch List
- Willow flycatcher (*Empidonax traillii*), nesting birds state-listed Endangered

Based on the detection of at least one singing California horned lark to the east of the site on two dates during the survey, it is presumed to nest in the area; however, it was not detected at the survey site itself (as it had been in 2007), despite the presence of suitable habitat.

Cooper's hawk, recorded singly on three visits, is considered a Watch List species, while nesting, by the State of California. Although it may use the site for foraging, breeding behavior or other evidence of nesting was not observed for this species.

A single, non-vocal willow flycatcher was observed on one visit (May 28, 2010), but this is considered to have been a migrant; certain races of this species are protected in California, but migrant individuals—common in many habitats statewide—are indistinguishable in the field away from nesting habitat, and are not typically protected where they occur only as migrants (one was also seen on May 18, 2007).

One sensitive reptile species was observed—the coastal whiptail (*Aspidoscelis tigris stejnegeri*). This lizard remains common in remaining alluvial wash habitats in the Los Angeles Basin, such as is present on the project site.

CONCLUSION AND RECOMMENDATIONS

The 2010 plant survey was conducted during the blooming season and no sensitive plant species were found on the subject property. Previous surveys also failed to detect sensitive plant taxa[3]. Given that the spring of 2010 followed an above-average rainfall season, and that no prior surveys have resulted in the detection of special-status plant taxa, it is presumed that none are present on site, and no mitigation is recommended.

Active nests of native bird species are protected by the Migratory Bird Treaty Act (16 U.S.C. 704) and the California Fish and Game Code (Section 3503). If activities associated with construction or grading are

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3 Impact Sciences, Inc. 2007. Updated Biological Inventory and Analysis, Claremont University Consortium Quarry Site.

planned during the bird nesting/breeding season, generally January through March for early nesting birds (e.g., Coopers hawks or hummingbirds) and from mid-March through September for most bird species, the applicant should have a qualified biologist conduct surveys for active nests. Pre-construction nesting bird surveys should be conducted weekly, within 30 days prior to initiation of ground-disturbing activities to determine the presence/absence of active nests. The surveys should continue on a weekly basis with the last survey being conducted no more than three days before the start of clearance/construction work. Surveys should include examination of trees, shrubs, and the ground, as several bird species known to the area are shrub or ground nesters, including mourning doves. Protected bird nests that are found within the construction zone should be protected by a buffer of 300 feet for most species or 500 feet or raptors, unless the buffer distance is modified by the California Fish and Game Department, demarcated by construction fencing or other means that will allow avoidance of the nests until young birds have fledged, and no continued use of the nest is observed. If ground-disturbing activities are delayed, additional pre-construction surveys will be conducted so that no more than three days will have elapsed between the survey and ground-disturbing activities.

Prior to construction, a qualified biologist should be retained by the applicant as the biological monitor subject to the approval of the CEQA lead agency. That person should ensure that impacts to biological resources are avoided or minimized, and should conduct pre-construction field surveys for special-status species that may be affected and/or eliminated as a result of grading and/or site preparation activities. During earthmoving activities, the biological monitor should be present to relocate any vertebrate species that may come into harm's way to an appropriate offsite location of similar habitat. The biological monitor should be authorized to stop specific grading activities if violations of mitigation measures or any local, state, or federal laws are suspected.

APPENDIX A

Protocol-level Survey Report for coastal California gnatcatcher (Cooper Ecological Monitoring)

APPENDIX B

Plant species observed at the Claremont University Consortium Quarry site; survey date May 13, 2010

Arial font indicates non-native taxa
*: Plant not detected in earlier surveys

DICOTS

Adoxaceae (moschatel family)

Sambucus nigra ssp. *caerulea* (blue elderberry)

Anacardiaceae (sumac family)

Malosma laurina (laurel sumac)
Schinus molle (Peruvian-pepper)

Apocynaceae (dogbane family)

Nerium oleander (oleander)

Asteraceae (sunflower family)

Ambrosia acanthicarpa (annual bur-sage)
Artemisia californica (California sagebrush)
Baccharis emoryi (Emory's baccharis)
Baccharis salicifolia (mulefat)
Baccharis sarothroides (broom baccharis)
Brickellia californica (California brickellbush)
Carduus pycnocephalus (Italian thistle)
Centaurea melitensis (tocolote)
Cirsium occidentale var. *californicum* (California thistle)
Cirsium vulgare (bull thistle)
Conyza bonariensis (asthmaweed)*
Conyza canadensis (horseweed)
Corethrogyne filaginifolia (California aster)
Ericameria linearifolia (linear-leaved goldenbush)
Ericameria pinifolia (pine-leaf goldenbush)
Eriophyllum confertiflorum var. *confertiflorum* (golden yarrow)
Gnaphalium californicum (California everlasting)
Heterotheca grandiflora (telegraph weed)
Lepidospartum squamatum (California broomsage)
Logfia filaginoides (California cottonrose)
Malacothrix glabrata (smooth desert-dandelion)*
Malacothrix saxatilis (cliff malacothrix)
Psilocarphus tenellus (slender wooly-marbles)*
Sonchus asper ssp. *asper* (prickly sow thistle)
Tithonia fruticosa (Mexican sunflower)*
Xanthium spinosum (spiny cocklebur)

Boraginaceae (borage family)

Amsinckia menziesii var. *intermedia* (rancher's fireweed)
Cryptantha intermedia (common cryptantha)
Cryptantha muricata (prickly cryptantha)
Eriodictyon californicum (California yerba santa)
Heliotropium curassavicum (salt heliotrope)
Pectocarya linearis ssp. *ferocula* (slender combseed)
Pectocarya penicillata (winged combseed)
Pectocarya recurvata (curve-nut combseed)*
Phacelia ramosissima var. *latifolia* (branching phacelia)

Brassicaceae (mustard family)

Brassica rapa (field mustard)
Hirschfeldia incana (short-pod mustard)
Lobularia maritima (sweet alyssum)
Rorippa curvisiliqua (curve-pod yellow-cress)
Sisymbrium irio (London rocket)

Buddlejaceae (buddleja family)

Buddleja davidii (butterfly bush)

Caryophyllaceae (pink family)

Herniaria hirsuta var. *hirsuta* (hairy rupturewort)*
Spergularia rubra (ruby sand-spurrey)*

Convolvulaceae (morning-glory family)

Cuscuta californica var. *californica* (chaparral dodder)

Cucurbitaceae (gourd family)

Marah macrocarpus var. *macrocarpus* (big-fruited man-root)

Euphorbiaceae (spurge family)

Chamaesyce albomarginata (rattlesnake weed)
Croton californicus (California croton)
Ricinus communis (castor-bean)

Fabaceae (legume family)

Lotus scoparius var. *scoparius* (deerweed)
Lupinus hirsutissimus (stinging lupine)
Melilotus indicus (yellow sweet-clover)
Prosopis velutina (velvet mesquite)

Geraniaceae (geranium family)

Erodium botrys (white-stem filaree)
Erodium cicutarium (red-stem filaree)

Grossulariaceae (gooseberry family)

Ribes aureum (golden currant)
Ribes malvaceum (chaparral currant)

Lamiaceae (mint family)

Lamium amplexicaule (henbit)*
Marrubium vulgare (horehound)
Salvia columbariae var. *columbariae* (chia sage)
Salvia mellifera (black sage)

Malvaceae (mallow family)

Malacothamnus fremontii (Fremont's bushmallow)
Malva parviflora (cheese weed)

Myrsinaceae (myrsine family)

Anagallis arvensis (scarlet pimpernel)

Oleaceae (olive family)

Fraxinus velutina (velvet-leaf ash)

Onagraceae (evening-primrose family)

Camissonia bistorta (suncups)
Camissonia californica (California suncups)

Oxalidaceae (oxalis family)

Oxalis corniculata ssp. *corniculata* (creeping wood-sorrel)

Phrymaceae (lopseed family)

Mimulus aurantiacus var. *pubescens* (southern bush monkeyflower)

Plantaginaceae (plantain family)

Penstemon spectabilis (royal penstemon)
Veronica arvensis (common speedwell)

Platanaceae (sycamore family)

Platanus racemosa (western sycamore)

Polemoniaceae (phlox family)

Eriastrum sapphirinum (sapphire woolystar)
Navarretia atractyloides (holly-leaf navarretia)*
Navarretia hamata ssp. *hamata* (hooked navarretia)*

Polygonaceae (buckwheat family)

Eriogonum davidsonii (Davidson's buckwheat)
Eriogonum fasciculatum (California buckwheat)
Persicaria capitata (pink knotweed)*

Rhamnaceae (buckthorn family)

Ceanothus leucodermis (whitethorn ceanothus)

Rosaceae (rose family)

Heteromeles arbutifolia (toyon)

Salicaceae (willow family)

Salix lasiolepis (arroyo willow)

Scrophulariaceae (figwort family)

Verbascum virgatum (wand mullein)

Solanaceae (nightshade family)

Datura wrightii (jimsonweed)
Nicotiana glauca (tree tobacco)
Solanum nigrum (black nightshade)
Solanum xanti (chaparral nightshade)

Urticaceae (nettle family)

Urtica urens (dwarf nettle)

Zygophyllaceae (caltrop family)

Tribulus terrestris (caltrop)

MONOCOTS

Poaceae (grass family)

Arundo donax (giant reed)
Avena barbata (slender oat)
Bromus diandrus (ripgut brome)
Bromus hordeaceus (soft chess)

Bromus madritensis ssp. *rubens* (red brome)
Lamarckia aurea (goldentop grass)*
Polypogon monspeliensis (rabbit's foot grass)
Schismus arabicus (Arabian splitgrass)
Vulpia myuros (mouse-tail fescue)

APPENDIX C

Animal species observed at the Claremont University Consortium Quarry site, May – June, 2010

AMPHIBIANS

Anaxyrus boreas halophilus (California toad)
Pseudacris regillis (Pacific chorus frog)

REPTILES

Sceloporus occidentalis longipes (Great Basin fence lizard)
Aspidoscelis tigris stejnegeri (coastal whiptail)

BIRDS

Callipepla californica (California quail)
Cathartes aura (turkey vulture)
Accipiter cooperii (Cooper's hawk)
Buteo jamaicensis (red-tailed hawk)
Porzana carolina (sora)
Charadrius vociferus (killdeer)
Larus occidentalis (western gull)
Zenaida macroura (mourning dove)
Chordeiles acutipennis (lesser nighthawk)
Archilochus alexandri (black-chinned hummingbird)
Calypte anna (Anna's hummingbird)
Selasphorus sasin (Allen's hummingbird)
Megaceryle alcyon (belted kingfisher)
Empidonax traillii (willow flycatcher)
Sayornis nigricans (black phoebe)
Sayornis saya (Sayornis saya)
Myiarchus cinerascens (ash-throated flycatcher)
Aphelocoma californica (western scrub-jay)
Corvus corax (common raven)
Eremophila alpestris actia (California horned lark)
Stelgidopteryx serripennis (northern rough-winged swallow)
Petrochelidon pyrrhonota (cliff swallow)
Hirundo rustica (barn swallow)
Psaltriparus minimus (bushtit)
Salpinctes obsoletus (rock wren)
Thryomanes bewickii (Bewick's wren)
Mimus polyglottos (northern mockingbird)
Toxostoma redivivum (California thrasher)
Dendroica petechia (yellow warbler)
Oporornis tolmiei (MacGillivray's warbler)
Wilsonia pusilla (Wilson's warbler)
Pipilo crissalis (California towhee)
Pheucticus melanocephalus (black-headed grosbeak)
Molothrus ater (brown-headed cowbird)
Icterus cucullatus (hooded oriole)
Carpodacus mexicanus (house finch)
Carduelis psaltria (lesser goldfinch)

MAMMALS

Canis latrans (coyote)
Sylvilagus audubonii (desert cottontail)
Spermophilus beecheyi (California ground squirrel)

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MEMORANDUM

To: Christopher Brown
Associate Project Manager II, Environmental Planning
Hogle-Ireland, Inc.

Job No. 0720.003

From: Joe Decruyenaere, Senior Biologist

Subject: Vegetation classification and opportunities for wildlife movement at the East Campus project site, Claremont University Consortium

Date: March 31, 2011

COMMENTS

The Hogle-Ireland memo of March 3, summarized two comments from the City of Claremont, received in response to the first screencheck draft EIR for the proposed sports facility located at the "Quarry site", Claremont Colleges East Campus. The City comments, as summarized by you, are given below in **bold font**, followed by our responses.

1. **The discussion of alluvial fan scrub (see page 2 of your 2007 report and page 3 of your 2010 report) needs to be expanded to include a statement as to the sensitivity of this community. Additionally, the Cooper reports indicate that on-site vegetation is actually Riversidian [sic] alluvial sage scrub and is very threatened (see page 3 of the 2007 Gnatcatcher survey and page 4 of the 2010 Gnatcatcher survey). The classification of on-site vegetation and sensitivity needs to be clear and consistent between these documents.**

Vegetation mapped as "alluvial fan scrub" in the Impact Sciences reports may be considered a disturbed subtype of Riversidean alluvial fan sage scrub (RAFSS), which is itself the local variant of coastal sage scrub

that occupies alluvial fans along the southern base of the San Gabriel Mountains.[1, 2] RAFSS has also been referred to variously as alluvial sage scrub, Riversidean alluvial fan scrub, alluvial fan sage scrub, and cismontane alluvial scrub.[3] RAFSS is not described by Holland in his Preliminary Descriptions of the Terrestrial Natural Communities of California (1986); however, it is included in Appendix B of that document (Vegetation Types not Described in this Document) and noted as being rare (page 148).[4]

As discussed in the 2007 Impact Sciences report, a continuum of vegetation types exists on site, none of which is undisturbed but all of which appear to be recovering to one or a small number of "climax" communities. Floristically, on-site scrub communities tend to host a high density of non-native species relative to undisturbed communities in the region, and Impact Sciences chose to be generic in its treatment of scrub vegetation on the site chiefly due to the fact that many non-native species are present throughout. It was also decided that to make fine distinctions between the various scrub sub-types would have produced an unnecessarily complex vegetation map that would have offered little in the way of explaining ecological distinctions in how the site may be used by wildlife, or otherwise illustrating the distribution of biological constraints.

Despite floristic differences between on-site scrub vegetation and undisturbed examples of RAFSS in the region, structural characteristics of on-site scrub communities provide most of the physical attributes of natural RAFSS formations. The physical similarity of on-site vegetation to more natural areas in the region is attested to by the presence of a relatively diverse vertebrate fauna, including several special-status species.

As mentioned in the Cooper report, RAFSS is indeed a declining vegetation type in the region. While not representative of a pristine example of RAFSS, the site provides habitat value for numerous sensitive species,

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1 O'Leary, JF. 1990. California Coastal Sage Scrub: General Characteristics and Considerations for Biological Conservation. In *Endangered Plant Communities of Southern California*. Allan A. Schoenherr, ed. Southern California Botanists Special Publication No. 3.

2 Hanes, TL; RD Friesen; and K Keane. 1989. Alluvial Scrub Vegetation in Coastal Southern California. USDA Forest Service Gen. Tech. Rep. PSW-110.

3 Strong, Jane. 2009. The Natural History of the Sante Fe Dam Recreation Area. Available at http://www.cnps-sgm.org/santafedam/plants.html.

4 Holland, RF. 1986. *Preliminary descriptions of the terrestrial natural communities of California*. State of California, The Resources Agency, Nongame Heritage Program, Dept. Fish & Game, Sacramento, Calif. 156 pp.

a fact recognized in both documents, and for which mitigation measures have already been proposed, that require revegetation of undeveloped portions of the project site with locally-indigenous RAFSS species in order to provide continued benefit to native wildlife.

2. **The City requests that we include a discussion of the site's use as a migratory corridor, if any. Please include a brief discussion that discusses terrestrial animals, fish/amphibians, and migratory birds.**

The project site is currently undeveloped and is utilized as a landfill for inert construction debris. Property to the east and south, as well as most of the western neighboring property is disturbed or developed. Remnant patches of good-quality vegetation are extant in the northern portion of the western neighboring property, as well as on open space belonging to Rancho Santa Ana Botanic Garden, north of the site and across Foothill Boulevard. Wildlife species observed on the site include amphibian, reptile, bird and mammal species.

Reptile and amphibian communities on-site are represented by at least five species which were observed during the course of Impact Sciences and Cooper Ecological surveys. It is likely that additional reptile species are present, but the likelihood of additional amphibian species is low due to the ephemeral and disturbed nature of wetland resources on site.

Bobcat (*Lynx rufus*) tracks were observed on the project site, indicating that relatively large wildlife species are able to access the site, likely in order to predate rabbits and other small mammal prey. It is likely that bobcat individuals obtain access to the site from the west and north, by utilizing a culvert running under Foothill Boulevard near the northeastern corner of the project site, or else through gaps in the chain link fence that surrounds the entire project site.

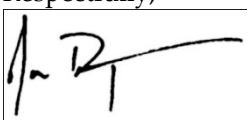
Apart from birds, any movement of wildlife on to the site is likely to originate from the neighboring parcels to the west and north, and any movement off of the site would return wildlife to these same parcels. The site is evidently part of the home range of at least one medium-sized mammal (bobcat) and thus is likely to meet some of the foraging requirements for this individual. Nevertheless, the fact that the project site occupies a "cul-de-sac" of open space within otherwise developed and disturbed areas suggests that regular wildlife movement onto the site would be part of daily home-range activities such as foraging, and would not involve further movement onto neighboring properties to the south and east. Therefore, the project site is not considered to be part of a wildlife movement corridor.

Over 60 bird species were observed in 2007 and 2010, and these were determined to comprise resident, migrant, and transient individuals. Upland communities on site provide habitat for a variety of scrub-obligate birds, including locally sensitive lesser nighthawk and California horned lark.[5] Additionally, the presence of the pond and associated riparian vegetation on site offers resting and foraging habitat for migratory waterfowl and riparian obligate birds.[6] On-site habitat elements may therefore serve as "stepping stones" in long-range migration and local dispersal patterns for regional bird populations.

Impact Sciences understands that a portion of the project site will be maintained as a retention basin holding all project site runoff, and therefore seasonally wet conditions can be expected to continue at its current level subsequent to project development. If wetland and riparian vegetation is allowed to colonize seasonally wet areas (such as the retention basin), the contribution of the site to migratory waterfowl will be maintained at its current level. Likewise, the re-vegetation of undeveloped areas of the project site with locally-indigenous RAFSS species will provide continued habitat value for resident and transient scrub-obligate bird species.

Thank you for allowing Impact Sciences to provide biological consulting services to you. Please contact me if you have any questions regarding the content of this memorandum. You may reach me at (626) 564-1500 (office), (818) 800-8758 (cell) or by email at jdecruyenaere@impactsciences.com.

Respectfully,



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[5] California horned lark and lesser nighthawk were both observed to nest on site in 2007. Neither species was observed to nest on site in 2010, although horned lark was observed and presumed to nest immediately off-site in 2010. Although not listed on any special-status species lists in 2007, the nighthawk was recently included on the Los Angeles Audubon list of Los Angeles County sensitive bird species.

[6] Such bird species observed in 2007 and 2010 include mallard, American avocet, common yellowthroat, sora, belted kingfisher, yellow warbler, and Wilson's warbler

APPENDIX E

Special Status Species Information Update

UPDATED BIOLOGICAL INVENTORY AND ANALYSIS

CLAREMONT UNIVERSITY CONSORTIUM QUARRY SITE

CITIES OF CLAREMONT AND UPLAND, CALIFORNIA

Prepared for:

Claremont University Consortium
150 E. 8th Street
Claremont, California 91711

Prepared by:

Impact Sciences, Inc.
234 East Colorado Boulevard, Suite 205
Pasadena, California 91101

July 2007

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BIOLOGICAL INVENTORY AND ANALYSIS

INTRODUCTION

This report updates the findings of a Biological Inventory and Analysis (BIA) originally prepared by Impact Sciences, Inc. in January 2003. The original BIA and this update were conducted in order to provide the Claremont University Consortium with a biological inventory and analysis of potential natural resources occurring at the Claremont Golf Course (including the south slope) and the quarry (also known as the pit). The golf course is located in the City of Claremont, Los Angeles County, and is bound by Indian Hill Boulevard to the west, Via Los Altos to the south, and the Rancho Santa Ana Botanic Garden to the north and east. The quarry is located in the Cities of Claremont and Upland, within Los Angeles and San Bernardino Counties, respectively, and is bound by Claremont Boulevard to the west, Arrow Route to the south, Monte Vista Avenue to the east, and Foothill Boulevard to the north (Figure 1). The golf course is a 40-acre site; the quarry is an 88-acre site. This update focuses solely on the quarry site and is based on the findings of two site visits, literature and database searches, California gnatcatcher focused survey, and Impact Sciences' knowledge of the area, including relevant portions of the earlier report.

METHODOLOGY

Prior to the on-site investigation, Impact Sciences biologist Joe Decruyenaere conducted a review of the original BIA and other pertinent literature to assist in the identification of special-status species that could occur on or utilize the site. The literature review included searches of the California Department of Fish and Game (CDFG) California Natural Diversity Database (CNDDB) (CDFG 2006a), the California Native Plant Society (CNPS) database (CNPS 2007), and the CDFG Special Plants and Animals pages of the Department of Fish and Game Habitat Conservation Planning Branch website (CDFG 2006b, 2007). The CNDDB lists historical and recently recorded occurrences of special-status plant and animal species. The CNPS database lists historical and recent occurrences of special-status plant species. The CDFG site provides a variety of natural-history-related information relevant to species occurring within California. The database searches were centered on the Ontario USGS topographic map and the surrounding eight USGS topographic maps: Glendora, Mt. Baldy, Cucamonga Peak, Guasti, Corona North, Prado Dam, Yorba Linda, and San Dimas.

On May 4, 2007, Impact Sciences conducted a site visit to perform focused surveys for sensitive plants identified as potentially occurring on the quarry site. A focused survey for coastal California gnatcatcher (CAGN) was also initiated at this time and continued into June 2007. The CAGN survey followed US Fish and Wildlife protocol as is further discussed in the report prepared by Cooper Ecological

Monitoring, attached to this report as Appendix D. The focused survey for sensitive plant species revealed some potential for the occurrence of silvery legless lizard, so an additional site visit was made on June 15, 2007, to conduct a focused survey for that species.

PLANT COMMUNITIES

The quarry site is abandoned and has served as a dumping ground for concrete blocks, culverts, and other rubble. There is an archery range in the western portion of the site. The archery range covers approximately 4.6 acres. The quarry site supports four plant communities: alluvial fan scrub (45.5 acres), willow scrub (0.7 acres), seasonal pond (0.6 acres), and ruderal (26.4 acres); 1.6 acres of the site are disturbed.

Alluvial fan scrub is the predominant native vegetation type in the quarry site and vicinity. Various scrub types occurring on the subject property are here collectively discussed as subtypes of alluvial fan scrub, as they indicate recovery towards a predominant composition. The dominant canopy of this vegetation type is composed of a variety of shrub and sub-shrub species commonly found in scrub and chaparral communities throughout the region that share characteristics of establishment on frequently abraded substrates, such as make up the base of the southern slope of the San Gabriel Mountains. On the quarry site these species include California sagebrush (Artemisia californica), California buckwheat (Eriogonum fasciculatum), scalebroom (Lepidospartum squamatum), California yerba santa (Eriodictyon californicum), and laurel sumac (Malosma laurina). Subdominants in this community on site include deerweed (Lotus scoparius), California brickellbush (Brickellia californica), Camissonia species (Camissonia bistorta and C. californica) and the non-native sweet alyssum (Lobularia maritima) and. This community is present in various stages of recovery from past disturbances associated with quarrying and dumping activities throughout the quarry site.

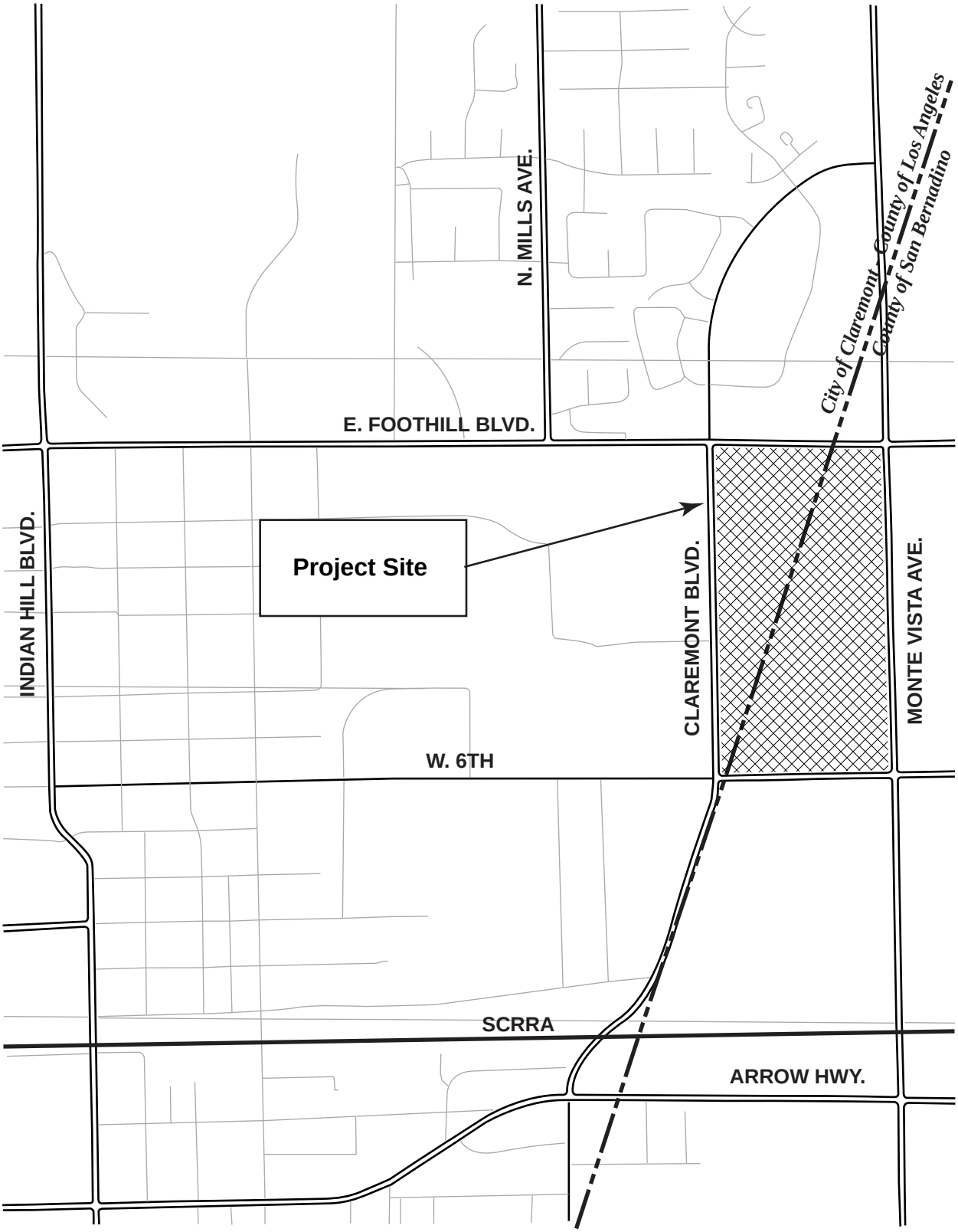
The most fully recovered areas of alluvial fan scrub are in the northern portion of the site and along slopes where artificial fill has not recently accumulated. Flatter, low-lying areas of the site that appear to be less well drained lack the diversity of sloped areas and are covered nearly exclusively by California buckwheat with scattered intrusions of mulefat (Baccharis salicifolia) and an understory of split grass (Schismus spp.). These areas have accumulated a compact topsoil with a high silt content. This degree of compaction is not representative of natural areas in the region, and it is doubtful that they will achieve recovery to the levels shown on better-drained, less-compacted sloped areas of the site.

A seasonal pond is located in the southern portion of the site and is vegetated with annual herbaceous species including horseweed (Conyza canadensis), curvepod yellowcress (Rorippa curvisiliqua), and salt heliotrope (Heliotropium curassavicum).

An area of willow scrub is present immediately adjacent to the seasonal pond and possesses a mix of common riparian species, chiefly Goodding's willow (Salix gooddingii) and mulefat. A small patch of riparian vegetation dominated by a single western sycamore tree is also associated with the same seasonally ponded depression. This small vegetation formation has been mapped as part of the willow scrub vegetation due to its small size and immediate proximity to the willow scrub community.

Most of the southern and much of the western portion of the site supports ruderal vegetation and continues to receive frequent disturbances. Ruderal species in these disturbed areas include black mustard (Brassica nigra), tocalote (Centaurea melitensis), yellow sweet clover (Medicago polymorpha), slender wild oat, (Avena barbata), smooth brome (Bromus hordeaceus), and other non-native species among a few scattered native shrubs, including California buckwheat, coyote bush (Baccharis pilularis), and broom baccharis (B. sarothroides). Much of the area mapped as ruderal in the southern portion of the property, especially areas on north-facing graded slopes, lacks the non-native annual component of other ruderal areas on site and supports a moderate diversity of widely scattered native and non-native perennials, including mulefat, showy penstemon (Penstemon spectabilis) and tree tobacco (Nicotiana glauca). These areas have been mapped as ruderal since they are obviously in the early stages of succession and are surrounded by other areas more typically considered ruderal and dominated by annual plants. Nevertheless, the current floral character of these areas indicates a strong likelihood that, in the absence of disturbance, they would recover to a state similar to that of the alluvial scrub currently present on other steeply sloped areas of the quarry.

The plant communities observed at the quarry site are depicted in Appendix C, Vegetation Map.



NOT TO SCALE

SOURCE: Impact Sciences, Inc. – July 2007

FIGURE **1**

Regional Location

720-002•07/07

COMMON PLANTS

A total of 83 species of plants was observed at the quarry site in May 2007, none of which was a special-status species. Refer to Appendix A for the list of plant species observed.

COMMON WILDLIFE

A total of 63 species of wildlife was observed, or evidence of their presence noted at the quarry site during the course of sensitive plant, CAGN and silvery legless lizard surveys. Seven special-status wildlife species were observed. Please refer to Appendix B for the list of wildlife species observed.

SPECIAL-STATUS SPECIES

Special-status species include those that are state or federally listed as Rare, Threatened, Endangered, or are candidates for listing. Special-status species also include Federal and State Species of Special Concern. Plants included on Lists 1, 2, 3, or 4 of the CNPS inventory, or those that are considered of local concern are also considered to be special-status species. The potential for special-status species to occur on the site is based on habitat suitability, known ranges of special-status species in the region, and or database searches documenting known occurrences of species in the vicinity of the site. Please refer to Table 1 – Special-status Plant Species Known to Occur in the Project Region and Table 2 – Special-status Wildlife Species Known to Occur in the Project Region for a complete list of special-status species considered in this analysis. Special-status species observed during the surveys are indicated in bold.

Table 1
Special-status Plant Species Known to Occur in the Project Region

Common Name Scientific Name	Status			Habitat	Potential To Occur: Yes/No	Development Constraint	Recommendation
	Federal	State	CNPS				
Woolly mountain-parsley Oreonana vestita	--	--	1B.3	High ridges, scree, talus or gravel in lower montane coniferous forest, subalpine coniferous forest, and upper montane coniferous forest, between 1615 – 3500 m msl.	No; habitat for this species does not occur on the subject property, which is below the elevational range of the species.	None	N/A
Southern tarplant Centromadia parryi ssp. australis	--	--	1B.1	Marshes and swamp margins, vernally mesic valley and foothill grassland, vernal pools. Often in disturbed sites near the coast; also in alkaline soils, sometimes with saltgrass (Distichlis). 0 – 425 m msl.	No; a depression in the southern portion of the quarry seasonally contains ponded water, but the subject property is outside of the species' natural range. The nearest CNDDB records are located in Pasadena and Yorba Linda.	None	N/A

Common Name Scientific Name	Status			Habitat	Potential To Occur: Yes/No	Development Constraint	Recommendation
	Federal	State	CNPS				
Smooth tarplant Centromadia pungens ssp. laevis	--	--	1B.1	Alkaline soils in chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grassland communities between 0 – 480 m msl. Frequently confused with other Centromadia species such as C. parryi ssp. australis and C. pungens ssp. pungens.	No; alkaline soils are absent from the project site.	None	N/A
White rabbit-tobacco Pseudognaphalium leucocephalum	--	--	2.2	Sandy or gravelly soils in chaparral, cismontane woodland, coastal scrub, and riparian woodland habitats between 0 – 2100 m msl. Treated in The Jepson Manual (Hickman 1993) as Gnaphalium leucocephalum.	No; habitat for this species does not occur on the subject property. Although the predominant vegetation on site is an alluvial scrub formation, hydrological dynamics and soil texture are not representative of those of undisturbed habitats in which the species typically occurs.	None	N/A

Common Name Scientific Name	Status			Habitat	Potential To Occur: Yes/No	Development Constraint	Recommendation
	Federal	State	CNPS				
Rayless ragwort Senecio aphanactis	--	--	2.2	Drying alkaline flats in chaparral, cismontane woodland, and coastal scrub habitats between 15 – 800 m msl.	No; habitat for this species does not occur on the subject property.	None	N/A
San Bernardino aster Symphyotrichum defoliatum	--	--	1B.2	Cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, vernally mesic valley and foothill grassland, and near ditches, streams, and springs between 2 – 2040 m msl.	No; habitat for this species does not occur on the subject property.	None	N/A
Greata's aster Symphyotrichum (Aster) greatae	--	--	1B.3	Mesic habitats in broadleafed upland forest, chaparral, cismontane woodland, and lower montane coniferous forest, between 300 – 2010 m msl.	No; habitat for this species does not occur on the subject property.	None	N/A

Common Name Scientific Name	Status			Habitat	Potential To Occur: Yes/No	Development Constraint	Recommendation
	Federal	State	CNPS				
Nevin's barberry Berberis nevinii	FE	SE	1B.1	Steep north-facing slopes and low-grade sandy washes in chaparral, cismontane woodland, coastal, and riparian scrub between 295 and 825 m msl.	Yes; habitat for this species occurs on the subject property, and the species is known from locations within one mile of the site. Nevertheless, this shrub is easily recognizable during and outside of the flowering season and in poor rain years. Focused surveys in spring 2007 failed to detect any individuals. It is presumed to be currently absent from the site.	None	N/A
Robinson's pepper-grass Lepidium virginicum var. robinsonii	--	--	1B.2	Dry soils in chaparral and coastal scrub habitats between 1 – 835 m msl.	Yes; habitat for this species occurs on the subject property. Focused surveys conducted in spring 2007 failed to detect this species.	The loss of individuals of this species from the subject property would be a potential violation of the CEQA and Fish and Game Code (Section 1913).	The site was surveyed with the potential for occurrence of this species in mind and none was found. Nevertheless, spring of 2007 was extremely dry, and very little annual vegetation was apparent. Follow-up surveys are recommended after sufficient winter precipitation makes such surveys feasible, if no construction has begun.

Common Name Scientific Name	Status			Habitat	Potential To Occur: Yes/No	Development Constraint	Recommendation
	Federal	State	CNPS				
Coulter's saltbush Atriplex coulteri	--	--	1B.2	Ocean bluffs, ridge tops and alkaline lowlands in coastal bluff scrub, coastal dunes, coastal scrub, valley and foothill grassland between 3 – 460 m msl.	No; habitat for this species does not occur on the subject property.	None	N/A
Davidson's saltscale Atriplex serenana var. davidsonii	--	--	1B.2	Alkaline soils in coastal bluff scrub and coastal scrub habitats between 3 – 250 m msl.	No; habitat for this species does not occur on the subject property; alkaline soils are absent.	None	N/A
San Gabriel Mountains dudleya Dudleya densiflora	--	--	1B.1	In crevices and on decomposed granite of cliffs and canyon walls in chaparral, coastal scrub, and lower montane coniferous forest habitats between 300 – 520 m msl.	No; habitat for this species does not occur on the subject property. The species is not known outside of San Gabriel Canyon	None	N/A
Many-stemmed dudleya Dudleya multicaulis	--	--	1B.1	Heavy, often clay, soils in chaparral, coastal scrub, valley and foothill grassland habitats between 0 – 790 m msl.	No; habitat for this species does not occur on the subject property.	None	N/A
Round-leaved filaree California macrophylla	--	--	1B.1	Clay soils in cismontane woodland, valley and foothill grassland between 15 – 1200 m msl.	No; habitat for this species does not occur on the subject property.	None	N/A

Common Name Scientific Name	Status			Habitat	Potential To Occur: Yes/No	Development Constraint	Recommendation
	Federal	State	CNPS				
Hall's Monardella Monardella macrantha ssp. hallii	--	--	1B.3	Dry slopes and ridges within broad leaf upland forest, chaparral, cismontane woodland, lower montane coniferous forest, and valley and foothill grassland communities between 695-2195 m msl.	No; habitat for this species does not occur on the subject property.	None	N/A
Salt spring checkerbloom Sidalcea neomexicana	--	--	2.2	Alkali playas and brackish marshes within chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub, and playa communities between 0 – 1530 m msl.	No; habitat for this species does not occur on the subject property.	None	N/A
Chaparral sand-verbena Abronia villosa var. aurita	--	--	1B.1	Sandy soils in chaparral, coastal scrub, and desert dune communities between 80 – 1600 m msl.	No; habitat for this species does not occur on the subject property.	None	N/A
Rock Creek broomrape Orobanche valida ssp. valida	--	--	1B.2	Parasitic on various chaparral shrubs on slopes of loose decomposed granite within chaparral, pinyon, and juniper woodland communities between 1250 – 2000 m msl.	No; habitat for this species does not occur on the subject property.	None	N/A

Common Name Scientific Name	Status			Habitat	Potential To Occur: Yes/No	Development Constraint	Recommendation
	Federal	State	CNPS				
Santa Ana River woollystar Eriastrum densifolium ssp. sanctorum	--	--	1B.1	Sandy soils on river floodplains and terraced fluvial deposits in coastal scrub and chaparral communities between 150 – 610 m msl.	No; habitat for this species does not occur on the subject property.	None	N/A
San Gabriel Linanthus Linanthus concinnus	--	--	1B.2	Rocky soils and openings in chaparral, lower montane coniferous forest, and upper montane coniferous forest communities between 1520 – 2800 m msl. Often with Jeffrey pine and canyon oak.	No; the subject property is below the elevational range of the species.	None	N/A
Prostrate Navarretia Navarretia prostrata	--	--	1B.1	Alkaline soils, vernal pools and mesic habitats within coastal scrub, meadow, seep and valley and foothill grassland communities between 15 – 700 m msl.	No; habitat for this species does not occur on the subject property.	None	N/A

Common Name Scientific Name	Status			Habitat	Potential To Occur: Yes/No	Development Constraint	Recommendation
	Federal	State	CNPS				
Parry's spineflower Chorizanthe parryi var. parryi	--	--	3.3	Sandy or rocky openings in chaparral and coastal scrub communities between 40 – 1705 m msl. Previously confused with C. procumbens and often misidentified as this plant.	Yes; marginal habitat for this species is available in disturbed areas of the subject property. Focused surveys in 2007 failed to detect any individuals of this species.	The loss of individuals of this species from the subject property would be a potential violation of the CEQA and Fish and Game Code (Section 1913).	The site was surveyed with the potential for occurrence of this species in mind and none was found. Nevertheless, spring of 2007 was extremely dry, and very little annual vegetation was apparent. Follow-up surveys are recommended after sufficient winter precipitation makes such surveys feasible, if no construction has begun.
Slender-horned spineflower Dodecahema leptoceras	FE	SE	1B.1	Sandy soils on flood terraces in chaparral, cismontane woodland, and alluvial fan scrub communities between 200 – 760 m msl.	No; habitat for this species does not occur on the subject property.	None	N/A
Johnston's buckwheat Eriogonum microthecum var. johnstonii	--	--	1B.3	Rocky habitats or granite or limestone on slopes and ridges within subalpine coniferous forest and upper montane coniferous forest communities between 2210 – 2900 m msl.	No; habitat for this species does not occur on the subject property, which is below the elevational range of the species.	None	N/A

Common Name Scientific Name	Status			Habitat	Potential To Occur: Yes/No	Development Constraint	Recommendation
	Federal	State	CNPS				
Peirson's spring beauty Claytonia lanceolata var. peirsonii	--	--	1B.1	Granitic scree, often with a sandy or fine soil component and cobbles within subalpine coniferous forest and upper montane coniferous forest communities between 2135 – 2745 m msl. A synonym of C. lanceolata in The Jepson Manual.	No; habitat for this species does not occur on the subject property, which is below the elevational range of the species.	None	N/A
Mesa Horkelia Horkelia cuneata ssp. puberula	--	--	1B.1	Sandy or gravelly sites in chaparral, cismontane woodland, and coastal scrub communities between 70 – 810 m msl.	No; habitat for this species does not occur on the subject property.	None	N/A
Fringed grass-of-parnassus Parnassia cirrata	--	--	1B.3	Mesic habitats, sometimes in calcareous soils, within lower montane coniferous forest, meadows, seeps, and upper montane coniferous forest communities between 2135 – 3000 m msl.	No; habitat for this species does not occur on the subject property, which is below the elevational range of the species.	None	N/A
California sawgrass Cladium californicum	--	--	2.2	Alkaline or freshwater habitats in meadow, seep, marsh and swamp communities between 60 – 600 m msl.	No; habitat for this species does not occur on the subject property.	None	N/A

Common Name Scientific Name	Status			Habitat	Potential To Occur: Yes/No	Development Constraint	Recommendation
	Federal	State	CNPS				
Hot springs Fimbristylis *Fimbristylis thermalis*	--	--	2.2	Alkaline habitats near hot springs within meadow and seep communities between 110 – 1340 m msl.	No; habitat for this species does not occur on the subject property.	None	N/A
Thread-leaved Brodiaea *Brodiaea filifolia*	FT	SE	1B.1	Openings, often in clay soils, within chaparral, cismontane woodland, coastal scrub, playa, valley and foothill grassland, and vernal pools communities between 25 – 860 m msl.	No; habitat for this species does not occur on the subject property.	None	N/A
Slender mariposa lily *Calochortus clavatus var. gracilis*	--	--	1B.2	Shaded foothill canyons, often on grassy slopes within chaparral and coastal scrub communities between 360 – 1000 m msl.	No; habitat for this species does not occur on the subject property.	None	N/A
Plummer's mariposa lily *Calochortus plummerae*	--	--	1B.2	Rocky and sandy sites, usually of granitic or alluvial material in coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, and lower montane coniferous forest communities between 90 – 1610 m msl.	Yes; suitable habitat for this species is present in the northern portion of the subject property. Focused surveys in 2007 failed to detect this species.	The loss of individuals of this species from the subject property would be a potential violation of the CEQA and Fish and Game Code (Section 1913).	The site was surveyed with the potential for occurrence of this species in mind and none was found. Nevertheless, spring of 2007 was extremely dry, and very little annual vegetation was apparent. Follow-up surveys are recommended after sufficient winter precipitation makes such surveys feasible, if no construction has begun.

Common Name Scientific Name	Status			Habitat	Potential To Occur: Yes/No	Development Constraint	Recommendation
	Federal	State	CNPS				
Intermediate mariposa lily Calochortus weedii var. intermedius	--	--	1B.2	Rocky areas in chaparral, coastal scrub, and valley and foothill grassland communities between 105 – 855 m msl.	Yes; habitat for this species occurs on the subject property. Focused surveys in spring 2007 failed to detect this species.	The loss of individuals of this species from the subject property would be a potential violation of the CEQA and Fish and Game Code (Section 1913).	The site was surveyed with the potential for occurrence of this species in mind and none was found. Nevertheless, spring of 2007 was extremely dry, and very little annual vegetation was apparent. Follow-up surveys are recommended after sufficient winter precipitation makes such surveys feasible, if no construction has begun.
Lemon lily Lilium parryi	--	--	1B.2	Wet, mountainous terrain, generally in forested areas, shady streamsides, and open, boggy meadows and seeps between 1220 – 2790 m msl.	No; habitat for this species does not occur on the subject property, which is below the elevational range of the species.	None	N/A
Chaparral Nolina Nolina cismontana	--	--	1B.2	Sandstone, shale, and gabbro substrates in chaparral and coastal scrub communities between 140 – 1275 m msl.	No; habitat for this species does not occur on the subject property.	None	N/A

Common Name Scientific Name	Status			Habitat	Potential To Occur: Yes/No	Development Constraint	Recommendation
	Federal	State	CNPS				
California satintail Imperata brevifolia	--	--	2.1	Mesic, often alkaline, habitats within chaparral, coastal scrub, Mojavean desert scrub, meadow, seep, and riparian scrub communities between 0 – 500 m msl. Mistakenly classified as a noxious weed in California from 1960 to 2004.	No; habitat for this species does not occur on the subject property.	None	N/A

N/A = Not applicable

Status Key

Federal, FC = Candidate for federal listing; FE = Federally Endangered; FT = Federal Threatened

State, CE = California Endangered; CT = California Threatened

CNPS, 1B = Plants Rare and Endangered in California and elsewhere; 2 = Rare or Endangered in California, more common elsewhere; 3 = Plants about which more information is needed; 0.1 = Seriously Endangered in California; 0.2 = Fairly Endangered in California; 0.3 = Not very Endangered in California

Table 2
Special-status Wildlife Species Known to Occur in the Project Region

Common Name Scientific Name	Status			Habitat	Potential To Occur, Yes/No	Development Constraint	Recommendation
	Federal	State	Other				
Fish							
Santa Ana speckled dace *Rhinichthys osculus* ssp. 3	FSS	CSC	--	Requires permanent flowing streams with summer water temperatures of 17 – 20 degrees C. Usually inhabits shallow cobble and gravel riffles. Occurs in the headwaters of the Santa Ana and San Gabriel Rivers.	No; aquatic habitat is not present on site	None	N/A
Santa Ana sucker *Catostomus santaanae*	FT, FSS	CSC	--	Habitat generalist, but prefer sand/rubble/boulder bottoms, cool, clear water and algae; native range is restricted to basins of the Los Angeles, San Gabriel and Santa Ana Rivers.	No; aquatic habitat is not present on site	None	N/A
Arroyo chub *Gila orcuttii*	FSS	CSC	--	Slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation and associated invertebrates. Native populations are restricted to the Los Angeles, San Gabriel, San Luis Rey, Santa Ana, and Santa Margarita Rivers, and to Malibu and San Juan Creeks.	No; aquatic habitat is not present on site	None	N/A

Common Name Scientific Name	Status			Habitat	Potential To Occur, Yes/No	Development Constraint	Recommendation
	Federal	State	Other				
Amphibians							
Coast Range newt Taricha torosa torosa	--	CSC	--	Occupies terrestrial habitats and will migrate over a kilometer to breed in ponds, reservoirs and slow-moving streams within coastal drainages from Mendocino to San Diego County	No; suitable habitat does not occur on site.	None	N/A
San Gabriel Mtns slender salamander Batrachoseps gabrieli	FSS	--	--	Known only from the San Gabriel Mountains; found under rocks, wood, fern fronds and on soil at the base of talus slopes. Most active on the surface in winter and early spring.	No; suitable habitat does not occur on site.	None	N/A
Mountain yellow-legged frog Rana muscosa	FE, FSS	CSC	--	Always encountered within a few feet of water. Tadpoles may require 2 to 4 years to complete their aquatic development. Federal listing refers to populations in the San Gabriel, San Jacinto, and San Bernardino Mountains only.	No; suitable habitat does not occur on site.	None	N/A

Common Name Scientific Name	Status			Habitat	Potential To Occur, Yes/No	Development Constraint	Recommendation
	Federal	State	Other				
Reptiles							
Southwestern pond turtle Emys marmorata pallida	BLMS, FSS	CSC	--	Requires basking sites such as partially submerged logs, vegetation mats or open mud banks and needs suitable nesting sites in permanent or near permanent bodies of water in many habitat types below 2000 m msl	No; no permanent water sources of a type appropriate for this species are found within the project vicinity.	None	N/A
San Diego banded gecko Coleonyx variegatus abbotti	--	--	CDFG Special Animals list	Granite or rocky outcrops in coastal scrub and chaparral habitats	No; rocky outcrops are absent from the site.	None	N/A
Coast horned lizard Phrynosoma coronatum	BLMS, FSS	CSC	--	Prefers friable, rocky, or shallow sandy soils in scrub and chaparral habitats in arid and semi-arid regions. Requires the presence of native ants for prey.	Yes; marginal habitat is present on site, as the vegetation and climate conditions are appropriate for this widespread species. Nevertheless, native ants did not appear to be in abundance during site surveys, and an appropriate prey base may be lacking.	The loss of individuals of this species from the subject property would be a potential violation of CEQA.	Clearance surveys for sensitive reptile, bird, and mammal species are recommended to avoid conflict with CEQA, as it pertains to impacts to sensitive wildlife species.

Common Name Scientific Name	Status			Habitat	Potential To Occur, Yes/No	Development Constraint	Recommendation
	Federal	State	Other				
Reptiles (continued)							
Orange-throated whiptail Aspidoscelis hyperythra	--	CSC	--	Prefers washes and other sandy areas with patches of brush and rocks within low elevation coastal scrub, chaparral, and valley foothill hardwood habitats. Perennial plants are required to support its major prey, termites.	No; The subject property is outside the species range.	None	N/A
Coastal western whiptail Aspidoscelis tigris stejnegeri	--	--	CDFG Special Animals list	Various habitats in firm, sandy or rocky soils within sparse vegetation, open areas, woodlands and riparian communities of deserts and semi-arid areas	Yes; Observed on site.	The loss of individuals of this species from the subject property would be a potential violation of CEQA.	Clearance surveys for sensitive reptile, bird, and mammal species are recommended to avoid conflict with CEQA, as it pertains to impacts to sensitive wildlife species.

Common Name Scientific Name	Status			Habitat	Potential To Occur, Yes/No	Development Constraint	Recommendation
	Federal	State	Other				
Reptiles (continued)							
Silvery legless lizard *Anniella pulchra pulchra*	FSS	CSC	--	Leaf litter associates with sandy or loose loamy soil of high moisture content under sparse vegetation	No; focused surveys were conducted for this species based on the fact that the litter layer beneath many of the shrubs on site is well developed and supports a moderate invertebrate community. Nevertheless, upon completion of the surveys, the substrate of this site was judged to be too rocky to support this species. It is presumed to be absent from the site.	None	N/A
Coast patch-nosed snake *Salvadora hexalepis virgultea*	--	CSC	--	A low shrub structure of minimum density. Presumed to take refuge and perhaps overwinter in burrows or woodrat nests. Preys on whiptail lizards (Cnemidophorus).	Yes; this poorly known snake ranges over much of southern California. Suitable habitat exists on the subject property, including the presence of numerous woodrat nests and individuals of coastal western whiptail lizards.	The loss of individuals of this species from the subject property would be a potential violation of CEQA.	Clearance surveys for sensitive reptile, bird, and mammal species are recommended to avoid conflict with CEQA, as it pertains to impacts to sensitive wildlife species.

Common Name Scientific Name	Status			Habitat	Potential To Occur, Yes/No	Development Constraint	Recommendation
	Federal	State	Other				
Reptiles (continued)							
Two-striped garter snake Thamnophis hammondii	BLMS, FSS	CSC	--	Highly aquatic species found in or near permanent fresh water, often along streams with rocky beds and riparian growth within coastal regions from the vicinity of Salinas to northwest Baja California below about 2300 m msl	No; no permanent water sources or riparian communities of a type appropriate to this species are found within the project vicinity.	None	N/A
Northern red-diamond rattlesnake Crotalus ruber ruber	--	CSC	--	Occurs in rocky areas and dense vegetation within chaparral, woodland, grassland and desert areas. Needs rodent burrows, cracks or surface cover objects.	No; the subject property is outside the species range.	None	N/A
Birds							
Cooper's hawk (nesting) Accipiter cooperi	--	CSC	--	Nests in open forests, groves, or trees along rivers, or low scrub of treeless areas. The wooded area is often near the edge of a field or water opening.	Yes; observed displaying courtship behavior over site.	If the species were to breed on site, loss of individuals or interference with their breeding behavior would constitute a violation of the California Fish and Game Code and the Federal Migratory Bird Treaty Act.	Clearance surveys for sensitive reptile, bird, and mammal species are recommended to avoid conflict with CEQA, as it pertains to impacts to sensitive wildlife species.

Common Name Scientific Name	Status			Habitat	Potential To Occur, Yes/No	Development Constraint	Recommendation
	Federal	State	Other				
Birds (continued)							
Golden eagle (nesting and wintering) *Aquila chrysaetos*	BCC, BLMS	CSC, DFG, CDF	--	Nests and winters in cliff walls, large trees, and rolling foothill and mountain areas supporting sage-juniper and desert vegetation.	No; breeding habitat is lacking from the site and surrounding area, and the region of the site is generally too urbanized to support a population of this species.	None. If this species were to forage on the site, development would be unlikely to directly impact individuals of this species. This species is not expected to breed on site, so impacts to nests would not be expected.	N/A
Long-eared owl (nesting) *Asio otus*	--	--	CSC	Riparian bottomlands grown to tall willows and cottonwoods, also belts of live oak paralleling stream courses. Require adjacent open land productive of mice and the presence of old nests of crows, hawks or magpies for breeding.	No; habitat does not occur on site.	None	N/A

Common Name Scientific Name	Status			Habitat	Potential To Occur, Yes/No	Development Constraint	Recommendation
	Federal	State	Other				
Birds (continued)							
Western burrowing owl (burrow sites) Athene cunicularia	BCC, BLMS	CSC	--	Open, dry grassland and desert habitats throughout California, or scrublands characterized by low-growing, widely spaced vegetation. Dependant upon burrowing mammals, especially California ground squirrel.	No; although the site contains flat, relatively unvegetated areas, burrowing owls need a larger area than is available on the quarry site. Additionally, suitable burrows should provide a near-360 vantage. Much of the property has too much vegetation. The southern portion would have the highest potential of supporting burrowing owls; however, burrows are absent from this area, and most ground squirrel activity is associated with rock rubble in lower portions of the subject property.	None	N/A
Western yellow-billed cuckoo Coccyzus americanus occidentalis	FC, FWS, FSS	SE	--	Nests in riparian jungles of willow, often mixed with cottonwood with an understory of blackberry, nettles, or wild grape.	No; suitable habitat is not available on site or in the vicinity.	None	N/A

Common Name Scientific Name	Status			Habitat	Potential To Occur, Yes/No	Development Constraint	Recommendation
	Federal	State	Other				
Birds (continued)							
Black swift Cypseloides niger	FWS	CSC	USBC, AWL, ABC	Breeds in small colonies on cliffs behind or adjacent to waterfalls in deep canyons and sea bluffs above the surf along the coastal belt of Santa Cruz and Monterey County, the central and southern Sierra Nevada, and the San Bernardino and San Jacinto Mountains.	No; suitable habitat is not available on site or in the vicinity.	None	N/A
Costa's hummingbird (nesting) Calypte costae			USBC, AWL, ABC	Various herbaceous and woody plants provide flower nectar; also takes small insects and spiders. In winter, exotic shrubs such as bottlebrush important. Mostly shrubs, but also trees, provide cover. Nest placed in a wide variety of trees, cacti, shrubs, woody forbs, and sometimes vines, sometimes located close to water source, but more often well away from water.	Yes; observed on site, though not presumed to be breeding.	If the species were to breed on site, loss of individuals or interference with their breeding behavior would constitute a violation of the California Fish and Game Code and the Federal Migratory Bird Treaty Act.	Clearance surveys for sensitive reptile, bird, and mammal species are recommended to avoid conflict with CEQA, as it pertains to impacts to sensitive wildlife species.

Common Name Scientific Name	Status			Habitat	Potential To Occur, Yes/No	Development Constraint	Recommendation
	Federal	State	Other				
Birds (continued)							
Southwestern willow flycatcher (nesting) Empidonax traillii extimus	FE, FSS (full species)	SE (full species)	USBC, AWL, ABC	Makes short sallies for flying insects from exposed perches in willow thickets or from low perches in adjacent meadows; occasionally eats berries and seeds. Dense willow thickets are required for nesting and roosting. Low, exposed branches are used for singing posts and hunting perches. Nesting site usually near languid stream, standing water, or seep. Most numerous where extensive thickets of low, dense willows edge on wet meadows, ponds, or backwaters.	Yes; a non-vocal migrant of an unknown subspecies was observed on site on one occasion during the course of protocol surveys for California gnatcatcher. Breeding behavior was not observed.	If the species were to breed on site, loss of individuals or interference with their breeding behavior would constitute a violation of the California Fish and Game Code and the Federal Migratory Bird Treaty Act.	Clearance surveys for sensitive reptile, bird, and mammal species are recommended to avoid conflict with CEQA, as it pertains to impacts to sensitive wildlife species.

Common Name Scientific Name	Status			Habitat	Potential To Occur, Yes/No	Development Constraint	Recommendation
	Federal	State	Other				
Birds (continued)							
Coastal California gnatcatcher Polioptila californica californica	FT	CSC	USBC, AWL, ABC	Obligate permanent resident of coastal sage and alluvial scrub habitats below 800 m msl in southern California.	No; historical (pre-1960) records exist from Claremont/Upland for this species. The nearest extant populations appear to be in Los Angeles County, one at a recently-discovered locale to the west in the Glendora foothills, and a well documented population further west in the San Jose Hills. No extant populations are known from the band of scrub habitats extending along the base of the San Gabriel Mountains east of the subject property to Lytle Creek, despite hundreds of hours of recent (post-2000) fieldwork in the area. It is unlikely that the California gnatcatcher would ever become established at the study site, and even less likely given that its preferred vegetation (Artemisia californica) is scarce on the site.	None. If this species were to forage or disperse over the site, development would be unlikely to directly impact individuals of this species. This species is not expected to breed on site, so impacts to nests are not expected.	N/A

Common Name Scientific Name	Status			Habitat	Potential To Occur, Yes/No	Development Constraint	Recommendation
	Federal	State	Other				
Birds (continued)							
Yellow warbler Dendroica petechia brewsteri	--	CSC	--	Riparian plant associations, preferably of willow, cottonwood, aspen, sycamore, and alder for nesting and foraging. Also nests in montane shrubbery of open conifer forests.	No; an individual of this species was observed during the course of protocol CAGN surveys. However, this individual appears to have been a migrant. The species is not expected to breed on site.	None	N/A
Least Bell's vireo Vireo bellii pusillus	FE, FWS	SE	USBC, AWL, ABC	Summer resident of southern California in low riparian habitats in the vicinity of water or in dry river bottoms below 2000 feet. Nests are placed along margins of bushes or on twigs projecting into pathways, usually on willow, mulefat, or mesquite.	No; suitable habitat is not available on site or in the vicinity.	None	N/A
Yellow-breasted chat Icteria virens	--	CSC	--	Summer resident in riparian thickets of willow and other brushy tangles such as blackberry and wild grape near watercourses. Forages and nests within ten feet of the ground.	No; suitable habitat is not available on site or in the vicinity.	None	N/A

Common Name Scientific Name	Status			Habitat	Potential To Occur, Yes/No	Development Constraint	Recommendation
	Federal	State	Other				
Birds (continued)							
Horned lark (nesting) Eremophila alpestris	--	CSC	--	Mostly eats insects, snails, and spiders during breeding season; adds grass and forb seeds and other plant matter to diet at other seasons. Walks along ground, searching for food. Grasses, shrubs, forbs, rocks, litter, clods of soil, and other surface irregularities provide cover. Builds grass-lined nest; cup-shaped in depression on ground in the open. Frequents grasslands and other open habitats with low, sparse vegetation.	Yes; observed nesting on subject property.	If the species were to breed on site, loss of individuals or interference with their breeding behavior would constitute a violation of the California Fish and Game Code and the Federal Migratory Bird Treaty Act.	Clearance surveys for sensitive reptile, bird, and mammal species are recommended to avoid conflict with CEQA, as it pertains to impacts to sensitive wildlife species.
Coastal cactus wren Campylorhynchus brunneicapillus sandiegensis	BCC, FSS	--	CSC	Southern California coastal sage scrub. Tall Opuntia cacti are required for nesting and roosting.	No; habitat is not present on the subject property.	None	N/A
Tricolored blackbird (nesting colony) Agelaius tricolor	BCC, BLMS	CSC	USBC, AWL, ABC	Highly colonial species, requiring open water, protected nesting substrate and foraging areas with insect prey within a few kilometers of the colony.	No; Suitable nesting habitat is not present on the property, or within range to make the site a likely part of a foraging area.	None	N/A

Common Name Scientific Name	Status			Habitat	Potential To Occur, Yes/No	Development Constraint	Recommendation
	Federal	State	Other				
Birds (continued)							
Southern California rufous-crowned sparrow Aimophila ruficeps canescens	--	--	CSC	Frequents relatively steep, often rocky hillsides with grass and forb patches. Resident in southern California costal sage scrub and mixed chaparral.	Yes; suitable habitat is present on site.	If the species were to breed on site, loss of individuals or interference with their breeding behavior would constitute a violation of the California Fish and Game Code and the Federal Migratory Bird Treaty Act.	Clearance surveys for sensitive reptile, bird, and mammal species are recommended to avoid conflict with CEQA, as it pertains to impacts to sensitive wildlife species.
Bell's sage sparrow Amphispiza belli belli	BCC	--	CSC	Nests on the ground beneath shrubs or in shrubs 6 to 18 inches above the ground within chaparral communities dominated by fairly dense stands of chamise or in coastal scrub in southern part of the range.	No; chamise-dominated vegetation is not present on the site.	None	N/A

Common Name Scientific Name	Status			Habitat	Potential To Occur, Yes/No	Development Constraint	Recommendation
	Federal	State	Other				
Birds (continued)							
Lawrence's goldfinch (nesting) Carduelis lawrencei	FWS	--	USBC, AWL, ABC	Closely associated with oaks. Nests in open oak or other arid woodland and chaparral near water. Nearby herbaceous habitats used for feeding.	Yes; pair observed collecting nest material on the subject property. Presumed to be nesting off-site.	If the species were to breed on site, loss of individuals or interference with their breeding behavior would constitute a violation of the California Fish and Game Code and the Federal Migratory Bird Treaty Act.	Clearance surveys for sensitive reptile, bird, and mammal species are recommended to avoid conflict with CEQA, as it pertains to impacts to sensitive wildlife species.
Mammals							
Pallid bat Antrozous pallidus	FSS, BLMS	CSC	WBWG: High Priority	Deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts in small colonies of 12–100 bats within rock crevices, caves, mineshafts, under bridges, in buildings, and tree hollows. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	Yes; roosting habitat is lacking from the site but this species may potentially forage over the site.	None. If this species were to forage on the site, development would be unlikely to directly impact individuals of this species.	N/A

Common Name Scientific Name	Status			Habitat	Potential To Occur, Yes/No	Development Constraint	Recommendation
	Federal	State	Other				
Mammals (continued)							
Western yellow bat Lasiurus xanthinus	--	--	WBWG: High Priority	Found in valley foothill riparian, desert riparian, desert wash, and desert palm oasis habitats. Roosts in trees, particularly palms. Forages over water and among trees.	No; the dense foliage needed for roosting is lacking from this site, as is suitable foraging habitat.	None	N/A
Yuma myotis Myotis yumaensis	BLMS	--	WBWG: Low-Med. Priority	Distribution is closely tied to bodies of water. Maternity colonies in caves, mines, buildings, or crevices. Optimal habitats are open forests and woodlands with sources of water over which to feed.	No; roosting and foraging habitat are lacking from the site.	None	N/A
Western mastiff bat Eumops perotis	BLMS	CSC	WBWG: High Priority	Roosts in crevices in cliff faces, high buildings, trees and tunnels within many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, etc.	Yes; roosting habitat is lacking from the site but this species may potentially forage over the site.	None. If this species were to forage on the site, development would be unlikely to directly impact individuals of this species.	N/A

Common Name Scientific Name	Status			Habitat	Potential To Occur, Yes/No	Development Constraint	Recommendation
	Federal	State	Other				
Mammals (continued)							
San Diego black-tailed jackrabbit *Lepus californica bennettii*	--	CSC	--	Shrub habitats and intermediate canopy stages of shrub habitats and open shrub/herbaceous and tree/herbaceous edges.	Yes; observed on site in 2003. However, surveys conducted in spring 2007 failed to detect this species.	The loss of individuals of this species from the subject property would be a potential violation of CEQA.	Adults of this highly mobile species are likely to escape any hazard posed by construction activities. Very young offspring of this species (less than 5 days old) are generally too uncoordinated to negotiate an escape from danger, and a clearance survey for jackrabbit dens is recommended to be conducted alongside any other pre-construction surveys.

Common Name Scientific Name	Status			Habitat	Potential To Occur, Yes/No	Development Constraint	Recommendation
	Federal	State	Other				
Mammals (continued)							
Northwestern San Diego pocket mouse *Chaetodipus fallax fallax*	--	CSC	--	Sandy, herbaceous areas, usually in association with rocks or coarse gravel in coastal scrub, chaparral, grassland, and sagebrush communities of southwestern California.	Yes; habitat is present and records exist (2001 and 2002) of this species in Claremont, Upland and along the I-210 alignment.	The loss of individuals of this species from the subject property would be a potential violation of CEQA.	Clearance surveys for sensitive reptile, bird, and mammal species are recommended to avoid conflict with CEQA, as it pertains to impacts to sensitive wildlife species.
Nelson's bighorn sheep *Ovis canadensis nelsoni*	BLMS, FSS	--	--	Open, rocky, steep areas with available water and herbaceous forage. Widely distributed from the White Mountains in Mono County to the Chocolate Mountains in Imperial County.	No; habitat for this species does not occur on the subject property.	None	N/A
San Bernardino kangaroo rat *Dipodomys merriami parvus*	FE	CSC	--	Early to intermediate seral stages of alluvial scrub or sandy loam substrates characteristic of alluvial fans and flood plains.	No; the subject property is outside the species known geographic range.	None	N/A

Common Name Scientific Name	Status			Habitat	Potential To Occur, Yes/No	Development Constraint	Recommendation
	Federal	State	Other				
Mammals (continued)							
Los Angeles pocket mouse *Perognathus longimembris brevinasus*	FSS	CSC	--	Lower elevation grasslands and Coastal Sage associations in the Los Angeles Basin, from approximately Burbank and San Fernando on the northwest to San Bernardino on the northeast, and Cabazon, Hemet, and Aguanga on the east and southeast. Geographic limits on the southwest are not clear, but probably lie somewhere near the Hollywood Hills. Inhabits open ground with soils composed of fine sands. May not often dig burrows but hide under weeds and dead leaves instead, though this behavior is disputable.	Yes; very little is known of the habitat requirements for this species, but the subject property is broadly similar to habitats in which records are know, and the presence of the species on site cannot be reliably discounted.	The loss of individuals of this species from the subject property would be a potential violation of CEQA.	Clearance surveys for sensitive reptile, bird, and mammal species are recommended to avoid conflict with CEQA, as it pertains to impacts to sensitive wildlife species.
American badger *Taxidea taxus*	--	CSC	--	Drier, open stages of most shrub, forest, and herbaceous habitats with friable soils.	No; substrates on the site are too rocky to allow the construction of large burrows suitable for badgers.	None	N/A

Common Name Scientific Name	Status			Habitat	Potential To Occur, Yes/No	Development Constraint	Recommendation
	Federal	State	Other				
Mammals (continued)							
San Diego desert woodrat Neotoma lepida intermedia	--	CSC	--	Moderate to dense canopies in coastal scrub of southern California from San Diego County to San Luis Obispo County. Particularly abundant in rock outcrops, rocky cliffs and slopes.	Yes; the site contains numerous woodrat nests within laurel sumac shrubs throughout the northern part of the property. A report prepared on the subject property in 2003 positively identified N. l. intermedia as occurring on site. Nevertheless, the site is situated within the range of two woodrat taxa, N. l. intermedia and N. fucipes, and without focused trapping surveys, it is not possible to know definitively which species occurs on the site.	The loss of individuals of this species from the subject property would be a potential violation of CEQA.	Clearance surveys for sensitive reptile, bird, and mammal species are recommended to avoid conflict with CEQA, as it pertains to impacts to sensitive wildlife species.

N/A= Not applicable

Status Key:

Federal: FE = Federal Endangered; FT = Federal Threatened; BCC = Fish and Wildlife Service Bird of Conservation Concern; BLMS = Bureau of Land Management Sensitive; FSC = Federal Special Concern species; FSS = Forest Service Sensitive

State: CE = California Endangered; CFP = California Fully Protected; CT = California Threatened; CSC = California Species of Concern; CDF = California Department of Forestry and Fire Protection Sensitive

Other: ABC = American Bird Conservancy Green List; AWL = Audubon Watch List; USBC = United States Bird Conservation Watch List; WBWG: = Western Bat Working Group;

CNDDB: Special Animal = Species that do not have a formal designation by any resource agency, but that are considered sensitive resources by the CDFG due to known declines in population

JURISDICTIONAL WATERS AND STREAMBEDS

The site receives drainage from areas to the north and retains water sufficient to support scattered mulefat individuals and willow scrub communities occurring sporadically throughout the lower areas of the quarry. Because the quarry does not support navigable waters or waters associated with interstate commerce, it would not fall under the jurisdiction of the Army Corps of Engineers. Nevertheless, the presence of hydrophytic vegetation and clear indications of high water marks may invoke the need for CDFG-issued permits under section 1603 of the Fish and Game Code, which grants authority over "any project which will divert, obstruct or change the natural flow or bed, channel or bank of any river, stream or lake designated by the department in which there is at any time an existing fish or wildlife resource or from which these resources derive benefit".

SUMMARY

Plants

Based on a review of the CNDDB and the CNPS database, a number of special-status plant species are known to occur in the vicinity of the project site and, therefore, may potentially occur on the site. Plant species with potential to occur at the project site include Nevin's barberry (Berberis nevinii), Robinson's pepper-grass (Lepidium virginicum var. robinsonii), Parry's spineflower, (Chorizanthe parryi var. parryi), Plummer's mariposa lily (Calochortus plummerae), and intermediate mariposa lily (Calochortus weedii var. intermedius).

Sensitive plant species considered in this analysis that are not assumed to have potential to occur on the project site include woolly mountain-parsley (Oreonana vestita), southern tarplant (Centromadia parryi), smooth tarplant (Centromadia pungens ssp. laevis), white rabbit-tobacco (Pseudognaphalium leucocephalum), rayless ragwort (Senecio aphanactis), San Bernardino aster (Symphyotrichum defoliatum), Greata's aster (Symphyotrichum greatae), Coulter's saltbush (Atriplex coulteri), Davidson's saltscale (Atriplex serenana var. davidsonii), San Gabriel Mountains dudleya (Dudleya densiflora), many-stemmed dudleya (Dudleya multicaulis), round-leaved filaree (California macrophylla), Hall's Monardella (Monardella macrantha ssp. hallii), Salt Spring checkerbloom (Sidalcea neomexicana), Chaparral sand-verbena (Abronia villosa var. aurita), Rock Creek broomrape (Orobanche valida ssp. valida), Santa Ana River woollystar (Eriastrum densifolium ssp. sanctorum), San Gabriel Linanthus (Linanthus concinnus), Prostrate Navarretia (Navarretia prostrata), Slender-horned spineflower (Dodecahema leptoceras), Johnston's buckwheat (Eriogonum microthecum var. johnstonii), Peirson's spring beauty (Claytonia lanceolata var. peirsonii), Mesa Horkelia (Horkelia cuneata ssp. puberula), Fringed grass-of-parnassus (Parnassia cirrata), California sawgrass (Cladium californicum), Hot springs Fimbristylis (Fimbristylis thermalis), Thread-leaved Brodiaea (Brodiaea

filifolia), Slender mariposa lily (Calochortus clavatus var. gracilis), Lemon lily (Lilium parryi), Chaparral Nolina (Nolina cismontana), and California satintail (Imperata brevifolia).

The surveys were conducted during the blooming season and no sensitive plant species were found on the subject property. Previous surveys (1996 (month unknown), 1998 (month unknown), December 2003) have also failed to detect sensitive plant taxa. Given that the spring of 2007 was extremely dry, an incomplete accounting of the total floral diversity of the site is possible, if not likely, and the absence of these species cannot be presumed with confidence.

Due to repeated and recent high levels of disturbance associated with the ruderal areas in the southern portion of the site, it can be reasonably assumed that sensitive plant taxa do not occur there. However, scrub habitats elsewhere on the subject property show a moderate degree of recovery from historical disturbances. Follow-up surveys may be required by the permitting agency and are recommended in less-disturbed areas of the site if development is proposed therein and when construction has not begun.

Wildlife

Of the special-status wildlife species considered in this analysis, a total of seven have been observed at the quarry. They are coastal western whiptail (Aspidoscelis tigris stejnegeri), Cooper's hawk (Accipiter cooperi), Costa's hummingbird (Calypte costae), willow flycatcher (Empidonax traillii), horned lark (Eremophila alpestris), Lawrence's goldfinch (Carduelis lawrencei), and San Diego black-tailed jackrabbit (Lepus californica bennettii). Collectively, these species occur over all vegetation types within the subject property, including ruderal.

San Diego desert woodrat (Neotoma lepida intermedia) is presumed to occur in the northern portion of the site, within the laurel sumac dominated stands of alluvial scrub. A positive identification of this species cannot be made without a trapping survey.

Wildlife species considered in this analysis that may potentially occur at the site include coast horned lizard (Phrynosoma coronatum), coast patch-nosed snake (Salvadora hexalepis virgultea), southern California rufous-crowned sparrow (Aimophila ruficeps canescens), pallid bat (Antrozous pallidus), western mastiff bat (Eumops perotis), northwestern San Diego pocket mouse (Chaetodipus fallax fallax), and Los Angeles pocket mouse (Perognathus longimembris brevinasus). The original Impact Sciences report for the Golf Course and Quarry notes that surveys conducted at the site by Recon (1996) and by Envicom (1998) failed to identify any of these species as occurring on the site.

Wildlife species considered in this analysis that are not expected to occur at the project site include Santa Ana speckled dace (Rhinichthys osculus ssp. 3), Santa Ana sucker (Catostomus santaanae), Arroyo chub (Gila

orcuttii), Coast Range newt (Taricha torosa torosa), San Gabriel Mountains slender salamander (Batrachoseps gabrieli), Mountain yellow-legged frog (Rana muscosa), Southwestern pond turtle (Emys marmorata pallida), San Diego banded gecko (Coleonyx variegatus abbotti), Orange-throated whiptail (Aspidoscelis hyperythra), Silvery legless lizard (Anniella pulchra pulchra), Two-striped garter snake (Thamnophis hammondii), Northern red-diamond rattlesnake (Crotalus ruber ruber), Golden eagle (Aquila chrysaetos), Coastal California gnatcatcher (Polioptila californica californica), Western yellow bat (Lasiurus xanthinus), Yuma myotis (Myotis yumaensis), San Bernardino kangaroo rat (Dipodomys merriami parvus), Nelson's bighorn sheep (Ovis canadensis nelsoni), and American badger (Taxidea taxus). Surveys conducted at the site by Recon (1996) and by Envicom (1998) failed to identify any of these species as occurring on the site.

Two of the special-status bird species (willow flycatcher and Lawrence's goldfinch) and two of the special-status mammal species (pallid bat and western mastiff bat) may potentially forage on or migrate through the site, but are not likely to nest or roost on site and direct impacts are therefore unlikely. A third special status mammal species, San Diego black-tailed jackrabbit, was observed on site in 2003 but was not detected in spring 2007. It is a highly mobile species with relatively precocial young and direct mortality from construction activities is therefore unlikely if conducted outside of the time immediately following birth (4 to 5 days).

Remaining special-status wildlife species may nest or roost on site, or may conduct the majority of their home range activities on site. Furthermore, with the exception of black-tailed jackrabbit, all of the special-status mammal species are either fossorial or, in the case of woodrats, spend the majority of daylight hours inside a fortified nest, from which they would be disinclined to leave if a perceived threatening situation such as ground disturbance from construction activity were to arise.

In addition to special-status wildlife, all active native bird nests are protected during the breeding season by the California Fish and Game Code (Section 3503) and the Federal Migratory Bird Treaty Act, regardless of whether the bird species is otherwise considered sensitive by CDFG. To avoid impacts to nesting birds during construction, it is recommended that a qualified biologist (approved by the CEQA lead agency) be retained to conduct nesting bird surveys within suitable nesting habitat prior to initiation of construction activities.

If present on the site, impacts (i.e., loss of occupied habitat or individual animals) to any special-status wildlife species could be considered a potentially significant impact, pursuant to the CEQA.

Surveys for special-status reptile and mammal species are recommended prior to and during grading and site-preparation activities. If any special-status reptile species are found, they should be collected and transported to appropriate habitat areas nearby.

Jurisdictional Waters and Streambeds

The CDFG will have to be contacted in order to determine if they have jurisdiction over isolated wetlands within the abandoned quarries. If CDFG has jurisdiction, wetland delineation would be necessary, and replacement or enhancement mitigation possible.

Other Considerations

Mature Trees

There are several mature trees occurring on the project site, including sycamore and blue elderberry. The City of Claremont does not take jurisdiction over mature trees if they are on private property. However, trees belonging to the City of Claremont are protected. Therefore, the City of Claremont should be consulted prior to the removal of any City trees. It is noted that there are many trees along Claremont Boulevard, along the western boundary of the property. These appear to be off site, as they are outside the fence surrounding the quarry. They may belong to the City of Claremont and thereby may trigger the need for consultation with the City if they are to be affected by project implementation.

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APPENDIX A

Plant Species Observed on the Claremont University Consortium Quarry Project Site

Scientific name	Common name
ANACARDIACEAE	SUMAC, CASHEW FAMILY
Malosma laurina	laurel-leaf sumac
Schinus molle	Peruvian pepper
APOCYNACEAE	DOGBANE FAMILY
Nerium oleander	oleander
ASTERACEAE	SUNFLOWER FAMILY
Ambrosia acanthicarpa	annual bur sage
Artemisia californica	California sagebrush
Baccharis emoryi	Emory's baccharis
Baccharis salicifolia	mulefat
Baccharis sarothroides	broom Baccharis
Brickellia californica	California brickellbush
Carduus pycnocephalus	Italian thistle
Centaurea melitensis	tocalote
Cirsium occidentale var. californicum	western thistle
Cirsium vulgare	common thistle
Conyza canadensis	horseweed
Ericameria linearifolia	linear-leaved goldenbush
Ericameria pinifolia	pinebush
Eriophyllum confertiflorum var. confertiflorum	golden yarrow
Filago californica	California cottonrose
Gnaphalium californicum	green everlasting
Heterotheca grandiflora	telegraph weed
Lepidospartum squamatum	scale-broom
Lessingia filaginifolia	California-aster
Malacothrix saxatilis var. saxatilis	malacothrix
Sonchus asper	prickly sow thistle
Xanthium spinosum	spiny cocklebur
BORAGINACEAE	BORAGE FAMILY
Amsinckia menziesii var. intermedia	rancher's fireweed
Cryptantha intermedia	common cryptantha
Cryptantha muricata	prickly cryptantha
Heliotropium curassavicum	salt heliotrope
Pectocarya linearis ssp. ferocula	slender combseed
Pectocarya penicillata	winged combseed
BRASSICACEAE	MUSTARD FAMILY
Brassica rapa	field mustard
Hirschfeldia incana	short podded mustard
Lobularia maritima	sweet alyssum
Rorippa curvisiliqua	curvepod yellowcress
Sisymbrium irio	London rocket
BUDDLEJACEAE	BUDDLEJA FAMILY
Buddleja davidii	butterfly bush
CAPRIFOLIACEAE	HONEYSUCKLE FAMILY

Scientific name	Common name
Sambucus mexicana	blue elderberry
CUCURBITATCEAE	GOURD FAMILY
Marah macrocarpa var. macrocarpa	manroot
CUSCUTACEAE	DODDER FAMILY
Cuscuta californica var. californica	California dodder
EUPHORBIACEAE	SPURGE FAMILY
Chamaesyce albomarginata	rattlesnake weed
Croton californica	California croton
Ricinus communis	castor bean
FABACEAE	LEGUME FAMILY
Prosopis sp.	mesquite
Lotus scoparius var. scoparius	deerweed
Lupinus hirsutissimus	stinging lupine
Melilotus indica	sourclover
Medicago polymorpha	yellow sweet clover
GERANIACEAE	GERANIUM FAMILY
Erodium botrys	long-beaked filaree
Erodium cicutarium	red-stem filaree
GROSSULARIACEAE	GOOSEBERRY FAMILY
Ribes malvaceum	Chaparral currant
HYDROPHYLLACEAE	WATERLEAF FAMILY
Eriodictyon californicum	yerba santa
Phacelia ramosissima	branching phacelia
LAMIACEAE	MINT FAMILY
Marrubium vulgare	horehound
Salvia columbariae	chia
Salvia mellifera	black sage
MALVACEAE	MALLOW FAMILY
Malacothamnus fremontii	Fremont's bushmallow
Malva parviflora	cheeseweed
OLEACEAE	OLIVE FAMILY
Fraxinus velutina	velvet-leaf ash
ONAGRACEAE	EVENING PRIMROSE FAMILY
Camissonia bistorta	southern suncup
Camissonia californica	California suncup
OXALIDACEAE	OXALIS FAMILY
Oxalis corniculata	creeping woodsorrel

Scientific name	Common name
PLATANACEAE	PLANE TREE, SYCAMORE FAMILY
Platanus racemosa	western sycamore
POLEMONIACEAE	PHLOX FAMILY
Eriastrum sapphirinum	sapphire woolystar
POLYGONACEAE	BUCKWHEAT FAMILY
Eriogonum fasciculatum	California buckwheat
Eriogonum davidsonii	Davidson's buckwheat
PRIMULACEAE	PRIMROSE FAMILY
Anagallis arvensis	scarlet pimpernel
RHAMNACEAE	BUCKTHORN FAMILY
Ceanothus leucodermis	whitethorn ceanothus
ROSACEAE	ROSE FAMILY
Heteromeles arbutifolia	toyon
SALICACEAE	WILLOW FAMILY
Salix gooddingii	Goodding's willow
SCROPHULARIACEAE	FIGWORT FAMILY
Mimulus aurantiacus	sticky-bush monkeyflower
Penstemon spectabilis	royal penstemon
Verbascum virgatum	wand mullein
SOLANACEAE	NIGHTSHADE FAMILY
Datura wrightii	Jimson weed
Nicotiana glauca	tree tobacco
Solanum nigrum	black nightshade
Solanum xanti	purple nightshade
URTICACEAE	NETTLE FAMILY
Urtica urens	dwarf nettle
ZYGOPHYLLACEAE	CALTROP FAMILY
Tribulus terrestris	puncture vine
POACEAE	GRASS FAMILY
Arundo donax	giant reed
Avena barbata	slender wild oat
Bromus diandrus	ripgut brome
Bromus hordeaceus	soft chess
Bromus madritensis ssp. rubens	red brome
Polypogon monspeliensis	rabbitsfoot grass
Schismus sp.	splitgrass
Vulpia myuros	foxtail fescue

APPENDIX B

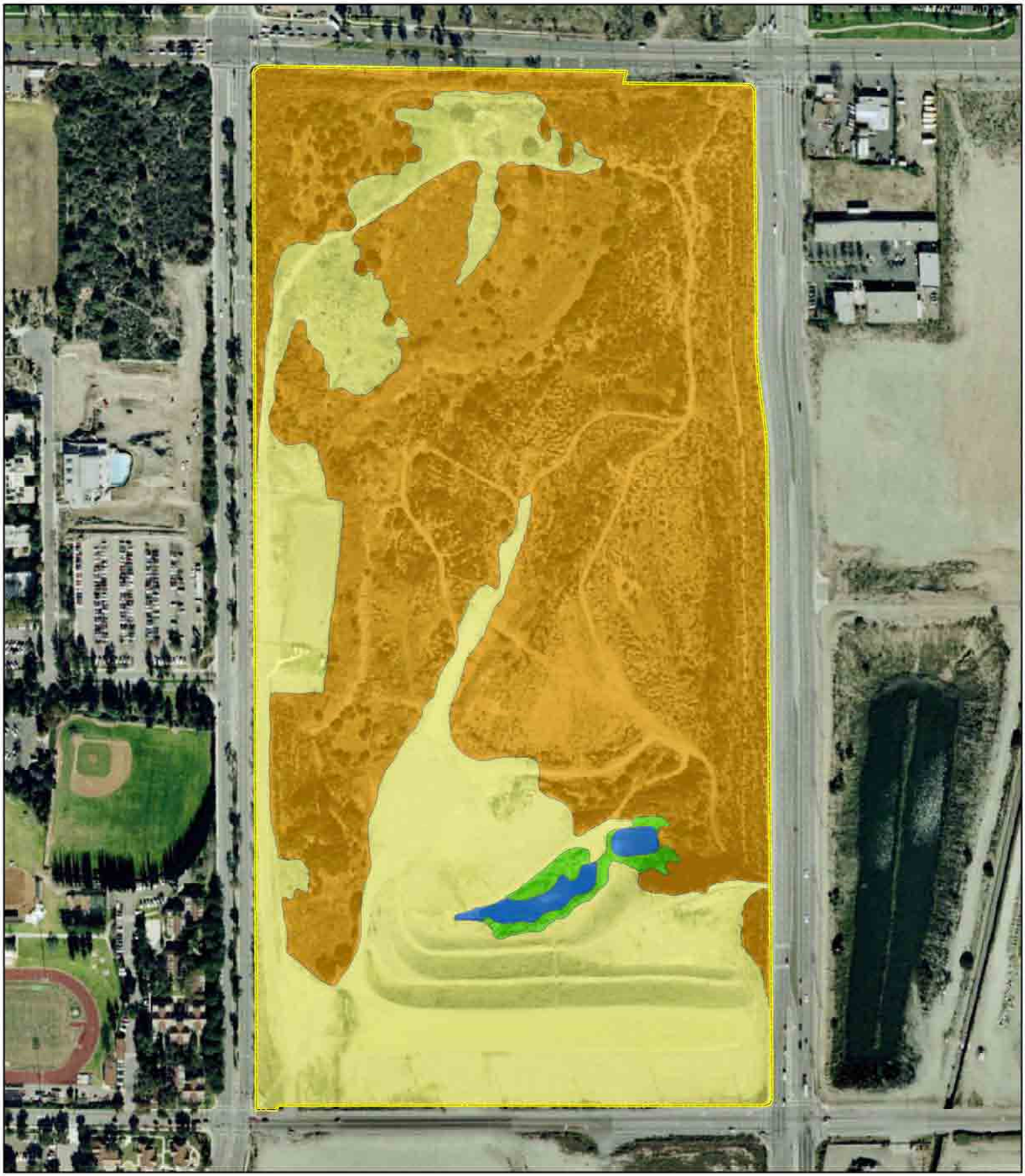
Wildlife Species Observed on the Claremont University Consortium Quarry Project Site

Scientific name	Common name
Reptiles	
SQUAMATA	LIZARDS, SNAKES
Sceloporus occidentalis bocourtii	Coast Range fence lizard
Uta stansburiana elegans	California side-blotched lizard
Birds	
ANSERIFORMES	DUCKS, GEESE
Anas platyrhynchos	mallard
GALLIFORMES	CHICKENS, PHEASANTS, QUAIL
Callipepla californica	California quail
FALCONIFORMES	FALCONS, EAGLES, HAWKS
Accipiter cooperii	Cooper's hawk
Buteo jamaicensis	red-tailed hawk
CHARADRIIFORMES	PLOVERS
Charadrius vociferus	killdeer
Recurvirostra americana	American avocet
COLUMBIFORMES	PIGEONS, DOVES
Columba livia	rock pigeon
Zenaida macroura	mourning dove
CAPRIMULGIFORMES	NIGHTHAWKS, WHIPORWILLS
Chordeiles acutipennis	lesser nighthawk
APODIFORMES	SWIFTS, HUMMINGBIRDS
Archilochus alexandri	black-chinned hummingbird
Calypte anna	Anna's hummingbird
Calypte costae	Costa's hummingbird
Selasphorus sasin	Allen's hummingbird
PICIFORMES	WOODPECKERS
Melanerpes formicivorus	acorn woodpecker
Colaptes auratus	northern flicker
PASSERIFORMES	SONGBIRDS
Contopus sordidulus	western wood-pewee
Empidonax traillii	willow flycatcher
Empidonax wrightii	gray flycatcher
Sayornis nigricans	black phoebe
Myiarchus cinerascens	ash-throated flycatcher
Tyrannus vociferans	Cassin's kingbird
Tyrannus verticalis	western kingbird
Vireo gilvus	warbling vireo
Aphelocoma californica	western scrub-jay
Corvus brachyrhynchos	American crow
Corvus corax	common raven
Eremophila alpestris	horned lark

Scientific name	Common name
Tachycineta thalassina	violet-green swallow
Stelgidopteryx serripennis	northern rough-winged swallow
Petrochelidon pyrrhonota	cliff swallow
Hirundo rustica	barn swallow
Psaltriparus minimus	bushtit
Salpinctes obsoletus	rock wren
Thryomanes bewickii	Bewick's wren
Chamaea fasciata	wrentit
Mimus polyglottos	northern mockingbird
Toxostoma redivivum	California thrasher
Sturnus vulgaris	European starling
Bombycilla cedrorum	cedar waxwing
Phainopepla nitens	Phainopepla
Vermivora celata	orange-crowned warbler
Dendroica petechia	yellow warbler
Oporornis tolmiei	MacGillivray's warbler
Geothlypis trichas	common yellowthroat
Wilsonia pusilla	Wilson's warbler
Pipilo maculatus	spotted towhee
Pipilo crissalis	California towhee
Passerculus sandwichensis	savannah sparrow
Melospiza melodia	song sparrow
Zonotrichia leucophrys	white-crowned sparrow
Pheucticus melanocephalus	black-headed grosbeak
Passerina amoena	lazuli bunting
Sturnella neglecta	western meadowlark
Molothrus ater	brown-headed cowbird
Icterus cucullatus	hooded oriole
Carpodacus mexicanus	house finch
Carduelis psaltria	lesser goldfinch
Carduelis lawrencei	Lawrence's goldfinch
Mammals	
CARNIVORA	CARNIVORES
Lynx rufus	bobcat
RODENTIA	RODENTS
Spermophilus beecheyi	California ground squirrel
Thomomys bottae	Botta's pocket gopher
Neotoma fuscipes or lepida	dusky-footed or desert woodrat
LAGOMORPHA	RABBITS, HARES
Sylvilagus audubonii	desert cottontail

APPENDIX C

Vegetation Map



Claremont University Consortium
Vegetation Communties

- Parcel Boundary
- Alluvial Scrub
- Ruderal
- Seasonal Pond
- Willow Scrub

N

0 150 300 Feet

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APPENDIX D

Protocol Survey for California Gnatcatcher Performed by Cooper Ecological Monitoring

Protocol survey for California Gnatcatcher *Polioptila californica* at the "pit", a former quarry site adjacent to Claremont College.

Spring 2007

Performed by:
Daniel S. Cooper
Cooper Ecological Monitoring, Inc.
15 So. Raymond Ave., 2nd Fl.
Pasadena, CA 91105
dan@cooperecological.com
Permit # TE100008-0

For:

Impact Sciences
803 Camarillo Springs Rd.
Suite A
Camarillo, CA 93012

June 22, 2007

Site description

The "pit" is a c. 80-acre parcel of alluvial fan scrub and ruderal vegetation in the lower San Antonio Creek drainage in Claremont, California (Fig. 1). The study site is bounded by Foothill Blvd., Monte Vista Ave., Arrow Route and Claremont Blvd., and is split in two by the Los Angeles/San Bernardino Co. line. It apparently receives very little visitation by people, as it is surrounded by a high, locked chainlink fence.

The best-quality native scrub habitat on the site (i.e., that which is least invaded by exotic species) is located in the northeastern corner, and disturbance increases west and south of here. One subshrub, *Eriogonum fasciculatum*, is a strong dominant, and *Artemesia californica* is relatively rare. The numerous *Lepidospartum squamatum* differentiate the habitat from more widespread coastal sage scrub and chaparral. Even in this dry year (2007), numerous wildflowers were observed throughout the site (incl. abundant *Eriastrum sapphirinum*). A small seasonal sump in the southern end of the property (dry during surveys) supports a limited amount of riparian vegetation (incl. *Salix goodingii* and a single large *Platanus racemosa*), some of the only trees on the site. The entire eastern border is a moderate slope that was graded several years ago, but now supports low *Eriogonum*-dominated scrub. Other areas of grading were noted throughout the property, and concrete and gravel debris piles are scattered, though mainly covered with native scrub vegetation. A large "mesa" of flat, graded, bare earth lies along the southern boundary adjacent to Arrow Route. The soil of the majority of the site is well-drained and coarse, with large cobbles, particularly underlying the high-quality scrub in the northeast.

This parcel is one of several remaining along the Los Angeles/San Bernardino Co. line in the Claremont/Upland area, most of which have recently become developed to commercial or residential use or are currently being graded for development. Still, San Antonio Wash habitat persists on non-public lands just north of here, as well as a limited amount protected within the Rancho Santa Ana Botanic Gardens.

Effort

Following U.S. Fish and Wildlife Service guidelines (USFWS 1997) a total of six visits were made to the site to survey for California Gnatcatcher. Surveys covered the entire site, and survey dates were (all 2007):

- 04 May
- 11 May
- 18 May
- 30 May
- 07 June
- 15 June

Results

A total of 58 species was detected during the survey (see accompanying birdlist), and no California Gnatcatchers were detected during the six visits.

Seventeen bird species were found on 5-6 visits:

- Red-tailed Hawk *Buteo jamaicensis*
- California Quail *Callipepla californica*
- Mourning Dove *Zenaida macroura*
- Lesser Nighthawk *Chordeiles acutipennis*
- Black-chinned Hummingbird *Archilochus alexandri*
- Anna's Hummingbird *Calypte anna*
- Western Scrub Jay *Aphelocoma californica*
- California Horned Lark *Eremophila alpestris actia*
- Bushtit *Psaltriparus minimus*
- Rock Wren *Salpinctes obsoletus*
- Bewick's Wren *Thryomanes bewickii*
- Northern Mockingbird *Mimus polyglottos*
- California Thrasher *Toxostoma redivivum*
- Spotted Towhee *Pipilo maculatus*
- California Towhee *Pipilo crissalis*
- House Finch *Carpodacus mexicanus*
- Lesser Goldfinch *Carduelis psaltria*

All are presumed to be breeding either onsite or immediately adjacent to the parcel. Direct breeding observations were made for the following species:

- Cooper's Hawk *Accipiter cooperi* (nesting call on 11 May, pair in display flight over site on 15 June)

- Lesser Nighthawk (female flushed off nest w/ 2 eggs on 18 May)
- Horned Lark (male skylarking each visit through 07 June)
- Rock Wren (pair with 3 young on 30 May)
- California Towhee (pair copulating on 04 May, family group on 07 June)
- Lawrence's Goldfinch *Carduelis lawrencei* (pair collecting nesting material on 04 May; flew to west off site)
- Lesser Goldfinch (family group on 30 May).

Of the bird species recorded, one would be considered sensitive under state or federal law, the (California) Horned Lark, a California Bird Species of Special Concern (DFG 1992). Based on the presence of a pair in suitable nesting habitat in late spring and a singing/skylarking male (male larks perform high display flights over nesting sites where they sing overhead and circle down to earth), a single pair of Horned Larks was present and presumably nesting on the "mesa" area of barren ground along the southern border of the site (Fig. 2). Every effort should be made to provide future habitat for this species on the site (flat, barren earth largely devoid of vegetation).

A single, non-vocal Willow Flycatcher *Empidonax traillii* was observed on one visit (18 May), but this was undoubtedly a migrant; certain races of this species are protected in California, but migrant individuals - common in many habitats statewide - are indistinguishable in the field away from nesting habitat, and are not typically protected.

Discussion

The California Gnatcatcher is scarce in southwestern San Bernardino County and adjacent eastern Los Angeles County, with only historical (pre-1960) records from Claremont/Upland (Atwood 1980, Davis et al. 1998). The nearest extant populations appear to be in Los Angeles County, one at a recently-discovered locale to the west in the Glendora foothills, and a well-documented population further west in the San Jose Hills (*fide* M.C. Long, County of Los Angeles). In San Bernardino County, birds are known from the Jurupa Mtns. on the San Bernardino/Riverside County line south of Rialto (Davis et al. 1998, R. Erickson, pers. comm.). Though the USFWS designated the Etiwanda Fan-Lytle Creek area as a Critical Habitat unit (see: http://www.fws.gov/policy/library/03-9435.html), records from the band of sage scrub along the lower San Gabriel Mtns. foothills are few, and no extant populations are known from here, despite hundreds of hours of recent (post-2000) fieldwork in the area in preparation for residential development (*fide* R. Erickson).

Given this distribution, it is unlikely that the California Gnatcatcher would ever become established at the study site, and even less likely given that its preferred vegetation (*Artemisia californica*) is scarce on the site.

However, the habitat that *is* present, Riverside Alluvial Fan Sage Scrub, is considered to be among the most threatened vegetation communities in the state, ranked by The Nature Conservancy's Heritage Program as G1 S1.1 ("Fewer than 6 viable occurrences worldwide and/or 2000 acres" and "very threatened") (Sawyer and Keeler-Wolf 1995, CNPS 1997). The avifauna present on the site represents a relatively good representation of this distinctive community (e.g., Lesser Nighthawk, Costa's Hummingbird *Calypte costae*, Rock Wren,

Phainopepla *Phainopepla nitens*), based on that present in similar alluvial fan scrub remnants such as San Gabriel River Wash and Big Tujunga Creek/Hansen Dam area (*pers. obs.*). The only "missing" bird species appears to be Greater Roadrunner, which may occur on occasion, and Cactus Wren, which requires cactus. Finally, the continuing presence of several ground-nesting species here (i.e., California Quail, Lesser Nighthawk) bodes well for future conservation success.

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Fig. 1. View west across middle of site. Buckwheat (*Eriogonum fasciculatum*)-dominated scrub in the foreground, with (presumably) frost-killed Laurel Sumac (*Malosma laurina*) at right. Sump is at left, and graded "mesa" is at far left. Photo by Joe Decruyenaere.

Figure 2. Locations of sensitive species on "Claremont Pit" site (this study).

APPENDIX F

California Gnatcatcher Protocol Survey

Cooper Ecological Monitoring, Inc.
EIN 72-1598095
Daniel S. Cooper, President
5850 W. 3rd St. #167
Los Angeles, CA 90036
(323) 397-3562; dan@cooperecological.com

July 8, 2010

I certify that the information in this survey report and attached exhibits fully and accurately represents my work.

Daniel S. Cooper
President, CEM, Inc.
USFWS Permit #TE 100008-1

Protocol survey for California gnatcatcher *Polioptila californica* at the "pit", a former quarry site adjacent to the Claremont Colleges.

Spring 2010

Performed by:

Daniel S. Cooper
Cooper Ecological Monitoring, Inc.
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Permit # TE100008-1

For:

Impact Sciences
803 Camarillo Springs Rd., Suite A
Camarillo, CA 93012

July 8, 2007

Summary
This report presents the findings from a protocol survey for the California gnatcatcher *Polioptila californica* at a former gravel quarry site in Claremont, Los Angeles Co., California. We found no California gnatcatcher at this site in 2010. Previously, we performed a protocol survey for the California gnatcatcher during spring 2007 (dated 22 June 2007), also with negative results.

Site description
The Claremont "pit" is a c. 80-acre fragment of alluvial fan scrub and ruderal vegetation in the lower San Antonio Creek drainage in Claremont, California, centered at the following coordinates: 34.102992, -117.700632 (Fig. 1). The site is bounded by Foothill Blvd., Monte Vista Ave., Arrow Route and Claremont Blvd. The best-quality native scrub habitat on the site (i.e., that which is least invaded by exotic species) is located in the northeastern corner, and disturbance increases west and south of here. One subshrub, *Eriogonum fasciculatum*, is a strong dominant, and *Artemesia californica* is relatively rare. The numerous *Lepidospartum squamatum* differentiate the habitat from more widespread coastal sage scrub and chaparral. As in 2007, when we last performed a protocol survey for the California gnatcatcher at the site, a diverse wildflower community was present throughout the site. A small seasonal sump in the southern end of the property (surface water present throughout most of the 2010 survey) supports a limited amount of riparian vegetation (incl. black willow *Salix goodingii* and a single large western sycamore *Platanus racemosa*), some of the only trees on the site. The entire eastern border is a moderately-steep slope that was cut years ago, but now supports low *Eriogonum*-dominated scrub.

As of 2010, the central portion of the property is largely bare earth and/or recently excavated by earth-moving machines. Other areas of grading and earth-moving are evident throughout the property, and concrete, boulder and miscellaneous debris piles are scattered but often covered with native scrub vegetation. A large "mesa" of flat, graded, bare earth lies along the southern boundary adjacent to Arrow Route. The soil of the majority of the site is well-drained and coarse, with large cobbles, particularly underlying the high-quality scrub in the northeast.

Effort

Following U.S. Fish and Wildlife Service guidelines (USFWS 1997) a total of six visits were made to the site to survey for California Gnatcatcher. Surveys were performed by Daniel S. Cooper ("DSC") or by Robert A. Hamilton ("RAH", TE# 799557), covered the entire site, and survey dates were (all 2010):

- 06 May (08:50 - 10:50, 61-70 degrees F, wind 0; DSC/RAH)
- 13 May (08:50 - 11:50, 66-77 degrees F, wind 0; DSC/RAH)
- 21 May (11:00 - 13:00, 68-73 degrees F, wind 1-5 mph; RAH)
- 28 May (11:00 - 13:45, 69-72 degrees F, wind 1-5 mph; RAH)
- 04 June (09:40 - 12:00, 69-73 degrees F, wind 1-3 mph; DSC)
- 15 June (08:10 - 09:20, 72-73 degrees F, wind 0; DSC)

Recorded vocalizations of the California gnatcatcher were not used during this survey.

Findings

A total of 37 bird species was detected during the survey (see accompanying birdlist), and no California gnatcatcher was detected during the six visits.

13 bird species were found on 5-6 visits:

- Red-tailed Hawk *Buteo jamaicensis*
- California Quail *Callipepla californica*
- Mourning Dove *Zenaida macroura*
- Anna's Hummingbird *Calypte anna*
- Allen's Hummingbird *Selasphorus sasin*
- Black Phoebe *Sayornis nigricans*
- Western Scrub Jay *Aphelocoma californica*
- Barn Swallow *Hirundo rustica*
- Bewick's Wren *Thryomanes bewickii*
- Northern Mockingbird *Mimus polyglottos*
- California Towhee *Pipilo crissalis*
- House Finch *Carpodacus mexicanus*
- Lesser Goldfinch *Carduelis psaltria*

At least four resident, scrub-obligate bird species appear to have been extirpated from the site since 2007, when they were recorded four or more times in six visits, including the Costa's hummingbird *Calypte costae* (none in 2010), wrentit *Chamaea fasciata* (none in 2010), California thrasher *Toxostoma redivivum* (one in 2010) and spotted towhee *Pipilo maculatus* (none in 2010). All are scrub-obligate species that have been shown to be sensitive to habitat isolation and patch size reduction in southern California.

Of the bird species recorded, one would be considered Sensitive under state and/or federal law, the **California horned lark** *Eremophila alpestris actia*, a California Bird Species of Special Concern. Based on the detection of at least one singing bird to the east of the site on two dates during the survey, it should be considered present in the area; however, it was *not* detected at the survey site itself (as it had been in 2007), despite the presence of suitable habitat.

The dominant habitat at the site, **Riverside Alluvial Fan Sage Scrub**, is considered to be imperiled and is tracked by the California Natural Diversity Database (CNDDB). A few characteristic species of this habitat type, including the California quail *Callipepla californica*, lesser nighthawk *Chordeiles acutipennis* and rock wren *Salpinctes obsoletus* are still present as of 2010.

The Cooper's hawk *Accipiter cooperii*, recorded singly on three visits, is now considered a "WatchList" species by the State of California, and was formerly classified as a Bird Species of Special Concern. While it may use the survey site for foraging, we did not observe breeding behavior or other evidence of nesting. However, a family of red-tailed hawk *Buteo jamaicensis* (no special status) fledged two young in a large sycamore in the main sump toward the southern end of the property, with the juveniles free-flying by the last visit (15 June 2010).

A single, non-vocal willow Flycatcher *Empidonax traillii* was observed on one visit (28 May), but this was undoubtedly a migrant; certain races of this species are protected in California, but migrant individuals - common in many habitats statewide - are indistinguishable in the field away from nesting habitat, and are not typically protected where they occur only as migrants (one was also seen on 18 May in 2007).

One sensitive herptile was observed, the **coastal whiptail** *Aspidoscelis tigris stejnegeri*; an adult was photographed (Fig. 2) on 15 June amid small boulders at the top of the western slope of the main sump. This lizard remains common in remaining alluvial wash habitats in the Los Angeles Basin.

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Photographs

Figure 1. View showing alluvial fan scrub habitat occupied by California quail, lesser nighthawk, and rock wren (but not by California gnatcatcher) in 2010. Photo by Daniel S. Cooper, 15 June 2010.

Figure 2. Coastal whiptail *Aspidoscelis tigris stejnegeri*. Photo by Daniel S. Cooper, 15 June 2010.

Figure 3. Locations of coastal whiptail (red dot) and California horned lark (dotted blue line) detections, May/June 2010.

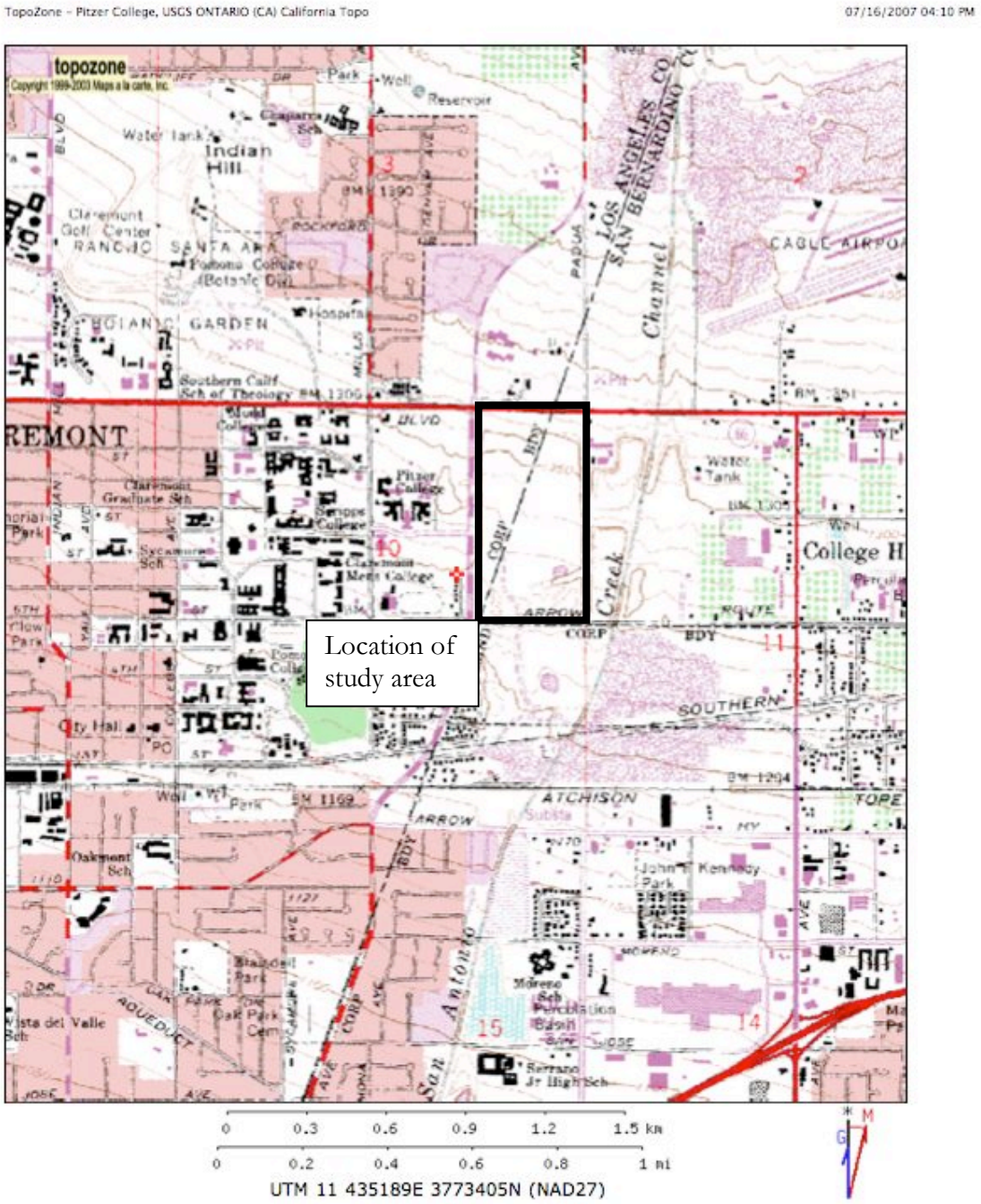

Figure 4. Location of study area (USGS "Ontario" quadrangle, Los Angeles Co.).

APPENDIX G

Preliminary Geotechnical Assessment

RMA Group

GEOTECHNICAL CONSULTANTS

10851 EDISON COURT, RANCHO CUCAMONGA, CA 91730 : (909) 989-1751 : FAX (909) 989-4287

August 21, 2007

Claremont McKenna College
Story House
742 N Amhurst Ave
Claremont, CA 91711-6430

Attention: Brian Worley
Director of Facilities and Campus Services

Subject: Preliminary Geotechnical Assessment
Pit Master Plan - Proposed Sports Complex
Southwest Corner of Foothill Boulevard & Monte Vista Avenue
Claremont/Upland, CA

Gentlemen:

In accordance with your request and authorization, this letter has been prepared to present a written summary of our preliminary geotechnical findings for the proposed Claremont McKenna College Sports Complex. These findings were verbally presented in a consultant meeting held at the Story House at Claremont McKenna College on August 9, 2007.

Our initial geotechnical assessment has consisted of review of prior regional geologic maps, review of regional seismic and ground water data, review of regional land hazard maps and general plans, review of prior geologic and geotechnical reports prepared for the site, examination of aerial photographs, reconnaissance geologic mapping, and preparation of this report.

This report has been prepared to present preliminary geotechnical information for planning purposes rather than engineering design. A more detailed investigation of the site, including subsurface investigation and laboratory testing of soil samples, will need to be performed to develop more specific geotechnical engineering design recommendations.

We appreciate this opportunity to be of service to you on this project. If you have any questions regarding this report, please do not hesitate to contact us at your convenience.

Respectfully submitted,

RMA Group

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INTRODUCTION

Site Location

The proposed Claremont McKenna College Sports Complex site is a former sand and gravel quarry located on the east side of the Claremont Colleges. It is bounded Claremont Boulevard on the east, Foothill Boulevard on the north, Monte Vista Avenue on the east, and 6th Street - Arrow Route on the south. The Los Angeles-San Bernardino County line diagonally bisects the site in a northeast-southwest direction. The Los Angeles County portion of the site is located within the City of Claremont and the San Bernardino County portion of the site is located in the City of Upland.

Land Use History

Review of aerial photographs and other historic data indicate that the site is a former sand and gravel quarry that has been partially backfilled. A 1938 aerial photograph shows that the site was an undeveloped alluvial fan that may have been partially graded to control surface runoff. Aerial photographs taken in 1955 show a quarry excavation in the southern ½ to ¾ of the site. Aerial photographs taken in 1965 show the quarry excavation had been extended further to the north, partial backfilling of the southwest corner of the quarry, and standing water in the southeast corner of the quarry. Aerial photographs taken in 1969, 1970 and 1972 show that the quarry excavation had been extended north to Foothill Boulevard, addition backfilling along the western side of the site, and standing water in the south-central part of the site. These photographs also show that the quarry was locally deepened in the southern and western sides of the site. Aerial photographs taken in 1978 show vegetation covering much of the site, indicating the quarrying had apparently stopped. The 1978 photographs also show that additional backfill had been place in the northwest corner of the site. Aerial photographs taken in 1989 and 1991 show that a considerable amount of backfill had been placed in the northwest corner of the site and several dirt roads are visible. Vegetation covered much of the site suggesting that the property was not being quarried. Aerial photographs taken in 1996 show that additional backfill had been placed in the northwest, west and central parts of the site. Aerial photographs taken in 2001 shown that additional fill had been placed in the south central part of the site. Other areas appear unchanged. Aerial photographs taken in 2005 show additional fill and standing water in the south central part of the site, and a graded pad along the southern property line adjacent to 6th Street and Arrow Route. Aerial photographs used to generate historical information are listed in Appendix A.

Currently there is an archery range in the western portion of the site and soils are being dumped in the south central portion of the site.

Planned Usage

According to a preliminary site plan prepared by Gruen Associates, both the upper and lower elevations of the property will be developed. It has been proposed to construct sports fields, sand volleyball courts, basketball courts, restrooms and equipment storage rooms on the upper portion of the property. It has also been proposed to construct baseball and softball fields, a golf practice area, a soccer/lacrosse field, restrooms/locker buildings, an archery range, equipment storage buildings and a parking lot with the lower elevation of the property. Two access roads will connect the upper and lower levels. The currently proposed land usage is depicted on the accompanying Geologic Map (Plate 1).

FINDINGS

Geologic Setting

The site is located on a broad, coalescing alluvial fan that emanates from San Antonio Canyon and the San Gabriel Mountains to the north. These sediments fill the western portion of a deep structural depression known as the upper Santa Ana River Valley. According to The California Department of Water Resources (1970) the alluvial deposits beneath the site are more than 500 feet thick and rest on a basement of crystalline bedrock.

The upper Santa Ana River Valley is bordered by the San Gabriel Mountains and the active Cucamonga fault to the north, and the Puente Hills and potentially active Chino fault to the west. To the south are the Jurupa Mountains and other resistant granitic and metamorphic hills. The eastern boundary of the valley is the San Bernardino Mountains and the active San Andreas fault. There are several faults within the upper Santa Ana River Valley. The most notable, with respect to historic earthquake activity, is the San Jacinto fault, located about 20 miles to the east. However, the most significant local fault within the upper Santa Ana River Valley is the San Jose fault, which is shown on regional maps as passing through the site.

Geologic Description

Five geologic units have been identified within the site. From oldest to youngest, these are: alluvium, landfill deposits, road fill, compacted fill and dumped fill.

- Alluvium (map symbols Qal and Qoal): The alluvial deposits consist of coarse grained soils that were derived as outwash from San Antonio Canyon and the San Gabriel Mountains, which are situated about 3 miles north of the site. The upper portion of these deposits consists of younger alluvium (map symbol Qal) composed of light gray sandy gravel and gravelly sand with cobble and some boulders. The lower portion of these deposits consists of older alluvium (map symbol Qoal) composed of orange brown and

reddish brown soils of similar composition. Alluvial soils are exposed by remnants of quarry cuts on the northern and eastern sides of the site and along the quarry floor on the eastern side of the site. Alluvial soils underlie each of the fill units at the site. Over much of the quarry floor the alluvium is covered by a thin veneer of fill estimated to be a few feet or less in thickness.

- Landfill Deposits (map symbol afl): Landfill soils and construction debris were dumped in the western part of the site upon completion of quarrying. Surface exposures, the landfill deposits are composed primarily of course grained soils with gravel, cobbles, boulders and inert construction debris (primarily concrete and asphalt). The landfill soils were apparently end dumped over the top of slopes. The eastward facing slope of the landfill has been identified by the California Geological Survey as a potential earthquake induced landslide zone on the Seismic Hazard Map of the Ontario Quadrangle.
- Roadfill (map symbol afr): A roadfill was placed along the eastern side of the site during the construction of Monte Vista Avenue in the mid 1990's. Considering the age of construction, it is expected that the roadfill was placed in a controlled manner and compacted.
- Compacted fill (map symbol afc) : A compacted fill was placed in the southern part of the site north of Arrow Route in 2004 and 2005. The placement and compaction of this fill was observed and tested by RMA Group (2005). Preparation of the ground for fill placement consisted of removal of fills and other loose soils down to firm alluvium, except along its eastern side where it was benched into roadfill and along its west side where it was benched into landfill deposits. Prior to placement of fill, a keyway was excavated along the toe of slope on the northern side of the fill. The compacted fill is composed of granular soils, primarily gravelly sands with cobble and some boulders.
- Dumped fill (map symbol afu): Uncompacted fills have been spread and dumped over the floor of the quarry. In the southwest portion of the quarry the dumped soils fill a deeper portion of the quarry and are estimated to be on the order of 20 to 25 feet thick. In addition, there is a former quarry access ramp and fill area in the southeastern corner of the site that appears to contain about 10 to 30 feet on fill. Elsewhere the fills typically consist of end dumped piles that are about 4 to 5 feet high. Based on surface observation, the dumped soils typically consist of sandy, gravelly and silty sand soils with varying amounts of cobbles, inert construction debris and some boulders. In some locations the dumped fills contain of pieces of asphalt, large pieces of concrete, tree trunks and branches, and large boulders.

The geologic units discussed above are illustrated on the accompanying geologic map and cross sections (Plates 1 and 2).

Faulting and Seismicity

Regional geologic and ground water maps indicate that the San Jose fault crosses diagonally beneath the site. The locations of the fault on these regional maps vary, and are illustrated on Plate 1. It is believed that the 1990 magnitude 5.5 Upland earthquake occurred at depth along the San Jose fault. The San Jose fault within the site is not included within the boundaries of a State of California Earthquake Fault Zone for fault rupture hazards or similar City or County Zones.

The San Jose fault is an east to northeast trending, left lateral oblique fault with a reverse sense of displacement (Smith, 1977). It extends from the central part of the San Jose Hills to near the base of the San Gabriel Mountains, a distance of about 12 miles (Bortugno and Spittler, 1986). The Los Angeles County General Plan (1990) indicates that notched spurs mark the fault trace along the foot of an eroded scarp in the San Jose Hills and that the fault displaces upper Miocene sedimentary and volcanic rock as much as 2,700 feet vertically. In the Claremont area, the San Jose fault is known only as a ground water barrier.

In 2001 RMA Group logged a trench that was excavated into the bottom of the quarry across the regionally mapped trend of the San Jose fault. The trench exposed uninterrupted older alluvium. No faulting was encountered. Prior to placement of compacted fill in the southern part of the site, RMA geologists observed older alluvium soils and found the sediments to be unfaulted. Recently, RMA Group also mapped a quarry bottom on the east side of Monte Vista Avenue. The bottom of that quarry, which was about 50 feet below the original ground surface, exposed unfaulted older alluvial soils. Based on these data, it is concluded that the San Jose fault is not a surface fault rupture hazard within the site based on current State of California criteria (no offset in Holocene time, approximately the last 11,000 years).

There other faults in the region that could generate earthquakes that might be felt at the site. The characteristics and potential impacts of these other regional faults should be evaluated during more detailed geotechnical investigation of the property.

Ground Water

According to regional ground water contour maps, the historic depth to ground water beneath the site has ranged from about 400 to 600 feet. Depths to ground water depths are, if part, related to the San Jose fault, which is a subsurface ground water barrier. Converse Consultants (1983) reported depths to ground water of 195 and 140 feet in the northwest and southwest portions of the site, respectively, in 1983. They also reported that twice the normal rainfall occurred in the winter of 1982-83, causing ground water to temporarily rise and pond in the bottom of the quarry, that there is a relatively impermeable silty layer 50 to 70 feet below the quarry bottom, and the San Jose fault might have acted as ground water barrier, resulting in ground water flowing to the surface. Mr. Dale Klein (personal communication) reported that past ground water recharging in nearby areas has caused rising ground water in the basin, but the practice has since been stopped.

Flooding

The site is located with a potential inundation zone in the event of failure of San Antonio Dam. The Claremont General Plan indicates a flood water arrival time of about 15 minutes and an average over bank depth of 7½ feet. The general plan also indicates that the hazard at the site may be less due to the construction of the 210 Freeway which is situated north of the site. The Freeway was constructed below adjacent grades and thus would act as a large cut-off trench. The potential for failure of San Antonio Dam is remote.

The quarry is a closed depression, thus surface runoff will collect and pond in the basin until it either soaks into the ground or evaporates.

Regional Land Subsidence

According to a map of relative change in land surface altitude as estimated by interferometric synthetic radar prepared by Wildermuth Environmental, Inc (2002) on behave of the Chino Basin Watermaster, the site has not experienced land subsidence, but rather there has been about 1 to 3 centimeters of relative uplift between October 1993 and January 1999.

CONCLUSIONS AND RECOMMENDATIONS

General conclusion

Based on information gathered during our initial assessment of geotechnical conditions at the site, it is our professional judgment that the proposed development is geologically and geotechnically feasible, subject to appropriate planning, engineering and approval of governing agencies.

Removals and Over-Excavation

Landfill, dumped fill and other non-engineered fills within the site will be prone to settlement that could have adverse affects on improvements placed on such fills. Because these fills were placed in an uncontrolled manner and subsurface conditions are not uniform, the amount of settlement can not be predicted. Typically all non-engineered fills are removed to underlying, competent natural ground and recompacted prior to the construction of overlying improvements.

Based discussion at the August 9, 2007 client/consultant meeting held at Claremont McKenna College, we understand that the College does not want to remove the existing landfill (map symbol afl) because it would be cost prohibitive to the project. Instead, the College is willing to limit the types of improvements within the landfill to parking, access roads, athletic fields, sand volleyball courts, asphalt paved basketball courts and restroom/equipment storage buildings. We understand that the College is willing to accept the risk of damage to these improvements, reduced life span of improvements and increased maintenance requirements due to possible

future settlement of the landfill. Consequently, there are no specific removal recommendations for grading within the landfill. The ground surface should be cleared of vegetation and moisture conditioning prior to establishing grades. Any additional fills should be compacted to a least 90% of the maximum dry density. Placement of improvements on the landfill should be specifically approved by the appropriate governing agencies.

Dumped fill soils (map symbol afu) and any other miscellaneous overlying alluvium should be entirely removed to competent, underlying alluvial soils. Depths of these removals may range from a few feet to about 30 feet.

It is anticipated that existing compacted fill (afc), roadfill (afr) and alluvial soils in the quarry bottom (Qoal) will require removal of vegetation, scarification, moisture conditioning and compaction prior to placement of engineered fill.

Over-excavation and recompaction of building areas and exterior flatwork areas will be dependent upon building/flatwork locations and design grades attained upon completion of remedial grading. Over-excavation requirements for building and flatwork should be further evaluated upon development of a grading plan.

Slopes

Assuming the landfill is not entirely removed and recompacted, the slope on the east side of the landfill will need to be regraded and buttressed at an inclination of 2:1 (horizontal to vertical) or flatter. This could be accomplished by removing and recompacting the existing landfill material, or building a buttress in front of the existing slope. It is expected that a key for the buttress will need to be excavated about 2 to 5 feet below the lowest adjacent grade and that the width of the buttress key will need to be equal to about half the slope height to the full slope height; however further engineering analysis will be needed to determine the actual dimensions.

It is expected that any other graded slopes within the site will also need to be inclined at 2:1 or flatter. All graded slopes should be designed and built with terrace drains and benches in accordance with the requirements of the California Building Code. There is also a steep quarry cut in the northern part of the site, outside of the current development area. The potential impact of this slope should be further evaluated as planning progresses.

More detailed recommendations for slopes should be prepared upon development of a grading plan.

Fault Rupture

Regional geologic and ground water maps indicate that the San Jose fault passes beneath the site. Based on the results of geologic fault investigation of the site performed by RMA Group in 2001 and more recent observation of a older alluvial soils exposed at the bottom of a quarry on the east side of Monte Vista Avenue, it is our opinion that the San Jose fault is not a surface fault rupture

hazard based on current State of California criteria (no surface rupture during Holocene time) and thus a fault setback zone is not required.

Liquefaction Potential and Secondary Seismic Hazards

The site is not located within a liquefaction zone as depicted on the local State of California Seismic Hazard Zone Map or similar City and County maps. Based on the reported depth to ground water and the presence of older alluvial soils at the base of the former quarry, the potential for soil liquefaction is not expected to be a concern, with the possible exception of the proposed retention basin in the southern part of the quarry bottom.

Landfill, dumped fill and other miscellaneous non-engineered fills are potentially subject to seismically induced settlement due to the loose nature of these fills. Significant seismically induced settlement of the compacted fill and road fill is not expected due to the dense compacted nature of these fills. Seismically induced settlement of alluvial soils at the bottom of the former quarry is not expected due to the depths and age of these deposits.

As previously mentioned, the landfill slope is potentially subject to seismically induced landsliding. Tsunamis do not pose hazards due to the inland location of the site. There will be a slight seiche hazard in the southern portion of the quarry where a retention basin is planned. However, this does not a appear to be a large constraint due to the type of development proposed and the minimal water quantities that will be in the basin at most times.

Rippability and Over-sized materials

Based on available exposures, onsite soils are expected to be rippable with moderate effort. However, there are many large boulders, pieces of concrete and pieces of asphalt in non-engineered fill areas that may difficult to move. The building code allows placement of over-sized materials (greater than 12-inches in maximum dimension) 10 feet or more below grade provided rock disposal areas are shown on grading plans, the soils engineer devises a method of placement and continually observes the placement, and the soil engineer approves the fill stability. Recommendations for placement of oversized materials should be developed when more a detailed geotechnical investigation of the site is performed.

Foundations

It is expected that buildings constructed on compacted fills underlain by competent native soils may be supported by conventional spread and continuous footings. Soils exposed during reconnaissance of the site were observed to be granular, and therefore are expected to have a very low expansion potential. Consequently, it is anticipated only nominally sized and nominally reinforced footings will be needed to support light structures. Likewise, it is anticipated that buildings will need only nominally thick, unreinforced or nominally reinforced slabs. More detailed footing and slab design criteria should be developed when more detailed geotechnical

investigation of the site is performed. Footing dimensions and reinforcement could vary if expansive soils are encountered.

Current planning calls for construction of restrooms and equipment storage structures on landfill soils. Structures underlain by the landfill will potentially be subject to an unknown amount of future settlement. In the consultant meeting of August 9, 2007 it was suggested by others that the building be constructed with a floating foundation with flexible utility lines. The geotechnical feasibility of a floating foundation will require further evaluation.

Pavement

Pavement in areas underlain by landfill soils may be subject to an unknown amount of future settlement that could distort and offset paving and concrete improvements such as curbs and sidewalks. Consequently, calculation of pavement sections using R-value test results and traffic index values will not entirely model the future performance of paving in these areas. The College will need to evaluate potential pavement sections from an economic view point.

Pavement areas underlain by compacted fill resting on competent alluvial soils may be based upon calculations using R-values and traffic index values. Neither R-Values nor traffic index values have been determined to date. Additional evaluation of potential pavement sections should be performed during more detailed investigation of the site. Because there will likely be significant amounts of grading that will mix existing fill and natural soils, final pavement sections will need to be calculated near the completion of street subgrades.

Subsurface Drainage

Installation of subdrains beneath fills placed in the quarry bottom is not expected to be necessary due to the anticipated depth to ground water. Installation of backdrains or construction of weep holes should be anticipated for retaining walls. Retaining wall backdrains typically consist of 4 inch diameter PVC pipe surrounded by surrounded by crushed rock wrapped in filter fabric. If a buttress slope is constructed along the east side of the existing landfill, installation of backdrains might be recommended. This should be determined during more detailed geotechnical evaluation of the slope.

Storm Water Infiltration

A storm water infiltration basin is proposed in the southwest portion of the site. Based on known infiltration rates in the vicinity, the infiltration rate for a basin underlain by natural soils is expected to range from approximately 0.5 to 1 foot per day. Additional evaluation of soil infiltration rates should be performed during more detailed geotechnical investigation of the site.

Soil Percolation

It is anticipated that leach lines or seepage pits will need to be constructed to accept waste water from restrooms to be constructed in the lower portion of the site, and possibly the upper portion of the site. Field testing will need to be performed determine design rates. The impact of proposed and past site grading, and presence of non-engineered fills will also need to be considered in selection of leach line or seepage pit locations.

Additional Geotechnical Investigation

This report has been prepared for planning purposes, rather than engineering design. More detailed geotechnical study of the site will need to be performed as plans are developed.

CLOSURE

The findings, conclusions and recommendations in this report were prepared in accordance with generally accepted engineering and geologic principles and practices. No other warranty, either express or implied, is made. This report has been prepared for Claremont McKenna College to be used solely for planning purposes. Anyone using this report for any other purpose must draw their own conclusions regarding required construction procedures and subsurface conditions.

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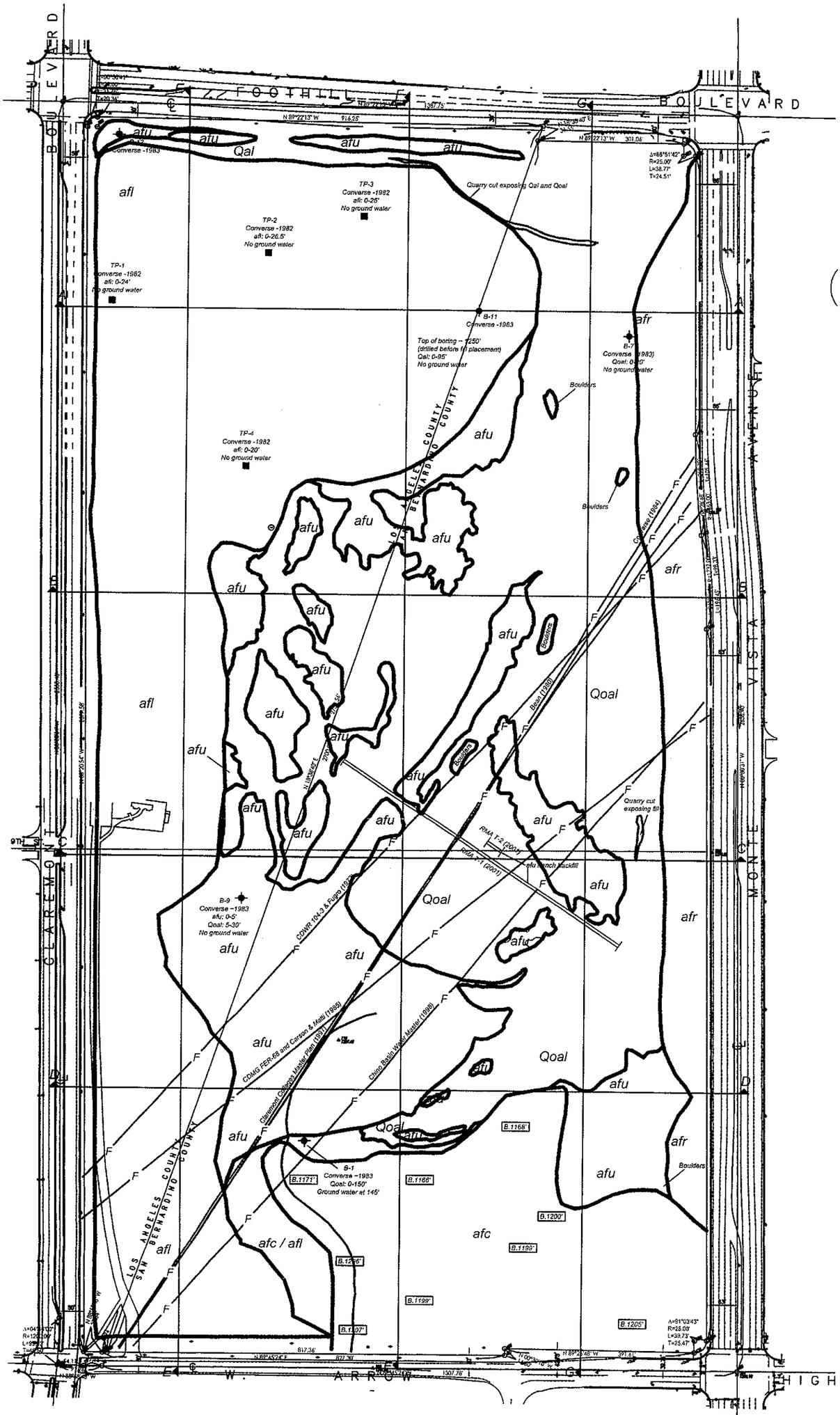
Claremont McKenna College
Pit Master Plan – Sports Complex
Claremont/Upland, CA
August 21, 2007

AERIAL PHOTOGRAPHS UTILIZED

Source	Flight Date	Flight No.	Photograph No.
1	1-18-05	C-553	13-2 & 13-3
1	6-15-01	C-541	150-151
1	5-31-96	C-528	137-138
1	7-1-91	C-487	154-156
2	8-3-89	1834	86, 87
1	2-25-86	C-450	139-140
1	1-21-78	C-279	138-139
1	10-15-72	C-193	29
1	2-7-70	C-297	42
1	2-69	C-295	45
1	1-30-69	C-293	37
1	8-9-65	C-101	20 & 21
1	11-9-55	F-34	4-109, 4-110
1	1938	W-65	C-3-4 & 5

Sources:
1. San Bernardino County Flood Control District
2. U.S. Geological Survey EROS Data Center

Google Earth online aerial photographs.



Actual Size:
24" x 36"
(Not to scale)

GEOLOGIC LEGEND

Geologic Units

- afu - Dumped fill
- afc - Compacted fill
- afr - Road fill
- afl - Landfill
- Qal - Alluvium locally covered by thin fill
- Qoal - Older alluvium locally covered by thin fill

Geologic Symbols

- Approximate geolic contact
- Postulated fault location (source denoted)
- Exploratory trench (Converse, 1982)
- Exploratory boring (Converse, 1983)
- Fault trench (RMA Group, 2001)
- Removal bottom elevation (RMA Group, 2005)

Scale: As Shown

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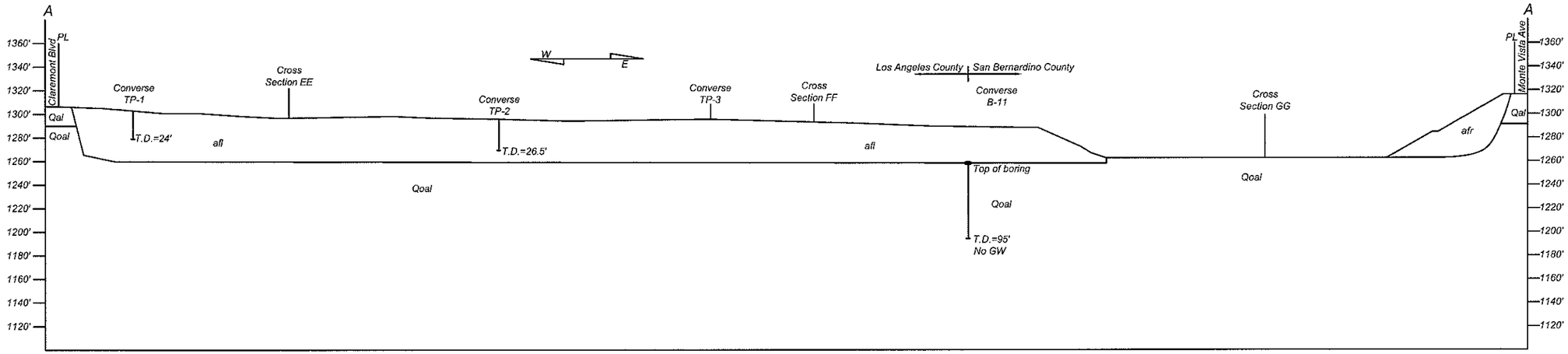
Scale in Feet (1"= 100')
0 50 100 200 400

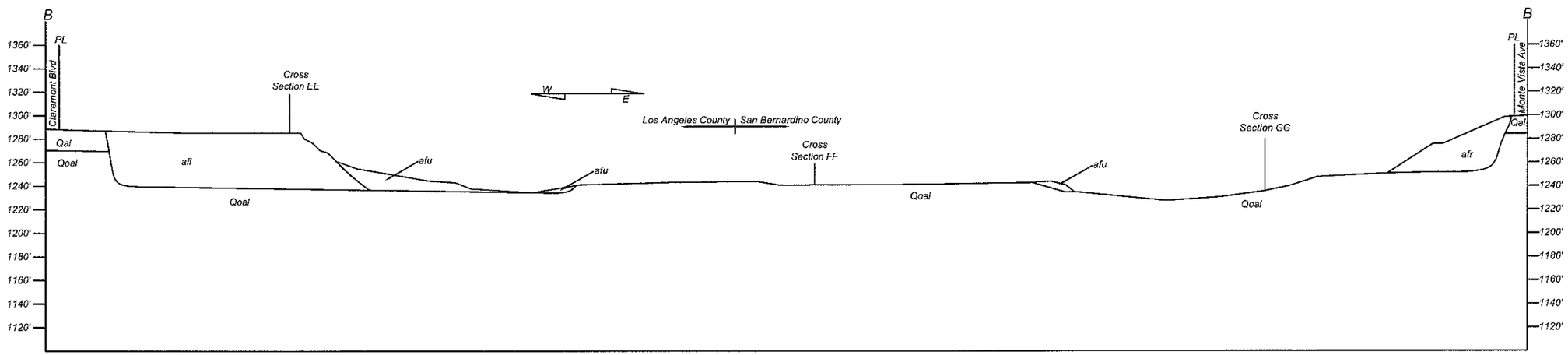
Claremont McKenna College
Story House
742 N Amhurst Ave
Claremont, CA 91711-6430

DRAWN BY:	520SAB
CHECKED BY:	550WGW
APPROVED BY:	500LEP
DATE:	August, 2007

Geologic Map
- Proposed Sports Complex
SW Foothill Blvd & Monte Vista Ave
Claremont, CA

RMA JOB No.:	07-150-01
SHEET No.:	1 OF 1
PLATE No.:	1





Note: All contacts are approximate

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Business: 909.989.1751 Fax: 909.989.4287
RMA Group
GEOTECHNICAL ENGINEERING •CONSTRUCTION INSPECTION •MATERIALS TESTING

PLAN CHANGES

ITEM	DESCRIPTION	BY	DATE	APP'D

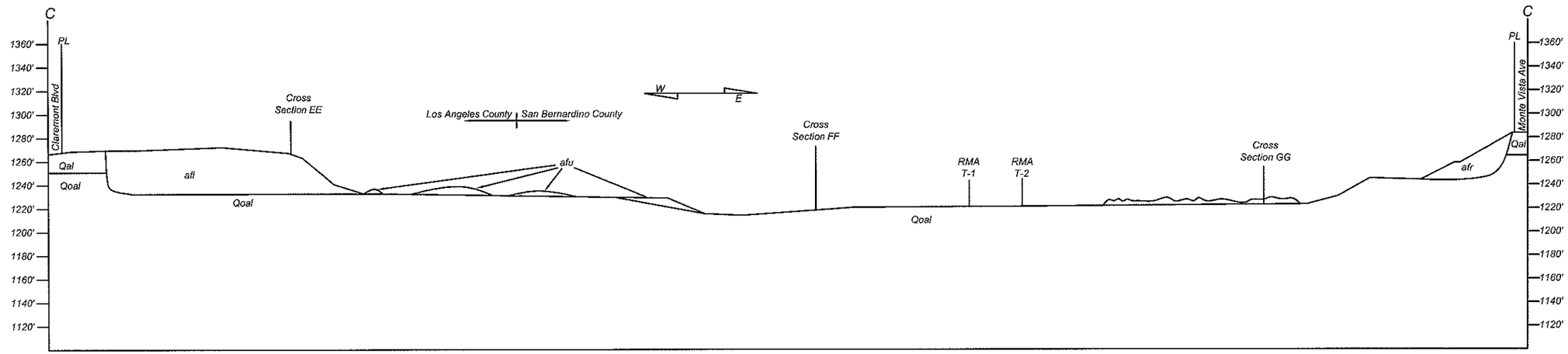
Scale in Feet
(1"=100' H=V))
0 50 100 200

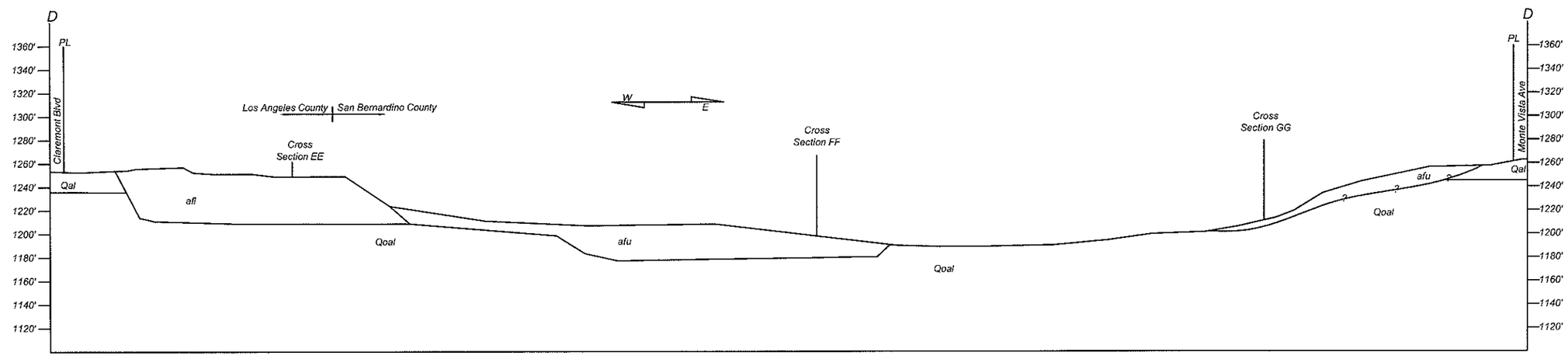
Claremont McKenna College
Story House
742 N Amhurst Ave
Claremont, CA 91711-6430

DRAWN BY: 520SAB
CHECKED BY: 550WGW
APPROVED BY: 500LEP
DATE: August, 2007

Geologic Cross Sections
Proposed Sports Complex
SW Foothill Blvd & Monte Vista Ave
Claremont, CA

RMA JOB NO.: 07-150-01
SHEET No.: 1 OF 5
PLATE: 2





Note: All contacts are approximate

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PLAN CHANGES

ITEM	DESCRIPTION	BY	DATE	APP'D

Scale in Feet
(1"=100' H=V))
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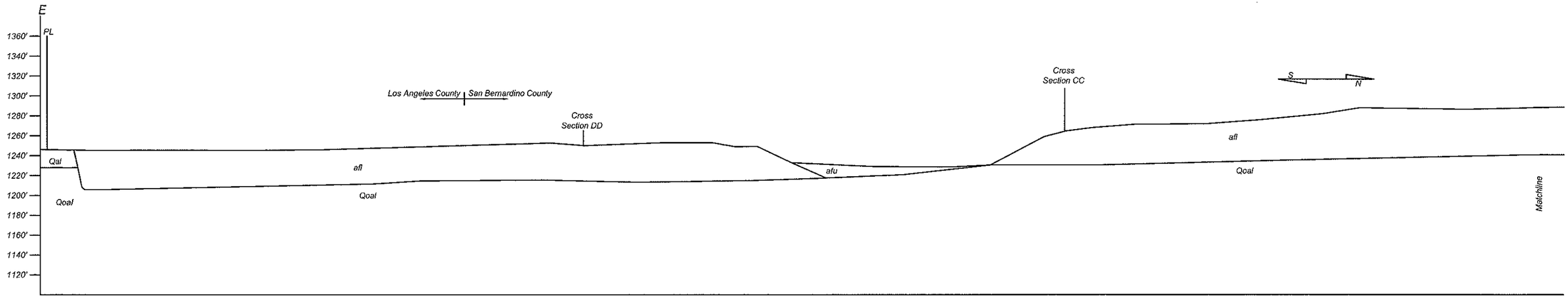
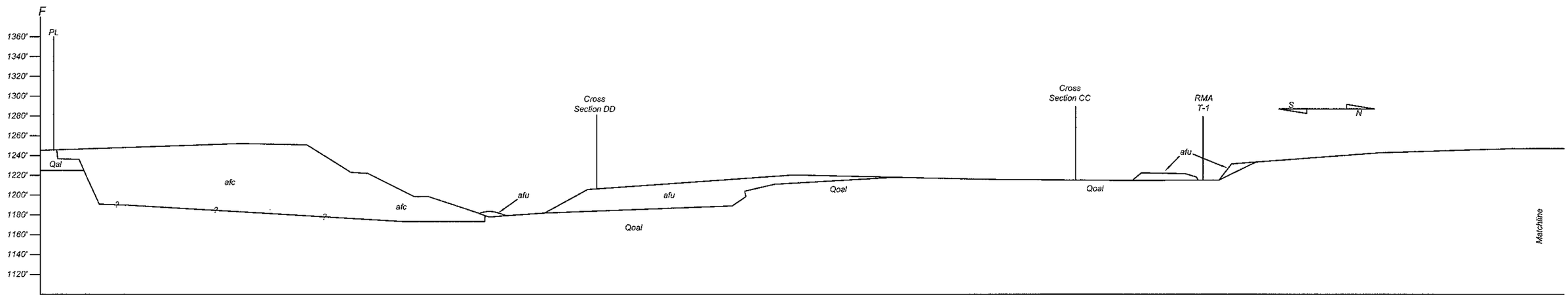
Claremont McKenna College
Story House
742 N Amhurst Ave
Claremont, CA 91711-6430

DRAWN BY: 520SAB
CHECKED BY: 550WGW
APPROVED BY: 500LEP
DATE: August, 2007

Geologic Cross Sections
Proposed Sports Complex
SW Foothill Blvd & Monte Vista Ave
Claremont, CA

RMA JOB NO.: 07-150-01
SHEET No.: 2 OF 5
PLATE: 2





Note: All contacts are approximate

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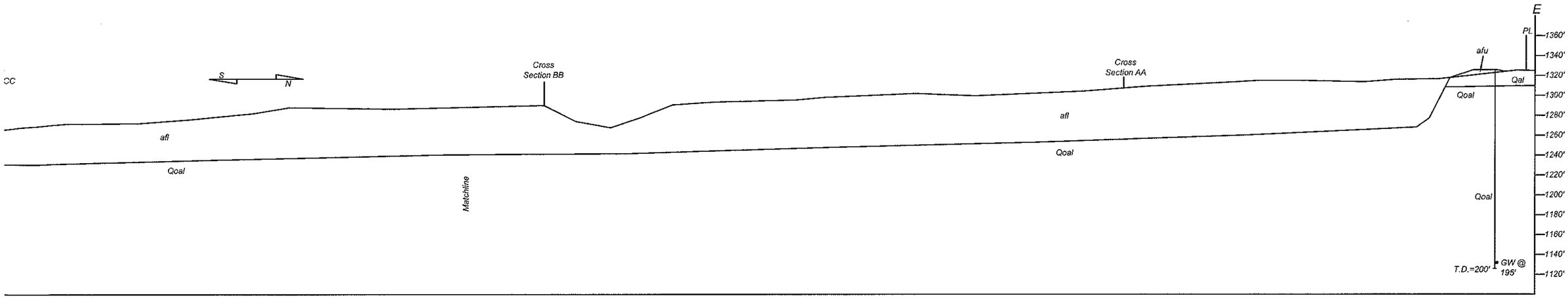
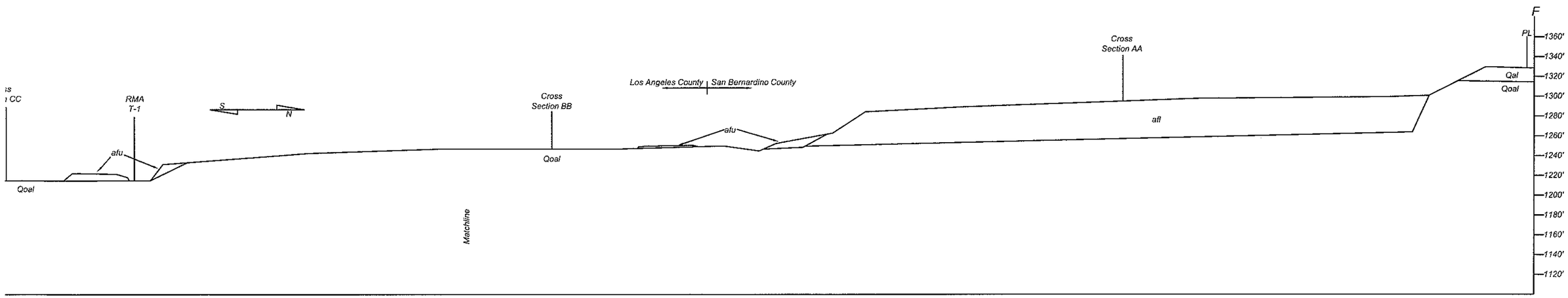
Claremont McKenna College
Story House
742 N Amhurst Ave
Claremont, CA 91711-6430

DRAWN BY: 520SAB
CHECKED BY: 550WGW
APPROVED BY: 500LEP
DATE: August, 2007

Geologic Cross Sections
Proposed Sports Complex
SW Foothill Blvd & Monte Vista Ave
Claremont, CA

RMA JOB NO.: 07-150-01
SHEET No.: 3 OF 5
PLATE: 2





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ITEM	DESCRIPTION	BY	DATE	APP'D

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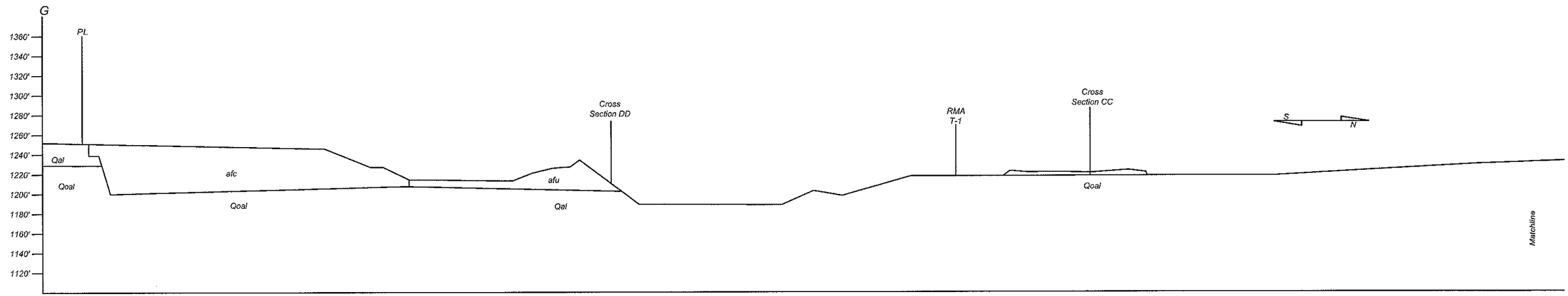
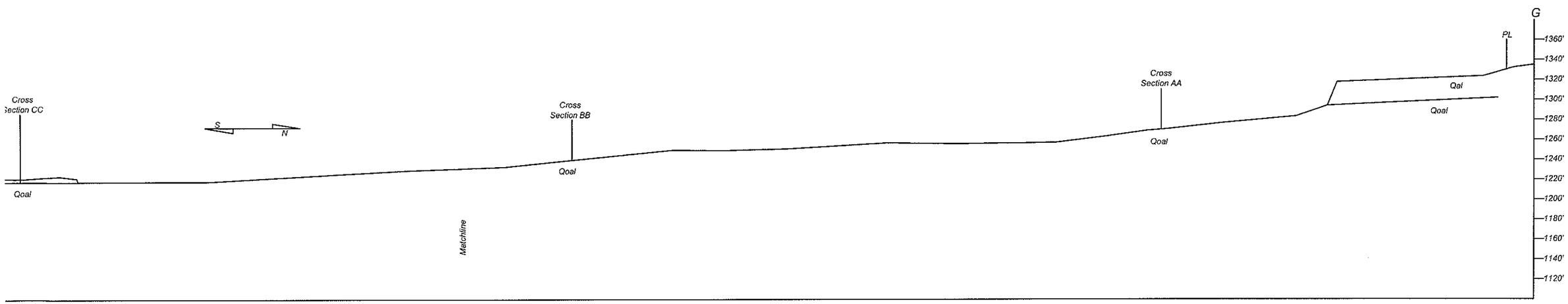
Story House
742 N Amhurst Ave
Claremont, CA 91711-6430

DRAWN BY: 520SAB
CHECKED BY: 550WGW
APPROVED BY: 500LEP
DATE: August, 2007

Geologic Cross Sections
Proposed Sports Complex
SW Foothill Blvd & Monte Vista Ave
Claremont, CA

RMA JOB NO.: 07-150-01
SHEET No.: 4 OF 5
PLATE: 2





Note: All contacts are approximate

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Scale in Feet
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DATE: August, 2007

Geologic Cross Sections
Proposed Sports Complex
SW Foothill Blvd & Monte Vista Ave
Claremont, CA

RMA JOB NO.: 07-150-01
SHEET No.: 5 OF 5
PLATE: 2

RMA Group

GEOTECHNICAL CONSULTANTS

12130 SANTA MARGARITA CT., RANCHO CUCAMONGA, CA 91730 : (909) 989-1751 : FAX (909) 989-4287

March 16, 2011

Claremont University Consortium
150 East Eighth Street
Claremont, CA 91711

Attention: Tim Morrison, Vice President – Facilities Management and Planning

Subject: Update to Preliminary Geotechnical Assessment
Pit Master Plan – Proposed Sports Complex
Southwest Corner of Foothill Boulevard and Monte Vista Avenue
Claremont/Upland, CA

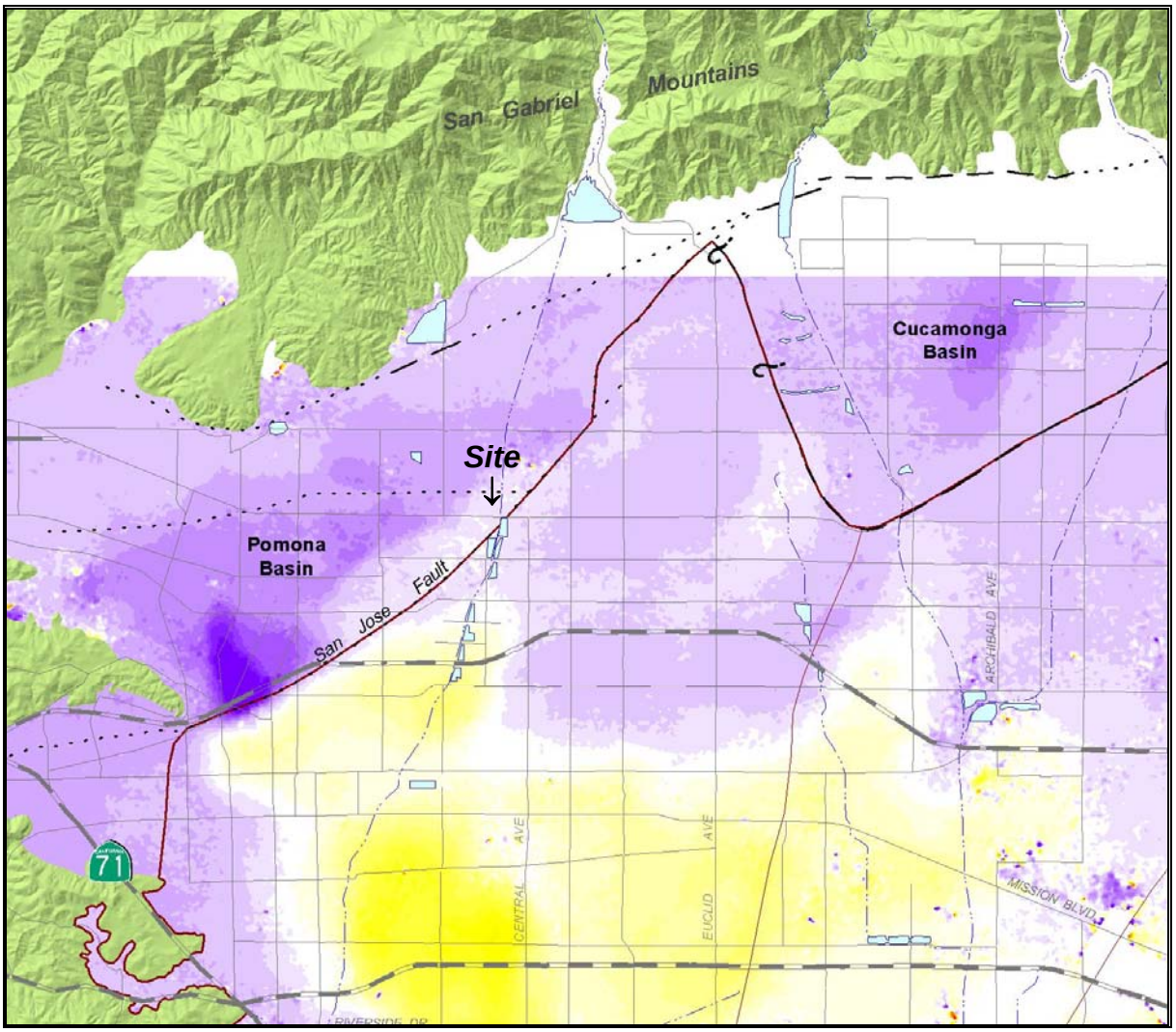
References: Preliminary Geotechnical Assessment, Pit Master Plan – Proposed Sports Complex Southwest Corner of Foothill Boulevard and Monte Vista Avenue Claremont, CA prepared by RMA Group dated August 21, 2007 (Job No. 07-150-01).

Gentlemen:

In response to your request and authorization, we have prepared this addendum to our preliminary geotechnical assessment report for the proposed Sports Complex at the southwest corner of Foothill Boulevard and Monte Vista Avenue in Claremont and Upland, California. The purpose of this report is to respond to a question raised by the City of Claremont regarding changes in surface altitude and to present a revised geologic map using the current land use plan as a base map.

During preparation of our 2007 report we reviewed a map prepared by Wildermuth Environmental Inc. for the Chino Basin Watermaster showing relative changes in land surface altitude from 1993 to 1999. The map, which is presented on the following page, was prepared using interferometric synthetic radar. The process consists of comparison of two synthetic radar images obtained from earth-orbiting satellites of the same area acquired at different times. The resulting map shows relative changes in ground surface elevations. In the area of the proposed Sports Complex, the map shows a relative uplift of about 1 to 3 centimeters between October 1993 and January 1999. The map also shows that the majority of the area between the San Gabriel Mountains and the San Bernardino Freeway from La Verne to Rancho Cucamonga has experienced similar uplift during this time period. Wildermuth does not identify a cause of the uplift. It may be related to regional tectonics. The reported uplift has occurred over a horizontal distance of many miles. Consequently, it has not caused any perceptible or significant differential land movement within the site or nearby area. Projecting this data into the future suggests that it is unlikely there will be significant differential land movement related region uplift within site in the foreseeable future.

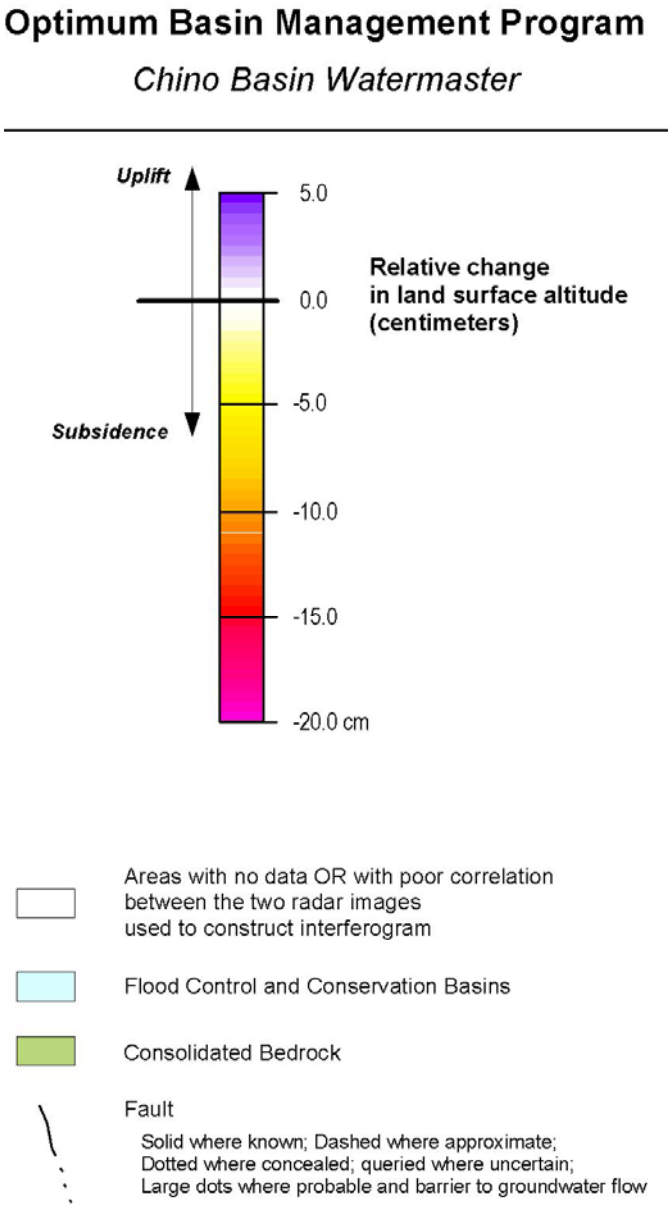
C.U.C.
Pit Sports Complex
Upland/Claremont, CA
March 24, 2011



REGIONAL LAND SUBSIDENCE/UPLIFT MAP
See Legend on Page 3

Source: Chino Basin Watermaster (Wildermuth, 2002)

C.U.C.
Pit Sports Complex
Upland/Claremont, CA
March 24, 2011



LEGEND FOR REGIONAL SUBSIDENCE/UPLIFT MAP

C.U.C.
Pit Sports Complex
Upland/Claremont, CA
March 23, 2011

Since we prepared our 2007 report, additional fill soils have been dumped on the floor in the central part of the site. A reconnaissance of the site performed on March 16, 2011. The new fill soils visible at that time consisted of primarily of gravelly sands with cobbles and boulders. Stockpiles of cobbles were also present. Small quantities concrete and other man-made materials were also present. The approximate revised limits of fill are shown on the attached Revised Geologic Map (Plate 1), which uses the latest development plan as a base map.

We trust this letter will serve your needs at this time. In you have any questions or require further assistance, please do not hesitate to contact us.

Respectfully,

RMA Group

PROFESSIONAL GEOLOGIST
GARY W. WALLACE
No. 1255
CERTIFIED ENGINEERING GEOLOGIST
STATE OF CALIFORNIA

Gary Wallace, P.G., C.E.G.
Vice President
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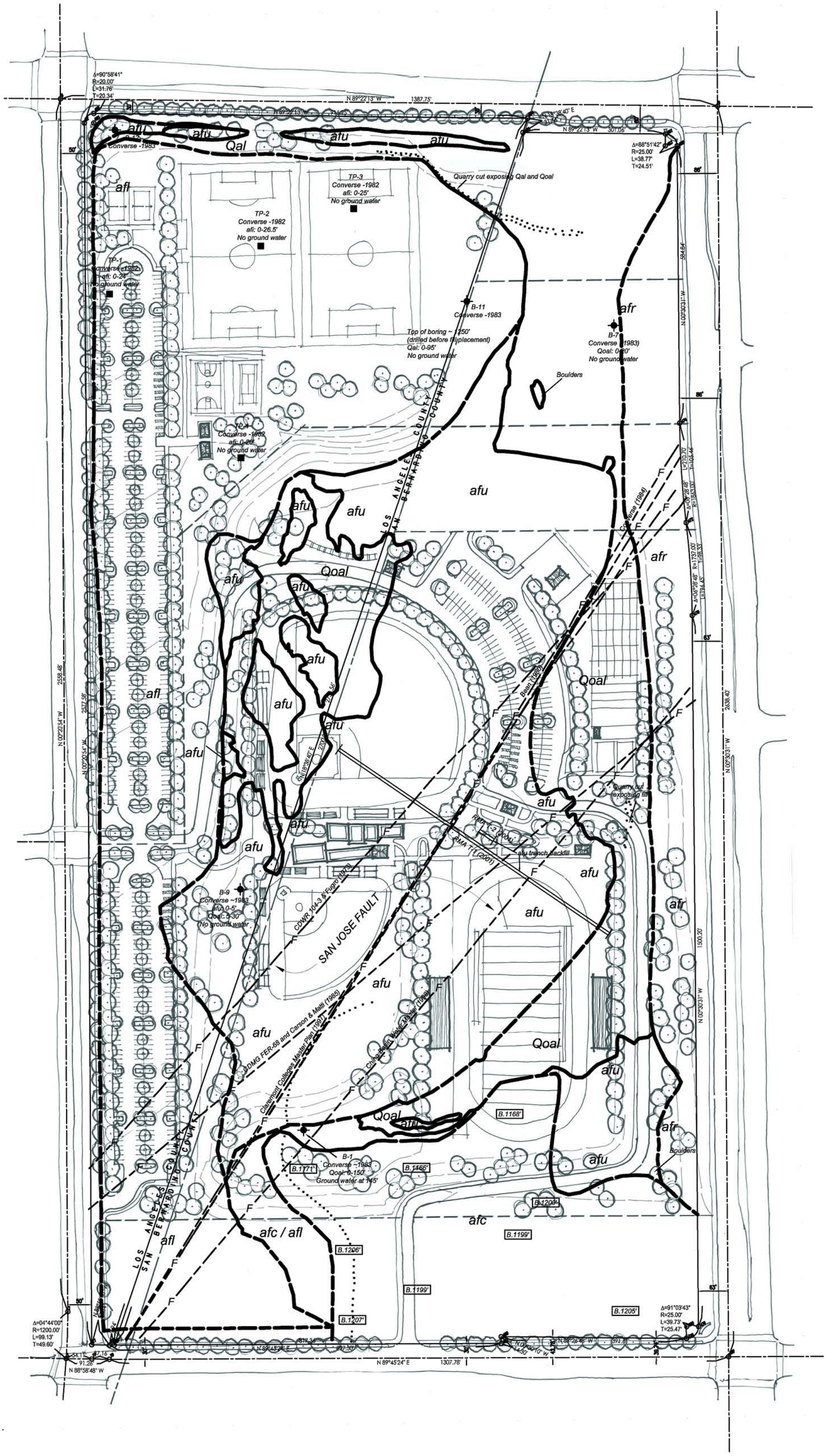
SLAWOMIR W. DYMERSKI
No. 2764
EXP. 9/30/12
GEOTECHNICAL
STATE OF CALIFORNIA

Slawek Dymerski, P.E., G.E.
Vice President
GE 2764

Attachment: Plate 1 - Revise Geologic Map



GEOLOGIC LEGEND

Geologic Units

- afu - Dumped fill
- afc - Compacted fill
- afr - Road fill
- afl - Landfill
- Qal - Alluvium locally covered by thin fill
- Qoal - Older alluvium locally covered by thin fill

Geologic Symbols

- Approximate geologic contact
- F - Postulated fault location (source denoted)
- Exploratory trench (Converse, 1982)
- Exploratory boring (Converse, 1983)
- Fault trench (RMA Group, 2001)
- B.1202 - Removal bottom elevation (RMA Group, 2005)

RMA Group
12130 SANTA MARGARITA COURT
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www.rmagrp.com

Scale in Feet: 0 50 100 200 400

Claremont University Consortium
Claremont, CA 91711-6430

DRAWN BY:	510WSC
CHECKED BY:	550WGW
APPROVED BY:	500DSW
DATE:	March, 2011

Revised Geologic Map - Proposed Sports Complex SW Foothill Blvd & Monte Vista Ave Claremont, CA

RMA JOB No.:	07-150-01
SHEET No.:	1 OF 1
PLATE No.:	1

APPENDIX H

Phase I Environmental Site Assessment

330 W. Bay Street, Suite 140
Costa Mesa, California 92627
(949) 642-0245 • FAX (949) 642-4474

GEOMATRIX

June 25, 2004
9234

Brenda Barham Hill
Claremont University Consortium
Pendleton Business Building
150 East 8th Street
Claremont, California 91711

Subject: Transmittal of Final Phase I Environmental Site Assessment Report
Pit Property
Claremont, California

Dear Brenda:

This letter transmits the final report for the Phase I Environmental Site Assessment of the Pit Property (the site). Geomatrix Consultants, Inc. (Geomatrix) conducted this assessment for Claremont University Consortium (CUC).

Based on the findings of our assessment, the site was used as an aggregate mine from the 1920s to about 1972. Since then, the site has been operated as a landfill permitted to accept inert waste. Based on these findings, we conclude that the subject property's use as a landfill represents a recognized environmental condition (REC) due to the uncertainty associated with the types of materials disposed of at the site and the inherent risks that the landfill creates for future use of the site and groundwater quality.

Geomatrix recommends that CUC maintain the schedule for regulatory compliance with ongoing permit requirements for the pit, which require monitoring Well A (or Pit Well No. 1) every third October, with the next sampling event to be conducted in October 2004. We also recommend that CUC attempt to locate other on-site monitoring wells and maintain or destroy them according to state and local standards.

In addition to complying with the monitoring and reporting requirements established for the site by the Regional Water Quality Control Board – Los Angeles Region (RWQCB), we recommend that CUC develop a strategy for eventual closure of the pit. Although the RWQCB has concluded that waste disposal at the site "has had no adverse impact on groundwater resources at the site," we note that several factors may contribute to uncertainty in this conclusion. For example: Well A does not appear to be located hydraulically downgradient of the pit; monitoring data we reviewed did not include groundwater samples collected directly beneath or immediately downgradient of the pit property; and previous groundwater monitoring did not include analysis for "emergent chemicals" such as perchlorate or n-nitrosodimethylamine (NDMA) that have impacted water supplies elsewhere in the Chino or San Gabriel groundwater basins. Consequently, we recommend that CUC consider this uncertainty, and the potential that

additional groundwater assessment or monitoring may be necessary in the future, in developing its plans for the pit property.

In addition to the above, prior to any reuse or development of the pit property, Geomatrix also recommends that CUC:

- perform more detailed visual survey and field screening of the site for potentially hazardous materials;
- collect and analyze samples of the slag-like material identified during site reconnaissance, and other suspect materials that may be identified during a more detailed field screening, to evaluate for the potential presence of hazardous substances; and
- prepare an environmental contingency plan to prepare for the potential that petroleum hydrocarbons or hazardous substances may be encountered during redevelopment activities.

Geomatrix appreciates the opportunity to assist CUC with this project. Please call either of the undersigned if you have any questions or wish to discuss the findings of our assessment.

Sincerely yours,
GEOMATRIX CONSULTANTS, INC.

Nancy Boschetto
Senior Geologist

Craig Stewart, C.HG. #106
Vice President and
Principal Hydrogeologist

Enclosures: Phase I Environmental Site Assessment Report (original + 4 copies)

cc: Michelle Rodriguez – Munger, Tolles & Olson (1 copy)

GEOMATRIX

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Pit Property

Claremont, California

Prepared for:

Claremont University Consortium
Pendleton Business Building
150 East 8th Street
Claremont, California 91711

Prepared by:

Geomatrix Consultants, Inc.
330 W. Bay Street, Suite 140
Costa Mesa, California 92627
(949) 642-0245

June 23, 2004

Project No. 9234.000

Geomatrix Consultants

GEOMATRIX

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Pit Property

Claremont, California

Prepared for:

Claremont University Consortium
Pendleton Business Building
150 East 8th Street
Claremont, California 91711

Prepared by:

Geomatrix Consultants, Inc.
330 W. Bay Street, Suite 140
Costa Mesa, California 92627
(949) 642-0245

June 23, 2004

Project No. 9234.000

Geomatrix Consultants

GEOMATRIX

PHASE I ENVIRONMENTAL SITE ASSESSMENT
Pit Property
Claremont University Consortium
Claremont, California

June 23, 2004
Project No. 9234

This report was prepared by the staff of Geomatrix Consultants, Inc., under the supervision of the Engineer and/or Geologist whose signature appears hereon.

The findings, recommendations, specifications, or professional opinions are presented within the limits described by the client, after being prepared in accordance with generally accepted professional engineering and geologic practice. No warranty is expressed or implied.

Nancy Boschetto
Senior Geologist

Craig Stewart, C.HG. #106
Vice President and
Principal Hydrogeologist

GEOMATRIX

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PHASE I ENVIRONMENTAL SITE ASSESSMENT
Pit Property
Claremont, California

1.0 INTRODUCTION

Geomatrix Consultants, Inc. (Geomatrix) has been retained by the Claremont University Consortium (CUC) to conduct a Phase I Environmental Site Assessment (Phase I) for property located southeast of the intersection of Claremont and Foothill Boulevards in the cities of Claremont and Upland, counties of Los Angeles and San Bernardino, California (the site, subject property, or pit). We understand that CUC, which owns the site, is developing a conceptual land plan for its potential future use and development. Phase I assessment activities described herein were performed in general accordance with the Geomatrix proposal dated September 5, 2003, which was authorized by CUC on September 8, 2003.

1.1 PURPOSE AND SCOPE

This Phase I was performed in general conformance with the scope and limitations of the ASTM E1527-00 standard. The purpose of this assessment was to evaluate site history, existing observable conditions, and current and historical uses of the subject site and surrounding properties to identify the potential presence of Recognized Environmental Conditions (RECs) in connection with the subject site. RECs are defined by ASTM as "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on a property or into the ground, groundwater, or surface water of the property." The term is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions interpreted to be *de minimis* are not RECs. In addition, the standard requires that historical RECs (HRECs) and known or suspect environmental conditions be identified in the Phase I report. The standard defines HRECs as environmental conditions "which in the past would have been considered a recognized environmental condition, but which may or may not be considered a recognized environmental condition currently."

Our conclusions are intended to assist CUC in evaluating the "business environmental risk" associated with the site, defined by the ASTM E1527-00 standard as "a risk which can have a material environmental or environmentally-driven financial impact on the business associated

with the current or planned use of a parcel of commercial real estate." Evaluation of business environmental risk may involve addressing issues outside the scope of this Phase I assessment.

1.2 SITE IDENTIFICATION

The subject property is located within the cities of Claremont and Upland, in the counties of Los Angeles and San Bernardino, California, southeast of the intersection of Claremont and Foothill Boulevards (Figure 1). Figure 2 shows a map of the subject site.

1.3 SCOPE OF SERVICES

Geomatrix performed the following scope of services to complete our Phase I assessment:

- visual observation of site conditions and of adjacent property use to assess the nature and type of activities that have been or are being conducted at and adjacent to the site in terms of the potential for release or threat of release of hazardous substances or petroleum products;
- review of federal and state environmental database information within the ASTM-specified radii plus 0.25 mile from the subject site using a database service to access records;
- regulatory agency file review regarding environmental conditions at facilities near the site;
- review of a 7.5-minute topographic map to evaluate the site's physical setting;
- interview of a representative of the property owner;
- review of sources of historical site use information, including historical aerial photographs and topographic maps; and
- interpretation of information and data assembled during the above tasks, and formulation of conclusions regarding the potential presence and impact of RECs as defined by the ASTM E1527-00 standard.

1.4 NON-SCOPE CONSIDERATIONS

The ASTM E1527-00 standard includes the following list of "additional issues" that are non-scope considerations outside of the scope of the ASTM Phase I practice: asbestos-containing materials, radon, lead-based paint, lead in drinking water, wetlands, regulatory compliance, cultural and historic risks, industrial hygiene, health and safety, ecological resources, endangered species, indoor air quality, and high voltage power lines. The non-scope items listed above were not included in our assessment of the subject property. Natural hazards such

as seismicity, liquefaction, and landslides were not evaluated in this Phase I. In addition, this Phase I did not evaluate regulatory compliance issues related to the permitting, operation, monitoring, closure, or post-closure of the on-site landfill.

1.5 EXCEPTIONS AND DEVIATIONS

Geomatrix has completed this assessment in general conformance with ASTM E1527-00. No exceptions or deviations from the ASTM standard occurred in the completion of this Phase I assessment.

1.6 PREVIOUS REPORTS

Both geotechnical and environmental investigations of the subject site have been conducted previously. A preliminary review of environmental information obtained from these reports is summarized in Section 4.2.2.2 of this report.

1.7 LIMITATIONS

The observations and conclusions presented in this report are based on the information obtained through the work described herein. Geomatrix's assessment did not include soil, groundwater, asbestos, or radon sampling. Any conclusions regarding the history and environmental conditions of the site and nearby properties rely on the completeness and accuracy of the information available at the time of our assessment as well as the cooperation and knowledge of persons contacted. As such, no absolute determination can be made of all environmental risks. Opinions presented herein apply to site conditions observed or from data obtained at the time of our assessment and cannot apply to site conditions or changes of which we are not aware or which we have not had the opportunity to evaluate.

2.0 PROPERTY DESCRIPTION AND PHYSICAL SETTING

This section presents information regarding the site ownership and location, site and adjacent property uses, and geologic and hydrogeologic setting of the site vicinity.

2.1 SITE OWNERSHIP AND LOCATION

The subject property, which is owned by CUC, is located southeast of the intersection of Foothill and Claremont Boulevards in the cities of Claremont and Upland, California; the boundary between the two cities, which coincides with the boundary between Los Angeles and San Bernardino counties, crosses northeast-southwest through the subject property (Figures 1

and 2). The USGS topographic map for the site, the Ontario, California 7.5' Quadrangle dated 1981, was used as the source for site setting information.

2.2 SITE AND VICINITY DESCRIPTION

The current use of the site and present use of adjacent properties are summarized below.

Size

The subject property is approximately 0.5 mile long (north-south) and 0.25 mile wide (east-west). The total land area encompassed by the site is approximately 80 acres.

Site Use

The subject property consists of a former aggregate quarry that has been used more recently as a landfill. Documents reviewed indicate the site currently is a Class III landfill permitted to accept inert waste. A small area along the west-central portion of the property is developed as an archery range.

Adjacent Site Use

The subject site is bounded on the north by Foothill Boulevard and on the south by Arrow Route. Claremont Boulevard and Monte Vista Avenue form the western and eastern property boundaries.

The campuses of Pitzer and Claremont McKenna Colleges lie to the west of the site. North of the site across Foothill Boulevard, from west to east, are an Arco gas station, a retail nursery, and vacant land. Claremont Cable airport is located northeast of the site. The properties to the south and east of the site are vacant, former gravel mining facilities.

2.3 PHYSICAL SETTING

Surface topography in the site vicinity slopes gently southwestward away from the San Bernardino Mountains, along the San Antonio Creek alluvial fan. The foothills of the San Gabriel Mountains are located approximately 2 to 3 miles north of the site. Ground surface elevation around the pit perimeter ranges between approximately 1230 and 1330 feet above mean sea level (msl), from south to north. The pit excavation is approximately 50 to 80 feet deep.

2.4 SITE GEOLOGIC AND HYDROGEOLOGIC SETTING

The site rests on Recent alluvial fan sediments that originated from the nearby San Gabriel Mountains. The deposits are generally coarse-grained, with varying degrees of cementation (Envicom, 1999). The pit also contains some areas of artificial fill and inert waste from its use as a landfill. Bedrock has not been encountered at the site. The potentially active San Jose fault trends northeast-southwest through the southern portion of the site and the active Cucamonga fault zone is located approximately 2 miles north of the property.

Regional groundwater flow direction historically has been generally southward and appears to be affected by the San Jose fault and by spreading grounds located northeast of the site. A 1979 groundwater contour map based on data collected by the Los Angeles County Flood Control District (LACFCD) shows groundwater flowing toward the southwest north of the San Jose fault and toward the southeast south of the fault (Law Environmental, 1989). Groundwater elevation data based on LACFCD wells monitored during 1989 show a generally southwestward groundwater flow direction in the site vicinity (Law Environmental, 1990). Both the 1979 and 1989 maps report lower overall groundwater elevations (by approximately 200 to 400 feet) south of San Jose fault, indicating that the fault influences groundwater flow beneath the site.

Groundwater levels within the pit generally appear to be below the bottom of the pit, but springs have been observed emerging from side walls of the pit after periods of heavy rainfall (LeRoy Crandall, 1986). Additionally, piezometers installed within the limits of the pit during geotechnical investigations encountered groundwater under artesian conditions, which flowed to the ground surface in some instances; static groundwater levels in these piezometers at the time of drilling are reported to have ranged from approximately 180 feet bgs to above ground surface at the base of the pit (Converse, 1983a). A groundwater elevation contour map for the site developed by Converse (1983b) shows groundwater flow direction toward the southwest, with elevations as much as 30 feet lower on the south side of the interpreted location of the San Jose fault; some of the elevation contours on this map appear to be based on the presence of seeps or springs within the pit. The relatively small groundwater elevation difference across the fault measured in 1983 may have been the result of higher groundwater elevations due to large amounts of rainfall that year, or may be an artifact of increased data density since the 1983 monitoring included on-site monitoring wells. During a groundwater monitoring event in 1986, piezometers installed by Converse were dry indicating that groundwater levels had dropped beneath the total depth of the piezometers (LeRoy Crandall, 1986). Measured depth to

groundwater in an on-site water supply well located near the northwest corner of the site (Well A or Pit Well No. 1) has ranged between 289 and 311 feet below grade (ATC, 2001b).

The northwest portion of the subject property overlies the Pomona groundwater sub-basin, which is part of the adjudicated Six Basins groundwater basin. The remainder of the site lies within the adjudicated Chino Basin. The basin boundaries appear to be controlled by the location of the San Jose fault.

3.0 SITE HISTORY

Historical uses of the subject site and neighboring properties are summarized below.

3.1 HISTORICAL TOPOGRAPHIC MAPS

Past uses of the subject site and the adjacent properties were assessed through a review of USGS historical topographic maps provided by Environmental Data Resources, Inc. (EDR, 2003b) for the years 1897, 1903, 1944, 1954, 1967, 1973, and 1981. Topographic maps reviewed are presented in Appendix A.

1897 Topographic Map: The subject property appears to be undeveloped except for one small structure shown near the eastern edge of the property, approximately 1/8 mile north of the southeast corner of the site. Foothill Boulevard (Route 66) and Arrow Route are visible bounding the property to the north and the south, respectively. Claremont village is present west of the site. An Atchison Topeka and Santa Fe railroad line is located approximately 0.5 mile south of the site.

1903 Topographic Map: Conditions at the subject property and vicinity are similar to those shown on the 1897 topographic map.

1944 Topographic Map: Subject property conditions appear similar to those shown on the 1903 topographic map except that the small on-site structure is not present. Foothill Boulevard is shown as a four-lane highway and two buildings appear to be present north of it across from the site. Areas around the subject property show increased development. West of the site, Claremont has expanded and Scripps and Pomona Colleges are labeled on the map. Another railway line is indicated approximately 0.25 mile south of the site.

1954 Topographic Map: The northern portion of the site is shown as scrub land, and the southern half is label as a gravel pit. It also appears that property south of Arrow Route is being mined as well. A light duty road extending approximately 1/8 mile north of Arrow Route

is shown west of the site; 13 small buildings are shown along this road. To the north, Foothill Boulevard is shown as a divided four-lane highway. A group of four small structures is shown south of Foothill Boulevard, east of the northeast corner of the site. Claremont Men's College is identified approximately 0.25 mile west of the site. Development southwest of the site has increased and the San Bernardino Freeway is present south of the site. Cable-Claremont Airport is shown approximately 1000 feet northeast of the site. The railway line 0.25 mile south of the site is labeled as a Pacific Electric line.

1967 Topographic Map: The site is not shown as scrub land and several unimproved roads are shown crossing the gravel pit at the subject property. Four other gravel pits are indicated south and east of the site. More buildings are shown at the Claremont college campuses than on the 1954 topographic map and Pitzer College structures are present west of the site. San Antonio Wash, approximately 300 to 900 feet east of the site, appears to have been channelized.

1973 Topographic Map: The majority of the subject property is shown as disturbed from mining activities and four small areas in the southern portion of the site are indicated to be intermittent ponds. Claremont Avenue has been constructed along the western site boundary and Monte Vista Avenue, identified as an unimproved road, is shown extending half way up the eastern side of the pit.

1981 Topographic Map: Conditions at the subject property appear similar to those on the 1973 topographic map, except that only one unimproved road and one small intermittent pond are shown in the southern portion the subject property.

3.2 HISTORICAL AERIAL PHOTOGRAPHS

Past uses of the subject site and the adjacent properties were further assessed through a review of historical aerial photographs provided by EDR (2003c) for the years 1928, 1949, 1952, 1968, 1976, 1989, 1994, and 2002. EDR photograph scales ranged from 1 inch equals 500 feet to 1 inch equals 666 feet (Appendix B).

1928 Aerial Photograph: The site appears to be undeveloped except for gravel mining in the southeastern part of the property. Foothill Boulevard to the north and Arrow Route to the south are visible on the photograph and appear to be improved roadways. More extensive gravel mining is present on the property to the south of the site. A group of structures is located west of the site, north of Arrow Route. A few small structures also are visible on the north and south sides of Foothill Boulevard, northeast of the site. Orchards are visible approximately 1500 feet east of the site across San Antonio Wash.

1949 Aerial Photograph: Gravel mining operations appear to have expanded northward to cover most of the southern portion of the site. Mining activities on the property south of the site appear not to have been ongoing at the time of this photograph because the land surface appears vegetated. Several large buildings, apparently commercial or industrial, are visible north of the site across Foothill Boulevard, which appears to have been widened since the 1928 photograph.

1952 Aerial Photograph: Conditions at the subject property appear similar to those shown on the 1949 photograph, except that mining operations appear to have extended into the southeast and southwest corners of the site. What appears to be a dirt road (Claremont Boulevard) is visible between the pit and the property to the west.

1968 Aerial Photograph: The majority of the site appears to be used for gravel mining. The adjacent property to the east also appears to be mined and what is apparently a dirt road separates the two properties. Additional structures are visible east of the site south of Foothill Boulevard. The San Antonio Channel has been constructed. Approximately 0.25 mile east of the site, east of San Antonio Channel, a large aboveground tank or reservoir is visible adjacent to the orchards.

1976 Aerial Photograph: Gravel mining on the site appears to have decreased and most of the site appears to be re-vegetating although several dirt roads remain visible. Gravel mining is occurring on other properties southeast of the site. Claremont Avenue has been constructed along the western boundary of the site. West of Claremont Avenue, a baseball diamond, a track, and buildings for Claremont McKenna and Pitzer Colleges are visible. Claremont-Cable airport is visible approximately 1500 feet northeast of the site.

1989 Aerial Photograph: The subject property appears more extensively vegetated. Gravel mining south and east of the site appears to have decreased and these sites also appear to be more vegetated than in the previous photograph. College and residential developments west of the site have expanded since 1976. Large commercial buildings are visible northeast of the site, across Foothill Boulevard. Much of the area east of the site formerly occupied by orchards has been developed with commercial or industrial structures. Three aboveground tanks, including the one noted in the 1968 photograph, are visible approximately 1500 feet east of the site.

1994 Aerial Photograph: The subject site appears to have less vegetation than in the 1989 photograph and some excavation or landfill activity appears to have occurred. Monte Vista

Avenue has been constructed along the eastern border of the subject site. Additional commercial developments are visible approximately 1200 feet southeast of the site.

2002 Aerial Photograph: Conditions at the subject property and in the vicinity appear similar to those in the 1994 photograph.

3.3 HISTORICAL SANBORN FIRE INSURANCE MAPS

Geomatrix requested copies of historical Sanborn fire insurance maps from EDR (2003a) to provide additional information on past uses of the subject and neighboring properties. EDR reported that there was no available Sanborn map coverage for the subject property (Appendix C).

3.4 HISTORICAL CITY DIRECTORY LISTINGS

Geomatrix requested a historical city directory search from EDR, which searched directories for the years 1935 through 2003 (EDR, 2003e). Because the subject property does not have an address, the city directory search was based on the address of 705 East Sixth Street, which is based on the street number nearest to the intersection of Arrow Route and Claremont Boulevard, near the southwest corner of the subject site. No city directory listings were available for this address or for addresses searched within an approximate 1/8-mile radius of this address (Appendix D).

3.5 WELL INFORMATION SEARCH

Information on water supply wells in the site vicinity was obtained from the EDR report (EDR, 2003d), which includes information on wells located within a 1-mile search radius of the site, and from a map of water supply and groundwater monitoring wells obtained from the office of the Watermaster of the Six Basins Area (Civiltec Engineering, 1998). Additional information on an on-site water supply well was obtained from files provided to Geomatrix by CUC. This section summarizes information obtained from these sources.

Within a 1-mile radius of the site, the EDR report and the Six Basins Area map identified 18 former or existing water supply wells. Records reviewed indicate that the Monte Vista Water District, Southern California Water Company (SCWC), City of Pomona, and City of Upland are the primary providers of public water supply in the site vicinity. A map presented by EDR (2003d) shows a cluster of wells located on the subject property, near Arrow Route; however, state well identification numbers for these wells indicate that they probably are located in other sections or tracts in the site vicinity.

According to documents reviewed and information provided by CUC, one water supply well (Well A, later identified as Pit Well No. 1) is located on the subject property. This well was not identified by EDR or on the Six Basins Watermaster map. According to ATC (2001b) and LeRoy Crandall (1986), Pit Well No. 1 was installed in 1984 to a depth of 621 feet bgs and was intended to supply water for future development of the site, but has not produced water except during groundwater sampling events.

Water quality data from selected water supply wells are included in the EDR report. Information presented by EDR (2003d) indicates that low concentrations of the volatile organic compounds (VOCs) 1,1-dichloroethene (1,1-DCE), 1,1,1-trichloroethane (1,1,1-TCA), and trichloroethene (TCE) have been detected in samples collected from water supply wells within 1 mile of the site. Concentrations of these compounds reported in the EDR report were below their respective California Department of Health Services (CaDHS) maximum contaminant levels (MCLs). Information provided in LeRoy Crandall (1986) indicates that water supply wells within 1 mile of the site sampled during 1984 and 1985 contained concentrations of nitrate at concentrations up to 69 milligrams per liter (mg/l), which exceeds the current MCLs for nitrate (45 mg/l for nitrate as NO3 or 1 mg/l for nitrate as nitrogen); the LeRoy Crandall (1986) report does not clarify whether nitrate concentrations were reported as NO3 or nitrogen.

4.0 ENVIRONMENTAL RECORDS REVIEW

The findings of the environmental record research and review are presented in this section.

4.1 STANDARD ENVIRONMENTAL RECORDS REVIEW

Geomatrix utilized the EDR electronic database search service to conduct an environmental records review (EDR, 2003d). The database search was used to identify properties that may be listed in the referenced agency records and located within the search radii. Because the site is large, Geomatrix requested that EDR search radii equal the ASTM standard plus 0.25 mile. The complete environmental database report is provided in Appendix E. The term "Claremont Colleges" is used in the EDR report to identify a leaking underground storage tank (LUST) site (see Section 4.1.3) and a former waste disposal facility (see Section 4.1.5), but according to CUC "Claremont Colleges" is not and never has been the name of a legal entity affiliated with CUC.

The following table identifies selected results of the environmental records review, which are discussed below.

Database	Search Radius	Total Sites Plotted within Search Radius
RCRIS	0.5 mile	5
CHMIRS	1.25 mile	4
SWF/LF	0.75 mile	1
WMUDS/SWAT	0.75 mile	2
LUST	0.75 mile	6
UST	0.5 mile	3
CA-FID	0.5 mile	3

The subject site was listed in the Waste Management Unit Database System (WMUDS/SWAT) database and is discussed further in Section 4.1.5. The site was not listed in any of the other ASTM standard databases searched by EDR (2003d).

4.1.1 Resource Conservation and Recovery Information System (RCRIS)

The RCRIS database consists of information on sites which generate, transport, store, treat, and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Within a search radius of 0.5 mile, EDR identified one RCRA large quantity generator (RCRA-LQG) and four RCRA small quantity generator (RCRA-SQG) sites.

The RCRA-LQG site, CCL Label, Inc. at 576 College Commerce Way, is located approximately 0.25 mile east of the subject property. The four RCRA-SQG sites listed in the EDR report are: Chevron Station 20-2024 at 699 East Foothill, located northwest of the site across Foothill Boulevard; Lockheed Aircraft Services at 2066 West 11th Street, approximately 0.25 mile east of the subject site; and Minnesota Rubber and QMR Plastics at 2377 West Foothill Boulevard and Integrated Care Systems at 2315 West Foothill Boulevard in Upland, both of which are located northeast of the site across Foothill Boulevard. No violations were reported in the EDR report for these facilities and information regarding the types of chemicals used was not provided.

Because CCL Label, Inc. and Lockheed Aircraft Services are located hydraulically cross-gradient from the site, potential releases at these facilities would not be expected to significantly impact conditions at the subject property. The Chevron station, Minnesota Rubber and QMR Plastics, and Integrated Care Systems are located north of Foothill and potentially are hydraulically upgradient from the site; however, the Chevron station case has been closed (see Section 4.1.3) and no violations have been reported at any of these facilities. Geomatrix does not consider it likely that conditions at these facilities have adversely impacted the subject property.

4.1.2 California Hazardous Materials Incident Report System (CHMIRS)

The CHMIRS database contains information on accidental releases or spills of hazardous materials reported to the California Office of Emergency Services. The EDR report indicates that accidental spills occurred at four locations within 1.25 mile of the subject property. The Benson Avenue Car Wash located at 1639 West Foothill Boulevard, approximately one mile east from the northeastern corner of the subject property, reported an accidental gasoline release from a fuel tanker in May 2002. Records reviewed indicate that the spilled gasoline evaporated or discharged into a storm drain. An accidental spill occurred at an unnamed site located at 9041 Central Avenue in November 1991, approximately 0.75 mile southeast of the site; no further information is provided regarding this incident. On January 20, 2000, a small release of gear lube vapor was reported at 687 North Benson Avenue, approximately one mile east-northeast of the site. At an unnamed site, located approximately 0.75 mile southeast of the site at 5225 Arrow, a release of an unidentified compound occurred in June 1989. Based on the distances of these facilities from the subject property, these four incidents are not expected to impact conditions at the site.

4.1.3 Leaking Underground Storage Tanks (LUSTs)

The LUST database, which is maintained by the State Water Resources Control Board (SWRCB), lists an inventory of reported incidents of leaking underground storage tanks (LUSTs). EDR identified six LUST facilities within a 0.75-mile radius from the site.

Records reviewed indicate that releases to soil only occurred at the five following locations and that these cases have been closed by overseeing agencies:

- diesel fuel at Weston E. Montgomery Fuel located at 2085 11th Street, approximately 0.25 mile east of the site;
- diesel fuel at Dineen Trucking located at 1284 Airport Drive, approximately 0.75 mile northeast of the site;
- aviation gas at Chevron Station 20-2024 located at 699 East Foothill Boulevard, northwest of the site across Foothill Boulevard and Claremont Avenue;
- diesel fuel at "Claremont Colleges"[1] located at 303 East 1st Street, 0.5 mile southwest of the site; and
- waste oil at Pomona College located at 555 College Way, 0.5 mile west-southwest of the site.

[1] As presented in Section 4.1, the term "Claremont Colleges" (herein referring to a LUST site) does not refer to a legal entity affiliated with CUC.

All of the above LUST releases are reported as having impacted soil only and the cases have been closed. The "Claremont Colleges" and Pomona College LUST cases were closed in 1992 and 1996, respectively, but currently are under regulatory review by the California Regional Water Quality Control Board – Los Angeles Region (RWQCB) for evaluation of potential release of methyl tert-butyl ether (MTBE). Because these cases were closed, and due to their distances from the site or their likely hydraulic cross- or downgradient positions relative to groundwater flow, releases at the five facilities listed above are not expected to significantly impact conditions at the subject property.

The sixth LUST listed in the EDR report is located at a 76 Products Station located at 601 East Foothill Boulevard, at the northeast corner of its intersection with North Mills Avenue. Records reviewed indicate that a gasoline leak at this location is under evaluation by the Los Angeles County Department of Public Works (LADPW). Because this facility is located almost 0.25 mile west of the site and likely hydraulically cross-gradient from the site, it is unlikely that a release from the 76 Products station has adversely impacted conditions at the subject property. Additional information on this LUST is provided below in Section 4.2.3.

4.1.4 Solid Waste Facilities/Landfill Sites (SWF/LF) Database

The SWF/LF records contain an inventory of solid waste disposal facilities or landfills on file with the California Integrated Waste Management Board's Solid Waste Information System (SWIS) database. One SWF/LF site, the Claremont City Dump, was located within the 0.75-mile EDR search radius. Based on current street locations and addresses, the address provided for this facility, 1100 North Mills, apparently would be located near or within Pitzer College. EDR records indicate that this is a closed solid waste disposal site, but no additional information was provided by EDR. Additional information on this former facility was not available from CUC. A 1948 aerial photograph reviewed by Geomatrix at the Claremont Heritage historical society showed what appeared to be a dirt road extending east from North Mills Avenue, between 11th and 12th Streets, toward a circle-shaped area of disturbed surface soil; however, the use of this area as a dump is not corroborated by other information we reviewed. Because of its probable former location 0.25 mile west of the subject property and its apparent location cross-gradient with respect to groundwater flow, it is not likely that conditions at the former Claremont City Dump have adversely impacted the site.

4.1.5 WMUDS/SWAT Database

The waste management unit database system (WMUDS/SWAT) from the SWRCB is used for program tracking and inventory of waste management units. The subject property (identified as Conrock-Claremont at the intersection of Foothill Boulevard and Claremont Avenue) and

"Claremont Colleges"[2] at 1100 North Mills are listed in the WMUDS/SWAT database within the 0.75 mile search radius. The EDR report did not provide information on the disposal history or status of either property. The "Claremont Colleges" site has the same address as the Claremont City Dump described in the previous section.

4.1.6 Underground Storage Tank (UST) Database

The UST database contains information on USTs registered with the SWRCB and regulated under Subtitle I of RCRA. Three sites were identified by EDR within the search radius of 0.5 mile from the subject property: ARCO Products at 701 East Foothill Boulevard, Chevron USA at 699 East Foothill Boulevard, and TOSCO/UNOCAL at 601 East Foothill Boulevard. The latter two facilities also are listed in the LUST database under the names Chevron Station 20-2024 and 76 Products Station, respectively, and are discussed above in Section 4.1.3. Information on the contents or size of the UST at the ARCO Products station, which is located at the northeast corner of Foothill Boulevard and Claremont Avenue, was not provided in the UST database.

4.1.7 Facility Inventory (CA-FID) Database

The CA-FID database contains active and inactive UST locations registered with the SWRCB. Within the search radius of 0.5 mile, three active or inactive UST sites were identified by EDR: Eleventh Street Yard at 2085 West 11th Street in Upland, Golden Eagle Trucking at 2209 West Arrow, and Holliday Rock Co. Inc. at 2193 West Foothill Boulevard. Eleventh Street Yard is located less than 0.25 mile east and potentially upgradient of the site at the same address as Weston E. Montgomery Fuel, which was listed as a LUST site (Section 4.1.3). Golden Eagle Trucking is located approximately 0.25 mile east of the southeastern corner of the subject property and is listed as an active UST site; information regarding the size or contents of USTs at this facility is not provided in the EDR report. Records provided by EDR for the Holliday Rock Company indicate that this facility is an active hazardous materials handler and generator, and has a 17,500-gallon aboveground petroleum storage tank permitted with the San Bernardino County Department of Environmental and Health Services. No violations or releases are reported for this site. This site is located potentially upgradient and approximately 0.25 mile east of the northeast corner of the subject site.

[2] As presented in Section 4.1, the term "Claremont Colleges" (herein referring to a waste management facility) does not refer to a legal entity affiliated with CUC.

4.2 ADDITIONAL ENVIRONMENTAL RECORDS REVIEW

In conformance with the ASTM standard, inquiry was made with a representative of the property owner and other environmental agencies as described below.

4.2.1 Interview of Representative of Property Owner

The ASTM standard requires disclosure in the Phase I report whether the property owner, or other user of the report, has specialized knowledge about previous ownership or uses of the property that may be material to identifying RECs, or whether the property's title contains environmental liens or other information related to environmental condition of the property, including engineering and institutional controls and activity and use limitations.

On March 4, 2004, Geomatrix interviewed Tim Morrison, Director of Facilities for CUC, regarding his knowledge of the subject property. Mr. Morrison indicated that, to his knowledge, only inert landfill materials have been disposed of within the pit, which currently is a permitted Class III landfill. Since 1988, when CUC purchased the subject property, the pit has been used to dispose of inert waste materials generated by CUC projects only.
Mr. Morrison was not aware of any permit violations, environmental liens on the subject property, or of any past, current, or pending lawsuits related to environmental conditions at the subject property.

4.2.2 Files Provided by CUC

Geomatrix reviewed records at the CUC for the subject property and other properties owned by CUC. A summary of our review is presented below.

4.2.2.1 Subject Property

Documents available for the subject property indicate that gravel mining began at the site in the 1920s (LeRoy Crandall, 1986), but did not provide information on pit operations until the 1970s. In 1972, Conrock, the operator and owner of the site at that time, stopped quarrying operations and permitted the property for use as an inert landfill (Claremont Facilities Corporation [CFC], 1987). Between 1978 and 1984, the site was leased by Tony Glavinick, who continued operation of the site as an inert landfill (LeRoy Crandall, 1986).

Based on documents reviewed, the landfill was classified to accept non-water-soluble, non-decomposable inert solids. Because the subject property lies within the two different Regional Water Quality Control Board jurisdictions (Los Angeles and Santa Ana Regions), waste

discharge requirements (WDRs) have been issued for the pit by both agencies (LeRoy Crandall, 1986):

- WDR Order No. 72-66, December 13, 1972, Los Angeles Region
- WDR Order No. 73-14, February 28, 1973, Los Angeles Region
- WDR Order No. 72-47, December 21, 1972, Santa Ana Region
- WDR Order No. 79-93, June 29, 1979, Santa Ana Region.

ATC (2001a) states that the two water boards have agreed that the Los Angeles RWQCB will provide regulatory oversight of the subject property.

During 1983 and 1984, geotechnical investigations were conducted to evaluate the site for potential development (Converse, 1983a and 1984b). These investigation activities included geologic mapping, test borings and pits, soil sampling, observations of the landfill operation, hydrogeologic studies, and installation of at least 11 on-site piezometers ranging in depth from approximately 30 to 199 feet bgs. Records reviewed do not indicate that soil or groundwater samples were collected for chemical analysis as part of these investigations. Observations conducted between June 1983 and June 1984 indicated that landfill operations generally were not supervised (Converse, 1984a). Landfill materials reportedly consisted of approximately 50 to 70 percent clean soil, and 30 to 50 percent solid material including concrete, brick, and plaster board with small amounts of wood and metal (LeRoy Crandall, 1986).

Documents reviewed suggest that landfill operations were suspended in 1984 in anticipation of possible development of the site as a business park. An environmental impact report (EIR) was prepared for CFC, which acquired the site in 1986 (EDAW, 1984). Subsequently, an environmental site assessment also was conducted to evaluate the potential presence of hazardous substances (LeRoy Crandall, 1986). This assessment included a site inspection, organic vapor screening in shallow (up to 3 feet deep) hand-pushed probes and within existing piezometer casings, collection and analysis of soil samples collected during completion of 17 soil borings up to approximately 50 feet deep, and conversion of four of these borings to vapor monitoring wells. OVA readings greater than background were reported at three sampling points located within a mound of fill near the southeast corner of the site. A layer of black soil with "a strong odor of septic waste" was encountered at a depth of approximately 2 feet in this area; subsequent laboratory analysis of this black soil reported that it did not contain petroleum hydrocarbons or VOCs above laboratory reporting limits. Composite soil samples collected in borings drilled at the site contained hydrocarbon concentrations between 280 and 1900

milligrams per kilogram (mg/kg), but these were attributed to asphalt fragments present in the samples analyzed. No VOCs were detected in soil samples analyzed; two samples also analyzed for polychlorinated biphenyls (PCBs) also did not contain tested compounds above laboratory reporting limits. Organic vapor readings collected from the four vapor monitoring wells ranged from less than 10 to 80 parts per million (ppm) and were attributed to decomposing organic debris encountered during drilling.

In 1987, CFC evaluated closing the landfill (CFC, 1987). This landfill closure report summarized landfill closure issues, legal status and regulation issues, and technical requirements and costs of closing and/or sealing the landfill. The subject property was sold in 1987 to Arrow/Claremont Venture, and then to Claremont University Center in 1988 (Claremont University Center, 1991). In a 1991 letter to the RWQCB, the Claremont University Center states that it would like to maintain its existing waste discharge requirements as an inert materials landfill.

In response to a notification received from the RWQCB in January 1988, Law Environmental (1989 and 1990) prepared solid waste assessment test (SWAT) reports on the pit for the CalMat Company (formerly Conrock). These assessments included groundwater monitoring results for a well located on the northern part of the pit property (Well A) and five other deep wells in the site vicinity. Direction and approximate distances from the pit to the five off-site SWAT monitoring wells are: one well almost 1 mile north; one well almost 0.25 mile west; one well approximately 0.25 mile south; and two wells approximately 0.75 mile southwest of the southwest corner of the pit. Low concentrations of xylenes (2 to 5 micrograms per liter [µg/l]) were detected in three off-site wells during one monitoring event, but Law Environmental (1990) noted that the presence of xylenes in groundwater is "a common occurrence throughout the basin" and the result of leaking fuel USTs. The current MCL for total xylenes is 1,750 µg/l.

In December 2000, CUC applied to the County of San Bernardino for a Conditional Use Permit (CUP) to dispose of inert material from a large CalTrans project; however, CUC did not win its bid to purchase this inert material and disposal of this CalTrans waste at the pit did not occur (CUC, 2000 and 2001).

In May 2000, the RWQCB requested that CUC demonstrate that material disposed of in the pit does not pose a threat to groundwater quality (ATC, 2001a). Documents reviewed indicate that a report on the operational history of the landfill was submitted by ATC to the RWQCB in August 2000, but that the report did not present adequate information for the RWQCB to conclude whether the landfill had impacted groundwater (RWQCB, 2000). The RWQCB

issued a notice of non-compliance and requested that Claremont University Center comply with Order No. 00-070 and implement a groundwater monitoring program for the site (RWQCB, 2000). Based on results of three quarterly groundwater monitoring events in 1989 and 1990, the RWQCB approved the SWAT in March 2001 and agreed that these data indicate that waste disposal at the site has had no adverse impact on groundwater resources at the site (RWQCB, 2001a); however, the RWQCB requested that groundwater monitoring be continued according to current waste discharge requirements. In May 2001, ATC submitted a report to demonstrate that additional groundwater monitoring was not necessary (ATC, 2001a). That report contains inspection sheets for landfill operations when Conrock operated the site as well as pit disposal records for 1998 to 2000 when the site was owned by CUC. According to the report, access to the landfill was limited to CUC contractors for disposal of excavation, construction, and demolition debris from CUC projects only. In response, the RWQCB requested one additional groundwater monitoring event, which was conducted in August 2001. During this event, one groundwater sample from Pit Well No. 1 was collected and analyzed; no constituents analyzed were detected above MCLs and metals and inorganic water quality parameters of the groundwater sample were similar to those of regional groundwater (ATC, 2001b). Based on these results, the RWQCB approved an updated groundwater monitoring program for the site (RWQCB, 2001b), which requires that groundwater monitoring of Well A be conducted every third year during the month of October starting in 2004. The groundwater monitoring parameters include VOCs, metals, and general chemistry testing. In a letter from CUC to the SWRCB, CUC states that as of summer 2002, CUC no longer accepts waste generated by agencies other than CUC (CUC, 2002).

4.2.2.2 Pitzer College

Files for Pitzer College reviewed by Geomatrix indicated that five diesel USTs formerly were located approximately 0.25 mile west of the site. Removal of the tanks was completed in 1989. Soil samples collected beneath the former tank locations contained low concentrations of petroleum hydrocarbon (less than the San Bernardino County guideline of 100 mg/kg and the case has been closed. Due to its distance from the site or likely hydraulic cross- or downgradient positions relative to groundwater flow, this release at Pitzer College is not expected to impact conditions at the subject property.

4.2.3 File Review at Los Angeles County Department of Public Works

Geomatrix reviewed files for the 76 Products Station at 601 East Foothill Boulevard, which currently is an open LUST case, as discussed above in Section 4.1.3. The file for this facility reported that a shallow soil gas survey conducted in 1997 indicated the presence of subsurface

gasoline impacts. The LADPW requested additional investigation in February 1999 and a work plan for soil sampling at this station was submitted in May 1999. At the time of our file review, approval for this work plan had not been given by the LADPW. As concluded above, due to the location of the 76 Products Station, it is not likely that impacts at this facility have adversely affected the subject property.

4.2.4 Division of Oil, Gas, and Geothermal Resources

Abandoned oil and gas wells can present an environmental concern due to potential methane migration or soil and groundwater contamination from mud pits, storage pits, or other features. Based on maps available from the State of California, Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR), the subject property lies outside the mapped limits of known oil fields and outside the limits of DOGGR wildcat maps. The EDR physical setting report map does not show oil or gas wells within 1 mile of the site (EDR, 2003d). Based on this information, oil and gas wells do not represent a REC for the subject property.

4.2.5 State Fire Marshall's Office

The California State Fire Marshal's (CSFM) office was contacted to assess whether underground oil, gas, natural gas, or refined petroleum hydrocarbon pipelines are present beneath the subject site. CSFM indicated that no pipelines under its jurisdiction are present at the subject site (Appendix F).

5.0 RECONNAISSANCE FINDINGS

Craig Stewart and Nancy Boschetto of Geomatrix conducted a reconnaissance of the site on March 4, 2004. Mr. Morrison of CUC accompanied Geomatrix during portions of the site visit. Findings of the reconnaissance are summarized below. Photographs taken of the subject site at the time of the site reconnaissance are provided in Appendix G.

The majority of the site is occupied by a quarry that has been partially backfilled and graded in areas with what appears to be soil, rock, and predominantly inert waste material. Much of the side slopes and base of the pit are covered with grasses and shrub-like vegetation. A relatively narrow strip around the site perimeter was not excavated during former mining operations and remains at the approximate ground surface elevation of surrounding properties. Except for the archery range on the west side of the pit, no buildings or other structures are present at the subject property. A small power line extends onto the northwest corner of the subject property from Foothill Boulevard. Mr. Morrison indicated that this power line provides power to a water supply well at this location. Documents reviewed indicate a groundwater supply well,

identified as Well A (later as Pit Well No. 1) and owned by "Claremont Colleges," at this location (Law Environmental, 1989; ATC, 2001b); additional information on this well is presented above in Section 3.5. According to Mr. Morrison, the site is not served by a public water supply system.

Fill material observed during our reconnaissance consisted primarily of soil, rock, and concrete debris with lesser amounts of asphaltic concrete, wood, metal, and other miscellaneous materials (Figures G-3 through G-6). Some of the wood consisted of old telephone or power poles and appeared to be treated with creosote or similar material. Some of the concrete rubble contained rebar. Isolated pieces of plastic, fabric, ceramic, and metal trash, tires, and a small fire pit also were observed. A small pile, approximately 10 feet in diameter, of orange-brown sand and slag-like material was present in the west-central part of the pit (Figure G-7); the source and composition of this material were not apparent. Approximately 300 feet south of the orange-brown material, we observed a small pile (less than 5 feet in diameter) of whitish material that appeared similar to dried plaster or grout (Figure G-8); some of this material was formed into cylindrical shapes and may be related to former boring activities at the site.

During our site walk, ponded water was observed in the lower, southern portion of the pit (Figure G-9). Small areas of standing water that apparently had accumulated during recent rains also were noted on dirt roads in the southern half of the pit. No discoloration or sheen on surface water in the pit was noted at the time of our reconnaissance. A concrete or gunite terrace swale and down drain system is located along the upper portion of the eastern sidewall of the pit (Figure G-10). PVC pipes apparently corresponding to discharge points of a subdrain system were observed exiting the subsurface at intervals along the lower portions of the eastern pit wall (Figure G-11); no flow from these pipes was observed at the time of our site visit.

At three locations, features potentially corresponding to previously-installed groundwater monitoring wells were observed. A pair of PVC casings was observed sticking up approximately 2 feet above ground surface in the lower southwest portion of the pit (Figure G-12). PVC pipes were observed sticking up approximately 10 feet above ground surface at two locations in the central portion of the pit (Figures G-13 and G-14).

6.0 CONCLUSIONS

Geomatrix has performed this Phase I in general accordance with the scope and limitations of the ASTM E1527-00 standard. Exceptions to, or deletions from, this practice are described in Sections 1.4 and 1.5 of this report. Our conclusions are intended to help CUC evaluate the

"business environmental risk" associated with the site, as defined in the ASTM E1527-00 standard and discussed in this report. In addition, completion of this ASTM Phase I is intended to satisfy the "all appropriate inquiry" requirement for innocent landowner defense to CERCLA liability, as discussed in Appendix XI of the ASTM E1527-00 standard.

Based on our observations and the results obtained during our Phase I assessment of the subject property, the landfill on the subject property is considered a REC because of the uncertainty associated with types and composition of materials disposed of in the landfill and the inherent risks that the landfill creates for future use of the site and groundwater quality. Among the features related to the landfill the may contribute to these risks include potentially improperly abandoned monitoring wells and the orange-brown slag-like material of unknown composition observed during our reconnaissance.

7.0 CREDENTIALS

This report was prepared by Katherine Howe, Staff Geologist, and Nancy Boschetto, Senior Geologist, under the direct supervision of Craig Stewart, R.G., C.Hg., Principal Hydrogeologist. Qualifications for the project personnel are provided below.

Katherine Howe has more than eight years of experience in conducting field activities for soil and groundwater investigations, including preparation of technical reports summarizing investigation results. She has conducted Phase I assessments for sites located throughout southern California. Ms. Howe has a B.S. in Geology and a M.S. in Hydrogeology.

Nancy Boschetto has a B.S. degree in Geology and a M.S. degree in Geophysics and has more than 13 years of experience in environmental consulting. Ms. Boschetto has conducted numerous Phase I and Phase II assessments of various commercial and industrial properties in California. Her experience includes planning and implementing environmental site assessments, soil and groundwater impact studies, and due diligence.

Craig Stewart has more than 20 years of experience in applied hydrogeology, with specific experience in conducting environmental site assessments, soil and groundwater contamination assessments, preparing remedial investigation and feasibility study reports, developing remedial action plans, developing cost estimates, and evaluation of groundwater resources. He has a B.S. degree for an Independent Program of Studies in Geological Engineering and a M.A. degree in Geology. Mr. Stewart is a registered geologist and certified hydrogeologist in California.

8.0 REFERENCES

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GEOMATRIX

FIGURES

APPENDIX A

HISTORICAL TOPOGRAPHIC MAPS

The EDR-Historical Topographic Map Report

Pit Property
Foothill Blvd./Claremont Blvd.
Claremont, CA 91711

October 28, 2003

Inquiry Number: 1070546-5

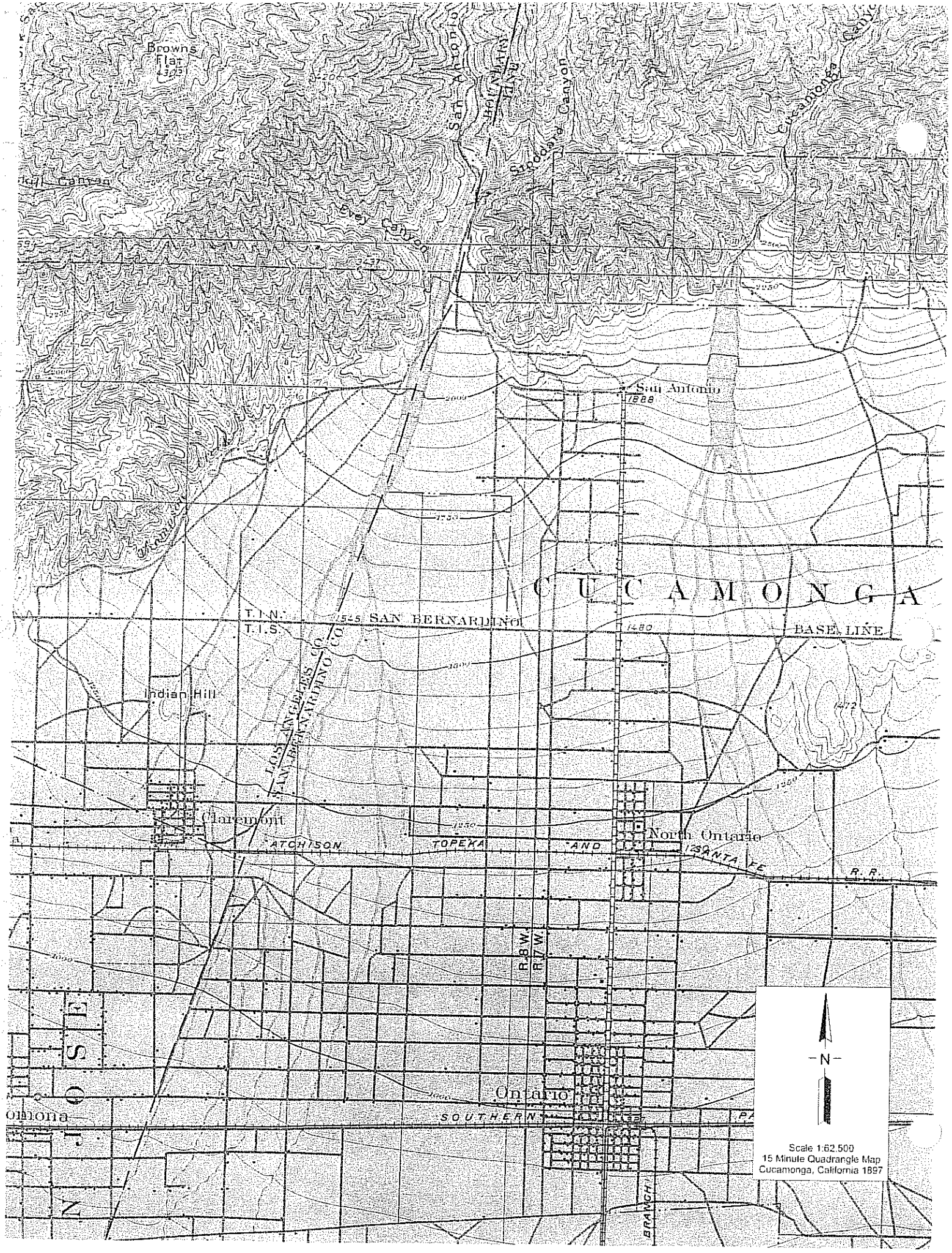
Environmental Data Resources, Inc.
an edr company

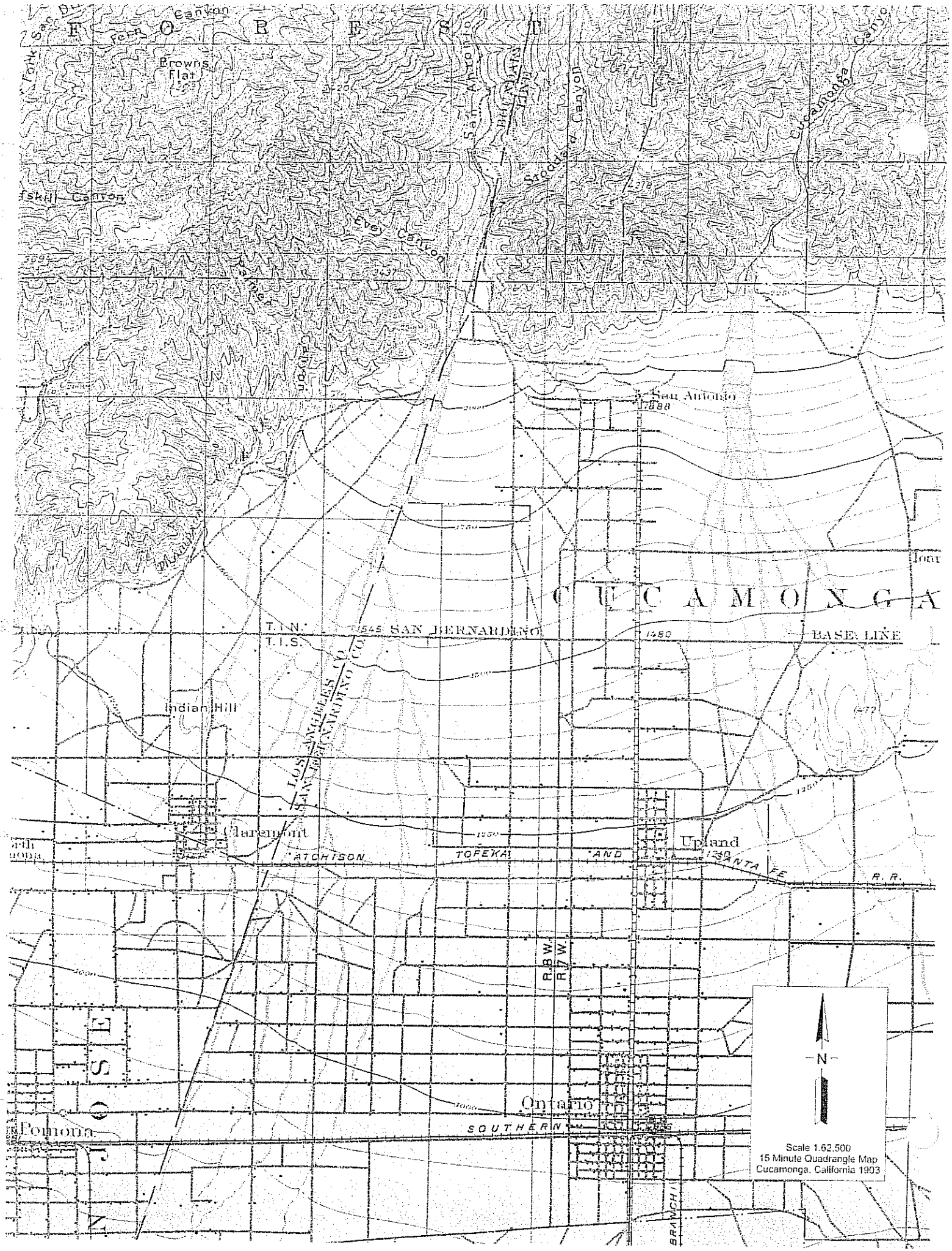
The Source For Environmental Risk Management Data

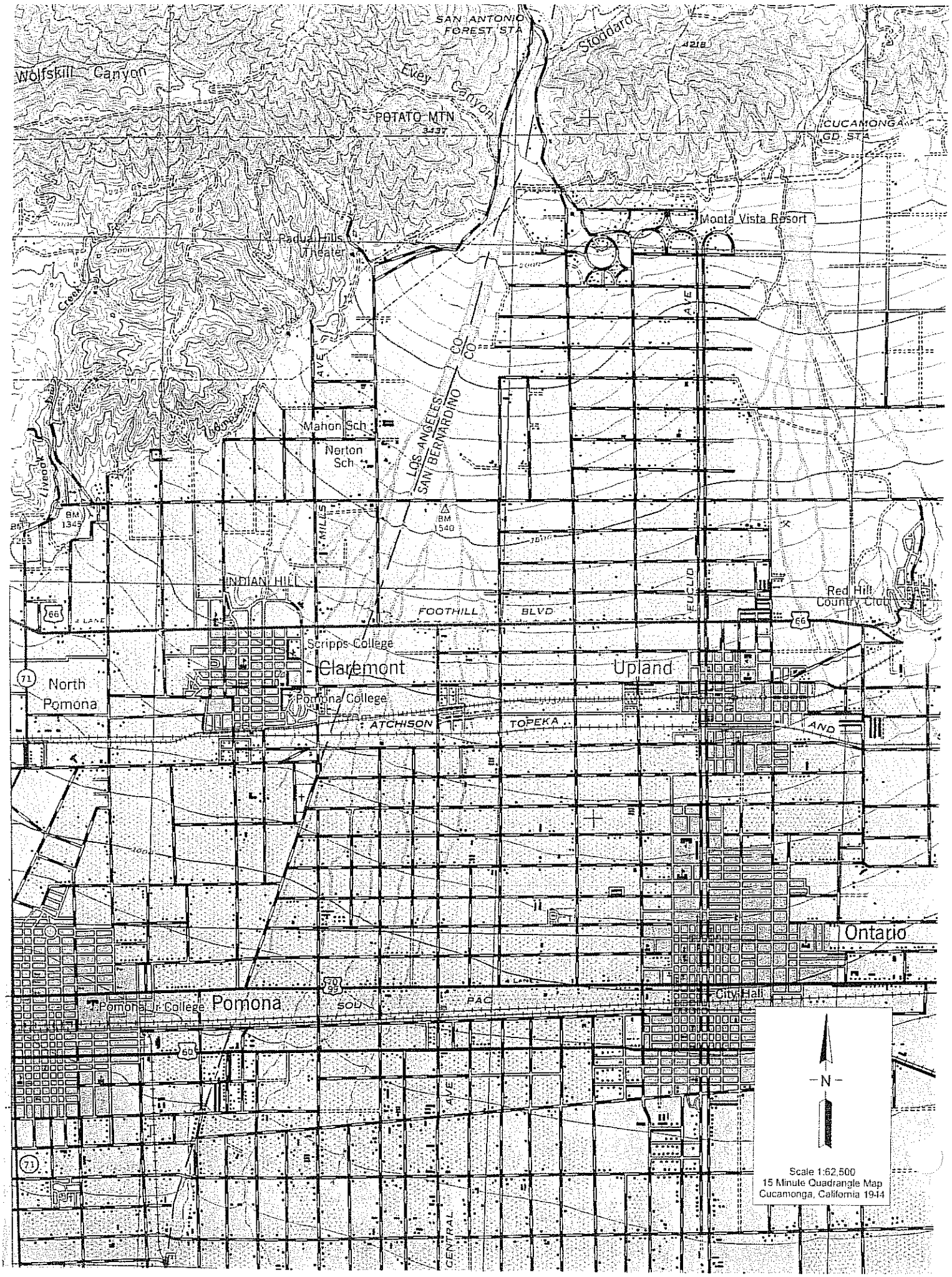
3530 Post Road
Southport, Connecticut 06490

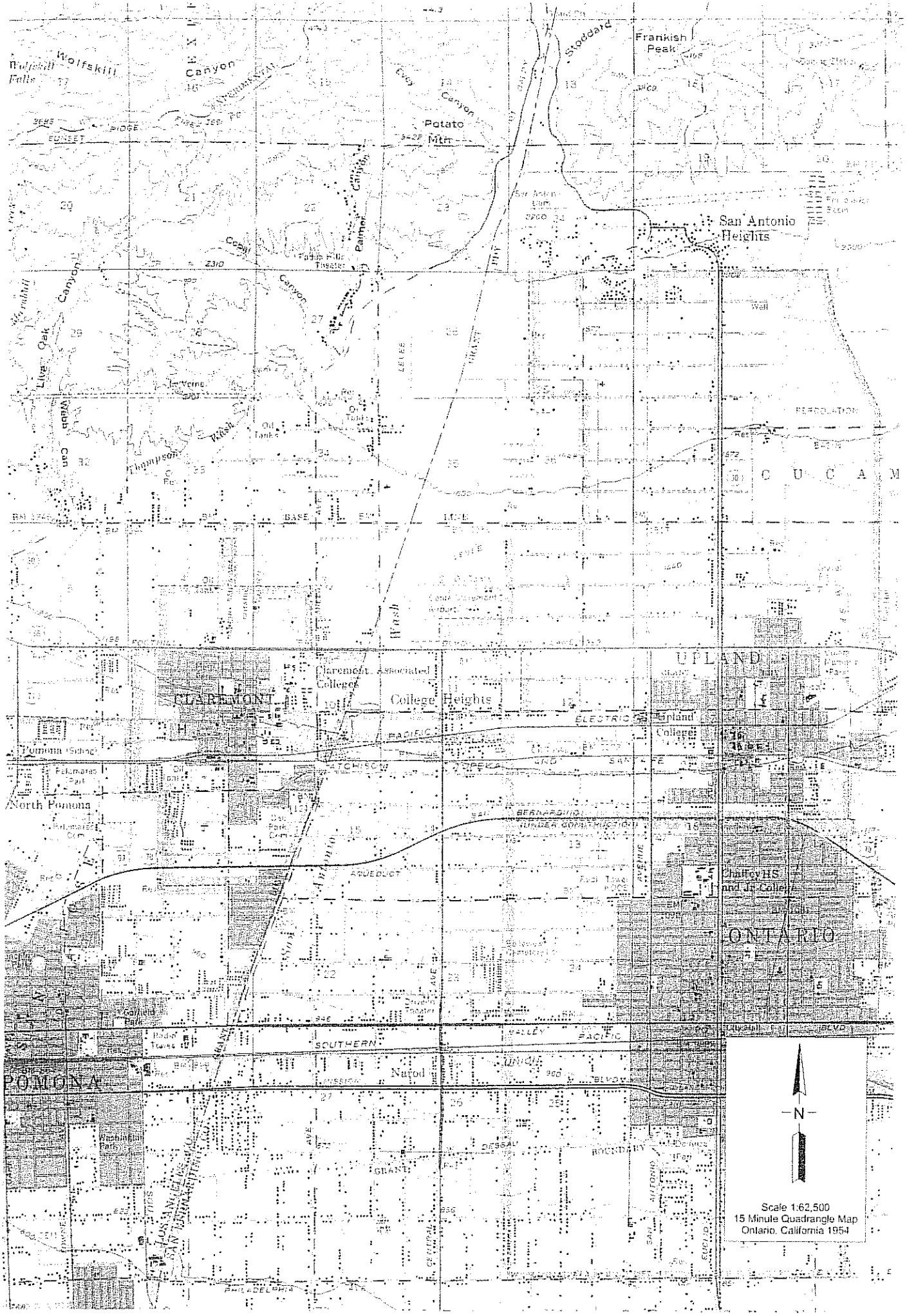
Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802


Browns Flat
San Antonio
Big Canyon
Cucamonga Canyon
CUCAMONGA
T. I N.
T. I S.
SAN BERNARDINO
BASE LINE
LOS ANGELES CO.
SAN BERNARDINO CO.
Indian Hill
Claremont
North Ontario
ATCHISON TOPEKA AND SANTA FE R. R.
R. 8 W.
R. 7 W.
Ontario
SOUTHERN
BRANCH
N
Scale 1:62,500
15 Minute Quadrangle Map
Cucamonga, California 1897


F O R E S T
Browns Flat
Eve Canyon
San Antonio
Cucamonga Canyon
Indian Hill
Claremont
Upland
Ontario
Pomona
SAN BERNARDINO
BASE LINE
T. 1 N.
T. 1 S.
R. 8 W.
R. 7 W.
ATCHISON TOPEKA AND SANTA FE R. R.
SOUTHERN
BRANCH
N
Scale 1:62,500
15 Minute Quadrangle Map
Cucamonga, California 1903


SAN ANTONIO FOREST STA
Stoddard
Wolfskill Canyon
Ekey Canyon
POTATO MTN
3437
CUCAMONGA GD STA
Monta Vista Resort
Padua Hills Theater
Mahon Sch
Norton Sch
LOS ANGELES CO
SAN BERNARDINO CO
BM 1540
BM 1349
INDIAN HILL
FOOTHILL BLVD
Red Hill Country Club
Scripps College
Claremont
Upland
North Pomona
Pomona College
ATCHISON TOPEKA AND
Ontario
City Hall
Pomona Jr College
Pomona
SOU PAC
N
Scale 1:62,500
15 Minute Quadrangle Map
Cucamonga, California 1944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Wolfskill Canyon
Stoddard
Frankish Peak
Potato Mtn
San Antonio Heights
Live Oak Canyon
Thompson Wash
Palmer Canyon
Cogil Canyon
Wash
C U C A M
UPLAND
Claremont Associated Colleges
College Heights
CLAREMONT
Upland College
Pomona (Siding)
North Pomona
Chaffey HS and Jr College
ONTARIO
POMONA
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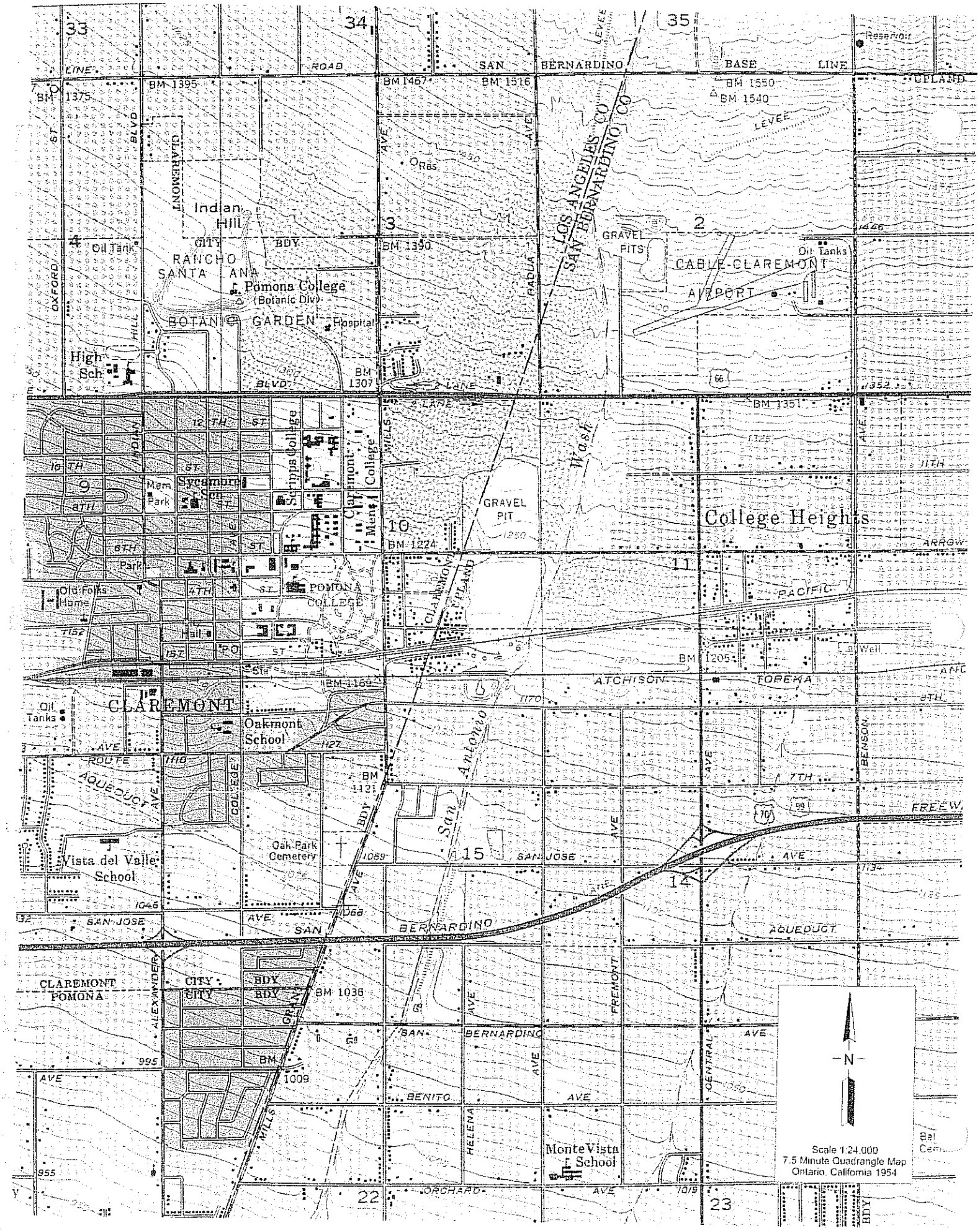
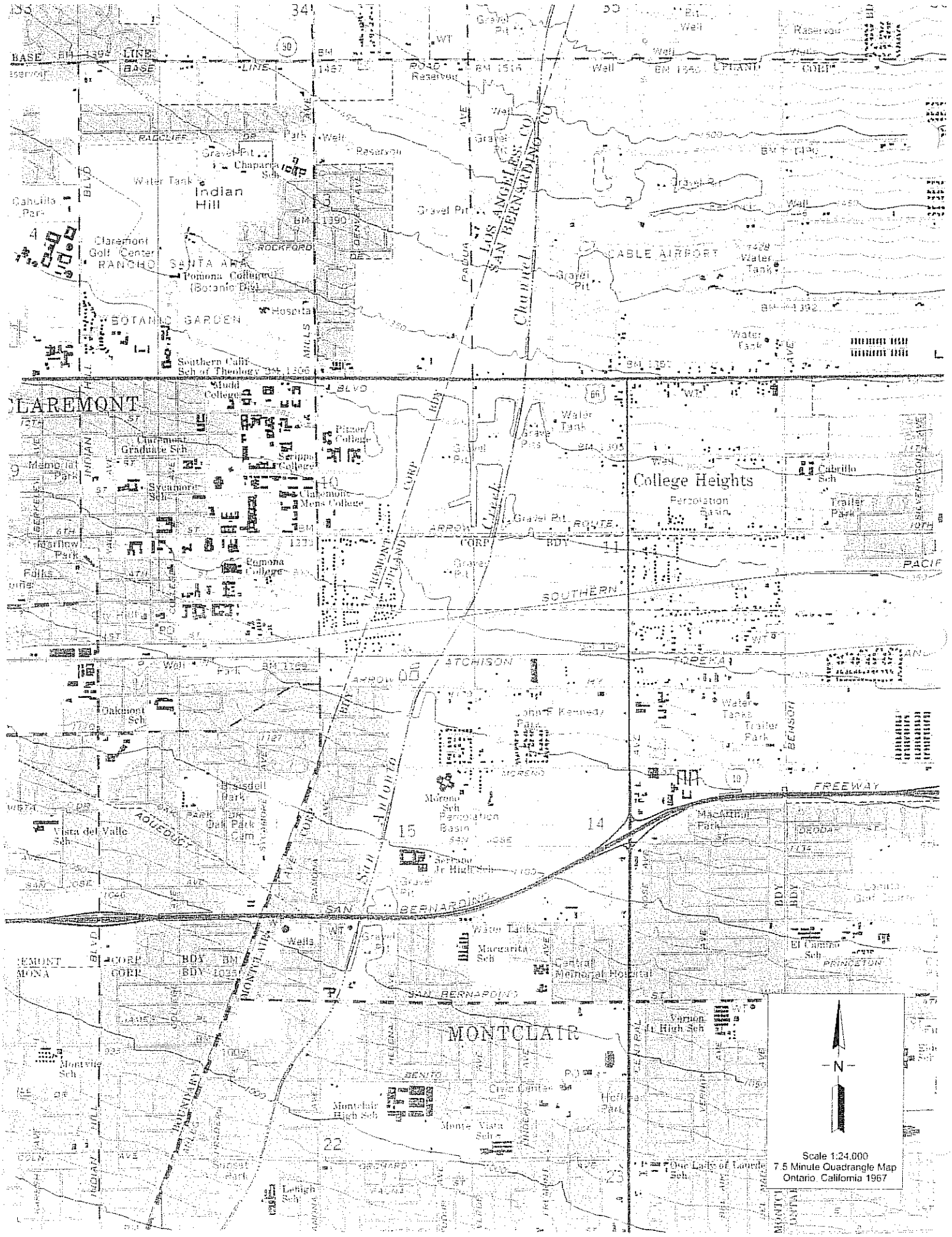
N
Scale 1:62,500
15 Minute Quadrangle Map
Ontario, California 1954


SAN BERNARDINO BASE LINE
UPLAND
LEVEE
Reservoir
LOS ANGELES CO
SAN BERNARDINO CO
Indian Hill
CLAREMONT
CITY BDY
RANCHO SANTA ANA
Pomona College
(Botanic Div)
BOTANIC GARDEN
Hospital
High Sch
Oil Tank
GRAVEL PITS
CABLE-CLAREMONT AIRPORT
Oil Tanks
Scripps College
Claremont Men's College
Sycamore Sch
Mem Park
Park
Old Folks Home
POMONA COLLEGE
Hall
GRAVEL PIT
College Heights
PACIFIC
ATCHISON TOPEKA
Well
CLAREMONT
Oakmont School
AQUEDUCT
Vista del Valle School
Oak Park Cemetery
San Antonio
SAN JOSE AVE
SAN BERNARDINO
FREEWAY
CLAREMONT
POMONA
BENITO AVE
MonteVista School
ORCHARD AVE
N
Scale 1:24,000
7.5 Minute Quadrangle Map
Ontario, California 1954


Indian Hill
Claremont Golf Center
RANCHO SANTA ANA
Pomona College (Botanic Div)
BOTANICAL GARDEN
Southern Calif Sch of Theology
CLAREMONT
Claremont Graduate Sch
Pitzer College
Scripps College
Claremont Mens College
Pomona College
College Heights
Percolation Basin
Trailer Park
Cabrillo Sch
Oakmont Sch
Vista del Valle Sch
Moreno Sch
Percolation Basin
Serrano Jr High Sch
Margarita Sch
Central Memorial Hospital
MONTCLAIR
Montclair High Sch
Monte Vista Sch
Vernon Jr High Sch
El Camino Sch
Our Lady of Lourde Sch
Lehigh Sch
Sunset Park
Hoff Park
Civic Center
Water Tank
Reservoir
Gravel Pit
Well
Park
LOS ANGELES CO
SAN BERNARDINO CO
ATCHISON
TOPEKA
SOUTHERN
PACIF
SAN BERNARDINO
FREEWAY
AQUEDUCT
MONTCLAIR
BOUNDARY
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RAILROAD
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7.5 Minute Quadrangle Map
Ontario, California 1967
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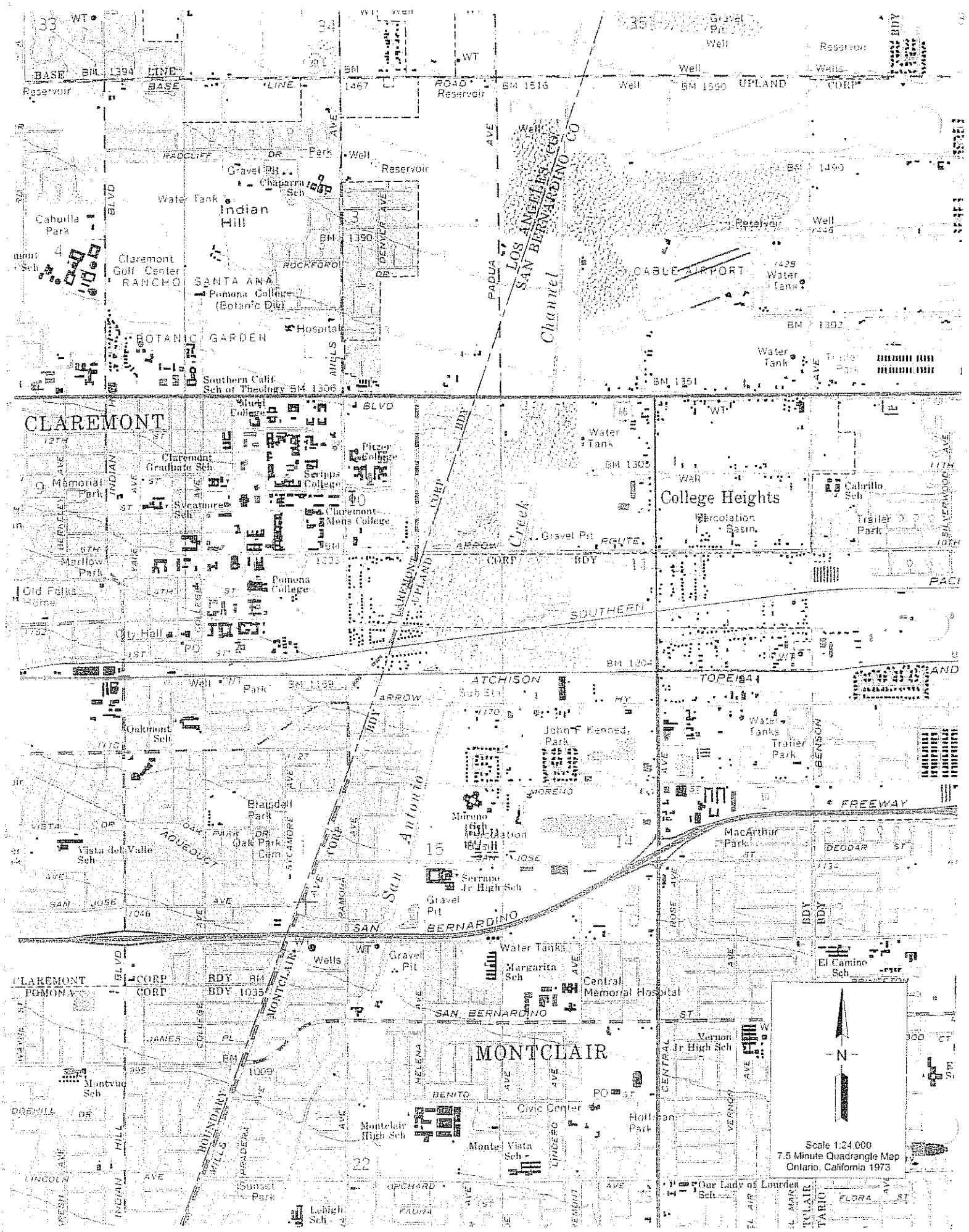
CLAREMONT
MONTCLAIR
College Heights
Indian Hill
Pomona College
Claremont Mens College
Scripps College
Pitzer College
Claremont Graduate Sch
Sycamore Sch
Mt Sch
Southern Calif Sch of Theology
Claremont Golf Center
RANCHO SANTA ANA
Pomona College (Botanic Dir)
BOTANIC GARDEN
Hospital
Cahuilla Park
Mamonat Park
Marlow Park
Old Folks Home
City Hall
Oakmont Sch
Blaisdell Park
Oak Park Cem
Vista del Valle Sch
Montvue Sch
Sunset Park
Lehigh Sch
Montclair High Sch
Monte Vista Sch
Civic Center
Holt Park
Vernon Jr High Sch
Our Lady of Lourdes Sch
Central Memorial Hospital
Margarita Sch
Serrano Jr High Sch
Moreno High Sch
John F Kennedy Park
MacArthur Park
El Camino Sch
Cabrillo Sch
Trailer Park
Water Tanks
Water Tank
Percolation Basin
Gravel Pit
Wells
Reservoir
Park
Chaparral Sch
CABLE AIRPORT
LOS ANGELES CO
SAN BERNARDINO CO
Channel
San Antonio
Creek
UPLAND
CORP
BDY
SOUTHERN
ATCHISON
TOPEKA
SANTA FE
SAN BERNARDINO
FREEWAY
AQUEDUCT
BOUNDARY
N
Scale 1:24 000
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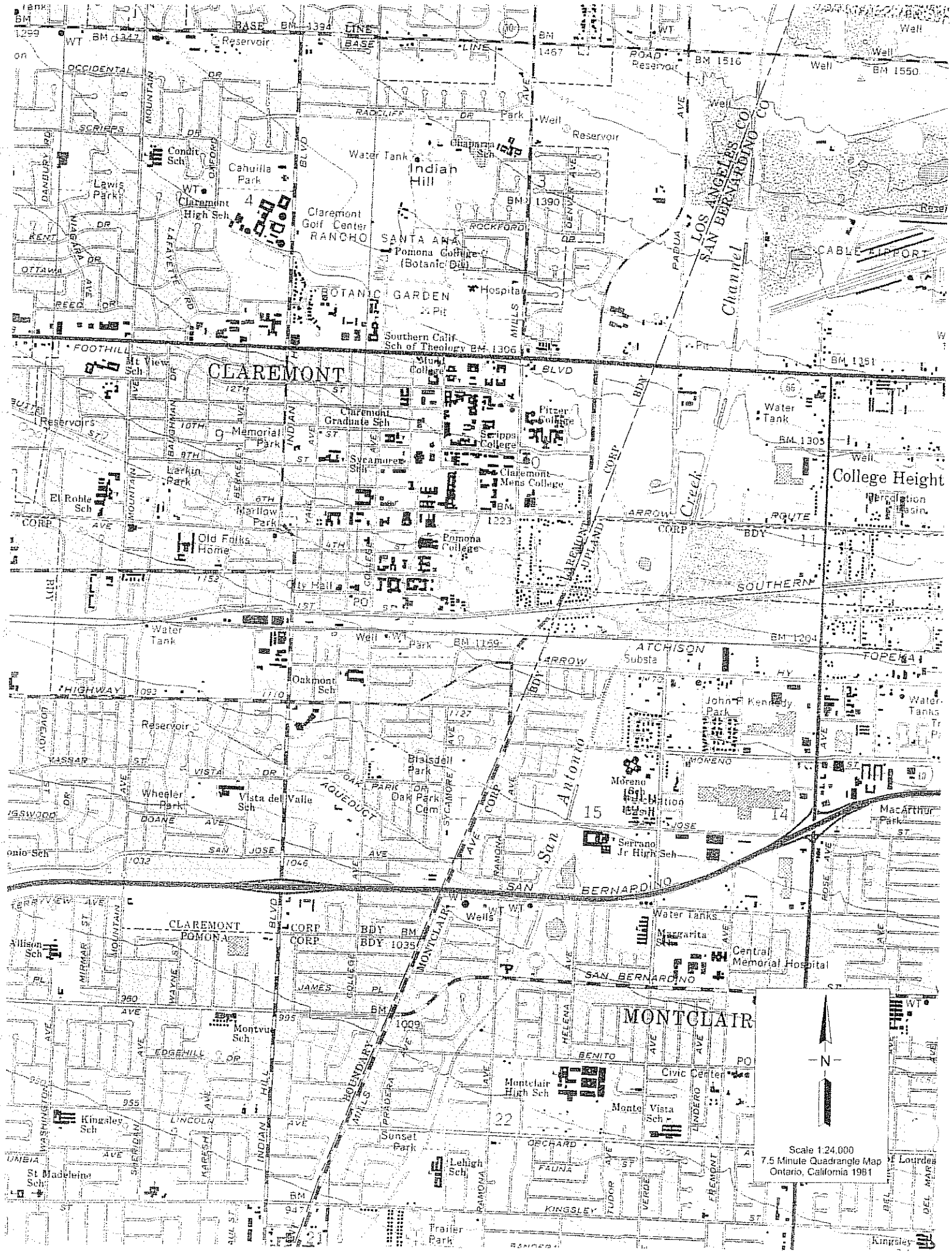
Ontario, California 1973


CLAREMONT
MONTCLAIR
College Height
Indian Hill
Claremont Golf Center
RANCHO SANTA ANA BOTANIC GARDEN
Pomona College (Botanic Gdn)
Claremont High Sch
Cahuilla Park
Lewis Park
Condit Sch
Chapman Sch
Water Tank
Reservoir
Hospital
Southern Calif Sch of Theology
Mt View Sch
Claremont Graduate Sch
Pitzer College
Scripps College
Claremont Mens College
Memorial Park
Sycamore Sch
Larkin Park
El Roble Sch
Marlow Park
Old Folks Home
Pomona College
City Hall
Oakmont Sch
Blaisdell Park
Wheeler Park
Vista del Valle Sch
Oak Park Cem
Moreno Sch
Serrano Jr High Sch
MacArthur Park
John F Kennedy Park
Central Memorial Hospital
Montvue Sch
Montclair High Sch
Civic Center
Monte Vista Sch
Kingsley Sch
Sunset Park
Lehigh Sch
St Madeleine Sch
Trailer Park
Allison Sch
Water Tanks
Substa
Los Angeles & San Bernardino Co
Cable Airport
Chaffey College
Kingsley
Scale 1:24,000
7.5 Minute Quadrangle Map
Ontario, California 1981
N

APPENDIX B

HISTORICAL AERIAL PHOTOGRAPHS

The EDR-Aerial Photography Print Service

Pit Property
Foothill Blvd./Claremont Blvd.
Claremont, CA 91711

October 28, 2003

Inquiry Number: 1070546-6

Environmental Data Resources, Inc.
an edr company

The Source For Environmental Risk Management Data

3530 Post Road
Southport, Connecticut 06490

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802

Inquiry : 1070546.6 Year : 1928 Flyer : Fairchild Scale : 1"=500'

Inquiry : 1070546.6 Year : 1949 Flyer : Fairchild Scale : 1"=500'

Inquiry : 1070546.6 Year : 1952 Flyer : Pacific Air Scale : 1"=555'

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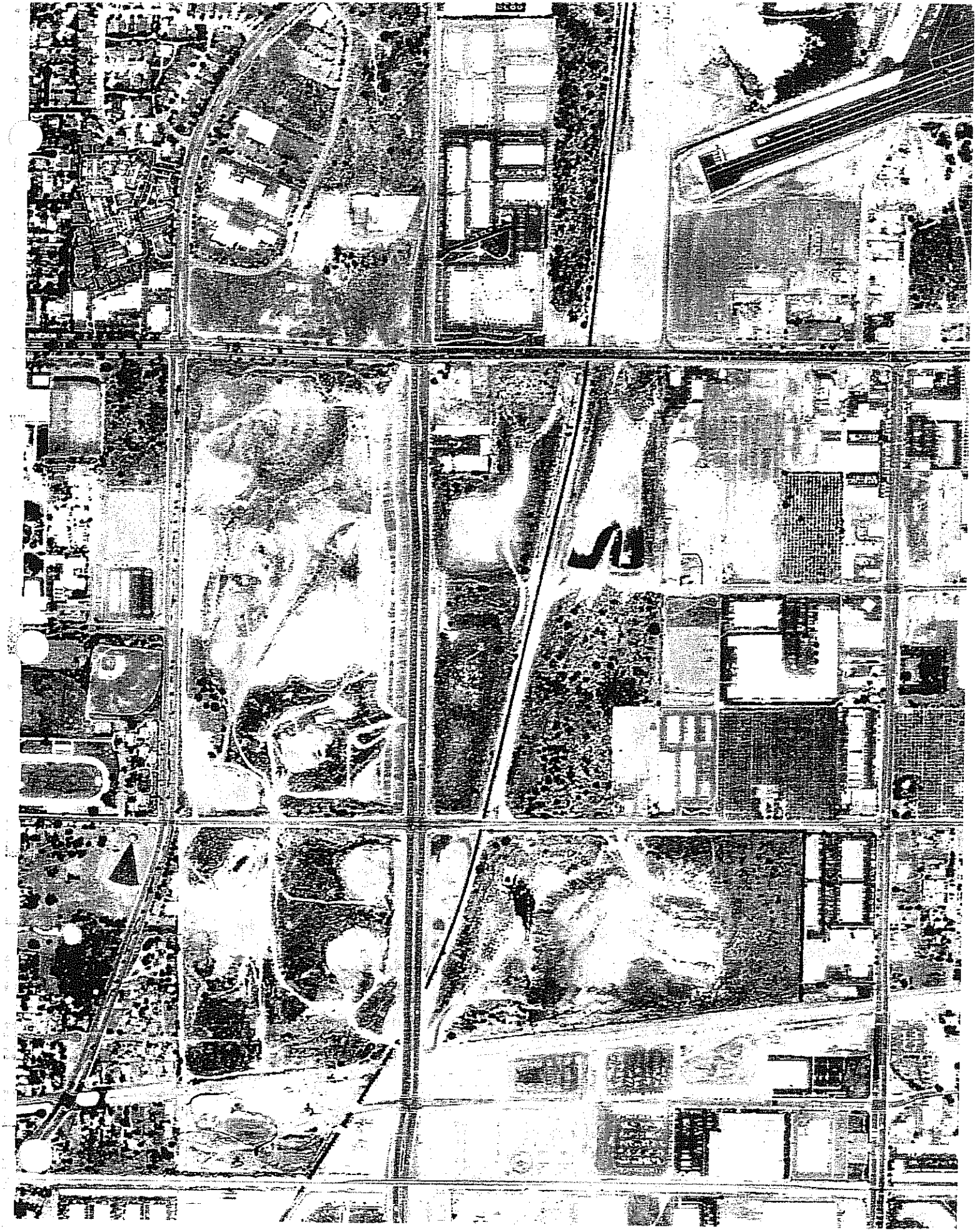

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Inquiry :1070546.6 Year : 2002 Flyer : USGS Scale : 1"=666'

APPENDIX C

SANBORN MAP REPORT

Environmental Data Resources, Inc.

"Linking Technology with Tradition"

Sanborn® Map Report

Ship to: Nancy Boschetto
Geomatrix Consultants
330 West Bay Street
Costa Mesa, CA 92627

Customer Project: NA
1064455NIC 949-642-0245

Order Date: 10/24/2003 **Completion Date:** 10/27/2003 7:18
Inquiry #: 1070546.4s
P.O. #: 9234/A
Site Name: Pit Property
Address: Foothill Blvd./Claremont Blvd.
City/State: Claremont, CA 91711
Cross Streets:

This document reports that the largest and most complete collection of Sanborn fire insurance maps has been reviewed based on client-supplied information, and fire insurance maps depicting the target property at the specified address were not identified.

NO COVERAGE

All maps provided pursuant to a Sanborn® Map Report are currently reproducible of fire insurance maps owned or licensed by Environmental Data Resources, Inc. NO WARRANTY, EXPRESSED OR IMPLIED IS MADE WHATSOEVER. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY CLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, WARRANTIES AS TO ACCURACY, VALIDITY, COMPLETENESS, ABILITY, CONDITION, QUALITY, MERCHANTABILITY, OR FITNESS FOR A PARTICULAR USE OR PURPOSE WITH RESPECT TO THE REPORT, THE MAPS, THE INFORMATION CONTAINED THEREIN, OR THE RESULTS OF A SEARCH OR OTHERWISE. ALL RISK IS ASSUMED BY THE USER. Environmental Data Resources, Inc. assumes no liability to any party for any loss or damage whether arising out of errors or omissions, negligence, accident or any other cause. In no event shall Environmental Data Resources, Inc., its affiliates or agents, be liable to anyone for special, incidental, consequential or exemplary damages.

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APPENDIX F

OFFICE OF THE STATE FIRE MARSHALL PIPELINE INFORMATION

Office of the State Fire Marshal
Pipeline Safety Division
1131 S Street
Sacramento, CA 95814

Date: October 20, 2003

To: Thandar Phyu
Geomatrix Consultants
330 W. Bay Street #140
Costa Mesa, CA 92627

Fax: (949) 642-4474
Phone: (949) 642-0246
Pages: 1

From: Lisa Dowdy
Phone: (916) 445-8477
Fax: (916) 445-8526

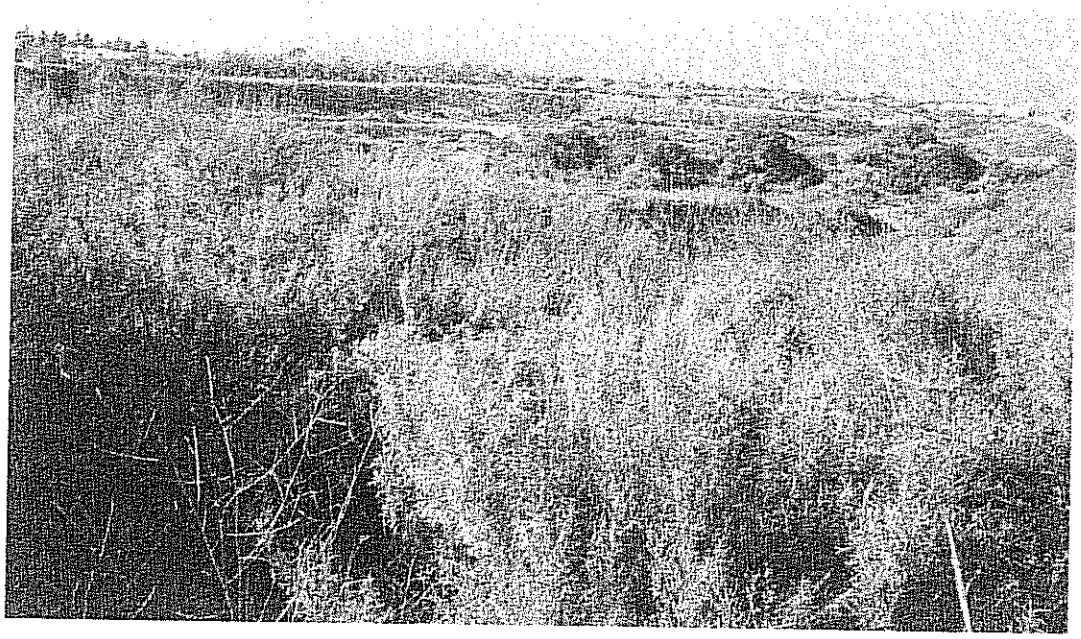
Subject: Pipeline Location Request: *For Project No. 9234, work site areas in Los Angeles and San Bernardino Counties.*

- *THERE ARE NO PIPELINES UNDER OSFM'S JURISDICTION AT THIS LOCATION.*
- *For Natural Gas pipelines please contact your local Gas Company.*
- *For other Oil's pipelines, please contact Division Oil & Gas at (714) 816-6847.*
- *For Public Utilities Please Contact the Public Utilities Commission at (415) 703-2782.*

Lisa Dowdy
Research Analyst I
Office Of California State Fire Marshal

APPENDIX G

SITE PHOTOGRAPHS



G-1. View to northwest from southeast corner of pit.

G-2. View to south of pit from Foothill Boulevard.

GEOMATRIX

SITE PHOTOGRAPHS

PIT PROPERTY
Claremont, California

Figure by	Project No
AY	9234
Date	Appendix
3/30/04	G

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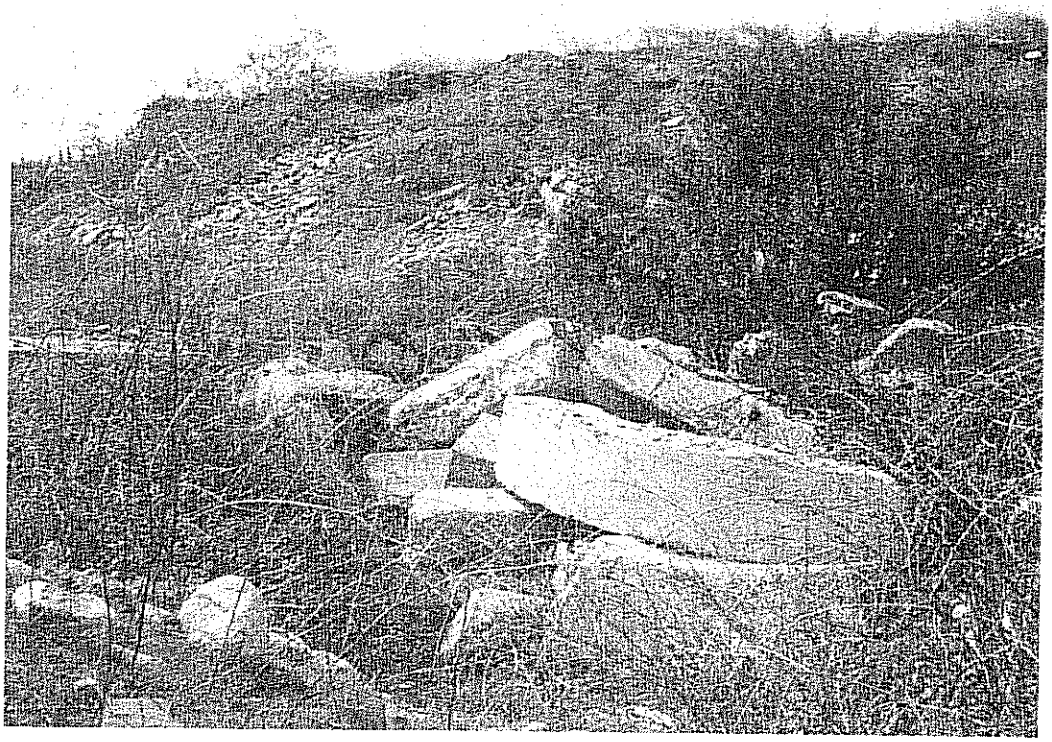
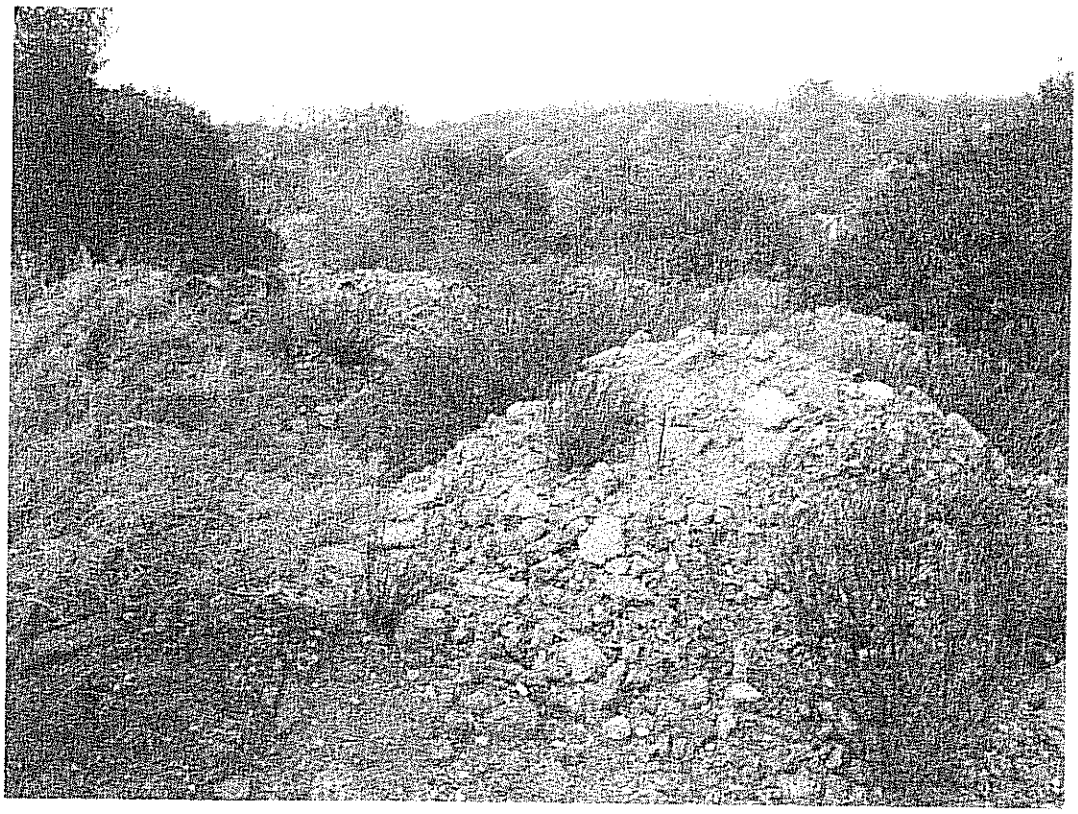


G-3. Concrete rubble near central-west edge of pit.



G-4. Asphaltic concrete rubble in northwest part of pit.

GEOMATRIX

SITE PHOTOGRAPHS

PIT PROPERTY
Claremont, California

Figure by	Project No.
AY	9234
Date	Appendix
3/30/04	G

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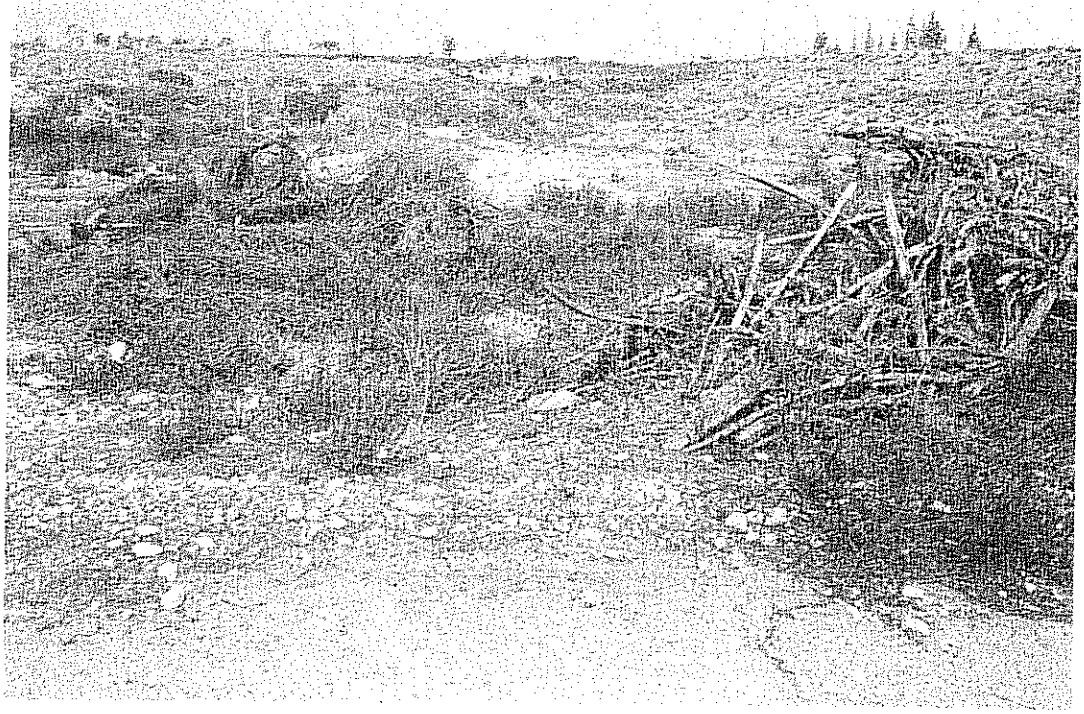
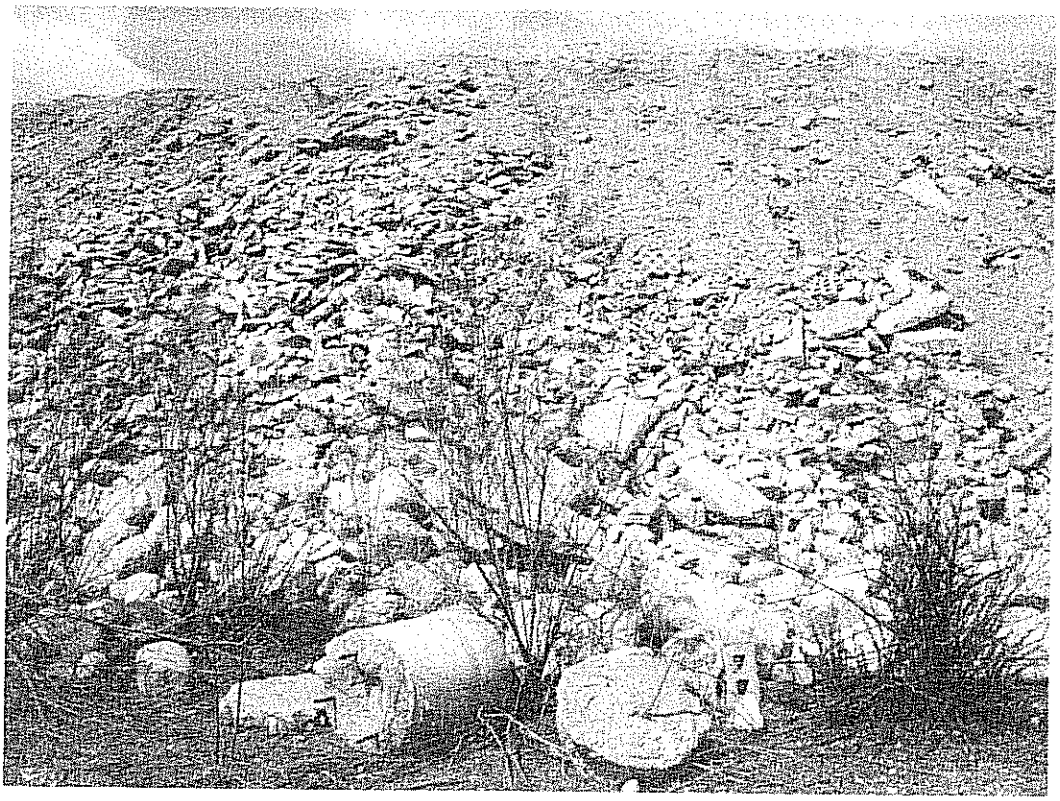


G-5. View to north of central portion of pit. Wood debris in center of photograph. PVC standpipe in background at left.



G-6. South-facing rubble slope in southwest area of pit.

GEOMATRIX

SITE PHOTOGRAPHS

PIT PROPERTY
Claremont, California

Figure by	Project No.
AY	9234
Date	Appendix
3/30/04	G

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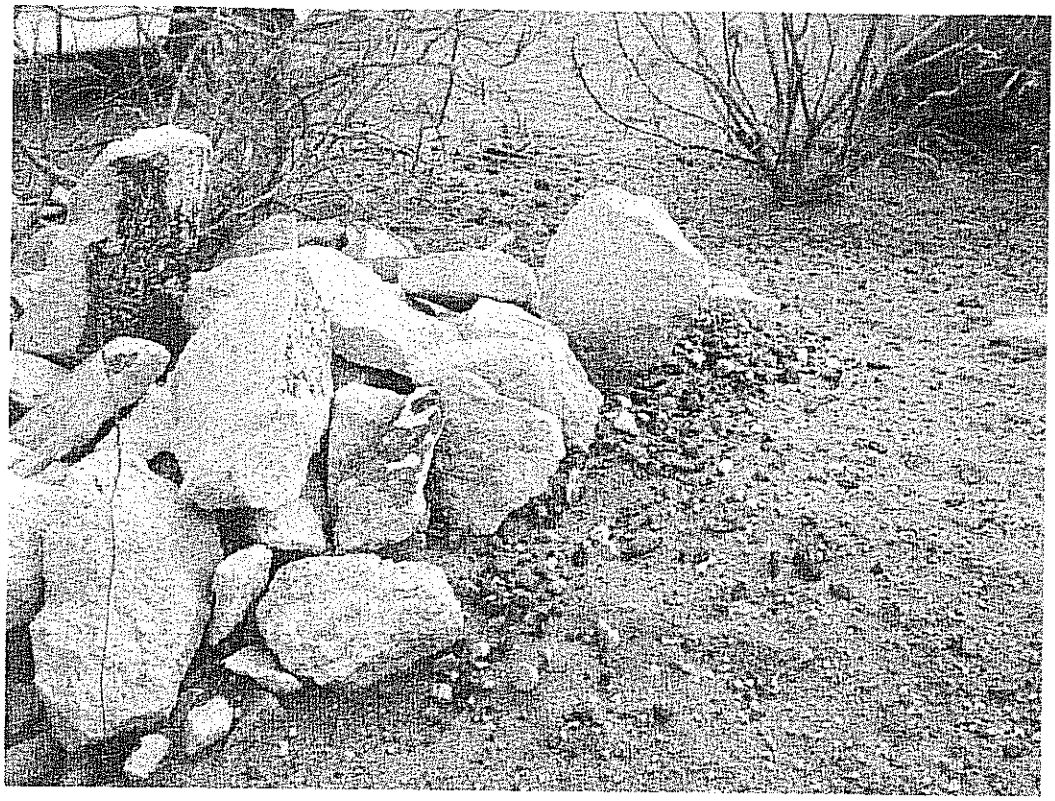
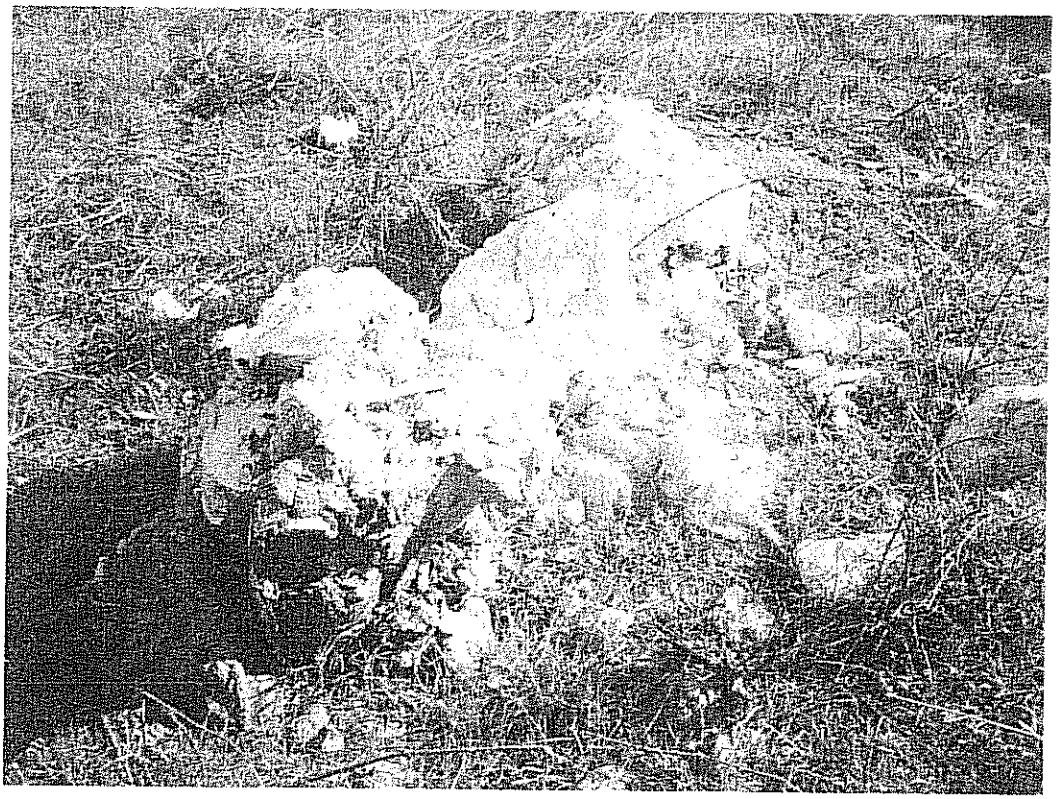


G-7. Concrete rubble adjacent to orange-brown material in northwest part of pit.



G-8. Dried plaster-like material in west-central pit, near toe of pit slope.

GEOMATRIX

SITE PHOTOGRAPHS

PIT PROPERTY
Claremont, California

Figure by	Project No.
AY	9234
Date	Appendix
3/30/04	G

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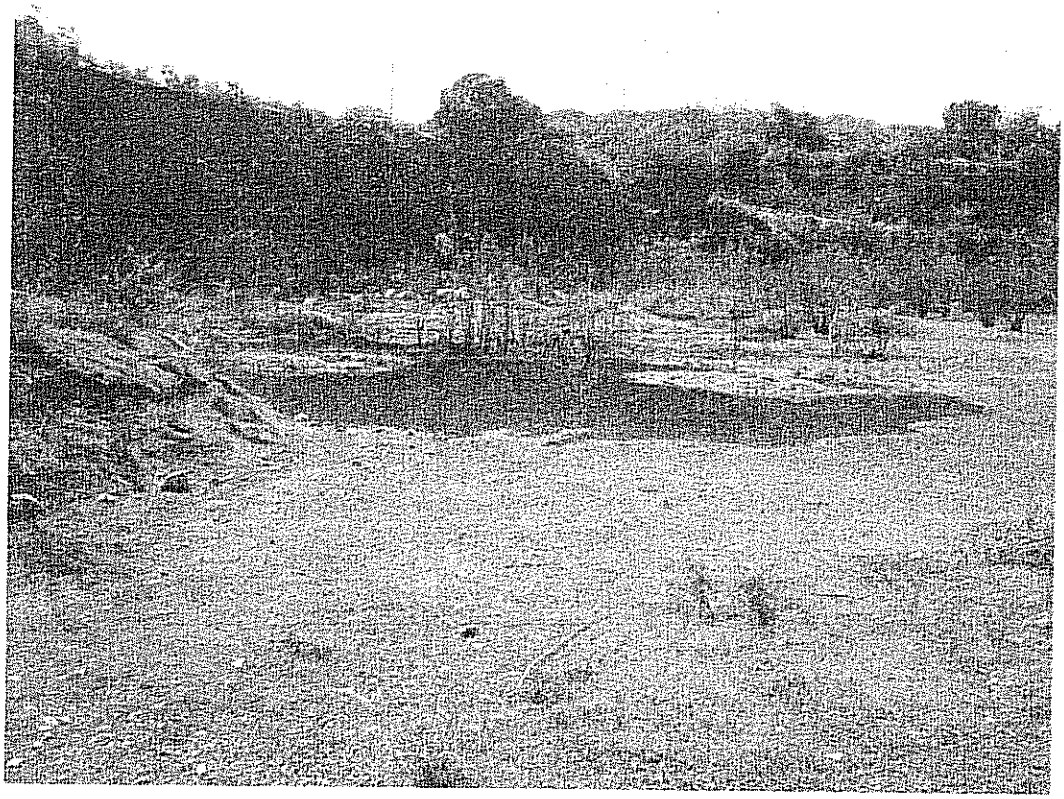
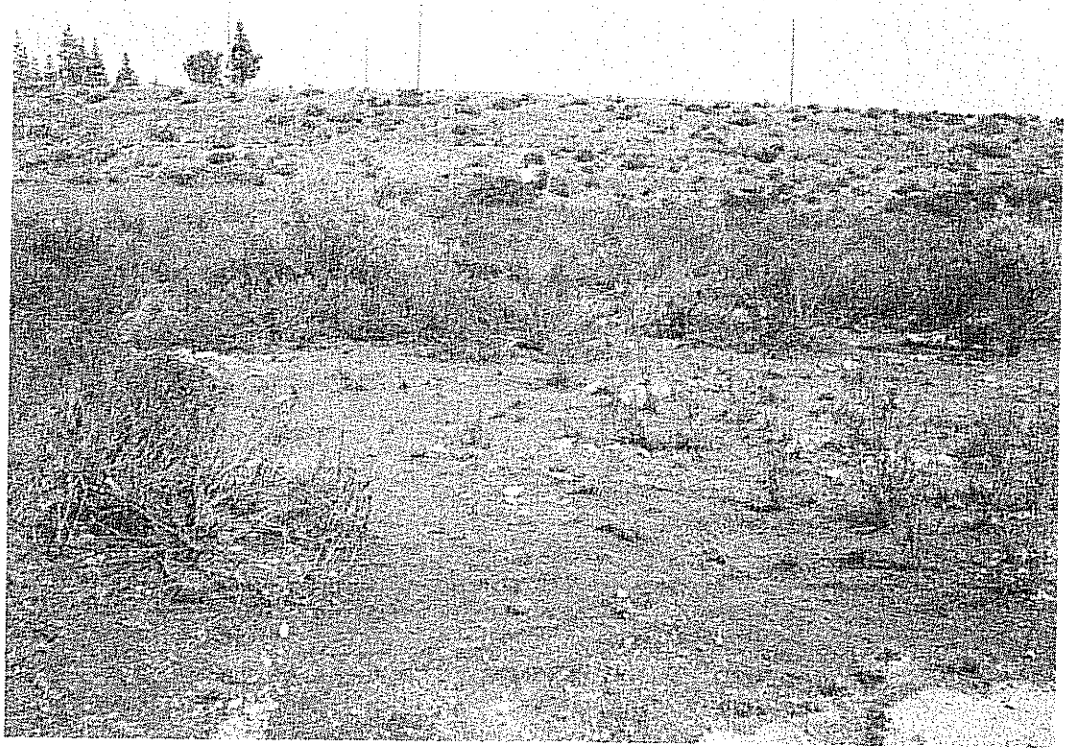


G-9. Standing water in lowest, southern portion of pit.



G-10. View to east of northeast wall of pit. Concrete terrace swale and down drain on pit side wall center of photograph.

GEOMATRIX

SITE PHOTOGRAPHS

PIT PROPERTY
Claremont, California

Figure by	Project No.
AY	9234
Date	Appendix
3/30/04	G

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G-11. Subdrain from beneath eastern side of pit.

G-12. PVC casing in lower southwest portion of pit.

GEOMATRIX

SITE PHOTOGRAPHS

PIT PROPERTY
Claremont, California

Figure by	Project No.
AY	9234
Date	Appendix
3/30/04	G

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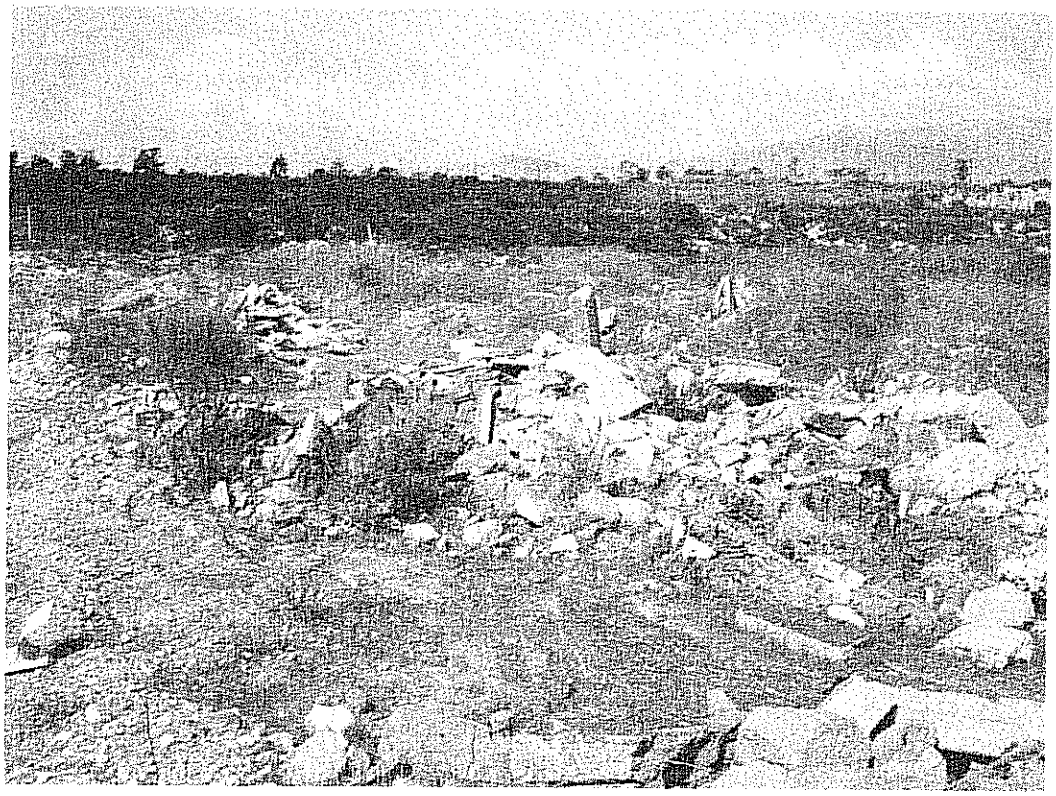
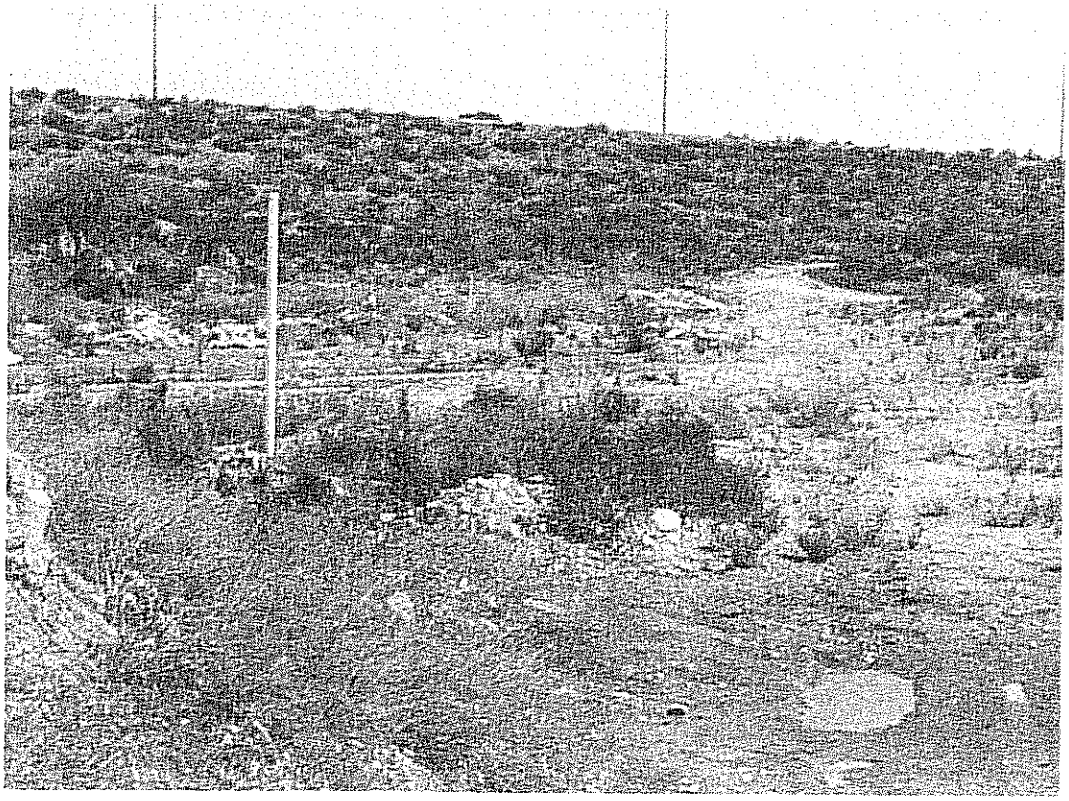


G-13. View to northwest from the central-east portion of the pit. Concrete rubble in foreground and two PVC riser pipes in left background in photograph.



G-14. View to east-southeast in from north-central part of pit. PVC standpipes in left foreground and center background.

GEOMATRIX

SITE PHOTOGRAPHS

PIT PROPERTY
Claremont, California

Figure by	Project No.
AY	9234
Date	Appendix
3/30/04	G

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GEOMATRIX

APPENDIX E

EDR RADIUS REPORT

:DR FieldCheck™ Report

with GeoCheck®

Pit Property
Foothill Blvd./Claremont Blvd.
Claremont, CA 91711

Inquiry Number: 1070546.3s

October 28, 2003

Environmental Data Resources, Inc.

The Source For Environmental Risk Management Data

3530 Post Road
Southport, Connecticut 06890

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

FORM-NIC

TABLE OF CONTENTS

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Overview Map	2
Detail Map	3
Map Findings Summary	4
Map Findings	6
Orphan Summary	41
Government Records Searched/Data Currency Tracking	GR-1

GEOCHECK ADDENDUM

Physical Setting Source Addendum	A-1
Physical Setting Source Summary	A-2
Physical Setting Source Map	A-7
Physical Setting Source Map Findings	A-8
Physical Setting Source Records Searched	A-46

Thank you for your business.

Please contact EDR at 1-800-352-0050
with any questions or comments.

Important: About The EDR FieldCheck (TM) Report

This is The EDR FieldCheck (TM) Report. Through its continuing emphasis in online technological advancements, EDR has developed the FieldCheck (TM) system, which enables EDR's customers to make certain online modifications to the maps and text contained in EDR Radius Map Reports. With FieldCheck (TM), an EDR customer can relocate and/or delete plotted sites and/or plot or delete orphan sites that would otherwise appear or be noted with an EDR Radius Map Report. Such modifications may be based on site visits, independent data verification and/or other actions taken or decisions made by EDR's customer. As a result, the maps and text contained in The EDR FieldCheck (TM) Report that you receive may have been so modified. Please note: EDR has not taken any action to verify any such modifications, and this report and the findings set forth herein must be read in light of this fact. GEOMATRIX CONSULTANTS should be contacted for information concerning all such modifications.

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EXECUTIVE SUMMARY

At the request of GEOMATRIX CONSULTANTS, a search of the environmental records covering the area detailed herein was conducted by Environmental Data Resources, Inc. (EDR). This report was derived from the results of such search, which, as conducted by EDR, met the government records search requirements of ASTM Standard Practice for Environmental Site Assessments, E 1527-00. Search distances were per ASTM standard or custom distances requested by the user.

NOTE: ALL MAPS AND TEXT INCLUDED HEREIN MAY HAVE BEEN MODIFIED BY GEOMATRIX CONSULTANTS BASED ON SITE VISITS, INDEPENDENT DATA VERIFICATION AND/OR OTHER ACTIONS TAKEN OR DECISIONS MADE BY GEOMATRIX CONSULTANTS. EDR HAS NOT TAKEN ANY ACTION TO VERIFY ANY OF SUCH MODIFICATIONS, AND THIS REPORT AND THE FINDINGS SET FORTH HEREIN MUST BE READ IN LIGHT OF THIS FACT. GEOMATRIX CONSULTANTS SHOULD BE CONTACTED FOR INFORMATION CONCERNING ALL SUCH MODIFICATIONS.

TARGET PROPERTY INFORMATION

ADDRESS

FOOTHILL BLVD./CLAREMONT BLVD.
CLAREMONT, CA 91711

COORDINATES

Latitude (North):	34.103500 - 34' 6' 12.6"
Longitude (West):	117.700700 - 117' 42' 2.5"
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	435368.4
UTM Y (Meters):	3773658.8
Elevation:	1243 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	2434117-A6 ONTARIO, CA
Source:	USGS 7.5 min quad index

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No sites were found in an online review and analysis by GEOMATRIX CONSULTANTS of EDR's search of available ("reasonably ascertainable") government records either on the target property or within the ASTM E 1527-00 search radius around the target property for the following databases:

FEDERAL ASTM STANDARD

NPL..... National Priority List
Proposed NPL..... Proposed National Priority List Sites
CERCLIS..... Comprehensive Environmental Response, Compensation, and Liability Information System

CERC-NFRAP	CERCLIS No Further Remedial Action Planned
CORRACTS	Corrective Action Report
RCRIS-TSD	Resource Conservation and Recovery Information System
ERNS	Emergency Response Notification System

STATE ASTM STANDARD

AWP	Annual Workplan Sites
Cal-Sites	Calsites Database
Toxic Pits	Toxic Pits Cleanup Act Sites
CA BOND EXP. PLAN	Bond Expenditure Plan
VCP	Voluntary Cleanup Program Properties
INDIAN UST	Underground Storage Tanks on Indian Land
HIST UST	Hazardous Substance Storage Container Database

FEDERAL ASTM SUPPLEMENTAL

CONSENT	Superfund (CERCLA) Consent Decrees
ROD	Records Of Decision
Delisted NPL	National Priority List Deletions
FINDS	Facility Index System/Facility Identification Initiative Program Summary Report
HMIRS	Hazardous Materials Information Reporting System
MLTS	Material Licensing Tracking System
MINES	Mines Master Index File
NPL Liens	Federal Superfund Liens
PADS	PCB Activity Database System
US BROWNFIELDS	A Listing of Brownfields Sites
DOD	Department of Defense Sites
RAATS	RCRA Administrative Action Tracking System
TRIS	Toxic Chemical Release Inventory System
TSCA	Toxic Substances Control Act
SSTS	Section 7 Tracking Systems
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

STATE OR LOCAL ASTM SUPPLEMENTAL

AST	Aboveground Petroleum Storage Tank Facilities
CLEANERS	Cleaner Facilities
CA WDS	Waste Discharge System
DEED	List of Deed Restrictions
NFA	No Further Action Determination
EMI	Emissions Inventory Data
REF	Unconfirmed Properties Referred to Another Agency
SCH	School Property Evaluation Program
NFE	Properties Needing Further Evaluation
CA SLIC	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
HAZNET	Hazardous Waste Information System
San Bern. Co. Permit	Hazardous Material Permits

EDR PROPRIETARY HISTORICAL DATABASES

Coal Gas	Former Manufactured Gas (Coal Gas) Sites

EXECUTIVE SUMMARY

BROWNFIELDS DATABASES

US BROWNFIELDS..... A Listing of Brownfields Sites
VCP..... Voluntary Cleanup Program Properties

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

FEDERAL ASTM STANDARD

RCRIS: Resource Conservation and Recovery Information System. RCRIS includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs): generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs): generate between 100 kg and 1,000 kg of hazardous waste per month. Large quantity generators (LQGs): generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste from the generator off-site to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

An online review and analysis by GEOMATRIX CONSULTANTS of the RCRIS-LQG list, as provided by EDR, and dated 09/10/2003 has revealed that there is 1 RCRIS-LQG site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
CCL LABEL INC	*576 COLLEGE COMMERCE WA*	*1/4 - 1/2 ESE*	*15*	*17*

RCRIS: Resource Conservation and Recovery Information System. RCRIS includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs): generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs): generate between 100 kg

and 1,000 kg of hazardous waste per month. Large quantity generators (LQGs): generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste from the generator off-site to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

An online review and analysis by GEOMATRIX CONSULTANTS of the RCRIS-SQG list, as provided by EDR, and dated 09/10/2003 has revealed that there are 4 RCRIS-SQG sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
MINNESOTA RUBBER AND QMR PLAST	*2377 W FOOTHILL BLVD UN*	*1/4 - 1/2 NNE*	*B2*	*7*
INTEGRATED CARE SYSTEMS	*2315 W FOOTHILL BLVD ST*	*1/4 - 1/2 NNE*	*B3*	*7*
CHEVRON STATION 20 2024	*699 E FOOTHILL*	*1/4 - 1/2 NNW*	*A6*	*10*
LOCKHEED AIRCRAFT SERVICE CO	*2066 W 11TH ST*	*1/4 - 1/2 E*	*16*	*18*

STATE ASTM STANDARD

CHMIRS: The California Hazardous Material Incident Report System contains information on reported hazardous material incidents, i.e., accidental releases or spills. The source is the California Office of Emergency Services.

An online review and analysis by GEOMATRIX CONSULTANTS of the CHMIRS list, as provided by EDR, and dated 12/31/2002 has revealed that there are 4 CHMIRS sites within approximately 1.25 miles of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
BENSON AVENUE CAR WASH	*1639 WEST FOOTHILL BLVD*	*1 - 2 ENE*	*26*	*33*
Not reported	687 N. BENSON AVE	1 - 2 ENE	30	39

Lower Elevation	Address	Dist / Dir	Map ID	Page
Not reported	5225 ARROW	1/2 - 1 SE	23	28
Not reported	9041 CENTRAL AVENUE	1 - 2 SE	F27	35

CORTESE: This database identifies public drinking water wells with detectable levels of contamination, hazardous substance sites selected for remedial action, sites with known toxic material identified through the abandoned site assessment program, sites with USTs having a reportable release and all solid waste disposal facilities from which there is known migration. The source is the California Environmental Protection Agency/Office of Emergency Information.

An online review and analysis by GEOMATRIX CONSULTANTS of the Cortese list, as provided by EDR, has revealed that there are 12 Cortese sites within approximately 1.25 miles of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
WESTON E. MONTGOMERY FUEL	*2085 11TH ST*	*1/4 - 1/2 E*	*C5*	*8*
CHEVRON STATION 20 2024	*699 E FOOTHILL*	*1/4 - 1/2 NNW*	*A6*	*10*
76 PRODUCTS STATION #3824	*601 FOOTHILL BLVD E*	*1/4 - 1/2 NW*	*D10*	*12*
DINEEN TRUCKING INC.	*1284 AIRPORT DR*	*1/2 - 1 NE*	*18*	*20*
LAND CARE INC.	*8475 LOMA PL*	*1/2 - 1 ESE*	*21*	*24*
RANCHO SANTA ANA BOT. GARDENS	*1500 COLLEGE AVE N*	*1/2 - 1 NW*	*22*	*26*
ARCO(FORMER) CLAREMONT	*306 FOOTHILL BLVD W*	*1 - 2 WNW*	*25*	*32*

EXECUTIVE SUMMARY

Lower Elevation	Address	Dist / Dir	Map ID	Page
CLAREMONT COLLEGES	*303 001ST ST E*	*1/2 - 1 SSW*	*17*	*18*
POMONA COLLEGE	*555 COLLEGE WY N*	*1/2 - 1 WSW*	*19*	*22*
GOODYEAR TIRE CENTER	*8995 CENTRAL AVE*	*1 - 2 SE*	*F24*	*29*
EXXON SERVICE STATION #35	*5209 MORENO*	*1 - 2 SSE*	*28*	*36*
SHELL	*246 INDIAN HILL BLVD N*	*1 - 2 WSW*	*29*	*38*

NOTIFY 65: Notify 65 records contain facility notifications about any release that could impact drinking water and thereby expose the public to a potential health risk. The data come from the State Water Resources Control Board's Proposition 65 database.

An online review and analysis by GEOMATRIX CONSULTANTS of the Notify 65 list, as provided by EDR, has revealed that there is 1 Notify 65 site within approximately 1.25 miles of the target property.

Lower Elevation	Address	Dist / Dir	Map ID	Page
CLAREMONT COLLEGE	301 E. FIRST STREET	1/2 - 1 SW	20	24

SWF/LF: The Solid Waste Facilities/Landfill Sites records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. The data come from the Integrated Waste Management Board's Solid Waste Information System (SWIS) database.

An online review and analysis by GEOMATRIX CONSULTANTS of the SWF/LF list, as provided by EDR, has revealed that there is 1 SWF/LF site within approximately 0.75 miles of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
CLAREMONT CITY DUMP	1100 N. MILLS	1/4 - 1/2 W	E11	14

WMUDS/SWAT: The Waste Management Unit Database System is used for program tracking and inventory of waste management units. The source is the State Water Resources Control Board.

An online review and analysis by GEOMATRIX CONSULTANTS of the WMUDS/SWAT list, as provided by EDR, has revealed that there are 2 WMUDS/SWAT sites within approximately 0.75 miles of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
CONROCK-CLAREMONT (REGION 4)	FOOTHILL / CLAREMONT	1/4 - 1/2 NNW	A1	6
CLAREMONT COLLEGES	1100 NORTH MILLS AVENUE	1/4 - 1/2 W	E12	15

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the State Water Resources Control Board Leaking Underground Storage Tank Information System.

An online review and analysis by GEOMATRIX CONSULTANTS of the LUST list, as provided by EDR, and dated 04/02/2003 has revealed that there are 6 LUST sites within approximately 0.75 miles of the target property.

EXECUTIVE SUMMARY

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
WESTON E. MONTGOMERY FUEL	*2085 11TH ST*	*1/4 - 1/2 E*	*C5*	*8*
CHEVRON STATION 20 2024	*699 E FOOTHILL*	*1/4 - 1/2 NNW*	*A6*	*10*
76 PRODUCTS STATION #3824	*601 FOOTHILL BLVD E*	*1/4 - 1/2 NW*	*D10*	*12*
DINEEN TRUCKING INC.	*1284 AIRPORT DR*	*1/2 - 1 NE*	*18*	*20*

Lower Elevation	Address	Dist / Dir	Map ID	Page
CLAREMONT COLLEGES	*303 001ST ST E*	*1/2 - 1 SSW*	*17*	*18*
POMONA COLLEGE	*555 COLLEGE WY N*	*1/2 - 1 WSW*	*19*	*22*

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

An online review and analysis by GEOMATRIX CONSULTANTS of the UST list, as provided by EDR, and dated 04/02/2003 has revealed that there are 3 UST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
ARCO PRODUCTS #05973	701 E FOOTHILL BLVD	1/4 - 1/2 NNW	A4	7
CHEVRON USA SS 202024	699 E FOOTHILL BLVD	1/4 - 1/2 NNW	A7	12
TOSCO/UNOCAL #30568	601 E FOOTHILL BLVD	1/4 - 1/2 NW	D9	12

CA FID: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

An online review and analysis by GEOMATRIX CONSULTANTS of the CA FID UST list, as provided by EDR, has revealed that there are 3 CA FID UST sites within approximately 0.5 miles of the target property.

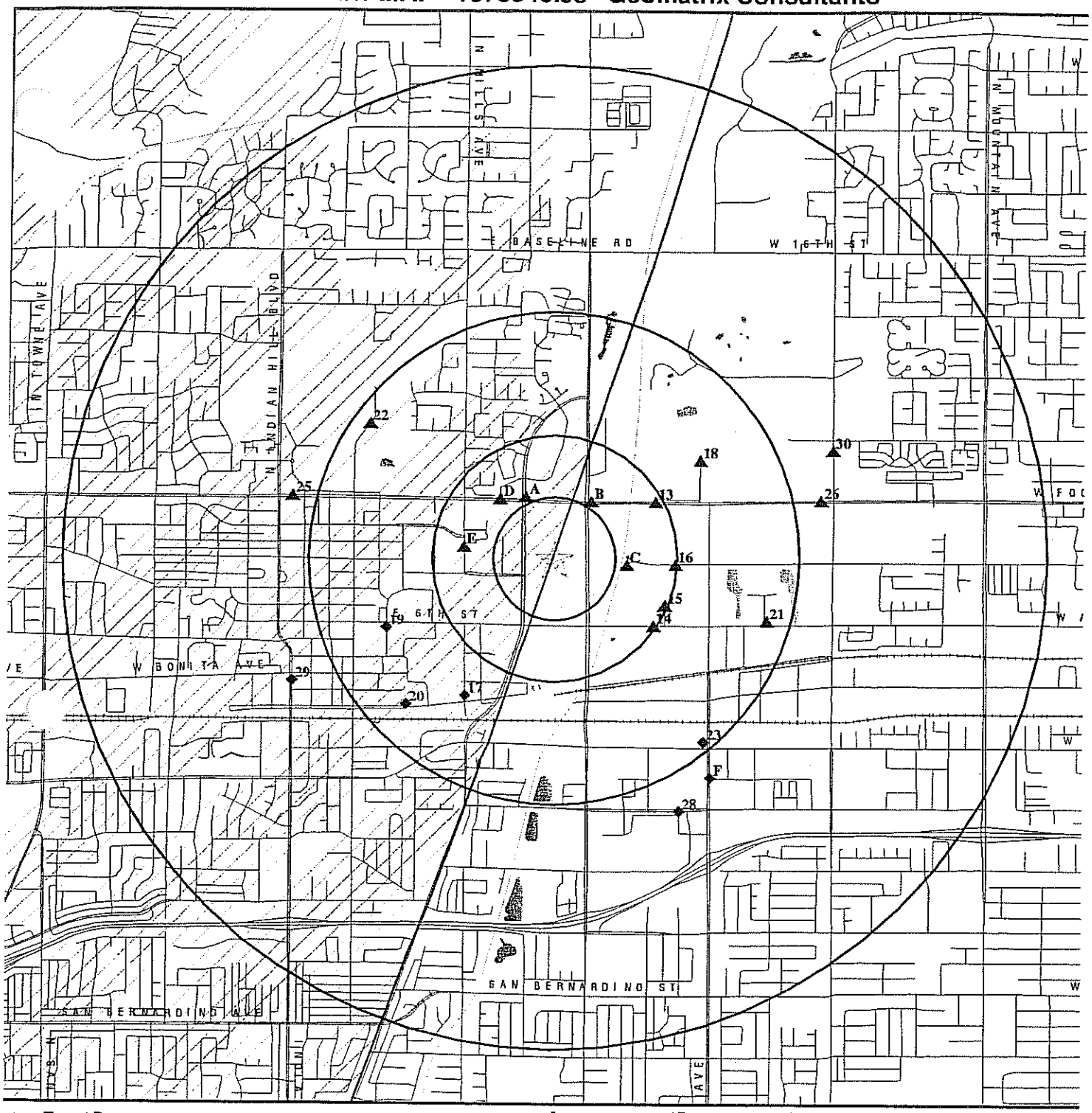
Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
ELEVENTH STREET YARD	2085 W 011TH ST	1/4 - 1/2 E	C8	12
HOLLIDAY ROCK CO INC	***2193 W FOOTHILL BLVD***	***1/4 - 1/2 ENE***	***13***	***16***
GOLDEN EAGLE TRUCKING	2209 W ARROW	1/4 - 1/2 SE	14	17

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped:

Site Name	Database(s)
CLAREMONT ONE HR CLNR-SOUTH	RCRIS-SQG, FINDS, CLEANERS
LEE SEUNG C (USA CLEANERS)	CLEANERS
HWY 58 2 MI WEST OF HWY 359	CHMIRS, EMI
RIALTO LILAC STREET	CHMIRS, EMI
GTE CALIFORNIA INCORP	HAZNET, Cortese
CHUNG'S MARKET	Cortese, LUST
LIVE OAK DEBRIS DISPOSAL SITE	WMUDS/SWAT, SWF/LF
TOSCO - 76 STATION #3607	LUST
THRIFTY OIL # / ARCO # 9691	LUST
LAIDLAW TRANSIT INC.	LUST
PROTOTYPES	VCP
SIXTH STREET DUMP-CLAREMONT	WMUDS/SWAT
CLAREMONT LANDFILL	WMUDS/SWAT, CA WDS
LANDFILL,UPLAND-INERT, 700 ARR	WMUDS/SWAT
LANDFILL,UPLAND-INERT-2430 ARR	WMUDS/SWAT
HIGHRAIL CONNECTOR INC	HAZNET
CO SANITATION DISTRICT OF LOS ANGELES	HAZNET
AUTO EXPO INC	HAZNET
GMS REALTY	HAZNET
AMERICAN STORES PROPERTIES, INC.	HAZNET
GMC REALTY LLC	HAZNET
MOBILE OIL CORP	HAZNET
TERRY SCOTT MITCHUM	HAZNET
STEVES COLLISION RESTORATION	HAZNET
INTOWN PROPERTIES INC/HUD	HAZNET
GTE AT AT&T FACILITY	HAZNET
DR. JOHN CAMPBELL	HAZNET
KATHRYN CARNEAL	HAZNET
MIKE PATEL	HAZNET
SHELL	HAZNET
SAN BERNARDINO ASSOCIATED GOVERNMENT	HAZNET
CALMAT CO.	HAZNET
ZCAR SPECIALTY	HAZNET
ABILTIY LABEL	HAZNET
TEDEUM	HAZNET
ARROW AUTO BODY	San Bern. Co. Permit
CORVETTE COLORS	San Bern. Co. Permit
DOLLAR CLEANERS	San Bern. Co. Permit
DOLLAR CLEANERS	San Bern. Co. Permit
RANCHO MOBILE AUTO SERVICE REPAIR	San Bern. Co. Permit
RANCHO MOBILE AUTO SERVICE REPAIR	San Bern. Co. Permit
RSI ASSOCIATES, INC	San Bern. Co. Permit
RSI ASSOCIATES, INC	San Bern. Co. Permit

OVERVIEW MAP - 1070546.3s - Geomatrix Consultants



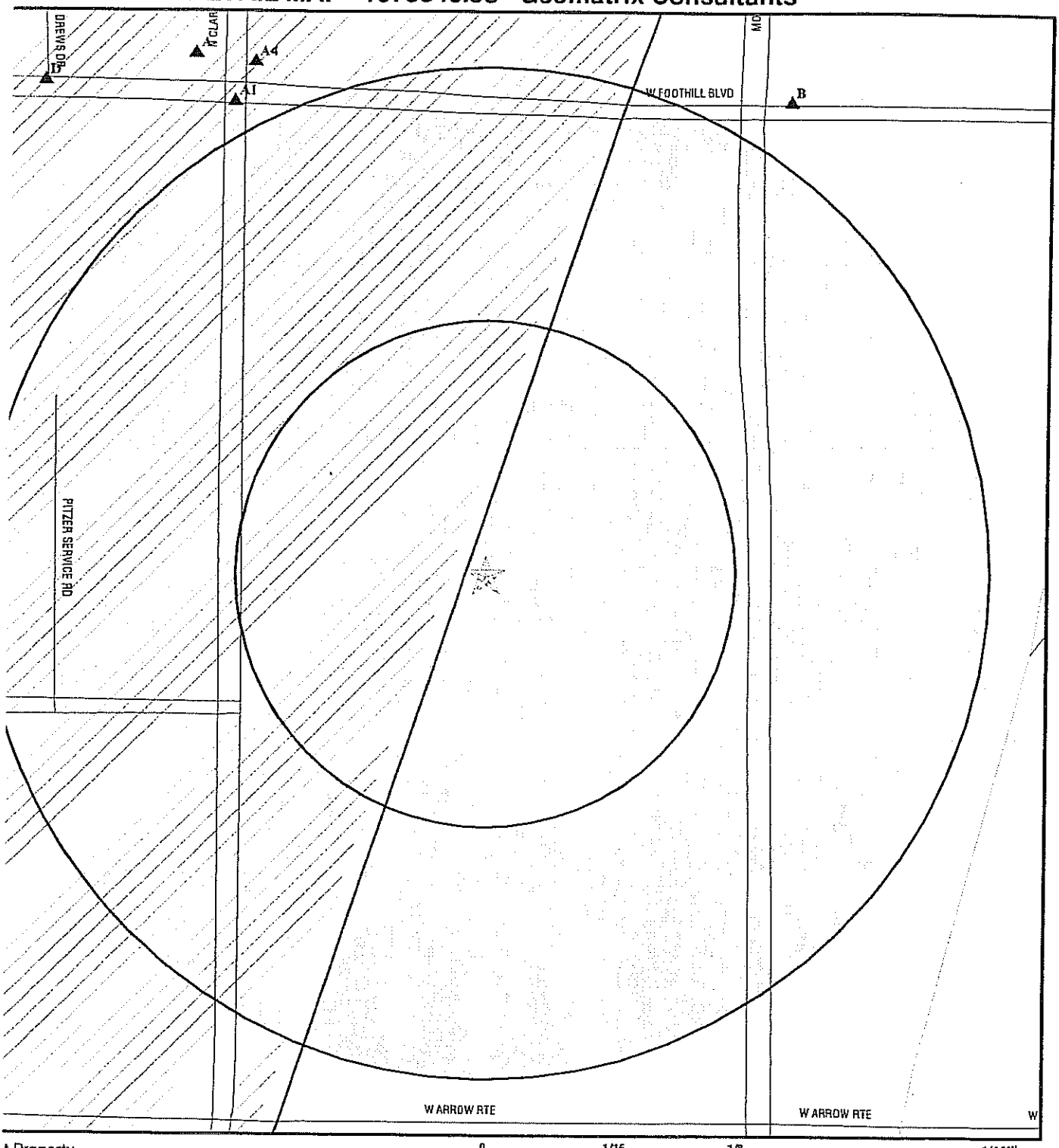
- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Coal Gasification Sites
- National Priority List Sites
- Landfill Sites
- t. Defense Sites

0 1/2 1 2 Miles

- County Boundary
- Oil & Gas pipelines
- 100-year flood zone
- 500-year flood zone
- Federal Wetlands
- Areas of Concern

TARGET PROPERTY:	Pit Property	CUSTOMER:	Geomatrix Consultants
ADDRESS:	Foothill Blvd./Claremont Blvd.	CONTACT:	Nancy Boschetto
CITY/STATE/ZIP:	Claremont CA 91711	INQUIRY #:	1070546.3s
LAT/LONG:	34.1035 / 117.7007	DATE:	October 28, 2003 10:09 am

DETAIL MAP - 1070546.3s - Geomatrix Consultants



0 1/16 1/8 1/4 Miles

t Property

at elevations higher than
ual to the target property

at elevations lower than
rget property

Gasification Sites

tive Receptors

nal Priority List Sites

ill Sites

Defense Sites

County Boundary

Oil & Gas pipelines

100-year flood zone

500-year flood zone

Areas of Concern

T PROPERTY:	Pit Property	CUSTOMER:	Geomatrix Consultants
SS:	Foothill Blvd./Claremont Blvd.	CONTACT:	Nancy Boschetto
TATE/ZIP:	Claremont CA 91711	INQUIRY #:	1070546.3s
NG:	34.1035 / 117.7007	DATE:	October 28, 2003 10:10 am

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
FEDERAL ASTM STANDARD								
NPL		1.250	0	0	0	0	0	0
Proposed NPL		1.250	0	0	0	0	0	0
CERCLIS		0.750	0	0	0	0	NR	0
CERC-NFRAP		0.500	0	0	0	NR	NR	0
CORRACTS		1.250	0	0	0	0	0	0
RCRIS-TSD		0.750	0	0	0	0	NR	0
RCRIS Lg. Quan. Gen.		0.500	0	0	1	NR	NR	1
RCRIS Sm. Quan. Gen.		0.500	0	0	4	NR	NR	4
ERNS		0.250	0	0	NR	NR	NR	0
STATE ASTM STANDARD								
AWP		1.250	0	0	0	0	0	0
Cal-Sites		1.250	0	0	0	0	0	0
CHMIRS		1.250	0	0	0	1	3	4
Cortese		1.250	0	0	3	5	4	12
Notify 65		1.250	0	0	0	1	0	1
Toxic Pits		1.250	0	0	0	0	0	0
State Landfill		0.750	0	0	1	0	NR	1
WMUDS/SWAT		0.750	0	0	2	0	NR	2
LUST		0.750	0	0	3	3	NR	6
CA Bond Exp. Plan		1.250	0	0	0	0	0	0
UST		0.500	0	0	3	NR	NR	3
VCP		0.750	0	0	0	0	NR	0
INDIAN UST		0.500	0	0	0	NR	NR	0
CA FID UST		0.500	0	0	3	NR	NR	3
HIST UST		0.250	0	0	NR	NR	NR	0
FEDERAL ASTM SUPPLEMENTAL								
CONSENT		1.000	0	0	0	0	NR	0
ROD		1.000	0	0	0	0	NR	0
Delisted NPL		1.000	0	0	0	0	NR	0
FINDS		TP	NR	NR	NR	NR	NR	0
HMIRS		TP	NR	NR	NR	NR	NR	0
MLTS		TP	NR	NR	NR	NR	NR	0
MINES		0.250	0	0	NR	NR	NR	0
NPL Liens		TP	NR	NR	NR	NR	NR	0
PADS		TP	NR	NR	NR	NR	NR	0
US BROWNFIELDS		0.500	0	0	0	NR	NR	0
DOD		1.000	0	0	0	0	NR	0
RAATS		TP	NR	NR	NR	NR	NR	0
TRIS		TP	NR	NR	NR	NR	NR	0
TSCA		TP	NR	NR	NR	NR	NR	0
SSTS		TP	NR	NR	NR	NR	NR	0
FTTS		TP	NR	NR	NR	NR	NR	0
STATE OR LOCAL ASTM SUPPLEMENTAL								
AST		TP	NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CLEANERS		0.250	0	0	NR	NR	NR	0
CA WDS		TP	NR	NR	NR	NR	NR	0
DEED		TP	NR	NR	NR	NR	NR	0
NFA		0.250	0	0	NR	NR	NR	0
EMI		TP	NR	NR	NR	NR	NR	0
REF		0.250	0	0	NR	NR	NR	0
SCH		0.250	0	0	NR	NR	NR	0
NFE		0.250	0	0	NR	NR	NR	0
CA SLIC		0.500	0	0	0	NR	NR	0
HAZNET		0.250	0	0	NR	NR	NR	0
San Bern. Co. Permit		0.250	0	0	NR	NR	NR	0
EDR PROPRIETARY HISTORICAL DATABASES								
Coal Gas		1.000	0	0	0	0	NR	0
BROWNFIELDS DATABASES								
US BROWNFIELDS		0.500	0	0	0	NR	NR	0
VCP		0.750	0	0	0	0	NR	0

NOTES:

AQUIFLOW - see EDR Physical Setting Source Addendum

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Coal Gas Site Search: No site was found in a search of Real Property Scan's ENVIROHAZ database.

A1 NNW 1/4-1/2 1408 ft. | **CONROCK-CLAREMONT (REGION 4)** | **WMUDS/SWAT** | **S103441455**
FOOTHILL / CLAREMONT BLVDS | **N/A**
CLAREMONT, CA

Site 1 of 4 in cluster A

Relative: Higher

Actual: 1326 ft.

WMUDS:

Region:	4
Date of Last Facility Edit:	Not reported
Last Facility Editors:	Not reported
Waste Discharge System ID:	4 190204NUR
Solid Waste Information ID:	Not reported
Waste Discharge System:	False
Solid Waste Assessment Test Program:	True
Facility Name:	Not reported
Toxic Pits Cleanup Act Program:	False
Resource Conservation Recovery Act Program:	False
Department of Defense:	False
Open to Public:	False
Number of WMUDS at Facility:	1
Facility Telephone:	Not reported
Primary Standard Industrial Classification:	Not reported
Secondary Standard Industrial Classification:	Not reported
Solid Waste Assessment Test Program Name:	CONROCK
NPID:	Not reported
Tonnage:	0
Regional Board ID:	Not reported
Municipal Solid Waste:	False
Superorder:	False
Sub Chapter 15:	False
Reg. Board Project Officer:	LT
Section Range:	Not reported
RCRA Facility:	Not reported
Waste Discharge Requirements:	Not reported
Base Meridian:	Not reported
Waste List:	False
Facility Description:	Not reported
Self-Monitoring Rept. Frequency:	Not reported

Threat to Water Quality:Not reported

Agency:	CONROCK
Address:	Not reported
Department:	Not reported
Contact:	Not reported
Telephone:	Not reported
Landowner:	Not reported
Address:	CA
Telephone:	Not reported
Contact:	Not reported

Map ID / Direction / Distance / Distance (ft.) / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
B2 NNE 1/4-1/2 1465 ft.	**MINNESOTA RUBBER AND QMR PLASTICS** 2377 W FOOTHILL BLVD UNIT 14 UPLAND, CA 91786	RCRIS-SQG FINDS	1001404372 CAR000046797

Site 1 of 2 in cluster B

Relative: Higher

Actual: 1338 ft.

RCRIS:
Owner: QUADION CORP (612) 927-1400
EPA ID: CAR000046797
Contact: LOUIS ROMAIN (612) 927-2216
Classification: Small Quantity Generator
TSDF Activities: Not reported
Violation Status: No violations found

FINDS:
Other Pertinent Environmental Activity Identified at Site:
Facility Registry System (FRS)
National Toxics Inventory (NTI)
Resource Conservation and Recovery Act Information system (RCRAINFO)

B3 NNE 1/4-1/2 1465 ft.	**INTEGRATED CARE SYSTEMS** 2315 W FOOTHILL BLVD STE 4 UPLAND, CA 91786	RCRIS-SQG FINDS	1000202570 CAD982521890

Site 2 of 2 in cluster B

Relative: Higher

Actual: 1338 ft.

RCRIS:
Owner: NEW ENGLAND (415) 555-1212
EPA ID: CAD982521890
Contact: ENVIRONMENTAL MANAGER (714) 855-5525
Classification: Small Quantity Generator
TSDF Activities: Not reported
Violation Status: No violations found

FINDS:
Other Pertinent Environmental Activity Identified at Site:
Facility Registry System (FRS)
Resource Conservation and Recovery Act Information system (RCRAINFO)

A4 NNW 1/4-1/2 1478 ft.	**ARCO PRODUCTS #05973** 701 E FOOTHILL BLVD CLAREMONT, CA 91711	UST	U003777576 N/A

Site 2 of 4 in cluster A

Relative: Higher

Actual: 1329 ft.

State UST:
Facility ID: 24253
Region: STATE
Local Agency: 19000

ARCO PRODUCTS #05973 (Continued) **U003777576**

C5 East 1/4-1/2 1485 ft. **WESTON E. MONTGOMERY FUEL**
2085 11TH ST
UPLAND, CA 91786

Cortese LUST **S102441224 N/A**

Site 1 of 2 in cluster C

Relative: Higher

Actual: 1291 ft.

State LUST:

Cross Street:	Not reported
Qty Leaked:	Not reported
Case Number	083602753T
Reg Board:	8
Chemical:	Diesel
Lead Agency:	Local Agency
Local Agency :	0
Case Type:	Soil only
Status:	Case Closed
Review Date:	Not reported
Workplan:	Not reported
Pollution Char:	Not reported
Remed Action:	Not reported
Monitoring:	Not reported
Close Date:	01/08/1996
Release Date:	10/25/1995
Cleanup Fund Id :	Not reported
Discover Date :	09/28/1995
Enforcement Dt :	Not reported
Enf Type:	Not reported
Enter Date :	12/19/1995
Funding:	Not reported
Staff Initials:	JC3
How Discovered:	Not reported
How Stopped:	Not reported
Interim :	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
MTBE Date :	/ /
Max MTBE GW :	0 Parts per Billion
MTBE Tested:	Not Required to be Tested.
Priority:	Not reported
Local Case # :	95058
Beneficial:	Not reported
Staff :	WDM
GW Qualifier :	Not reported
Max MTBE Soil :	Not reported
Soil Qualifier :	Not reported
Hydr Basin #:	Not reported
Operator :	Not reported
Oversight Prgm:	Local Oversight Program UST
Oversight Prgm :	LOP
Review Date :	06/25/1996
Stop Date :	/ /
Work Suspended :	Not reported
Responsible Party	WESTON E MONTGOMERY FUEL
RP Address:	2085 W. 11TH ST., UPLAND CA 91786
Global Id:	T0607100397
Org Name:	Not reported
Contact Person:	Not reported
MTBE Conc:	0

Confirm Leak:	Not reported
Prelim Assess:	Not reported
Remed Plan:	Not reported

WESTON E. MONTGOMERY FUEL (Continued) **S102441224**

Mtbe Fuel: 0
Water System Name: Not reported
Well Name: Not reported
Distance To Lust: 0
Waste Discharge Global ID: Not reported
Waste Disch Assigned Name: Not reported

LUST Region 8:
Region: 8
Substance: 12034 Cross Street: Not reported
Regional Board: 08
Local Case Num: 95058
Facility Status: Case Closed
Staff: Not reported
Lead Agency: Local Agency
Local Agency: 36000L
Qty Leaked: Not reported
County: San Bernardino
Review Date: Not reported Confirm Leak: Not reported
Workplan: Not reported Prelim Assess: Not reported
Pollution Char: Not reported Remed Plan: Not reported
Remed Action: Not reported Monitoring: Not reported
Close Date: 01/08/1996
Cleanup Fund Id : Not reported
Discover Date : 09/28/1995
Enforcement Dt : Not reported
Enf Type: Not reported
Enter Date : 12/19/1995
Funding: Not reported
Staff Initials: JC3
How Discovered: Not reported
How Stopped: Not reported
Interim : Not reported
Lat/Lon : 34.1032976 / -117.6908148
Leak Cause: Not reported
Leak Source: Not reported
Beneficial: Not reported
MTBE Date : Not reported
MTBE Tested : NRQ
Max MTBE GW : Not reported
GW Qualifies : Not reported
Max MTBE Soil : Not reported
Soil Qualifies : Not reported
Hydr Basin #: UPPER SANTA ANA VALL
Operator : Not reported
Oversight Prgm : LOP
Priority : Not reported
Work Suspended :Not reported
Responsible PartyWESTON E MONTGOMERY FUEL
Well name: WELL 14 - DESTROYED
Distance From Lust: 995.60273086480707350577296 31
Waste Disch Global Id: W0607110050
MTBE Class: *
Waste Disch Assigned Name: 01S/08W-11B02 S
Case Type: Soil only
Global ID: T0607100397
How Stopped Date: / /
Organization Name: Not reported

WESTON E. MONTGOMERY FUEL (Continued) **S102441224**

Contact Person: Not reported
RP Address: 2085 W. 11TH ST., UPLAND CA 91786
MTBE Concentration: 0
MTBE Fuel: 0
Case Number: 083602753T
Water System Name: UPLAND, CITY OF
Code Name: SAN BERNARDINO
Agency Name: Not reported
Priority: Not reported
State Expalnation: CASE CLOSED
Substance: DIESEL
Staff: Not reported
Case Type: S
Summary: Not reported

CORTESE:
Reg Id: 083602753T
Region: CORTESE
Reg By: Leaking Underground Storage Tanks

A6
NNW
1/4-1/2
1552 ft.

Relative: Higher

Actual: 1328 ft.

CHEVRON STATION 20 2024
699 E FOOTHILL
CLAREMONT, CA 91711

RCRIS-SQG **1000820179**
FINDS **CAD983662065**
LUST
Cortese

Site 3 of 4 in cluster A

RCRIS:
Owner: CHEVRON U S A PRODUCTS CO
(310) 694-7452
EPA ID: CAD983662065

Contact: DESIREE CLOSS
(310) 694-7452

Classification: Small Quantity Generator
TSDF Activities: Not reported

Violation Status: No violations found

FINDS:
Other Pertinent Environmental Activity Identified at Site:
Facility Registry System (FRS)
Resource Conservation and Recovery Act Information system (RCRAINFO)

State LUST:
Cross Street: Not reported
Qty Leaked: Not reported
Case Number R-21176
Reg Board: 4
Chemical: 1
Lead Agency: Local Agency
Local Agency : 19000
Case Type: Soil only
Status: Case Closed
Review Date: Not reported
Workplan: Not reported
Pollution Char: Not reported
Remed Action: Not reported
Monitoring: Not reported
Close Date: 07/24/1996
Release Date: 07/24/1996

Confirm Leak: Not reported
Prelim Assess: Not reported
Remed Plan: Not reported

CHEVRON STATION 20 2024 (Continued) **1000820179**

Cleanup Fund Id : Not reported
Discover Date : / /
Enforcement Dt : Not reported
Enf Type: Not reported
Enter Date : 08/23/1996
Funding: Not reported
Staff Initials: Not reported
How Discovered: Not reported
How Stopped: Not reported
Interim : Not reported
Leak Cause: Not reported
Leak Source: Not reported
MTBE Date : / /
Max MTBE GW : 0 Parts per Billion
MTBE Tested: Not Required to be Tested.
Priority: Not reported
Local Case # : Not reported
Beneficial: Not reported
Staff : JLC
GW Qualifier : Not reported
Max MTBE Soil : Not reported
Soil Qualifier : Not reported
Hydr Basin #: Not reported
Operator : Not reported
Oversight Prgm: Local Implementing Agency UST (includes non-LOP cases within LOP jurisdiction)
Oversight Prgm : LIA
Review Date : 07/24/1996
Stop Date : / /
Work Suspended : Not reported
Responsible Party CHEVRON USS INC
RP Address: 1300 S BEACH BLVD., LA HABRA CA 90632-6300
Global Id: T0603705326
Org Name: Not reported
Contact Person: Not reported
MTBE Conc: 0
Mtbe Fuel: 0
Water System Name: Not reported
Well Name: Not reported
Distance To Lust: 0
Waste Discharge Global ID: Not reported
Waste Disch Assigned Name: Not reported

LUST Region 4:
Report Date: 7/24/1996
Lead Agency: Local Agency
Local Agency: 19000
Case Number: R-21176
Substance: 1
Case Type: Soil
Status: Case Closed
Region: 4
Staff: Not reported

CORTESE:
Reg Id: R-21176
Region: CORTESE
Reg By: Leaking Underground Storage Tanks

CHEVRON STATION 20 2024 (Continued) — **1000820179**

A7
NNW
1/4-1/2
1567 ft.

CHEVRON USA SS 202024 — **UST** — **U003777391** / **N/A**
699 E FOOTHILL BLVD
CLAREMONT, CA 91711

Site 4 of 4 in cluster A

Relative:
Higher

Actual:
1328 ft.

State UST:

Facility ID:	21176
Region:	STATE
Local Agency:	19000

C8
East
1/4-1/2
1572 ft.

ELEVENTH STREET YARD — **CA FID UST** — **S101591770** / **N/A**
2085 W 011TH ST
UPLAND, CA 91786

Site 2 of 2 in cluster C

Relative:
Higher

Actual:
1293 ft.

FID:

Facility ID:	36008960	Regulate ID:	00038926
Reg By:	Active Underground Storage Tank Location		
Cortese Code:	Not reported	SIC Code:	Not reported
Status:	Active	Facility Tel:	Not reported
Mail To:	Not reported 3232 PADVA AVE UPLAND, CA 91786		
Contact:	Not reported	Contact Tel:	Not reported
DUNs No:	Not reported	NPDES No:	Not reported
Creation:	10/22/93	Modified:	00/00/00
EPA ID:	Not reported		
Comments:	Not reported		

D9
NW
1/4-1/2
1743 ft.

TOSCO/UNOCAL #30568 — **UST** — **U003777663** / **N/A**
601 E FOOTHILL BLVD
CLAREMONT, CA 91711

Site 1 of 2 in cluster D

Relative:
Higher

Actual:
1321 ft.

State UST:

Facility ID:	24724
Region:	STATE
Local Agency:	19000

D10
NW
1/4-1/2
1743 ft.

76 PRODUCTS STATION #3824 — **LUST** — **S102439925**
601 FOOTHILL BLVD E — **Cortese** — **N/A**
CLAREMONT, CA 91711

Site 2 of 2 in cluster D

Relative:
Higher

Actual:
1321 ft.

State LUST:

Cross Street:	MILLS
Qty Leaked:	Not reported
Case Number	R-10271
Reg Board:	4
Chemical:	Gasoline
Lead Agency:	Local Agency
Local Agency :	19000

76 PRODUCTS STATION #3824 (Continued) **S102439925**

Case Type: Soil only
Status: Leak being confirmed
Review Date: 09/15/1994 Confirm Leak: 09/15/1994
Workplan: Not reported Prelim Assess: Not reported
Pollution Char: Not reported Remed Plan: Not reported
Remed Action: Not reported
Monitoring: Not reported
Close Date: Not reported
Release Date: 09/16/1994
Cleanup Fund Id : Not reported
Discover Date : 09/13/1994
Enforcement Dt : Not reported
Enf Type: Not reported
Enter Date : 11/02/1995
Funding: Not reported
Staff Initials: Not reported
How Discovered: OM
How Stopped: Not reported
Interim : Not reported
Leak Cause: UNK
Leak Source: UNK
MTBE Date : / /
Max MTBE GW : 0 Parts per Billion
MTBE Tested: Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
Priority: Not reported
Local Case # : Not reported
Beneficial: Not reported
Staff : JLC
GW Qualifier : Not reported
Max MTBE Soil : Not reported
Soil Qualifier : Not reported
Hydr Basin #: Not reported
Operator : Not reported
Oversight Prgm: Local Implementing Agency UST (includes non-LOP cases within LOP jurisdiction)
Oversight Prgm : LIA
Review Date : 02/03/1999
Stop Date : 09/13/1994
Work Suspended : Not reported
Responsible Party TOSCO/76 PRODUCTS TEAM
RP Address: 555 ANTON, COSTA MESA, CA 92626
Global Id: T0603704922
Org Name: Not reported
Contact Person: Not reported
MTBE Conc: 0
Mtbe Fuel: 1
Water System Name: Not reported
Well Name: Not reported
Distance To Lust: 0
Waste Discharge Global ID: Not reported
Waste Disch Assigned Name: Not reported

LUST Region 4:
Report Date: 9/16/1994
Lead Agency: Local Agency
Local Agency: 19000
Case Number: R-10271
Substance: Gasoline

76 PRODUCTS STATION #3824 (Continued) **S102439925**

Case Type: Soil
Status: Leak being confirmed
Region: 4
Staff: Not reported

CORTESE:
Reg Id: R-10271
Region: CORTESE
Reg By: Leaking Underground Storage Tanks

E11 West 1/4-1/2 1974 ft. **CLAREMONT CITY DUMP** **SWF/LF** **S103340272**
1100 N. MILLS **N/A**
CLAREMONT, CA

Site 1 of 2 in cluster E

Relative: Higher

Actual: 1278 ft.

LF:
Facility ID: 19-AA-5678
Operator: Not reported
Operator Phone: Not reported
Operator Addr:
Owner: Not reported
Owner Address: Not reported
Not reported
Owner Telephone: Not reported
Activity: Solid Waste Disposal Site
Operator's Status: Closed
Regulation Status: Unpermitted
Region: STATE
Lat/Long: 34 / -118
Permit Date: Not reported
Accepted Waste:
Restrictions:
Status : Not reported
Swisnumber : Not reported
Site Type : Not reported
Aka : Not reported
Type Of Waste : Not reported
Disposal Area : Not reported
SWFP Date : Not reported
WDR Number : Not reported
Dates Of Operation : Not reported
Closure Approved : Not reported
Date Of Field Units : Not reported
Surface Condition : Not reported
Landfill Gas : Not reported
Leachate : Not reported
Emergency Response : Not reported
Other Recommendation : Not reported
Reassess Site : Not reported
Priority For Site Assessment : Not reported
Lea Date : Not reported
Explanation: Not Reported
No Further Action: Not Reported
Permitted Throughput with Units: 0
Permitted Throughput with Units: 0
Permitted Throughput with Units: 0
Actual Throughput with Units: Not reported
Actual Capacity with Units: 0

CLAREMONT CITY DUMP (Continued) **S103340272**

Permitted Capacity with Units:	0
Remaining Capacity with Units:	Not reported
Permitted Total Acreage:	0
Inspection Frequency:	Quarterly
Landuse Name:	Not reported
GIS Source:	Place
Permit Status:	Not reported
Category:	Disposal
Unit Number:	01
Last Waste Tire Inspection Count :	0
Last Waste Tire Inspection Date:	Not reported
Original Waste Tire Count:	0
Original Waste Tire Count Date:	Not reported
Closure Date:	/ /
Closure Type:	Not reported
Disposal Acreage:	0
Remaining Capacity:	0

E12 West 1/4-1/2 1974 ft. **CLAREMONT COLLEGES** **WMUDS/SWAT** **S104156333**
1100 NORTH MILLS AVENUE **N/A**
CLAREMONT, CA

Site 2 of 2 in cluster E

Relative: Higher

Actual: 1278 ft.

WMUDS:

Region:	4
Date of Last Facility Edit:	Not reported
Last Facility Editors:	Not reported
Waste Discharge System ID:	4 190149NUR
Solid Waste Information ID:	Not reported
Waste Discharge System:	False
Solid Waste Assessment Test Program:	True
Facility Name:	Not reported
Toxic Pits Cleanup Act Program:	False
Resource Conservation Recovery Act Program:	False
Department of Defense:	False
Open to Public:	False
Number of WMUDS at Facility:	1
Facility Telephone:	Not reported
Primary Standard Industrial Classification:	Not reported
Secondary Standard Industrial Classification:	Not reported
Solid Waste Assessment Test Program Name:	CLAREMONT COLLEGES
NPID:	Not reported
Tonnage:	0
Regional Board ID:	Not reported
Municipal Solid Waste:	False
Superorder:	False
Sub Chapter 15:	False
Reg. Board Project Officer:	LT
Section Range:	Not reported
RCRA Facility:	Not reported
Waste Discharge Requirements:	Not reported
Base Meridian:	Not reported
Waste List:	False
Facility Description:	Not reported
Self-Monitoring Rept. Frequency:	Not reported

Threat to Water Quality:Not reported
Agency: CLAREMONT COLLEGES
Address: Not reported

CLAREMONT COLLEGES (Continued) **S104156333**

Department: Not reported
Contact: Not reported
Telephone: Not reported
Landowner: Not reported
Address: CA
Telephone: Not reported
Contact: Not reported

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13 ENE 1/4-1/2 2493 ft.

HOLLIDAY ROCK CO INC
2193 W FOOTHILL BLVD
UPLAND, CA 91786

CA FID UST **S101619069**
EMI **N/A**
San Bern. Co. Permit
AST

Relative: Higher

Actual: 1347 ft.

FID:

Facility ID:	36001259	Regulate ID:	00019790
Reg By:	Active Underground Storage Tank Location		
Cortese Code:	Not reported	SIC Code:	Not reported
Status:	Active	Facility Tel:	Not reported
Mail To:	Not reported 2193 W FOOTHILL BLVD UPLAND, CA 91786		
Contact:	Not reported	Contact Tel:	Not reported
DUNs No:	Not reported	NPDES No:	Not reported
Creation:	10/22/93	Modified:	00/00/00
EPA ID:	Not reported		
Comments:	Not reported		

DEHS Permit:

Facility ID: PT0002502
Facility Status: ACTIVE
Permit Category: Hazmat Handler 11-25 Employees (w/Gen Prmt)
Expiration Date: 08/31/2004

Facility ID: PT0002503
Facility Status: ACTIVE
Permit Category: Generator - 11-25 Employees
Expiration Date: 08/31/2004

Facility ID: PT0002505
Facility Status: ACTIVE
Permit Category: Aboveground Petroleum Storage (AST) (SPCC)
Expiration Date: 08/31/2004

EMISSIONS :

Facility ID :	2912
Air District Code :	SC
SIC Code :	1442
Total Priority Score :	Not reported
Health Risk Assessment :	Not reported
Non-cancer Chronic Haz Index :	Not reported
Non-cancer Acute Haz Index :	Not reported
Air Basin :	SC
Air District Name :	SOUTH COAST AQMD
Community Health Air Pollution Info System :	Not reported
Consolidated Emission Reporting Rule :	Not reported
Total Organic Hydrocarbon Gases :	0
Reactive Organic Gases :	0
Carbon Monoxide Emissions :	1
NOX Gas Emissions (Nitrogen - Oxygen) :	5
SOX Gas Emissions (Sulphur - Oxygen) :	0

HOLLIDAY ROCK CO INC (Continued) **S101619069**

Facility ID :	2912
Air District Code :	SC
SIC Code :	1442
Total Priority Score :	Not reported
Health Risk Assessment :	Not reported
Non-cancer Chronic Haz Index :	Not reported
Non-cancer Acute Haz Index :	Not reported
Air Basin :	SC
Air District Name :	SOUTH COAST AQMD
Community Health Air Pollution Info System :	Not reported
Consolidated Emission Reporting Rule :	Not reported
Total Organic Hydrocarbon Gases :	Not reported
Reactive Organic Gases :	Not reported
Carbon Monoxide Emissions :	Not reported
NOX Gas Emissions (Nitrogen - Oxygen) :	Not reported
SOX Gas Emissions (Sulphur - Oxygen) :	Not reported

AST:

Owner:	HOLLIDAY ROCK CO INC
Total Gallons:	17500

14
SE
1/4-1/2
2573 ft.

GOLDEN EAGLE TRUCKING
2209 W ARROW
UPLAND, CA 91786

CA FID UST **1000186923**
N/A

Relative:
Higher

Actual:
1258 ft.

FID:

Facility ID:	36008932	Regulate ID:	00036403
Reg By:	Active Underground Storage Tank Location		
Cortese Code:	Not reported	SIC Code:	Not reported
Status:	Active	Facility Tel:	Not reported
Mail To:	Not reported 2209 W ARROW UPLAND, CA 91786		
Contact:	Not reported	Contact Tel:	Not reported
DUNs No:	Not reported	NPDES No:	Not reported
Creation:	10/22/93	Modified:	00/00/00
EPA ID:	Not reported		
Comments:	Not reported		

15
ESE
1/4-1/2
2579 ft.

CCL LABEL INC
576 COLLEGE COMMERCE WAY
UPLAND, CA 91786

RCRIS-LQG **1006805953**
FINDS **CAR000143222**

Relative:
Higher

Actual:
1272 ft.

CCL LABEL INC (Continued) **1006805953**

RCRIS:
Owner: CCL LABEL INC
EPA ID: CAR000143222
Contact: CHRIS CREEL
(626) 305-8022
Classification: Large Quantity Generator
TSDF Activities: Not reported
Violation Status: No violations found

FINDS:
Other Pertinent Environmental Activity Identified at Site:
Facility Registry System (FRS)
Resource Conservation and Recovery Act Information system (RCRAINFO)

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16 East 1/4-1/2 2606 ft. **LOCKHEED AIRCRAFT SERVICE CO** **RCRIS-SQG 1000270320**
2066 W 11TH ST **FINDS CAD981169691**
UPLAND, CA 91786

Relative: Higher
Actual: 1301 ft.

RCRIS:
Owner: UPLAND TECHNOLOGY
(415) 555-1212
EPA ID: CAD981169691
Contact: ENVIRONMENTAL MANAGER
(714) 988-2424
Classification: Small Quantity Generator
TSDF Activities: Not reported
Violation Status: No violations found

FINDS:
Other Pertinent Environmental Activity Identified at Site:
Facility Registry System (FRS)
Resource Conservation and Recovery Act Information system (RCRAINFO)

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17 SSW 1/2-1 3511 ft. **CLAREMONT COLLEGES** **LUST 1000727150**
303 001ST ST E **Cortese N/A**
CLAREMONT, CA 91711

Relative: Lower
Actual: 1183 ft.

State LUST:
Cross Street: Not reported
Qty Leaked: Not reported
Case Number I-13413H
Reg Board: 4
Chemical: Diesel
Lead Agency: Regional Board
Local Agency : 19000
Case Type: Soil only
Status: Leak being confirmed
Review Date: 10/26/2001 Confirm Leak: 10/26/2001
Workplan: 11/20/91 Prelim Assess: 11/20/91
Pollution Char: Not reported Remed Plan: Not reported
Remed Action: Not reported
Monitoring: 7/10/90

CLAREMONT COLLEGES (Continued) **1000727150**

Close Date: 09/17/1992
Release Date: 07/10/1990
Cleanup Fund Id : Not reported
Discover Date : 03/03/1990
Enforcement Dt : Not reported
Enf Type: DLSEL
Enter Date : 07/25/1990
Funding: Not reported
Staff Initials: Not reported
How Discovered: Not reported
How Stopped: Not reported
Interim : Not reported
Leak Cause: UNK
Leak Source: UNK
MTBE Date : / /
Max MTBE GW : 0 Parts per Billion
MTBE Tested: Not Required to be Tested.
Priority: Not reported
Local Case # : Not reported
Beneficial: Not reported
Staff : JLC
GW Qualifier : Not reported
Max MTBE Soil : Not reported
Soil Qualifier : Not reported
Hydr Basin #: Not reported
Operator : Not reported
Oversight Prgm: RB Lead Underground Storage Tank
Oversight Prgm : UST
Review Date : 02/14/2002
Stop Date : / /
Work Suspended :Not reported
Responsible PartyRAFAEL TORRES
RP Address: 50 E. FOOTHILL BLVD.
Global Id: T0603704067
Org Name: Not reported
Contact Person: Not reported
MTBE Conc: 0
Mtbe Fuel: 0
Water System Name: Not reported
Well Name: Not reported
Distance To Lust: 0
Waste Discharge Global ID: Not reported
Waste Disch Assigned Name: Not reported

LUST Region 4:
Report Date: 7/10/1990
Lead Agency: Local Agency
Local Agency: 19000
Case Number: I-13413
Substance: Diesel
Case Type: Soil
Status: Case Closed
Region: 4
Staff: Not reported

CORTESE:
Reg Id: I-13413
Region: CORTESE

CLAREMONT COLLEGES (Continued) **1000727150**

Reg By: Leaking Underground Storage Tanks

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18 NE 1/2-1 3780 ft.

DINEEN TRUCKING INC.
1284 AIRPORT DR
UPLAND, CA 91786

CA FID UST **S101619062**
Cortese **N/A**
LUST
San Bern. Co. Permit

Relative: Higher

Actual: 1385 ft.

State LUST:

Cross Street:	FOOTHILL		
Qty Leaked:	Not reported		
Case Number	083600599T		
Reg Board:	8		
Chemical:	Diesel		
Lead Agency:	Local Agency		
Local Agency :	0		
Case Type:	Soil only		
Status:	Case Closed		
Review Date:	Not reported	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	Not reported
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	Not reported		
Monitoring:	Not reported		
Close Date:	05/27/1988		
Release Date:	07/24/1987		
Cleanup Fund Id :	Not reported		
Discover Date :	/ /		
Enforcement Dt :	Not reported		
Enf Type:	Not reported		
Enter Date :	08/28/1987		
Funding:	Not reported		
Staff Initials:	Not reported		
How Discovered:	Tank Test		
How Stopped:	Not reported		
Interim :	Not reported		
Leak Cause:	Not reported		
Leak Source:	Not reported		
MTBE Date :	/ /		
Max MTBE GW :	0 Parts per Billion		
MTBE Tested:	Not Required to be Tested.		
Priority:	Not reported		
Local Case # :	87064		
Beneficial:	Not reported		
Staff :	VJJ		
GW Qualifier :	Not reported		
Max MTBE Soil :	Not reported		
Soil Qualifier :	Not reported		
Hydr Basin #:	Not reported		
Operator :	DINEEN, PATRICK		
Oversight Prgm:	LUST		
Oversight Prgm :	LUST		
Review Date :	08/28/1987		
Stop Date :	/ /		
Work Suspended :	Not reported		
Responsible Party	PATRICK DINEEN		
RP Address:	1284 AIRPORT DRIVE		
Global Id:	T0607100057		
Org Name:	Not reported		
Contact Person:	Not reported		
MTBE Conc:	0		

DINEEN TRUCKING INC. (Continued) **S101619062**

Mtbe Fuel: 0
Water System Name: Not reported
Well Name: Not reported
Distance To Lust: 0
Waste Discharge Global ID: Not reported
Waste Disch Assigned Name: Not reported

LUST Region 8:
Region: 8
Substance: 12034
Cross Street: FOOTHILL
Regional Board: 08
Local Case Num: 87064
Facility Status: Case Closed
Staff: VALERIE JAHN
Lead Agency: Local Agency
Local Agency: 36000L
Qty Leaked: Not reported
County: San Bernardino
Review Date: Not reported
Confirm Leak: Not reported
Workplan: Not reported
Prelim Assess: Not reported
Pollution Char: Not reported
Remed Plan: Not reported
Remed Action: Not reported
Monitoring: Not reported
Close Date: 05/27/1988
Cleanup Fund Id : Not reported
Discover Date : Not reported
Enforcement Dt : Not reported
Enf Type: Not reported
Enter Date : 08/28/1987
Funding: Not reported
Staff Initials: Not reported
How Discovered: Tank Test
How Stopped: Not reported
Interim : Not reported
Lat/Lon : 34.1090184 / -117.6910699
Leak Cause: Not reported
Leak Source: Not reported
Beneficial: Not reported
MTBE Date : Not reported
MTBE Tested : NRQ
Max MTBE GW : Not reported
GW Qualifies : Not reported
Max MTBE Soil : Not reported
Soil Qualifies : Not reported
Hydr Basin #: UPPER SANTA ANA VALL
Operator : DINEEN, PATRICK
Oversight Prgm : LUST
Priority : Not reported
Work Suspended : Not reported
Responsible Party PATRICK DINEEN
Well name: WELL 14 - DESTROYED
Distance From Lust: 1679.35219017480706567804588 23
Waste Disch Global Id: W0607110050
MTBE Class: *
Waste Disch Assigned Name: 01S/08W-11B02 S
Case Type: Soil only
Global ID: T0607100057
How Stopped Date: / /
Organization Name: Not reported

DINEEN TRUCKING INC. (Continued) **S101619062**

Contact Person: Not reported
RP Address: 1284 AIRPORT DRIVE
MTBE Concentration: 0
MTBE Fuel: 0
Case Number: 083600599T
Water System Name: UPLAND, CITY OF
Code Name: SAN BERNARDINO
Agency Name: Not reported
Priority: Not reported
State Expalnation: CASE CLOSED
Substance: DIESEL
Staff: VALERIE JAHN
Case Type: S
Summary: Not reported

CORTESE:
Reg Id: 083600599T
Region: CORTESE
Reg By: Leaking Underground Storage Tanks

FID:
Facility ID: 36000259 Regulate ID: 00009733
Reg By: Active Underground Storage Tank Location
Cortese Code: Not reported SIC Code: Not reported
Status: Active Facility Tel: Not reported
Mail To: Not reported
1284 AIRPORT DR
UPLAND, CA 91786
Contact: Not reported Contact Tel: Not reported
DUNs No: Not reported NPDES No: Not reported
Creation: 10/22/93 Modified: 00/00/00
EPA ID: Not reported
Comments: Not reported

DEHS Permit:
Facility ID: PT0002527
Facility Status: ACTIVE
Permit Category: Hazmat Handler 11-25 Employees (w/Gen Prmt)
Expiration Date: 08/31/2004

Facility ID: PT0002528
Facility Status: ACTIVE
Permit Category: Generator - 11-25 Employees
Expiration Date: 08/31/2004

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19 WSW 1/2-1 3906 ft. **POMONA COLLEGE**
555 COLLEGE WY N
CLAREMONT, CA 91711

LUST S101295894
Cortese N/A

Relative: Lower

Actual: 1216 ft.

State LUST:
Cross Street: 006TH ST
Qty Leaked: Not reported
Case Number I-15931H
Reg Board: 4
Chemical: Waste Oil
Lead Agency: Regional Board
Local Agency : 19000
Case Type: Soil only
Status: Leak being confirmed

POMONA COLLEGE (Continued) **S101295894**

Review Date: 02/20/2002
Workplan: Not reported
Pollution Char: Not reported
Remed Action: Not reported
Monitoring: Not reported
Close Date: 05/02/1996
Release Date: 11/20/1990
Cleanup Fund Id : Not reported
Discover Date : 10/31/1990
Enforcement Dt : Not reported
Enf Type: DLLET
Enter Date : 12/05/1990
Funding: Not reported
Staff Initials: Not reported
How Discovered: Tank Closure
How Stopped: Not reported
Interim : Not reported
Leak Cause: UNK
Leak Source: UNK
MTBE Date : / /
Max MTBE GW : 0 Parts per Billion
MTBE Tested: Not Required to be Tested.
Priority: Not reported
Local Case # : Not reported
Beneficial: Not reported
Staff : JLC
GW Qualifier : Not reported
Max MTBE Soil : Not reported
Soil Qualifier : Not reported
Hydr Basin #: Not reported
Operator : YOUNG, RICHARD
Oversight Prgm: RB Lead Underground Storage Tank
Oversight Prgm : UST
Review Date : 10/23/2001
Stop Date : 10/31/1990
Work Suspended :Not reported
Responsible PartyJAMES HANSEN
RP Address: 101 N. COLLEGE WAY
Global Id: T0603704368
Org Name: Not reported
Contact Person: Not reported
MTBE Conc: 0
Mtbe Fuel: 0
Water System Name: Not reported
Well Name: Not reported
Distance To Lust: 0
Waste Discharge Global ID: Not reported
Waste Disch Assigned Name: Not reported

Confirm Leak: 02/20/2002
Prelim Assess: Not reported
Remed Plan: Not reported

LUST Region 4:
Report Date: 11/20/1990
Lead Agency: Local Agency
Local Agency: 19000
Case Number: I-15931
Substance: Waste Oil
Case Type: Soil
Status: Case Closed
Region: 4

POMONA COLLEGE (Continued) **S101295894**

Staff: Not reported

CORTESE:
Reg Id: I-15931
Region: CORTESE
Reg By: Leaking Underground Storage Tanks

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20 SW 1/2-1 4458 ft. **CLAREMONT COLLEGE** **Notify 65** **S100177986**
301 E. FIRST STREET **N/A**
CLAREMONT, CA 91711

Relative: Lower
Actual: 1172 ft.

NOTIFY 65:
Date Reported: Not reported Staff Initials: Not reported
Board File Number: Not reported
Facility Type: Not reported
Discharge Date: Not reported
Incident Description: 91711-4439

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21 ESE 1/2-1 4772 ft. **LAND CARE INC.** **Cortese LUST** **S104752290**
8475 LOMA PL **N/A**
UPLAND, CA 91786

Relative: Higher
Actual: 1271 ft.

State LUST:
Cross Street: ARROW ROUTE
Qty Leaked: Not reported
Case Number 083603600T
Reg Board: 8
Chemical: Gasoline
Lead Agency: Local Agency
Local Agency : 0
Case Type: Soil only
Status: Case Closed
Review Date: Not reported Confirm Leak: Not reported
Workplan: Not reported Prelim Assess: Not reported
Pollution Char: Not reported Remed Plan: Not reported
Remed Action: Not reported
Monitoring: Not reported
Close Date: 04/21/2000
Release Date: 11/29/1999
Cleanup Fund Id : Not reported
Discover Date : 11/22/1999
Enforcement Dt : Not reported
Enf Type: Not reported
Enter Date : 01/26/2000
Funding: Not reported
Staff Initials: LH6
How Discovered: Tank Closure
How Stopped: Not reported
Interim : Not reported
Leak Cause: UNK
Leak Source: UNK
MTBE Date : / /
Max MTBE GW : 0 Parts per Billion
MTBE Tested: Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
Priority: Not reported
Local Case # : 99140
Beneficial: Not reported

LAND CARE INC. (Continued) **S104752290**

Staff : RS
GW Qualifier : Not reported
Max MTBE Soil : Not reported
Soil Qualifier : Not reported
Hydr Basin #: Not reported
Operator : KEITH WALTON
Oversight Prgm: Local Oversight Program UST
Oversight Prgm : LOP
Review Date : 01/26/2000
Stop Date : 11/22/1999
Work Suspended :No
Responsible PartyLAND CARE, INC
RP Address: Not reported
Global Id: T0607100625
Org Name: Not reported
Contact Person: Not reported
MTBE Conc: 0
Mtbe Fuel: 1
Water System Name: Not reported
Well Name: Not reported
Distance To Lust: 0
Waste Discharge Global ID: Not reported
Waste Disch Assigned Name: Not reported

LUST Region 8:
Region: 8
Substance: 8006619 Cross Street: ARROW ROUTE
Regional Board: 08
Local Case Num: 99140
Facility Status: Case Closed
Staff: ROSE SCOTT
Lead Agency: Local Agency
Local Agency: 36000L
Qty Leaked: Not reported
County: San Bernardino
Review Date: Not reported Confirm Leak: Not reported
Workplan: Not reported Prelim Assess: Not reported
Pollution Char: Not reported Remed Plan: Not reported
Remed Action: Not reported Monitoring: Not reported
Close Date: 04/21/2000
Cleanup Fund Id : Not reported
Discover Date : 11/22/1999
Enforcement Dt : Not reported
Enf Type: Not reported
Enter Date : 01/26/2000
Funding: Not reported
Staff Initials: LH6
How Discovered: Tank Closure
How Stopped: Not reported
Interim : Not reported
Lat/Lon : 34.100893 / -117.685865
Leak Cause: UNK
Leak Source: UNK
Beneficial: Not reported
MTBE Date : Not reported
MTBE Tested : NT
Max MTBE GW : Not reported
GW Qualifies : Not reported

LAND CARE INC. (Continued) **S104752290**

Max MTBE Soil : Not reported
Soil Qualifies : Not reported
Hydr Basin #: UPPER SANTA ANA VALL
Operator : KEITH WALTON
Oversight Prgm : LOP
Priority : Not reported
Work Suspended No
Responsible PartyLAND CARE, INC
Well name: Not reported
Distance From Lust: 1258.8168427196653957495046955
Waste Disch Global Id: Not reported
MTBE Class: *
Waste Disch Assigned Name: Not reported
Case Type: Soil only
Global ID: T0607100625
How Stopped Date: 11/22/1999
Organization Name: Not reported
Contact Person: Not reported
RP Address: Not reported
MTBE Concentration: 0
MTBE Fuel: 1
Case Number: 083603600T
Water System Name: Not reported
Code Name: SAN BERNARDINO
Agency Name: Not reported
Priority: Not reported
State Expalnation: CASE CLOSED
Substance: GASOLINE
Staff: ROSE SCOTT
Case Type: S
Summary: Not reported

CORTESE:
Reg Id: 083603600T
Region: CORTESE
Reg By: Leaking Underground Storage Tanks

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22 NW 1/2-1 4932 ft. **RANCHO SANTA ANA BOT. GARDENS**
1500 COLLEGE AVE N
CLAREMONT, CA 91711

LUST **S103316964**
HAZNET **N/A**
Cortese
LOS ANGELES CO. HMS

Relative: Higher

Actual: 1330 ft.

State LUST:
Cross Street: Not reported
Qty Leaked: Not reported
Case Number R-25583H
Reg Board: 4
Chemical: 1
Lead Agency: Regional Board
Local Agency : 19000
Case Type: Soil only
Status: Leak being confirmed
Review Date: 10/26/2001
Workplan: Not reported
Pollution Char: Not reported
Remed Action: Not reported
Monitoring: Not reported
Close Date: 07/14/1998
Release Date: 07/14/1998

Confirm Leak: 10/26/2001
Prelim Assess: Not reported
Remed Plan: Not reported

RANCHO SANTA ANA BOT. GARDENS (Continued) **S103316964**

Cleanup Fund Id : Not reported
Discover Date : / /
Enforcement Dt : Not reported
Enf Type: DLSEL
Enter Date : / /
Funding: Not reported
Staff Initials: Not reported
How Discovered: Not reported
How Stopped: Not reported
Interim : Not reported
Leak Cause: Not reported
Leak Source: Not reported
MTBE Date : / /
Max MTBE GW : 0 Parts per Billion
MTBE Tested: Not Required to be Tested.
Priority: Not reported
Local Case # : Not reported
Beneficial: Not reported
Staff : JLC
GW Qualifier : Not reported
Max MTBE Soil : Not reported
Soil Qualifier : Not reported
Hydr Basin #: Not reported
Operator : Not reported
Oversight Prgm: RB Lead Underground Storage Tank
Oversight Prgm : UST
Review Date : 10/23/2001
Stop Date : / /
Work Suspended : Not reported
Responsible Party TRUDY EMARA
RP Address: 1500 N COLLEGE AVE.
Global Id: T0603705516
Org Name: Not reported
Contact Person: Not reported
MTBE Conc: 0
Mtbe Fuel: 0
Water System Name: Not reported
Well Name: Not reported
Distance To Lust: 0
Waste Discharge Global ID: Not reported
Waste Disch Assigned Name: Not reported

LUST Region 4:
Report Date: 7/14/1998
Lead Agency: Local Agency
Local Agency: 19000
Case Number: R-25583
Substance: 1
Case Type: Soil
Status: Case Closed
Region: 4
Staff: Not reported

RANCHO SANTA ANA BOT. GARDENS (Continued) **S103316964**

HAZNET:

Gepaid:	CAL000066435
TSD EPA ID:	CAD028409019
Gen County:	Los Angeles
Tsd County:	Los Angeles
Tons:	2.0850
Waste Category:	Aqueous solution with less than 10% total organic residues
Disposal Method:	Treatment, Tank
Contact:	RANCHO SANTA ANA BOTANIC GARD
Telephone:	(000) 000-0000
Mailing Address:	1500 N COLLEGE AVE CLAREMONT, CA 91711 - 3157
County	Los Angeles

Gepaid:	CAL000066435
TSD EPA ID:	CAT080013352
Gen County:	Los Angeles
Tsd County:	Los Angeles
Tons:	0.4587
Waste Category:	Aqueous solution with 10% or more total organic residues
Disposal Method:	Not reported
Contact:	RANCHO SANTA ANA BOTANIC GARD
Telephone:	(000) 000-0000
Mailing Address:	1500 N COLLEGE AVE CLAREMONT, CA 91711 - 3157
County	Los Angeles

CORTESE:

Reg Id:	R-25583
Region:	CORTESE
Reg By:	Leaking Underground Storage Tanks

HMS:

Facility Id:	018332-025583		
Area:	6G		
Facility Type:	T1		
Permit Number:	000211944	Permit Status:	Removed
Facility Status:	Removed		
Region:	Los Angeles County:		

23
SE
1/2-1
5090 ft.

5225 ARROW
MONTCLAIR, CA 91763

CHMIRS **S100274966**
N/A

Relative:
Lower

Actual:
1193 ft.

CHMIRS:

OES Control Number:	8906437
Chemical Name:	Not reported
Extent of Release:	Not reported
Property Use:	Mercantile, Business
Incident Date:	05-JUN-89
Date Completed:	05-JUN-89
Time Completed :	1825
Agency Id Number :	36140
Agency Incident Number :	491354
OES Incident Number :	8906437
Time Notified :	1539
Surrounding Area :	962
Estimated Temperature :	80
Property Management :	P

(Continued) **S100274966**

More Than Two Substances Involved? :	N
Special Studies 1 :	Not reported
Special Studies 2 :	Not reported
Special Studies 3 :	Not reported
Special Studies 4 :	Not reported
Special Studies 5 :	Not reported
Special Studies 6 :	Not reported
Responding Agency Personel # Of Injuries :	0
Responding Agency Personel # Of Fatalities :	0
Resp Agncy Personel # Of Decontaminated :	0
Others Number Of Decontaminated :	0
Others Number Of Injuries :	0
Others Number Of Fatalities :	0
Vehicle Make/year :	Not reported
Vehicle License Number :	Not reported
Vehicle State :	Not reported
Vehicle Id Number :	Not reported
CA/DOT/PUC/ICC Number :	Not reported
Company Name :	Not reported
Reporting Officer Name/ID :	RANDOLPH W ROHRER
Report Date :	05-JUN-89
Comments :	Not reported
Facility Telephone Number :	714 626-1217
Waterway Involved :	Not reported
Waterway :	Not reported
Spill Site :	Not reported
Cleanup By :	Not reported
Containment :	Not reported
What Happened :	Not reported
Type :	Not reported
Other :	Not reported
Chemical 1 :	Not Reported
Chemical 2 :	Not Reported
Chemical 3 :	Not Reported
Date/Time :	Not reported
Evacuations :	Not reported

F24
SE
> 1
5786 ft.

GOODYEAR TIRE CENTER
8995 CENTRAL AVE
MONTCLAIR, CA 91763

Cortese **S101301191**
LUST **N/A**

Site 1 of 2 in cluster F

Relative:
Lower

Actual:
1171 ft.

State LUST:

Cross Street:	MORENO
Qty Leaked:	Not reported
Case Number	083600177T
Reg Board:	8
Chemical:	Waste Oil
Lead Agency:	Local Agency
Local Agency :	0
Case Type:	Soil only
Status:	Case Closed
Review Date:	Not reported
Workplan:	Not reported
Pollution Char:	Not reported
Remed Action:	Not reported
Monitoring:	Not reported
Close Date:	10/17/1994

Confirm Leak:	Not reported
Prelim Assess:	Not reported
Remed Plan:	Not reported

GOODYEAR TIRE CENTER (Continued) **S101301191**

Release Date: 03/30/1987
Cleanup Fund Id : Not reported
Discover Date : 02/25/1987
Enforcement Dt : Not reported
Enf Type: Not reported
Enter Date : 04/06/1987
Funding: Not reported
Staff Initials: Not reported
How Discovered: Tank Closure
How Stopped: Not reported
Interim : Not reported
Leak Cause: UNK
Leak Source: Tank
MTBE Date : / /
Max MTBE GW : 0 Parts per Billion
MTBE Tested: Not Required to be Tested.
Priority: Not reported
Local Case # : 87018
Beneficial: Not reported
Staff : VJJ
GW Qualifier : Not reported
Max MTBE Soil : Not reported
Soil Qualifier : Not reported
Hydr Basin #: Not reported
Operator : WICHMANN
Oversight Prgm: LUST
Oversight Prgm : LUST
Review Date : 05/30/1995
Stop Date : 02/25/1987
Work Suspended : Not reported
Responsible Party GOODYEAR TIRE AND RUBBER CO.
RP Address: 8995 CENTRAL AVENUE, MONTCLAIR, CA 91763
Global Id: T0607100022
Org Name: Not reported
Contact Person: Not reported
MTBE Conc: 0
Mtbe Fuel: 0
Water System Name: Not reported
Well Name: Not reported
Distance To Lust: 0
Waste Discharge Global ID: Not reported
Waste Disch Assigned Name: Not reported

LUST Region 8:
Region: 8
Substance: 12035 Cross Street: MORENO
Regional Board: 08
Local Case Num: 87018
Facility Status: Case Closed
Staff: VALERIE JAHN
Lead Agency: Local Agency
Local Agency: 36000L
Qty Leaked: Not reported
County: San Bernardino
Review Date: Not reported Confirm Leak: Not reported
Workplan: Not reported Prelim Assess: Not reported
Pollution Char: Not reported Remed Plan: Not reported
Remed Action: Not reported Monitoring: Not reported

GOODYEAR TIRE CENTER (Continued) **S101301191**

Close Date: 10/17/1994
Cleanup Fund Id : Not reported
Discover Date : 02/25/1987
Enforcement Dt : Not reported
Enf Type: Not reported
Enter Date : 04/06/1987
Funding: Not reported
Staff Initials: Not reported
How Discovered: Tank Closure
How Stopped: Not reported
Interim : Not reported
Lat/Lon : 34.090634 / -117.6893927
Leak Cause: UNK
Leak Source: Tank
Beneficial: Not reported
MTBE Date : Not reported
MTBE Tested : NRQ
Max MTBE GW : Not reported
GW Qualifies : Not reported
Max MTBE Soil : Not reported
Soil Qualifies : Not reported
Hydr Basin #: UPPER SANTA ANA VALL
Operator : WICHMANN
Oversight Prgm : LUST
Priority : Not reported
Work Suspended :Not reported
Responsible PartyGOODYEAR TIRE AND RUBBER CO.
Well name: WELL 04 - INACTIVE
Distance From Lust: 1678.5635790676019993324543875
Waste Disch Global Id: W0607110029
MTBE Class: *
Waste Disch Assigned Name: 01S/08W-14A03 S
Case Type: Soil only
Global ID: T0607100022
How Stopped Date: 02/25/1987
Organization Name: Not reported
Contact Person: Not reported
RP Address: 8995 CENTRAL AVENUE, MONTCLAIR, CA 91763
MTBE Concentration: 0
MTBE Fuel: 0
Case Number: 083600177T
Water System Name: MONTE VISTA CWD
Code Name: SAN BERNARDINO
Agency Name: Not reported
Priority: Not reported
State Expalnation: CASE CLOSED
Substance: WASTE OIL
Staff: VALERIE JAHN
Case Type: S
Summary: Not reported

CORTESE:
Reg Id: 083600177T
Region: CORTESE
Reg By: Leaking Underground Storage Tanks

GOODYEAR TIRE CENTER (Continued) **S101301191**

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25 WNW > 1 5790 ft. **ARCO(FORMER) CLAREMONT**
306 FOOTHILL BLVD W
CLAREMONT, CA 91711

LUST **S101642760**
Cortese **N/A**
LOS ANGELES CO. HMS

Relative: Higher

Actual: 1266 ft.

State LUST:

Cross Street:	HARVARD ST		
Qty Leaked:	Not reported		
Case Number	R-22230H		
Reg Board:	4		
Chemical:	Gasoline		
Lead Agency:	Regional Board		
Local Agency :	19000		
Case Type:	Soil only		
Status:	Leak being confirmed		
Review Date:	01/08/2002	Confirm Leak:	01/08/2002
Workplan:	10/11/95	Prelim Assess:	10/11/95
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	Not reported		
Monitoring:	Not reported		
Close Date:	09/17/1996		
Release Date:	04/28/1995		
Cleanup Fund Id :	Not reported		
Discover Date :	12/01/1994		
Enforcement Dt :	Not reported		
Enf Type:	DLSEL		
Enter Date :	10/11/1995		
Funding:	Not reported		
Staff Initials:	Not reported		
How Discovered:	Tank Closure		
How Stopped:	Not reported		
Interim :	Not reported		
Leak Cause:	Not reported		
Leak Source:	Piping		
MTBE Date :	/ /		
Max MTBE GW :	0 Parts per Billion		
MTBE Tested:	Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.		
Priority:	Not reported		
Local Case # :	Not reported		
Beneficial:	Not reported		
Staff :	JLC		
GW Qualifier :	Not reported		
Max MTBE Soil :	Not reported		
Soil Qualifier :	Not reported		
Hydr Basin #:	Not reported		
Operator :	Not reported		
Oversight Prgm:	RB Lead Underground Storage Tank		
Oversight Prgm :	UST		
Review Date :	02/14/2002		
Stop Date :	12/01/1994		
Work Suspended :	Not reported		
Responsible Party	JEFFREY HEUSEL		
RP Address:	21 TECHNOLOGY DR.		
Global Id:	T0603705357		
Org Name:	Not reported		
Contact Person:	Not reported		
MTBE Conc:	0		
Mtbe Fuel:	1		

ARCO(FORMER) CLAREMONT (Continued) **S101642760**

Water System Name: Not reported
Well Name: Not reported
Distance To Lust: 0
Waste Discharge Global ID: Not reported
Waste Disch Assigned Name: Not reported

LUST Region 4:
Report Date: 4/28/1995
Lead Agency: Regional Board
Local Agency: 19000
Case Number: R-22230
Substance: Gasoline
Case Type: Soil
Status: Case Closed
Region: 4
Staff: Not reported

CORTESE:
Reg Id: R-22230
Region: CORTESE
Reg By: Leaking Underground Storage Tanks

HMS:
Facility Id: 012027-012112
Area: 6G
Facility Type: T0
Permit Number: 00003771T Permit Status: Removed
Facility Status: Removed
Region: Los Angeles County:

Facility Id: 012027-022230
Area: 6G
Facility Type: T1
Permit Number: 000116390 Permit Status: Removed
Facility Status: Removed
Region: Los Angeles County:

26
ENE
> 1
5880 ft.

BENSON AVENUE CAR WASH
1639 WEST FOOTHILL BLVD
UPLAND, CA 91786

HAZNET S103952335
CHMIRS N/A

Relative:
Higher

Actual:
1357 ft.

HAZNET:
Gepaid: CAL000123885
TSD EPA ID: CAT080011059
Gen County: San Bernardino
Tsd County: Los Angeles
Tons: .4587
Waste Category: Waste oil and mixed oil
Disposal Method: Recycler
Contact: PARTNERSHIP -BLINDELL-DISCENSO
Telephone: (000) 000-0000
Mailing Address: 1639 W FOOTHILL BLVD
UPLAND, CA 91786
County San Bernardino

CHMIRS:
OES Control Number: 02-2730
Chemical Name: Gasoline
Extent of Release: Not reported
Property Use: Not reported

BENSON AVENUE CAR WASH (Continued) **S103952335**

Incident Date:	Not reported
Date Completed:	Not reported
Time Completed :	Not reported
Agency Id Number :	Not reported
Agency Incident Number :	Not reported
OES Incident Number :	02-2730
Time Notified :	Not reported
Surrounding Area :	Not reported
Estimated Temperature :	Not reported
Property Management :	Not reported
More Than Two Substances Involved? :	Not reported
Special Studies 1 :	Not reported
Special Studies 2 :	Not reported
Special Studies 3 :	Not reported
Special Studies 4 :	Not reported
Special Studies 5 :	Not reported
Special Studies 6 :	Not reported
Responding Agency Personel # Of Injuries :	1
Responding Agency Personel # Of Fatalities :	0
Resp Agncy Personel # Of Decontaminated :	Not reported
Others Number Of Decontaminated :	Not reported
Others Number Of Injuries :	Not reported
Others Number Of Fatalities :	Not reported
Vehicle Make/year :	Not reported
Vehicle License Number :	Not reported
Vehicle State :	Not reported
Vehicle Id Number :	Not reported
CA/DOT/PUC/ICC Number :	Not reported
Company Name :	Not reported
Reporting Officer Name/ID :	Not reported
Report Date :	Not reported
Comments :	Not reported
Facility Telephone Number :	Not reported
Waterway Involved :	Yes
Waterway :	Storm Drain
Spill Site :	Service Station
Cleanup By :	Responsible Party
Containment :	Yes
What Happened :	Fuel tanker left valve on while off loading. Some of the substance made it to storm drain, however substance evaporated and was unable to be recovered. Note: Driver complained of burning sensation due to gasoline being spilt on his foot. Driver denied tr
Type :	Gal(s)
Other :	Not reported
Chemical 1 :	Not Reported
Chemical 2 :	Not Reported
Chemical 3 :	Not Reported
Date/Time :	5/22/2002 0012
Evacuations :	0

F27
SE
> 1
6015 ft.

9041 CENTRAL AVENUE
MONTECLAIR, CA 91763

CHMIRS **S100278408**
N/A

Site 2 of 2 in cluster F

Relative:
Lower

Actual:
1163 ft.

CHMIRS:

OES Control Number:	9120140
Chemical Name:	Not reported
Extent of Release:	Not reported
Property Use:	Mercantile, Business
Incident Date:	01-NOV-91
Date Completed:	01-NOV-91
Time Completed :	1118
Agency Id Number :	36140
Agency Incident Number :	2872
OES Incident Number :	9120140
Time Notified :	930
Surrounding Area :	500
Estimated Temperature :	72
Property Management :	P
More Than Two Substances Involved? :	N
Special Studies 1 :	Not reported
Special Studies 2 :	Not reported
Special Studies 3 :	Not reported
Special Studies 4 :	Not reported
Special Studies 5 :	Not reported
Special Studies 6 :	Not reported
Responding Agency Personel # Of Injuries :	0
Responding Agency Personel # Of Fatalities :	0
Resp Agncy Personel # Of Decontaminated :	0
Others Number Of Decontaminated :	0
Others Number Of Injuries :	0
Others Number Of Fatalities :	0
Vehicle Make/year :	Not reported
Vehicle License Number :	Not reported
Vehicle State :	Not reported
Vehicle Id Number :	Not reported
CA/DOT/PUC/ICC Number :	Not reported
Company Name :	Not reported
Reporting Officer Name/ID :	DANIEL TAPIA T975
Report Date :	01-NOV-91
Comments :	No
Facility Telephone Number :	714 626-1217
Waterway Involved :	Not reported
Waterway :	Not reported
Spill Site :	Not reported
Cleanup By :	Not reported
Containment :	Not reported
What Happened :	Not reported
Type :	Not reported
Other :	Not reported
Chemical 1 :	Not Reported
Chemical 2 :	Not Reported
Chemical 3 :	Not Reported
Date/Time :	Not reported
Evacuations :	Not reported

(Continued) **S100278408**

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28 SSE > 1 6064 ft. | **EXXON SERVICE STATION #35**
5209 MORENO
MONTCLAIR, CA 91763 | **Cortese LUST** | **S102429524 N/A**

Relative: Lower

Actual: 1151 ft.

State LUST:

Cross Street:	CENTRAL		
Qty Leaked:	Not reported		
Case Number	083600938T		
Reg Board:	8		
Chemical:	Gasoline		
Lead Agency:	Regional Board		
Local Agency :	0		
Case Type:	Soil only		
Status:	Case Closed		
Review Date:	Not reported	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	Not reported
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	Not reported		
Monitoring:	Not reported		
Close Date:	06/28/1988		
Release Date:	12/23/1985		
Cleanup Fund Id :	Not reported		
Discover Date :	/ /		
Enforcement Dt :	Not reported		
Enf Type:	Not reported		
Enter Date :	06/20/1988		
Funding:	Not reported		
Staff Initials:	CR2		
How Discovered:	Not reported		
How Stopped:	Not reported		
Interim :	Not reported		
Leak Cause:	Not reported		
Leak Source:	Not reported		
MTBE Date :	/ /		
Max MTBE GW :	0 Parts per Billion		
MTBE Tested:	Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.		
Priority:	Not reported		
Local Case # :	Not reported		
Beneficial:	Not reported		
Staff :	CAB		
GW Qualifier :	Not reported		
Max MTBE Soil :	Not reported		
Soil Qualifier :	Not reported		
Hydr Basin #:	Not reported		
Operator :	Not reported		
Oversight Prgm:	LUST		
Oversight Prgm :	LUST		
Review Date :	03/18/1992		
Stop Date :	/ /		
Work Suspended :	Not reported		
Responsible Party	EXXON COMPANY USA		
RP Address:	P.O. BOX 4415, HOUSTON, TX 77210		
Global Id:	T0607100098		
Org Name:	Not reported		
Contact Person:	Not reported		
MTBE Conc:	0		
Mtbe Fuel:	1		

EXXON SERVICE STATION #35 (Continued) **S102429524**

Water System Name: Not reported
Well Name: Not reported
Distance To Lust: 0
Waste Discharge Global ID: Not reported
Waste Disch Assigned Name: Not reported

LUST Region 8:

Region:	8		
Substance:	8006619	Cross Street:	CENTRAL
Regional Board:	08		
Local Case Num:	Not reported		
Facility Status:	Case Closed		
Staff:	CARL BERHHARDT		
Lead Agency:	Regional Board		
Local Agency:	36000L		
Qty Leaked:	Not reported		
County:	San Bernardino		
Review Date:	Not reported	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	Not reported
Pollution Char:	Not reported	Remed Plan:	Not reported
Remed Action:	Not reported	Monitoring:	Not reported
Close Date:	06/28/1988		
Cleanup Fund Id :	Not reported		
Discover Date :	Not reported		
Enforcement Dt :	Not reported		
Enf Type:	Not reported		
Enter Date :	06/20/1988		
Funding:	Not reported		
Staff Initials:	CR2		
How Discovered:	Not reported		
How Stopped:	Not reported		
Interim :	Not reported		
Lat/Lon :	34.088555 / -117.6916368		
Leak Cause:	Not reported		
Leak Source:	Not reported		
Beneficial:	Not reported		
MTBE Date :	Not reported		
MTBE Tested :	NT		
Max MTBE GW :	Not reported		
GW Qualifies :	Not reported		
Max MTBE Soil :	Not reported		
Soil Qualifies :	Not reported		
Hydr Basin #:	UPPER SANTA ANA VALL		
Operator :	Not reported		
Oversight Prgm :	LUST		
Priority :	Not reported		
Work Suspended :	Not reported		
Responsible Party	EXXON COMPANY USA		
Well name:	Not reported		
Distance From Lust:	1942.928896577577127500921420 4		
Waste Disch Global Id:	Not reported		
MTBE Class:	*		
Waste Disch Assigned Name:	Not reported		
Case Type:	Soil only		
Global ID:	T0607100098		
How Stopped Date:	/ /		
Organization Name:	Not reported		
Contact Person:	Not reported		

EXXON SERVICE STATION #35 (Continued) **S102429524**

RP Address: P.O. BOX 4415, HOUSTON, TX 77210
MTBE Concentration: 0
MTBE Fuel: 1
Case Number: 083600938T
Water System Name: Not reported
Code Name: SAN BERNARDINO
Agency Name: Not reported
Priority: Not reported
State Expalnation: CASE CLOSED
Substance: GASOLINE
Staff: CARL BERHHARDT
Case Type: S
Summary: Not reported

CORTESE:
Reg Id: 083600938T
Region: CORTESE
Reg By: Leaking Underground Storage Tanks

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29 WSW > 1 6199 ft. **SHELL** **LUST S102436865**
246 INDIAN HILL BLVD N **Cortese N/A**
CLAREMONT, CA 91711

Relative: Lower
Actual: 1168 ft.

State LUST:
Cross Street: ARROW
Qty Leaked: Not reported
Case Number 225
Reg Board: 4
Chemical: Gasoline
Lead Agency: Local Agency
Local Agency : 19000
Case Type: Soil only
Status: Leak being confirmed
Review Date: 05/30/1985 Confirm Leak: 05/30/1985
Workplan: Not reported Prelim Assess: Not reported
Pollution Char: Not reported Remed Plan: Not reported
Remed Action: Not reported
Monitoring: Not reported
Close Date: Not reported
Release Date: 05/30/1985
Cleanup Fund Id : Not reported
Discover Date : 05/30/1985
Enforcement Dt : Not reported
Enf Type: Not reported
Enter Date : 12/31/1986
Funding: Not reported
Staff Initials: Not reported
How Discovered: Tank Closure
How Stopped: Not reported
Interim : Not reported
Leak Cause: UNK
Leak Source: UNK
MTBE Date : / /
Max MTBE GW : 0 Parts per Billion
MTBE Tested: Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
Priority: Not reported
Local Case # : Not reported
Beneficial: Not reported

SHELL (Continued) **S102436865**

Staff : JLC
GW Qualifier : Not reported
Max MTBE Soil : Not reported
Soil Qualifier : Not reported
Hydr Basin #: Not reported
Operator : Not reported
Oversight Prgm: Local Implementing Agency UST (includes non-LOP cases within LOP jurisdiction)
Oversight Prgm : LIA
Review Date : 08/18/1987
Stop Date : 05/30/1985
Work Suspended :Not reported
Responsible PartySHELL OIL COMPANY
RP Address: 511 NORTH BROOKHURST STREET, ANAHEIM, CA 92803
Global Id: T0603700005
Org Name: Not reported
Contact Person: Not reported
MTBE Conc: 0
Mtbe Fuel: 1
Water System Name: Not reported
Well Name: Not reported
Distance To Lust: 0
Waste Discharge Global ID: Not reported
Waste Disch Assigned Name: Not reported

LUST Region 4:
Report Date: 5/30/1985
Lead Agency: Local Agency
Local Agency: 19000
Case Number: 000225
Substance: Gasoline
Case Type: Soil
Status: Leak being confirmed
Region: 4
Staff: Not reported

CORTESE:
Reg Id: 000225
Region: CORTESE
Reg By: Leaking Underground Storage Tanks

30
ENE
> 1
6431 ft.

687 N. BENSON AVE
UPLAND, CA 26250

CHMIRS **S105669376**
N/A

Relative:
Higher

Actual:
1392 ft.

CHMIRS:
OES Control Number: 00-0294
Chemical Name: Gear Lube
Extent of Release: Not reported
Property Use: Not reported
Incident Date: Not reported
Date Completed: Not reported
Time Completed : Not reported
Agency Id Number : Not reported
Agency Incident Number : Not reported
OES Incident Number : 00-0294
Time Notified : Not reported
Surrounding Area : Not reported
Estimated Temperature : Not reported

(Continued) **S105669376**

Property Management :	Not reported
More Than Two Substances Involved? :	Not reported
Special Studies 1 :	Not reported
Special Studies 2 :	Not reported
Special Studies 3 :	Not reported
Special Studies 4 :	Not reported
Special Studies 5 :	Not reported
Special Studies 6 :	Not reported
Responding Agency Personel # Of Injuries :	0
Responding Agency Personel # Of Fatalities :	0
Resp Agncy Personel # Of Decontaminated :	Not reported
Others Number Of Decontaminated :	Not reported
Others Number Of Injuries :	Not reported
Others Number Of Fatalities :	Not reported
Vehicle Make/year :	Not reported
Vehicle License Number :	Not reported
Vehicle State :	Not reported
Vehicle Id Number :	Not reported
CA/DOT/PUC/ICC Number :	Not reported
Company Name :	Not reported
Reporting Officer Name/ID :	Not reported
Report Date :	Not reported
Comments :	Not reported
Facility Telephone Number :	Not reported
Waterway Involved :	No
Waterway :	Not reported
Spill Site :	Merchant/Business
Cleanup By :	n/a
Containment :	Yes
What Happened :	Smell from overheated gear lube. People complaining of symptoms caused by smell. No injuries.
Type :	VAPOR
Other :	small amount
Chemical 1 :	Not Reported
Chemical 2 :	Not Reported
Chemical 3 :	Not Reported
Date/Time :	1/20/00 1352
Evacuations :	0

City		EDR ID	Site Name	Site Address	Zip	Database(s)
CLAREMONT		S103702267	SIXTH STREET DUMP-CLAREMONT	705 EAST 6TH STREET		WMUDS/SWAT
CLAREMONT		S105092104	HIGHRAIL CONNECTOR INC	759 W ARROW HIGHWAY STE E / F	91711	HAZNET
CLAREMONT		S102808949	CO SANITATION DISTRICT OF LOS ANGELES	CITY OF CLAREMONT/CITY YARD	91711	HAZNET
CLAREMONT		S103951327	AUTO EXPO INC	508 CLAREMONT CENTER DR	91711	HAZNET
CLAREMONT		S104572597	GMS REALTY	438 CLAREMONT CENTER DR	91711	HAZNET
CLAREMONT		S103659536	AMERICAN STORES PROPERTIES, INC.	436 W. CLAREMONT CTR. DR.	91711	HAZNET
CLAREMONT		S104565657	GMC REALTY LLC	424 CLAREMONT CENTER DR	91711	HAZNET
CLAREMONT		1000355819	CLAREMONT ONE HR CLNR-SOUTH	424 CLAREMONT CENTER DR	91711	RCRIS-SQG, FINDS, CLEANERS
CLAREMONT		S105690139	TOSCO - 76 STATION #3607	1092 FOOTHILL BLVD W	91711	LUST
CLAREMONT		S103652101	GTE CALIFORNIA INCORP	315 INDIAN HILL BLVD	91711	HAZNET, Cortese
CLAREMONT		S102360674	LIVE OAK DEBRIS DISPOSAL SITE	4405 OAK CANYON ROAD	91711	WMUDS/SWAT, SWF/LF
CLAREMONT		S105086614	MOBILE OIL CORP	SHLDR OF HWY 10 ESTBND @ INDIAN HILL	91711	HAZNET
CLAREMONT	CA	S103438598	CLAREMONT LANDFILL	ARROW ROUTE / CLAREMONT BLVD.	91711	WMUDS/SWAT, CA WDS
MONTCLAIR		S104405154	CHUNG'S MARKET	10295 MILLS AVE	91763	Cortese, LUST
POMONA		S105557602	PROTOTYPES	WEST OF 845 EAST ARROW HIGHWAY	91711	VCP
SAN BERNARDINO COUN		S105631217		HWY 58 2 MI WEST OF HWY 359		CHMIRS, EMI
SAN BERNARDINO COUN		S105629377		RIALTO LILAC STREET		CHMIRS, EMI
UPLAND		S103626548	TERRY SCOTT MITCHUM	1244 9TH	91786	HAZNET
UPLAND		S103989549	STEVES COLLISION RESTORATION	1060 9TH	91786	HAZNET
UPLAND		S103970776	INTOWN PROPERTIES INC/HUD	930 ARROW HWY STE A	91786	HAZNET
UPLAND		S102805843	GTE AT AT&T FACILITY	2209 ARROW HWY	91786	HAZNET
UPLAND		S103961679	DR. JOHN CAMPBELL	2013 ARROW ROUTE	91786	HAZNET
UPLAND		S102042416	ARROW AUTO BODY	1685 ARROW RT C1	91786	San Bern. Co. Permit
UPLAND		S102042476	CORVETTE COLORS	1685 ARROW RT B1	91786	San Bern. Co. Permit
UPLAND		S105085581	KATHRYN CARNEAL	SOUTHEAST CORNER OF 11TH / CENTRAL	91786	HAZNET
UPLAND		S103464093	THRIFTY OIL # / ARCO # 9691	775 FOOTHILL BLVD	91786	LUST
UPLAND		S105698407	DOLLAR CLEANERS	1630 W FOOTHILL BLVD D	91786	San Bern. Co. Permit
UPLAND		S105698406	DOLLAR CLEANERS	1630 W FOOTHILL BLVD D	91786	San Bern. Co. Permit
UPLAND		S105265883	LEE SEUNG C (USA CLEANERS)	1475 E FOOTHILL BLD	91786	CLEANERS
UPLAND		S105698405	RANCHO MOBILE AUTO SERVICE REPAIR	1466 E FOOTHILL BLVD A	91786	San Bern. Co. Permit
UPLAND		S105698404	RANCHO MOBILE AUTO SERVICE REPAIR	1466 E FOOTHILL BLVD A	91786	San Bern. Co. Permit
UPLAND		S103977648	MIKE PATEL	1101 FOOTHILL BLVD	91786	HAZNET
UPLAND		S105126537	SHELL	1188 WEST FOOTHILL/MOUNTAIN	91786	HAZNET
UPLAND		S105974503	RSI ASSOCIATES, INC	1302 MONTE VISTA STE 12	91786	San Bern. Co. Permit
UPLAND		S105974502	RSI ASSOCIATES, INC	1302 MONTE VISTA STE 12	91786	San Bern. Co. Permit
UPLAND		S104573675	SAN BERNARDINO ASSOCIATED GOVERNMENT	ON ROUTE 30 FREEWAY @ BENSON AVE	91786	HAZNET
UPLAND		S103954404	CALMAT CO.	S.WEST INTERSECTION ARROW ROUNTE MON	91786	HAZNET
UPLAND		S105722527	ZCAR SPECIALTY	1462 9TH ST	91786	HAZNET
UPLAND		S105723715	ABILTIY LABEL	1935 11TH STE L	91786	HAZNET
UPLAND		S105624530	LAIDLAW TRANSIT INC.	1455 9TH STREET	91786	LUST
UPLAND		S102042692	TEDEUM	1075 9TH STREET	91786	HAZNET
UPLAND	CA	S104384496	LANDFILL,UPLAND-INERT, 700 ARR	700 ARROW ROUTE	91711	WMUDS/SWAT
UPLAND	CA	S104384499	LANDFILL,UPLAND-INERT-2430 ARR	2430 ARROW ROUTE	91786	WMUDS/SWAT

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Elapsed ASTM days: Provides confirmation that this EDR report meets or exceeds the 90-day updating requirement of the ASTM standard.

FEDERAL ASTM STANDARD RECORDS

NPL: National Priority List
Source: EPA
Telephone: N/A
National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 07/22/03
Date Made Active at EDR: 08/26/03
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 08/04/03
Elapsed ASTM days: 22
Date of Last EDR Contact: 08/04/03

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 3
Telephone 215-814-5418

EPA Region 4
Telephone 404-562-8033

EPA Region 6
Telephone: 214-655-6659

EPA Region 8
Telephone: 303-312-6774

Proposed NPL: Proposed National Priority List Sites
Source: EPA
Telephone: N/A

Date of Government Version: 06/10/03
Date Made Active at EDR: 08/26/03
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 08/04/03
Elapsed ASTM days: 22
Date of Last EDR Contact: 08/04/03

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System
Source: EPA
Telephone: 703-413-0223
CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 06/16/03
Date Made Active at EDR: 08/01/03
Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 06/23/03
Elapsed ASTM days: 39
Date of Last EDR Contact: 09/24/03

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned
Source: EPA
Telephone: 703-413-0223
As of February 1995, CERCLIS sites designated "No Further Remedial Action Planned" (NFRAP) have been removed from CERCLIS. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration. EPA has removed approximately 25,000 NFRAP sites to lift the unintended barriers to the redevelopment of these properties and has archived them as historical records so EPA does not needlessly repeat the investigations in the future. This policy change is part of the EPA's Brownfields Redevelopment Program to help cities, states, private investors and affected citizens to promote economic redevelopment of unproductive urban sites.

Date of Government Version: 06/11/03
Date Made Active at EDR: 08/01/03
Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 06/23/03
Elapsed ASTM days: 39
Date of Last EDR Contact: 09/24/03

CORRACTS: Corrective Action Report
Source: EPA
Telephone: 800-424-9346
CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 08/13/03
Date Made Active at EDR: 09/18/03
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 08/22/03
Elapsed ASTM days: 27
Date of Last EDR Contact: 09/08/03

RCRIS: Resource Conservation and Recovery Information System
Source: EPA
Telephone: 800-424-9346
Resource Conservation and Recovery Information System. RCRIS includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs): generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs): generate between 100 kg and 1,000 kg of hazardous waste per month. Large quantity generators (LQGs): generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. Transporters are individuals or entities that move hazardous waste from the generator off-site to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 09/10/03
Date Made Active at EDR: 10/01/03
Database Release Frequency: Varies

Date of Data Arrival at EDR: 09/11/03
Elapsed ASTM days: 20
Date of Last EDR Contact: 09/11/03

ERNS: Emergency Response Notification System
Source: National Response Center, United States Coast Guard
Telephone: 202-260-2342
Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/02
Date Made Active at EDR: 02/03/03
Database Release Frequency: Annually

Date of Data Arrival at EDR: 01/27/03
Elapsed ASTM days: 7
Date of Last EDR Contact: 10/27/03

FEDERAL ASTM SUPPLEMENTAL RECORDS

BRS: Biennial Reporting System
Source: EPA/NTIS
Telephone: 800-424-9346
The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/01/01
Database Release Frequency: Biennially

Date of Last EDR Contact: 10/01/03
Date of Next Scheduled EDR Contact: 12/15/03

CONSENT: Superfund (CERCLA) Consent Decrees
Source: EPA Regional Offices
Telephone: Varies
Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: N/A
Database Release Frequency: Varies

Date of Last EDR Contact: N/A
Date of Next Scheduled EDR Contact: N/A

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ROD: Records Of Decision
Source: EPA
Telephone: 703-416-0223
Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 07/09/03
Database Release Frequency: Annually
Date of Last EDR Contact: 10/08/03
Date of Next Scheduled EDR Contact: 01/05/04

DELISTED NPL: National Priority List Deletions
Source: EPA
Telephone: N/A
The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 07/22/03
Database Release Frequency: Quarterly
Date of Last EDR Contact: 08/04/03
Date of Next Scheduled EDR Contact: 11/03/03

FINDS: Facility Index System/Facility Identification Initiative Program Summary Report
Source: EPA
Telephone: N/A
Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 07/25/03
Database Release Frequency: Quarterly
Date of Last EDR Contact: 10/07/03
Date of Next Scheduled EDR Contact: 01/05/04

HMIRS: Hazardous Materials Information Reporting System
Source: U.S. Department of Transportation
Telephone: 202-366-4555
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 03/31/03
Database Release Frequency: Annually
Date of Last EDR Contact: 10/23/03
Date of Next Scheduled EDR Contact: 01/19/04

MLTS: Material Licensing Tracking System
Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 07/16/03
Database Release Frequency: Quarterly
Date of Last EDR Contact: 10/07/03
Date of Next Scheduled EDR Contact: 01/05/04

MINES: Mines Master Index File
Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959

Date of Government Version: 06/07/03
Database Release Frequency: Semi-Annually
Date of Last EDR Contact: 10/01/03
Date of Next Scheduled EDR Contact: 12/29/03

NPL LIENS: Federal Superfund Liens
Source: EPA
Telephone: 202-564-4267
Federal Superfund Liens. Under the authority granted the USEPA by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner receives notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/91
Database Release Frequency: No Update Planned
Date of Last EDR Contact: 08/25/03
Date of Next Scheduled EDR Contact: 11/24/03

PADS: PCB Activity Database System
Source: EPA
Telephone: 202-564-3887
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 06/30/03
Database Release Frequency: Annually
Date of Last EDR Contact: 08/13/03
Date of Next Scheduled EDR Contact: 11/10/03

DOD: Department of Defense Sites
Source: USGS
Telephone: 703-648-5920
This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 04/01/03
Database Release Frequency: Semi-Annually
Date of Last EDR Contact: 08/15/03
Date of Next Scheduled EDR Contact: 11/10/03

US BROWNFIELDS: A Listing of Brownfields Sites
Source: Environmental Protection Agency
Telephone: 202-566-2777
Included in the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities--especially those without EPA Brownfields Assessment Demonstration Pilots—minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients-States, political subdivisions, territories, and Indian tribes become BCRLF cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

Date of Government Version: 07/15/03
Database Release Frequency: Semi-Annually
Date of Last EDR Contact: 09/15/03
Date of Next Scheduled EDR Contact: 12/15/03

RAATS: RCRA Administrative Action Tracking System
Source: EPA
Telephone: 202-564-4104
RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/95
Database Release Frequency: No Update Planned
Date of Last EDR Contact: 09/08/03
Date of Next Scheduled EDR Contact: 12/08/03

TRIS: Toxic Chemical Release Inventory System
Source: EPA
Telephone: 202-260-1531
Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/01
Database Release Frequency: Annually
Date of Last EDR Contact: 09/23/03
Date of Next Scheduled EDR Contact: 12/22/03

TSCA: Toxic Substances Control Act
Source: EPA
Telephone: 202-260-5521
Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/98
Database Release Frequency: Every 4 Years
Date of Last EDR Contact: 09/02/03
Date of Next Scheduled EDR Contact: 12/08/03

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Contrc
Source: EPA
Telephone: 202-564-2501

Date of Government Version: 08/21/03
Database Release Frequency: Quarterly
Date of Last EDR Contact: 09/23/03
Date of Next Scheduled EDR Contact: 12/22/03

SSTS: Section 7 Tracking Systems
Source: EPA
Telephone: 202-564-5008
Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/01
Database Release Frequency: Annually
Date of Last EDR Contact: 10/20/03
Date of Next Scheduled EDR Contact: 01/19/04

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-564-2501
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/21/03
Database Release Frequency: Quarterly
Date of Last EDR Contact: 09/23/03
Date of Next Scheduled EDR Contact: 12/22/03

STATE OF CALIFORNIA ASTM STANDARD RECORDS

AWP: Annual Workplan Sites
Source: California Environmental Protection Agency
Telephone: 916-323-3400
Known Hazardous Waste Sites. California DTSC's Annual Workplan (AWP), formerly BEP, identifies known hazardous substance sites targeted for cleanup.

Date of Government Version: 08/31/03
Date Made Active at EDR: 09/17/03
Database Release Frequency: Annually
Date of Data Arrival at EDR: 09/02/03
Elapsed ASTM days: 15
Date of Last EDR Contact: 09/02/03

CAL-SITES: Calsites Database
Source: Department of Toxic Substance Control
Telephone: 916-323-3400
The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database.

Date of Government Version: 08/31/03
Date Made Active at EDR: 09/17/03
Database Release Frequency: Quarterly
Date of Data Arrival at EDR: 09/02/03
Elapsed ASTM days: 15
Date of Last EDR Contact: 09/02/03

CHMIRS: California Hazardous Material Incident Report System
Source: Office of Emergency Services
Telephone: 916-845-8400
California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 12/31/02
Date Made Active at EDR: 08/07/03
Database Release Frequency: Varies
Date of Data Arrival at EDR: 07/11/03
Elapsed ASTM days: 27
Date of Last EDR Contact: 08/25/03

CORTESE: "Cortese" Hazardous Waste & Substances Sites List
Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-9100
The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 04/01/01
Date Made Active at EDR: 07/26/01
Database Release Frequency: No Update Planned
Date of Data Arrival at EDR: 05/29/01
Elapsed ASTM days: 58
Date of Last EDR Contact: 10/27/03

NOTIFY 65: Proposition 65 Records
Source: State Water Resources Control Board
Telephone: 916-445-3846
Proposition 65 Notification Records. NOTIFY 65 contains facility notifications about any release which could impact drinking water and thereby expose the public to a potential health risk.

Date of Government Version: 10/21/93
Date Made Active at EDR: 11/19/93
Database Release Frequency: No Update Planned
Date of Data Arrival at EDR: 11/01/93
Elapsed ASTM days: 18
Date of Last EDR Contact: 10/20/03

TOXIC PITS: Toxic Pits Cleanup Act Sites
Source: State Water Resources Control Board
Telephone: 916-227-4364
Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/95
Date Made Active at EDR: 09/26/95
Database Release Frequency: No Update Planned
Date of Data Arrival at EDR: 08/30/95
Elapsed ASTM days: 27
Date of Last EDR Contact: 08/04/03

SWF/LF (SWIS): Solid Waste Information System
Source: Integrated Waste Management Board
Telephone: 916-341-6320
Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 09/12/03
Date Made Active at EDR: 10/16/03
Database Release Frequency: Quarterly
Date of Data Arrival at EDR: 09/15/03
Elapsed ASTM days: 31
Date of Last EDR Contact: 09/15/03

WMUDS/SWAT: Waste Management Unit Database
Source: State Water Resources Control Board
Telephone: 916-227-4448
Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/00
Date Made Active at EDR: 05/10/00
Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 04/10/00
Elapsed ASTM days: 30
Date of Last EDR Contact: 09/12/03

LUST: Leaking Underground Storage Tank Information System
Source: State Water Resources Control Board
Telephone: 916-341-5740
Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 04/02/03
Date Made Active at EDR: 04/25/03
Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 04/16/03
Elapsed ASTM days: 9
Date of Last EDR Contact: 10/14/03

CA BOND EXP. PLAN: Bond Expenditure Plan
Source: Department of Health Services
Telephone: 916-255-2118
Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/89
Date Made Active at EDR: 08/02/94
Database Release Frequency: No Update Planned

Date of Data Arrival at EDR: 07/27/94
Elapsed ASTM days: 6
Date of Last EDR Contact: 05/31/94

CA UST:

UST: Active UST Facilities
Source: SWRCB
Telephone: 916-341-5700
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 04/02/03
Date Made Active at EDR: 04/30/03
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 04/16/03
Elapsed ASTM days: 14
Date of Last EDR Contact: 10/14/03

VCP: Voluntary Cleanup Program Properties
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 08/31/03
Date Made Active at EDR: 09/17/03
Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 09/02/03
Elapsed ASTM days: 15
Date of Last EDR Contact: 09/02/03

INDIAN UST: Underground Storage Tanks on Indian Land
Source: EPA Region 9
Telephone: 415-972-3368

Date of Government Version: N/A
Date Made Active at EDR: N/A
Database Release Frequency: Varies

Date of Data Arrival at EDR: N/A
Elapsed ASTM days: 0
Date of Last EDR Contact: N/A

CA FID UST: Facility Inventory Database
Source: California Environmental Protection Agency
Telephone: 916-445-6532
The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/94
Date Made Active at EDR: 09/29/95
Database Release Frequency: No Update Planned

Date of Data Arrival at EDR: 09/05/95
Elapsed ASTM days: 24
Date of Last EDR Contact: 12/28/98

HIST UST: Hazardous Substance Storage Container Database
Source: State Water Resources Control Board
Telephone: 916-341-5700
The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/90
Date Made Active at EDR: 02/12/91
Database Release Frequency: No Update Planned

Date of Data Arrival at EDR: 01/25/91
Elapsed ASTM days: 18
Date of Last EDR Contact: 07/26/01

STATE OF CALIFORNIA ASTM SUPPLEMENTAL RECORDS

AST: Aboveground Petroleum Storage Tank Facilities
Source: State Water Resources Control Board
Telephone: 916-341-5712
Registered Aboveground Storage Tanks.

Date of Government Version: 07/01/03
Database Release Frequency: Quarterly

Date of Last EDR Contact: 08/04/03
Date of Next Scheduled EDR Contact: 11/03/03

CLEANERS: Cleaner Facilities
Source: Department of Toxic Substance Control
Telephone: 916-225-0873
A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 03/11/03
Database Release Frequency: Annually

Date of Last EDR Contact: 10/20/03
Date of Next Scheduled EDR Contact: 01/05/04

CA WDS: Waste Discharge System
Source: State Water Resources Control Board
Telephone: 916-657-1571
Sites which have been issued waste discharge requirements.

Date of Government Version: 09/22/03
Database Release Frequency: Quarterly

Date of Last EDR Contact: 09/24/03
Date of Next Scheduled EDR Contact: 12/22/03

DEED: List of Deed Restrictions
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
The use of recorded land use restrictions is one of the methods the DTSC uses to protect the public from unsafe exposures to hazardous substances and wastes.

Date of Government Version: 10/07/03
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 10/08/03
Date of Next Scheduled EDR Contact: 01/05/04

NFA: No Further Action Determination
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
This category contains properties at which DTSC has made a clear determination that the property does not pose a problem to the environment or to public health.

Date of Government Version: 08/31/03
Database Release Frequency: Quarterly

Date of Last EDR Contact: 09/02/03
Date of Next Scheduled EDR Contact: 12/01/03

EMI: Emissions Inventory Data
Source: California Air Resources Board
Telephone: 916-322-2990
Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/01
Database Release Frequency: Varies

Date of Last EDR Contact: 10/20/03
Date of Next Scheduled EDR Contact: 01/19/04

REF: Unconfirmed Properties Referred to Another Agency
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
This category contains properties where contamination has not been confirmed and which were determined as not requiring direct DTSC Site Mitigation Program action or oversight. Accordingly, these sites have been referred to another state or local regulatory agency.

Date of Government Version: 08/31/03
Database Release Frequency: Quarterly

Date of Last EDR Contact: 09/02/03
Date of Next Scheduled EDR Contact: 12/01/03

SCH: School Property Evaluation Program
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 08/31/03
Database Release Frequency: Quarterly

Date of Last EDR Contact: 09/02/03
Date of Next Scheduled EDR Contact: 12/01/03

NFE: Properties Needing Further Evaluation
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
This category contains properties that are suspected of being contaminated. These are unconfirmed contaminated properties that need to be assessed using the PEA process. PEA in Progress indicates properties where DTSC is currently conducting a PEA. PEA Required indicates properties where DTSC has determined a PEA is required, but not currently underway.

Date of Government Version: 08/31/03
Database Release Frequency: Quarterly

Date of Last EDR Contact: 09/02/03
Date of Next Scheduled EDR Contact: 12/01/03

HAZNET: Hazardous Waste Information System
Source: California Environmental Protection Agency
Telephone: 916-255-1136
Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method.

Date of Government Version: 12/31/01
Database Release Frequency: Annually

Date of Last EDR Contact: 08/12/03
Date of Next Scheduled EDR Contact: 11/10/03

LOCAL RECORDS

ALAMEDA COUNTY:

Local Oversight Program Listing of UGT Cleanup Sites
Source: Alameda County Environmental Health Services
Telephone: 510-567-6700

Date of Government Version: 07/03/03
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 10/27/03
Date of Next Scheduled EDR Contact: 01/26/04

Underground Tanks
Source: Alameda County Environmental Health Services
Telephone: 510-567-6700

Date of Government Version: 07/03/03
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 10/27/03
Date of Next Scheduled EDR Contact: 01/26/04

CONTRA COSTA COUNTY:

Site List
Source: Contra Costa Health Services Department
Telephone: 925-646-2286
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 09/04/03
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 09/02/03
Date of Next Scheduled EDR Contact: 12/01/03

FRESNO COUNTY:

CUPA Resources List
Source: Dept. of Community Health
Telephone: 559-445-3271
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 10/07/03
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 07/21/03
Date of Next Scheduled EDR Contact: 11/10/03

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing
Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Kern County Sites and Tanks Listing.

Date of Government Version: 07/25/03
Database Release Frequency: Quarterly

Date of Last EDR Contact: 09/08/03
Date of Next Scheduled EDR Contact: 12/08/03

LOS ANGELES COUNTY:

List of Solid Waste Facilities
Source: La County Department of Public Works
Telephone: 818-458-5185

Date of Government Version: 06/03/03
Database Release Frequency: Varies

Date of Last EDR Contact: 08/18/03
Date of Next Scheduled EDR Contact: 11/17/03

City of El Segundo Underground Storage Tank
Source: City of El Segundo Fire Department
Telephone: 310-524-2236

Date of Government Version: 09/11/03
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 08/18/03
Date of Next Scheduled EDR Contact: 11/17/03

City of Long Beach Underground Storage Tank
Source: City of Long Beach Fire Department
Telephone: 562-570-2543

Date of Government Version: 05/30/02
Database Release Frequency: Annually

Date of Last EDR Contact: 08/29/03
Date of Next Scheduled EDR Contact: 11/24/03

City of Torrance Underground Storage Tank
Source: City of Torrance Fire Department
Telephone: 310-618-2973

Date of Government Version: 09/03/03
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 08/18/03
Date of Next Scheduled EDR Contact: 11/17/03

City of Los Angeles Landfills
Source: Engineering & Construction Division
Telephone: 213-473-7869

Date of Government Version: 03/01/02
Database Release Frequency: Varies

Date of Last EDR Contact: 09/15/03
Date of Next Scheduled EDR Contact: 12/15/03

HMS: Street Number List
Source: Department of Public Works
Telephone: 626-458-3517
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 04/03/03
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 08/18/03
Date of Next Scheduled EDR Contact: 11/17/03

Site Mitigation List
Source: Community Health Services
Telephone: 323-890-7806
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 01/07/03
Database Release Frequency: Annually

Date of Last EDR Contact: 08/18/03
Date of Next Scheduled EDR Contact: 11/17/03

San Gabriel Valley Areas of Concern
Source: EPA Region 9
Telephone: 415-972-3178
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 12/31/98
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 07/06/99
Date of Next Scheduled EDR Contact: N/A

MARIN COUNTY:

Underground Storage Tank Sites
Source: Public Works Department Waste Management
Telephone: 415-499-6647
Currently permitted USTs in Marin County.

Date of Government Version: 08/19/03
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 08/04/03
Date of Next Scheduled EDR Contact: 11/03/03

NAPA COUNTY:

Sites With Reported Contamination
Source: Napa County Department of Environmental Management
Telephone: 707-253-4269

Date of Government Version: 10/02/03
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 09/30/03
Date of Next Scheduled EDR Contact: 12/29/03

Closed and Operating Underground Storage Tank Sites
Source: Napa County Department of Environmental Management
Telephone: 707-253-4269

Date of Government Version: 10/02/03
Database Release Frequency: Annually

Date of Last EDR Contact: 09/30/03
Date of Next Scheduled EDR Contact: 12/29/03

ORANGE COUNTY:

List of Underground Storage Tank Cleanups
Source: Health Care Agency
Telephone: 714-834-3446
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 07/01/03
Database Release Frequency: Quarterly

Date of Last EDR Contact: 09/11/03
Date of Next Scheduled EDR Contact: 12/08/03

List of Underground Storage Tank Facilities
Source: Health Care Agency
Telephone: 714-834-3446
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 07/01/03
Database Release Frequency: Quarterly

Date of Last EDR Contact: 09/11/03
Date of Next Scheduled EDR Contact: 12/08/03

List of Industrial Site Cleanups
Source: Health Care Agency
Telephone: 714-834-3446
Petroleum and non-petroleum spills.

Date of Government Version: 10/24/00
Database Release Frequency: Annually

Date of Last EDR Contact: 09/11/03
Date of Next Scheduled EDR Contact: 12/08/03

PLACER COUNTY:

Master List of Facilities
Source: Placer County Health and Human Services
Telephone: 530-889-7312
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 07/17/03
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 09/23/03
Date of Next Scheduled EDR Contact: 12/22/03

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites
Source: Department of Public Health
Telephone: 909-358-5055
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 06/03/03
Database Release Frequency: Quarterly

Date of Last EDR Contact: 10/20/03
Date of Next Scheduled EDR Contact: 01/19/04

Underground Storage Tank Tank List
Source: Health Services Agency
Telephone: 909-358-5055

Date of Government Version: 05/30/03
Database Release Frequency: Quarterly

Date of Last EDR Contact: 10/20/03
Date of Next Scheduled EDR Contact: 01/19/04

SACRAMENTO COUNTY:

CS - Contaminated Sites
Source: Sacramento County Environmental Management
Telephone: 916-875-8406

Date of Government Version: 07/17/03
Database Release Frequency: Quarterly

Date of Last EDR Contact: 08/04/03
Date of Next Scheduled EDR Contact: 11/03/03

ML - Regulatory Compliance Master List
Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 07/17/03
Database Release Frequency: Quarterly

Date of Last EDR Contact: 08/04/03
Date of Next Scheduled EDR Contact: 11/03/03

SAN BERNARDINO COUNTY:

Hazardous Material Permits
Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 09/30/03
Database Release Frequency: Quarterly

Date of Last EDR Contact: 09/09/03
Date of Next Scheduled EDR Contact: 12/08/03

SAN DIEGO COUNTY:

Solid Waste Facilities
Source: Department of Health Services
Telephone: 619-338-2209
San Diego County Solid Waste Facilities.

Date of Government Version: 08/01/00
Database Release Frequency: Varies

Date of Last EDR Contact: 08/25/03
Date of Next Scheduled EDR Contact: 11/24/03

Hazardous Materials Management Division Database
Source: Hazardous Materials Management Division
Telephone: 619-338-2268
The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 03/31/02
Database Release Frequency: Quarterly

Date of Last EDR Contact: 10/07/03
Date of Next Scheduled EDR Contact: 01/05/04

SAN FRANCISCO COUNTY:

Local Oversite Facilities
Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920

Date of Government Version: 09/11/03
Database Release Frequency: Quarterly

Date of Last EDR Contact: 09/08/03
Date of Next Scheduled EDR Contact: 12/08/03

Underground Storage Tank Information
Source: Department of Public Health
Telephone: 415-252-3920

Date of Government Version: 09/11/03
Database Release Frequency: Quarterly

Date of Last EDR Contact: 09/08/03
Date of Next Scheduled EDR Contact: 12/08/03

SAN MATEO COUNTY:

Fuel Leak List
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921

Date of Government Version: 07/21/03
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 10/27/03
Date of Next Scheduled EDR Contact: 01/26/04

Business Inventory
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 06/16/03
Database Release Frequency: Annually

Date of Last EDR Contact: 10/13/03
Date of Next Scheduled EDR Contact: 01/12/04

SANTA CLARA COUNTY:

Fuel Leak Site Activity Report
Source: Santa Clara Valley Water District
Telephone: 408-265-2600

Date of Government Version: 07/02/03
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 09/30/03
Date of Next Scheduled EDR Contact: 12/29/03

Hazardous Material Facilities
Source: City of San Jose Fire Department
Telephone: 408-277-4659

Date of Government Version: 12/11/02
Database Release Frequency: Annually

Date of Last EDR Contact: 09/08/03
Date of Next Scheduled EDR Contact: 12/08/03

SOLANO COUNTY:

Leaking Underground Storage Tanks
Source: Solano County Department of Environmental Management
Telephone: 707-421-6770

Date of Government Version: 08/21/03
Database Release Frequency: Quarterly

Date of Last EDR Contact: 09/15/03
Date of Next Scheduled EDR Contact: 12/15/03

Underground Storage Tanks
Source: Solano County Department of Environmental Management
Telephone: 707-421-6770

Date of Government Version: 08/21/03
Database Release Frequency: Quarterly

Date of Last EDR Contact: 09/15/03
Date of Next Scheduled EDR Contact: 12/15/03

SONOMA COUNTY:

Leaking Underground Storage Tank Sites
Source: Department of Health Services
Telephone: 707-565-6565

Date of Government Version: 07/28/03
Database Release Frequency: Quarterly

Date of Last EDR Contact: 10/27/03
Date of Next Scheduled EDR Contact: 01/26/04

SUTTER COUNTY:

Underground Storage Tanks
Source: Sutter County Department of Agriculture
Telephone: 530-822-7500

Date of Government Version: 07/01/01
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 10/27/03
Date of Next Scheduled EDR Contact: 01/05/04

VENTURA COUNTY:

Inventory of Illegal Abandoned and Inactive Sites
Source: Environmental Health Division
Telephone: 805-654-2813
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 09/01/02
Database Release Frequency: Annually

Date of Last EDR Contact: 08/26/03
Date of Next Scheduled EDR Contact: 11/24/03

Listing of Underground Tank Cleanup Sites
Source: Environmental Health Division
Telephone: 805-654-2813
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 09/26/03
Database Release Frequency: Quarterly

Date of Last EDR Contact: 09/15/03
Date of Next Scheduled EDR Contact: 12/15/03

Underground Tank Closed Sites List
Source: Environmental Health Division
Telephone: 805-654-2813
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 07/30/03
Database Release Frequency: Quarterly

Date of Last EDR Contact: 10/16/03
Date of Next Scheduled EDR Contact: 01/12/04

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 09/02/03
Database Release Frequency: Quarterly

Date of Last EDR Contact: 09/15/03
Date of Next Scheduled EDR Contact: 12/15/03

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report
Source: Yolo County Department of Health
Telephone: 530-666-8646

Date of Government Version: 06/19/03
Database Release Frequency: Annually

Date of Last EDR Contact: 10/20/03
Date of Next Scheduled EDR Contact: 01/19/04

California Regional Water Quality Control Board (RWQCB) LUST Records

LUST REG 1: Active Toxic Site Investigation
Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-576-2220
Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/01
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 08/25/03
Date of Next Scheduled EDR Contact: 11/24/03

LUST REG 2: Fuel Leak List
Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457

Date of Government Version: 03/28/03
Database Release Frequency: Quarterly

Date of Last EDR Contact: 10/14/03
Date of Next Scheduled EDR Contact: 01/12/04

LUST REG 3: Leaking Underground Storage Tank Database
Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147

Date of Government Version: 05/19/03
Database Release Frequency: Quarterly

Date of Last EDR Contact: 08/18/03
Date of Next Scheduled EDR Contact: 11/17/03

LUST REG 4: Underground Storage Tank Leak List
Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-266-6600
Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 08/09/01
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 09/30/03
Date of Next Scheduled EDR Contact: 12/29/03

LUST REG 5: Leaking Underground Storage Tank Database
Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-255-3125

Date of Government Version: 07/01/03
Database Release Frequency: Quarterly

Date of Last EDR Contact: 10/16/03
Date of Next Scheduled EDR Contact: 01/05/04

LUST REG 6L: Leaking Underground Storage Tank Case Listing
Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 916-542-5424
For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/03
Database Release Frequency: No Update Planned
Date of Last EDR Contact: 09/08/03
Date of Next Scheduled EDR Contact: 12/08/03

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-346-7491

Date of Government Version: 05/29/03
Database Release Frequency: Quarterly
Date of Last EDR Contact: 10/07/03
Date of Next Scheduled EDR Contact: 01/05/04

LUST REG 7: Leaking Underground Storage Tank Case Listing
Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-346-7491

Date of Government Version: 07/02/02
Database Release Frequency: Semi-Annually
Date of Last EDR Contact: 09/30/03
Date of Next Scheduled EDR Contact: 12/29/03

LUST REG 8: Leaking Underground Storage Tanks
Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4498
California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/16/03
Database Release Frequency: No Update Planned
Date of Last EDR Contact: 08/11/03
Date of Next Scheduled EDR Contact: 11/10/03

LUST REG 9: Leaking Underground Storage Tank Report
Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/01
Database Release Frequency: No Update Planned
Date of Last EDR Contact: 10/20/03
Date of Next Scheduled EDR Contact: 01/19/04

California Regional Water Quality Control Board (RWQCB) SLIC Records

SLIC REG 1: Active Toxic Site Investigations
Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220

Date of Government Version: 04/03/03
Database Release Frequency: Semi-Annually
Date of Last EDR Contact: 08/25/03
Date of Next Scheduled EDR Contact: 11/24/03

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Any contaminated site that impacts groundwater or has the potential to impact groundwater.

Date of Government Version: 03/28/03
Database Release Frequency: Quarterly
Date of Last EDR Contact: 10/14/03
Date of Next Scheduled EDR Contact: 01/12/04

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Any contaminated site that impacts groundwater or has the potential to impact groundwater.

Date of Government Version: 09/16/03
Database Release Frequency: Semi-Annually
Date of Last EDR Contact: 08/18/03
Date of Next Scheduled EDR Contact: 11/17/03

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Any contaminated site that impacts groundwater or has the potential to impact groundwater.

Date of Government Version: 07/01/03
Database Release Frequency: Quarterly
Date of Last EDR Contact: 10/27/03
Date of Next Scheduled EDR Contact: 01/26/04

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-855-3075
Unregulated sites that impact groundwater or have the potential to impact groundwater.

Date of Government Version: 07/02/03
Database Release Frequency: Semi-Annually
Date of Last EDR Contact: 10/07/03
Date of Next Scheduled EDR Contact: 01/05/04

SLIC REG 6L: SLIC Sites
Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574

Date of Government Version: 09/09/03
Database Release Frequency: Varies
Date of Last EDR Contact: 09/08/03
Date of Next Scheduled EDR Contact: 12/08/03

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583

Date of Government Version: 05/08/03
Database Release Frequency: Semi-Annually
Date of Last EDR Contact: 10/07/03
Date of Next Scheduled EDR Contact: 01/05/04

SLIC REG 7: SLIC List
Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491

Date of Government Version: 05/29/03
Database Release Frequency: Varies
Date of Last EDR Contact: 09/08/03
Date of Next Scheduled EDR Contact: 11/24/03

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-3298

Date of Government Version: 04/01/03
Database Release Frequency: Semi-Annually
Date of Last EDR Contact: 10/20/03
Date of Next Scheduled EDR Contact: 01/05/04

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980

Date of Government Version: 09/08/03
Database Release Frequency: Annually
Date of Last EDR Contact: 09/02/03
Date of Next Scheduled EDR Contact: 12/01/03

EDR PROPRIETARY HISTORICAL DATABASES

Former Manufactured Gas (Coal Gas) Sites: The existence and location of Coal Gas sites is provided exclusively to EDR by Real Property Scan, Inc. ©Copyright 1993 Real Property Scan, Inc. For a technical description of the types of hazards which may be found at such sites, contact your EDR customer service representative.

Disclaimer Provided by Real Property Scan, Inc.

The information contained in this report has predominantly been obtained from publicly available sources produced by entities other than Real Property Scan. While reasonable steps have been taken to insure the accuracy of this report, Real Property Scan does not guarantee the accuracy of this report. Any liability on the part of Real Property Scan is strictly limited to a refund of the amount paid. No claim is made for the actual existence of toxins at any site. This report does not constitute a legal opinion.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

BROWNFIELDS DATABASES

VCP: Voluntary Cleanup Program Properties
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 08/31/03
Database Release Frequency: Quarterly

Date of Last EDR Contact: 09/02/03
Date of Next Scheduled EDR Contact: 12/01/03

US BROWNFIELDS: A Listing of Brownfields Sites
Source: Environmental Protection Agency
Telephone: 202-566-2777
Included in the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities–especially those without EPA Brownfields Assessment Demonstration Pilots--minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients-States, political subdivisions, territories, and Indian tribes become BCRLF cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

Date of Government Version: N/A
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: N/A
Date of Next Scheduled EDR Contact: N/A

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data
Source: PennWell Corporation
Telephone: (800) 823-6277
This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 from the U.S. Fish and Wildlife Service.

STREET AND ADDRESS INFORMATION

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GEOCHECK®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

PIT PROPERTY
FOOTHILL BLVD./CLAREMONT BLVD.
CLAREMONT, CA 91711

TARGET PROPERTY COORDINATES

Latitude (North):	34.103500 - 34' 6' 12.6"
Longitude (West):	117.700699 - 117' 42' 2.5"
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	435368.4
UTM Y (Meters):	3773658.8
Elevation:	1243 ft. above sea level

EDR's GeoCheck Physical Setting Source Addendum has been developed to assist the environmental professional with the collection of physical setting source information in accordance with ASTM 1527-00, Section 7.2.3. Section 7.2.3 requires that a current USGS 7.5 Minute Topographic Map (or equivalent, such as the USGS Digital Elevation Model) be reviewed. It also requires that one or more additional physical setting sources be sought when (1) conditions have been identified in which hazardous substances or petroleum products are likely to migrate to or from the property, and (2) more information than is provided in the current USGS 7.5 Minute Topographic Map (or equivalent) is generally obtained, pursuant to local good commercial or customary practice, to assess the impact of migration of recognized environmental conditions in connection with the property. Such additional physical setting sources generally include information about the topographic, hydrologic, hydrogeologic, and geologic characteristics of a site, and wells in the area.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata. EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

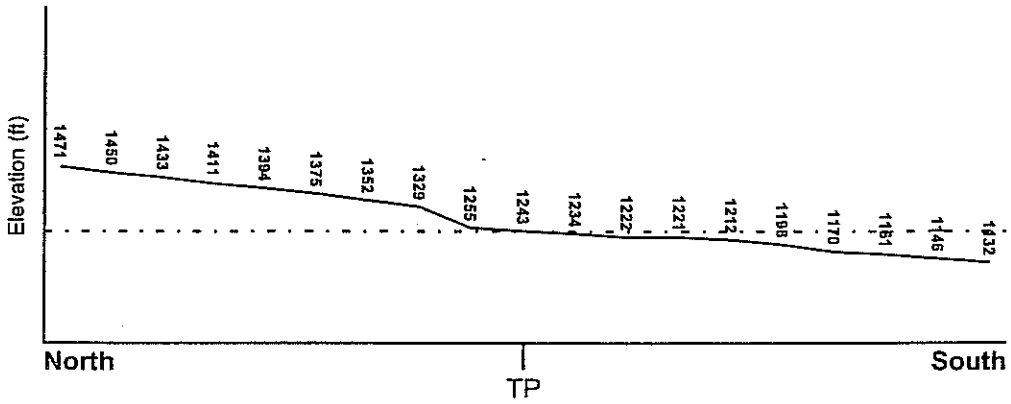
TOPOGRAPHIC INFORMATION

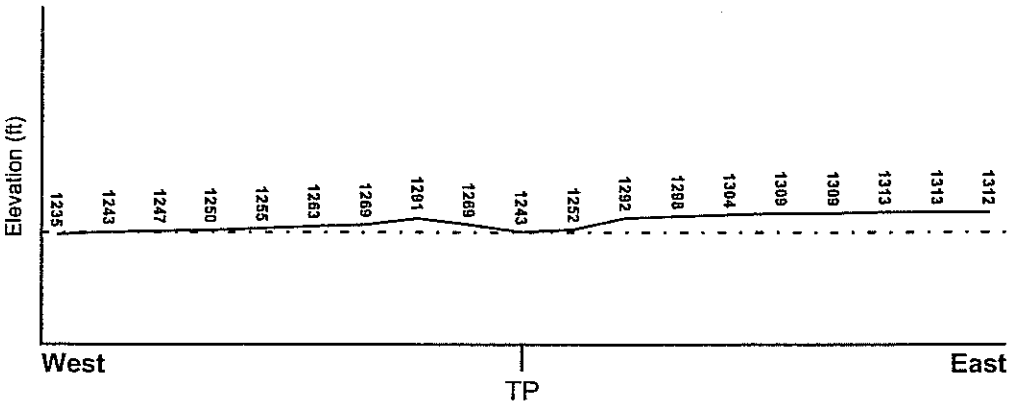
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

USGS Topographic Map:	2434117-A6 ONTARIO, CA
General Topographic Gradient:	General South
Source:	USGS 7.5 min quad index

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 1243 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
SAN BERNARDINO, CA	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property:	06071C8605F
Additional Panels in search area:	06071C8610F 06071C8608F 0650430900B 0601090000A

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
ONTARIO	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

* ©1996 Site-specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

Era: Cenozoic
System: Quaternary
Series: Quaternary
Code: Q *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name: URBAN LAND

Soil Surface Texture: variable

Hydrologic Group: Not reported

Soil Drainage Class: Not reported

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 10 inches

Depth to Bedrock Max: > 10 inches

Soil Layer Information							
	Boundary			Classification			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)
1	0 inches	6 inches	variable	Not reported	Not reported	Max: 0.00 Min: 0.00	Max: 0.00 Min: 0.00

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures:	gravelly - loamy sand coarse sandy loam stony - loamy sand fine sand silt loam sandy loam fine sandy loam clay loam gravelly - sandy loam loamy fine sand
Surficial Soil Types:	gravelly - loamy sand coarse sandy loam stony - loamy sand fine sand silt loam sandy loam fine sandy loam clay loam gravelly - sandy loam loamy fine sand
Shallow Soil Types:	fine sandy loam gravelly - loam
Deeper Soil Types:	gravelly - fine sandy loam sand silty clay loam gravelly - sandy loam loam

ADDITIONAL ENVIRONMENTAL RECORD SOURCES

According to ASTM E 1527-00, Section 7.2.2, "one or more additional state or local sources of environmental records may be checked, in the discretion of the environmental professional, to enhance and supplement federal and state sources... Factors to consider in determining which local or additional state records, if any, should be checked include (1) whether they are reasonably ascertainable, (2) whether they are sufficiently useful, accurate, and complete in light of the objective of the records review (see 7.1.1), and (3) whether they are obtained, pursuant to local, good commercial or customary practice." One of the record sources listed in Section 7.2.2 is water well information. Water well information can be used to assist the environmental professional in assessing sources that may impact groundwater flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
7	USGS0138280	1/4 - 1/2 Mile WNW
8	USGS0155706	1/2 - 1 Mile SSE
B10	USGS0138366	1/2 - 1 Mile NW
12	USGS0138261	1/2 - 1 Mile SW
B14	USGS0138369	1/2 - 1 Mile NW

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

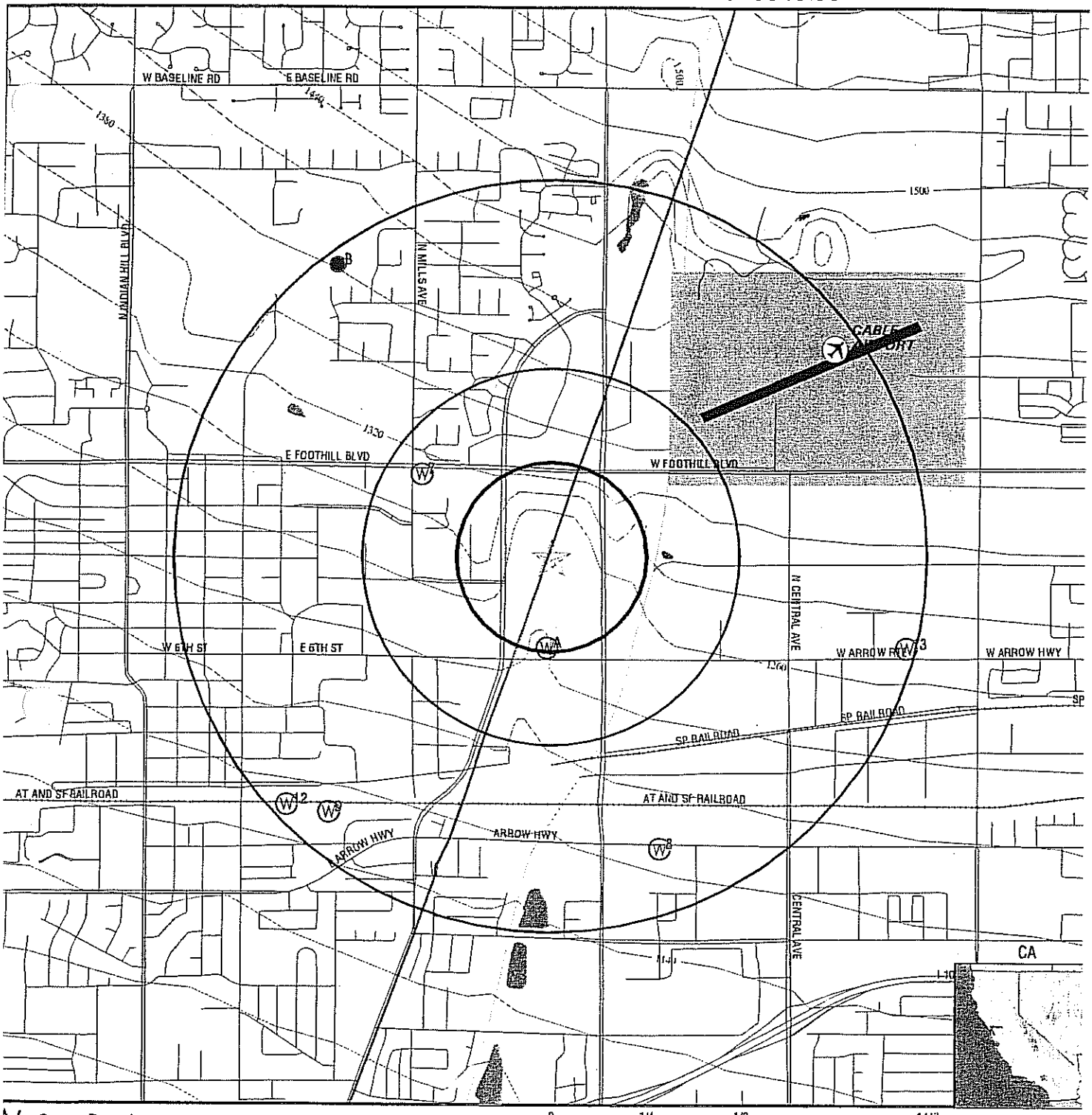
MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	1146	1/8 - 1/4 Mile South
A2	1151	1/8 - 1/4 Mile South
A3	1106	1/8 - 1/4 Mile South
A4	3162	1/8 - 1/4 Mile South
A5	1105	1/8 - 1/4 Mile South
A6	1109	1/8 - 1/4 Mile South
9	14205	1/2 - 1 Mile SW
B11	1108	1/2 - 1 Mile NW
13	1150	1/2 - 1 Mile ESE

PHYSICAL SETTING SOURCE MAP - 1070546.3s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

TARGET PROPERTY:	Pit Property	CUSTOMER:	Geomatrix Consultants
ADDRESS:	Foothill Blvd./Claremont Blvd.	CONTACT:	Nancy Boschetto
CITY/STATE/ZIP:	Claremont CA 91711	INQUIRY #:	1070546.3s
LAT/LONG:	34.1035 / 117.7007	DATE:	October 28, 2003 10:10 am

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation	Database	EDR ID Number
A1 **South** **1/8 - 1/4 Mile** **Lower**	**CA WELLS**	**1146**

Water System Information:

Prime Station Code:	01S/08W-10B01 S	User ID:	MET
FRDS Number:	1910024011	County:	Los Angeles
District Number:	15	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	340600.0 1174200.0	Precision:	Undefined
Source Name:	FAIR OAKS WELL 01		
System Number:	1910024		
System Name:	SCWC - CLAREMONT		
Organization That Operates System:			
	P.O. BOX 9016		
	SAN DIMAS, CA 91773		
Pop Served:	34028	Connections:	10187
Area Served:	CLAREMONT		

Sample Information: * Only Findings Above Detection Level Are Listed

Sample Collected:	08/09/1985	Findings:	1.000 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	10/02/1985	Findings:	1.200 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06/18/1986	Findings:	.300 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	08/31/1988	Findings:	.800 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	10/04/1989	Findings:	2.500 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	10/04/1989	Findings:	2.500 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	04/24/1990	Findings:	.700 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	07/03/1990	Findings:	.700 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	08/24/1990	Findings:	2.000 TON
Chemical:	ODOR THRESHOLD @ 60 C		
Sample Collected:	08/24/1990	Findings:	360.000 UMHO
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	08/24/1990	Findings:	7.870
Chemical:	PH (LABORATORY)		
Sample Collected:	08/24/1990	Findings:	134.800 MG/L
Chemical:	TOTAL ALKALINITY (AS CACO3)		
Sample Collected:	08/24/1990	Findings:	164.500 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	08/24/1990	Findings:	129.600 MG/L
Chemical:	TOTAL HARDNESS (AS CACO3)		
Sample Collected:	08/24/1990	Findings:	42.800 MG/L
Chemical:	CALCIUM		

Sample Collected:	08/24/1990	Findings:	5.500 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	08/24/1990	Findings:	23.300 MG/L
Chemical:	SODIUM		
Sample Collected:	08/24/1990	Findings:	1.600 MG/L
Chemical:	POTASSIUM		
Sample Collected:	08/24/1990	Findings:	6.200 MG/L
Chemical:	CHLORIDE		
Sample Collected:	08/24/1990	Findings:	.400 MG/L
Chemical:	FLUORIDE (TEMPERATURE DEPENDENT)		
Sample Collected:	08/24/1990	Findings:	205.200 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	08/24/1990	Findings:	16.600 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/24/1990	Findings:	.100 NTU
Chemical:	TURBIDITY (LAB)		
Sample Collected:	09/05/1990	Findings:	.600 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	11/07/1990	Findings:	.800 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	12/31/1990	Findings:	1.100 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	02/19/1991	Findings:	1.600 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	02/19/1991	Findings:	1.100 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	03/13/1991	Findings:	.900 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	04/03/1991	Findings:	.900 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	05/01/1991	Findings:	1.300 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	05/01/1991	Findings:	1.100 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	05/01/1991	Findings:	.900 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	05/01/1991	Findings:	.800 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07/03/1991	Findings:	.900 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08/07/1991	Findings:	1.100 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	08/07/1991	Findings:	1.200 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	12/04/1991	Findings:	.700 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	01/08/1992	Findings:	1.000 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	02/05/1992	Findings:	16.670 C
Chemical:	SOURCE TEMPERATURE C		

Sample Collected:	02/05/1992	Findings:	360.000 UMHO
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	02/05/1992	Findings:	7.900
Chemical:	FIELD PH		
Sample Collected:	02/05/1992	Findings:	7.900
Chemical:	PH (LABORATORY)		
Sample Collected:	02/05/1992	Findings:	131.200 MG/L
Chemical:	TOTAL ALKALINITY (AS CACO3)		
Sample Collected:	02/05/1992	Findings:	160.100 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	02/05/1992	Findings:	120.000 MG/L
Chemical:	TOTAL HARDNESS (AS CACO3)		
Sample Collected:	02/05/1992	Findings:	41.600 MG/L
Chemical:	CALCIUM		
Sample Collected:	02/05/1992	Findings:	3.900 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	02/05/1992	Findings:	26.400 MG/L
Chemical:	SODIUM		
Sample Collected:	02/05/1992	Findings:	1.200 MG/L
Chemical:	POTASSIUM		
Sample Collected:	02/05/1992	Findings:	8.100 MG/L
Chemical:	CHLORIDE		
Sample Collected:	02/05/1992	Findings:	188.400 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	02/05/1992	Findings:	.810
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	02/05/1992	Findings:	.030
Chemical:	LANGELIER INDEX @ SOURCE TEMP.		
Sample Collected:	02/05/1992	Findings:	16.600 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/05/1992	Findings:	.100 NTU
Chemical:	TURBIDITY (LAB)		
Sample Collected:	02/05/1992	Findings:	12.030
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	02/05/1992	Findings:	16.670 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	02/05/1992	Findings:	360.000 UMHO
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	02/05/1992	Findings:	7.900
Chemical:	FIELD PH		
Sample Collected:	02/05/1992	Findings:	7.900
Chemical:	PH (LABORATORY)		
Sample Collected:	02/05/1992	Findings:	131.200 MG/L
Chemical:	TOTAL ALKALINITY (AS CACO3)		
Sample Collected:	02/05/1992	Findings:	160.100 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	02/05/1992	Findings:	120.000 MG/L
Chemical:	TOTAL HARDNESS (AS CACO3)		
Sample Collected:	02/05/1992	Findings:	41.600 MG/L
Chemical:	CALCIUM		

Sample Collected:	02/05/1992	Findings:	3.900 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	02/05/1992	Findings:	26.400 MG/L
Chemical:	SODIUM		
Sample Collected:	02/05/1992	Findings:	1.200 MG/L
Chemical:	POTASSIUM		
Sample Collected:	02/05/1992	Findings:	8.100 MG/L
Chemical:	CHLORIDE		
Sample Collected:	02/05/1992	Findings:	1.000 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	02/05/1992	Findings:	188.400 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	02/05/1992	Findings:	.810
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	02/05/1992	Findings:	.030
Chemical:	LANGELIER INDEX @ SOURCE TEMP.		
Sample Collected:	02/05/1992	Findings:	16.600 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/05/1992	Findings:	.100 NTU
Chemical:	TURBIDITY (LAB)		
Sample Collected:	02/05/1992	Findings:	12.030
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	03/04/1992	Findings:	1.300 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	04/01/1992	Findings:	1.000 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	05/06/1992	Findings:	.600 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07/01/1992	Findings:	1.000 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08/05/1992	Findings:	.900 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09/02/1992	Findings:	1.100 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	10/07/1992	Findings:	.600 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	11/04/1992	Findings:	1.850 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	01/27/1993	Findings:	1.000 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	02/03/1993	Findings:	1.600 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	03/03/1993	Findings:	1.000 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	04/07/1993	Findings:	1.200 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	05/05/1993	Findings:	1.300 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07/07/1993	Findings:	1.700 UG/L
Chemical:	1,1-DICHLOROETHYLENE		

Sample Collected:	08/04/1993	Findings:	1.700 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	10/06/1993	Findings:	1.600 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	02/02/1994	Findings:	15.500 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/01/1994	Findings:	.600 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07/06/1994	Findings:	1.300 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08/03/1994	Findings:	1.800 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09/07/1994	Findings:	1.400 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	11/02/1994	Findings:	1.700 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	11/02/1994	Findings:	1.100 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	12/07/1994	Findings:	.600 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	12/13/1994	Findings:	1.100 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	12/13/1994	Findings:	1.300 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	01/04/1995	Findings:	1.200 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	02/08/1995	Findings:	.800 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	03/01/1995	Findings:	.900 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	04/05/1995	Findings:	1.200 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	05/03/1995	Findings:	1.300 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06/07/1995	Findings:	1.800 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07/05/1995	Findings:	1.700 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08/02/1995	Findings:	1.400 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	10/04/1995	Findings:	1.900 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	11/01/1995	Findings:	.800 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	12/06/1995	Findings:	1.200 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	01/03/1996	Findings:	1.600 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	01/22/1996	Findings:	380.000 UMHO
Chemical:	SPECIFIC CONDUCTANCE		

Sample Collected:	01/22/1996	Findings:	8.000
Chemical:	PH (LABORATORY)		
Sample Collected:	01/22/1996	Findings:	144.800 MG/L
Chemical:	TOTAL ALKALINITY (AS CACO3)		
Sample Collected:	01/22/1996	Findings:	176.700 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	01/22/1996	Findings:	154.400 MG/L
Chemical:	TOTAL HARDNESS (AS CACO3)		
Sample Collected:	01/22/1996	Findings:	52.900 MG/L
Chemical:	CALCIUM		
Sample Collected:	01/22/1996	Findings:	4.500 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	01/22/1996	Findings:	17.500 MG/L
Chemical:	SODIUM		
Sample Collected:	01/22/1996	Findings:	1.050 MG/L
Chemical:	POTASSIUM		
Sample Collected:	01/22/1996	Findings:	4.400 MG/L
Chemical:	CHLORIDE		
Sample Collected:	01/22/1996	Findings:	212.000 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	01/22/1996	Findings:	15.200 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/07/1996	Findings:	1.700 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	02/27/1996	Findings:	3.000 UG/L
Chemical:	ARSENIC		
Sample Collected:	02/27/1996	Findings:	17.000 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/27/1996	Findings:	3800.000 UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	04/03/1996	Findings:	1.500 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	05/01/1996	Findings:	1.400 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06/05/1996	Findings:	2.100 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07/03/1996	Findings:	2.400 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07/23/1996	Findings:	1.200 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	07/23/1996	Findings:	1.600 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	08/07/1996	Findings:	2.400 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09/04/1996	Findings:	2.400 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	10/02/1996	Findings:	3.100 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	11/06/1996	Findings:	2.100 UG/L
Chemical:	1,1-DICHLOROETHYLENE		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	11/27/1996	Findings:	.800 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	12/04/1996	Findings:	17.800 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	12/04/1996	Findings:	8.120
Chemical:	PH (LABORATORY)		
Sample Collected:	12/04/1996	Findings:	1.000 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	12/04/1996	Findings:	.100 NTU
Chemical:	TURBIDITY (LAB)		
Sample Collected:	01/08/1997	Findings:	1.800 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	02/05/1997	Findings:	2.300 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	02/26/1997	Findings:	19.300 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/05/1997	Findings:	1.500 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	03/05/1997	Findings:	2.810 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	03/05/1997	Findings:	1.050 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	03/19/1997	Findings:	2.500 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	05/07/1997	Findings:	2.500 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06/04/1997	Findings:	1.700 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07/02/1997	Findings:	1.200 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07/08/1997	Findings:	1.600 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	07/08/1997	Findings:	1.600 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07/08/1997	Findings:	20.200 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/06/1997	Findings:	1.300 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09/03/1997	Findings:	2.800 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	10/01/1997	Findings:	2.000 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	11/05/1997	Findings:	2.500 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	12/03/1997	Findings:	.600 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	01/07/1998	Findings:	1.200 UG/L
Chemical:	1,1-DICHLOROETHYLENE		

Map ID Direction Distance Elevation	Database	EDR ID Number
A2 **South** **1/8 - 1/4 Mile** **Lower**	**CA WELLS**	**1151**

Water System Information:

Prime Station Code:	01S/08W-11D01 S	User ID:	TAN
FRDS Number:	3610029015	County:	San Beernardino
District Number:	13	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Inactive Raw
Source Lat/Long:	340600.0 1174200.0	Precision:	Undefined
Source Name:	WELL 21 - INACTIVE		
System Number:	3610029		
System Name:	MONTE VISTA CWD		
Organization That Operates System:			
	PO BOX 71		
	MONTCLAIR, CA 91763		
Pop Served:	38000	Connections:	10837
Area Served:	MONTCLAIR		

A3 **South** **1/8 - 1/4 Mile** **Lower**	**CA WELLS**	**1106**

Water System Information:

Prime Station Code:	01S/08W-03F03 S	User ID:	MET
FRDS Number:	1910126032	County:	Los Angeles
District Number:	15	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Active Untreated
Source Lat/Long:	340600.0 1174200.0	Precision:	Undefined
Source Name:	WELL T-03		
System Number:	1910126		
System Name:	POMONA-CITY, WATER DEPT.		
Organization That Operates System:			
	P O BOX 660		
	POMONA, CA 91769		
Pop Served:	131723	Connections:	27808
Area Served:	POMONA		

Sample Information: * Only Findings Above Detection Level Are Listed

Sample Collected:	04/18/1989	Findings:	410.000 UMHO
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	04/18/1989	Findings:	7.920
Chemical:	PH (LABORATORY)		
Sample Collected:	04/18/1989	Findings:	134.300 MG/L
Chemical:	TOTAL ALKALINITY (AS CACO3)		
Sample Collected:	04/18/1989	Findings:	163.900 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	04/18/1989	Findings:	166.400 MG/L
Chemical:	TOTAL HARDNESS (AS CACO3)		
Sample Collected:	04/18/1989	Findings:	41.600 MG/L
Chemical:	CALCIUM		
Sample Collected:	04/18/1989	Findings:	15.200 MG/L
Chemical:	MAGNESIUM		

Sample Collected:	04/18/1989	Findings:	14.400 MG/L
Chemical:	SODIUM		
Sample Collected:	04/18/1989	Findings:	1.800 MG/L
Chemical:	POTASSIUM		
Sample Collected:	04/18/1989	Findings:	5.900 MG/L
Chemical:	CHLORIDE		
Sample Collected:	04/18/1989	Findings:	.500 MG/L
Chemical:	FLUORIDE (TEMPERATURE DEPENDENT)		
Sample Collected:	04/18/1989	Findings:	1.300 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	04/18/1989	Findings:	.600 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	04/18/1989	Findings:	246.000 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	04/18/1989	Findings:	12.100 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/18/1989	Findings:	.100 NTU
Chemical:	TURBIDITY (LAB)		
Sample Collected:	04/18/1989	Findings:	410.000 UMHO
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	04/18/1989	Findings:	7.920
Chemical:	PH (LABORATORY)		
Sample Collected:	04/18/1989	Findings:	134.300 MG/L
Chemical:	TOTAL ALKALINITY (AS CACO3)		
Sample Collected:	04/18/1989	Findings:	163.900 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	04/18/1989	Findings:	166.400 MG/L
Chemical:	TOTAL HARDNESS (AS CACO3)		
Sample Collected:	04/18/1989	Findings:	41.600 MG/L
Chemical:	CALCIUM		
Sample Collected:	04/18/1989	Findings:	15.200 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	04/18/1989	Findings:	14.400 MG/L
Chemical:	SODIUM		
Sample Collected:	04/18/1989	Findings:	1.800 MG/L
Chemical:	POTASSIUM		
Sample Collected:	04/18/1989	Findings:	5.900 MG/L
Chemical:	CHLORIDE		
Sample Collected:	04/18/1989	Findings:	.500 MG/L
Chemical:	FLUORIDE (TEMPERATURE DEPENDENT)		
Sample Collected:	04/18/1989	Findings:	1.300 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	04/18/1989	Findings:	.600 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	04/18/1989	Findings:	246.000 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	04/18/1989	Findings:	12.100 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/18/1989	Findings:	.100 NTU
Chemical:	TURBIDITY (LAB)		

Sample Collected:	10/10/1989	Findings:	2.100 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	10/10/1989	Findings:	1.500 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	05/05/1992	Findings:	356.000 UMHO
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	05/05/1992	Findings:	7.400
Chemical:	PH (LABORATORY)		
Sample Collected:	05/05/1992	Findings:	138.000 MG/L
Chemical:	TOTAL ALKALINITY (AS CACO3)		
Sample Collected:	05/05/1992	Findings:	168.400 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	05/05/1992	Findings:	172.000 MG/L
Chemical:	TOTAL HARDNESS (AS CACO3)		
Sample Collected:	05/05/1992	Findings:	52.900 MG/L
Chemical:	CALCIUM		
Sample Collected:	05/05/1992	Findings:	8.630 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	05/05/1992	Findings:	10.400 MG/L
Chemical:	SODIUM		
Sample Collected:	05/05/1992	Findings:	1.950 MG/L
Chemical:	POTASSIUM		
Sample Collected:	05/05/1992	Findings:	8.500 MG/L
Chemical:	CHLORIDE		
Sample Collected:	05/05/1992	Findings:	.340 MG/L
Chemical:	FLUORIDE (TEMPERATURE DEPENDENT)		
Sample Collected:	05/05/1992	Findings:	.770 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	05/05/1992	Findings:	207.000 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	05/05/1992	Findings:	11.800 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/21/1994	Findings:	.660 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	09/21/1994	Findings:	.660 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	10/13/1994	Findings:	13.800 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/06/1995	Findings:	12.400 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/26/1995	Findings:	395.000 UMHO
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	06/26/1995	Findings:	7.500
Chemical:	PH (LABORATORY)		
Sample Collected:	06/26/1995	Findings:	155.000 MG/L
Chemical:	TOTAL ALKALINITY (AS CACO3)		
Sample Collected:	06/26/1995	Findings:	189.000 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	06/26/1995	Findings:	.390 MG/L
Chemical:	CARBONATE ALKALINITY		

Sample Collected:	06/26/1995	Findings:	184.000 MG/L
Chemical:	TOTAL HARDNESS (AS CACO3)		
Sample Collected:	06/26/1995	Findings:	54.000 MG/L
Chemical:	CALCIUM		
Sample Collected:	06/26/1995	Findings:	12.000 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	06/26/1995	Findings:	9.200 MG/L
Chemical:	SODIUM		
Sample Collected:	06/26/1995	Findings:	2.100 MG/L
Chemical:	POTASSIUM		
Sample Collected:	06/26/1995	Findings:	9.400 MG/L
Chemical:	CHLORIDE		
Sample Collected:	06/26/1995	Findings:	.280 MG/L
Chemical:	FLUORIDE (TEMPERATURE DEPENDENT)		
Sample Collected:	06/26/1995	Findings:	240.000 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	06/26/1995	Findings:	.100
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	06/26/1995	Findings:	.005 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	06/26/1995	Findings:	13.640 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/26/1995	Findings:	3100.000 UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	09/21/1995	Findings:	1.200 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	09/21/1995	Findings:	1.300 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	01/25/1996	Findings:	.760 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	01/25/1996	Findings:	.760 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	10/01/1996	Findings:	11.440 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01/09/1997	Findings:	11.000 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/23/1997	Findings:	372.000 UMHO
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09/23/1997	Findings:	7.560
Chemical:	PH (LABORATORY)		
Sample Collected:	09/23/1997	Findings:	156.000 MG/L
Chemical:	TOTAL ALKALINITY (AS CACO3)		
Sample Collected:	09/23/1997	Findings:	190.000 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	09/23/1997	Findings:	157.000 MG/L
Chemical:	TOTAL HARDNESS (AS CACO3)		
Sample Collected:	09/23/1997	Findings:	49.800 MG/L
Chemical:	CALCIUM		
Sample Collected:	09/23/1997	Findings:	7.820 MG/L
Chemical:	MAGNESIUM		

Sample Collected:	09/23/1997	Findings:	18.000 MG/L
Chemical:	SODIUM		
Sample Collected:	09/23/1997	Findings:	1.490 MG/L
Chemical:	POTASSIUM		
Sample Collected:	09/23/1997	Findings:	5.530 MG/L
Chemical:	CHLORIDE		
Sample Collected:	09/23/1997	Findings:	.490 MG/L
Chemical:	FLUORIDE (TEMPERATURE DEPENDENT)		
Sample Collected:	09/23/1997	Findings:	.540 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	09/23/1997	Findings:	227.000 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	09/23/1997	Findings:	9.930 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/23/1997	Findings:	.540 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	09/23/1997	Findings:	.480 MG/L
Chemical:	FLUORIDE (TEMPERATURE DEPENDENT)		
Sample Collected:	09/23/1997	Findings:	2.900 UG/L
Chemical:	ARSENIC		
Sample Collected:	01/27/1998	Findings:	1.300 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	01/27/1998	Findings:	.800 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	02/09/1998	Findings:	9.380 MG/L
Chemical:	NITRATE (AS NO3)		

A4
South
1/8 - 1/4 Mile
Lower

CA WELLS 3162

Water System Information:

Prime Station Code:	036/029-001	User ID:	TAN
FRDS Number:	3610029016	County:	San Beernardino
District Number:	13	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Inactive Raw
Source Lat/Long:	340600.0 1174200.0	Precision:	Undefined
Source Name:	WELL 22 - INACTIVE		
System Number:	3610029		
System Name:	MONTE VISTA CWD		
Organization That Operates System:	PO BOX 71 MONTCLAIR, CA 91763		
Pop Served:	38000	Connections:	10837
Area Served:	MONTCLAIR		

Sample Information: * Only Findings Above Detection Level Are Listed

Sample Collected:	05/11/1995	Findings:	18.900 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	05/11/1995	Findings:	530.000 UMHO
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	05/11/1995	Findings:	7.800
Chemical:	FIELD PH		

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Sample Collected:	05/11/1995	Findings:	7.800
Chemical:	PH (LABORATORY)		
Sample Collected:	05/11/1995	Findings:	158.400 MG/L
Chemical:	TOTAL ALKALINITY (AS CACO3)		
Sample Collected:	05/11/1995	Findings:	193.200 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	05/11/1995	Findings:	228.000 MG/L
Chemical:	TOTAL HARDNESS (AS CACO3)		
Sample Collected:	05/11/1995	Findings:	66.000 MG/L
Chemical:	CALCIUM		
Sample Collected:	05/11/1995	Findings:	12.800 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	05/11/1995	Findings:	20.300 MG/L
Chemical:	SODIUM		
Sample Collected:	05/11/1995	Findings:	1.900 MG/L
Chemical:	POTASSIUM		
Sample Collected:	05/11/1995	Findings:	17.500 MG/L
Chemical:	CHLORIDE		
Sample Collected:	05/11/1995	Findings:	.200 MG/L
Chemical:	FLUORIDE (TEMPERATURE DEPENDENT)		
Sample Collected:	05/11/1995	Findings:	2.900 UG/L
Chemical:	ARSENIC		
Sample Collected:	05/11/1995	Findings:	681.000 UG/L
Chemical:	IRON		
Sample Collected:	05/11/1995	Findings:	67.000 UG/L
Chemical:	MANGANESE		
Sample Collected:	05/11/1995	Findings:	308.000 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	05/11/1995	Findings:	.970
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	05/11/1995	Findings:	.240
Chemical:	LANGELIER INDEX @ SOURCE TEMP.		
Sample Collected:	05/11/1995	Findings:	29.600 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/11/1995	Findings:	12.220
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	05/11/1995	Findings:	6682.000 UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	05/18/1995	Findings:	30.600 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/14/1995	Findings:	29.100 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/05/1995	Findings:	23.600 MG/L
Chemical:	NITRATE (AS NO3)		

Map ID Direction Distance Elevation	Database	EDR ID Number
A5 **South** **1/8 - 1/4 Mile** **Lower**	**CA WELLS**	**1105**

Water System Information:

Prime Station Code:	01S/08W-03F02 S	User ID:	MET
FRDS Number:	1910126031	County:	Los Angeles
District Number:	15	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Active Untreated
Source Lat/Long:	340600.0 1174200.0	Precision:	Undefined
Source Name:	WELL T-01		
System Number:	1910126		
System Name:	POMONA-CITY, WATER DEPT.		
Organization That Operates System:	P O BOX 660 POMONA, CA 91769		
Pop Served:	131723	Connections:	27808
Area Served:	POMONA		

Sample Information: * Only Findings Above Detection Level Are Listed

Sample Collected:	10/10/1989	Findings:	1.200 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	10/10/1989	Findings:	1.300 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	10/24/1989	Findings:	5.000 UNITS
Chemical:	COLOR		
Sample Collected:	10/24/1989	Findings:	2.000 TON
Chemical:	ODOR THRESHOLD @ 60 C		
Sample Collected:	10/24/1989	Findings:	500.000 UMHO
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	10/24/1989	Findings:	7.640
Chemical:	PH (LABORATORY)		
Sample Collected:	10/24/1989	Findings:	193.600 MG/L
Chemical:	TOTAL ALKALINITY (AS CACO3)		
Sample Collected:	10/24/1989	Findings:	236.200 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	10/24/1989	Findings:	178.800 MG/L
Chemical:	TOTAL HARDNESS (AS CACO3)		
Sample Collected:	10/24/1989	Findings:	49.500 MG/L
Chemical:	CALCIUM		
Sample Collected:	10/24/1989	Findings:	13.400 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	10/24/1989	Findings:	33.900 MG/L
Chemical:	SODIUM		
Sample Collected:	10/24/1989	Findings:	1.300 MG/L
Chemical:	POTASSIUM		
Sample Collected:	10/24/1989	Findings:	5.100 MG/L
Chemical:	CHLORIDE		
Sample Collected:	10/24/1989	Findings:	.700 MG/L
Chemical:	FLUORIDE (TEMPERATURE DEPENDENT)		

Sample Collected:	10/24/1989	Findings:	285.000 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	10/24/1989	Findings:	14.000 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10/24/1989	Findings:	.100 NTU
Chemical:	TURBIDITY (LAB)		
Sample Collected:	04/21/1992	Findings:	377.000 UMHO
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	04/21/1992	Findings:	7.800
Chemical:	PH (LABORATORY)		
Sample Collected:	04/21/1992	Findings:	136.000 MG/L
Chemical:	TOTAL ALKALINITY (AS CACO3)		
Sample Collected:	04/21/1992	Findings:	166.000 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	04/21/1992	Findings:	154.000 MG/L
Chemical:	TOTAL HARDNESS (AS CACO3)		
Sample Collected:	04/21/1992	Findings:	48.800 MG/L
Chemical:	CALCIUM		
Sample Collected:	04/21/1992	Findings:	6.870 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	04/21/1992	Findings:	18.500 MG/L
Chemical:	SODIUM		
Sample Collected:	04/21/1992	Findings:	1.760 MG/L
Chemical:	POTASSIUM		
Sample Collected:	04/21/1992	Findings:	8.850 MG/L
Chemical:	CHLORIDE		
Sample Collected:	04/21/1992	Findings:	.450 MG/L
Chemical:	FLUORIDE (TEMPERATURE DEPENDENT)		
Sample Collected:	04/21/1992	Findings:	.580 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	04/21/1992	Findings:	239.000 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	04/21/1992	Findings:	13.400 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10/11/1993	Findings:	377.000 UMHO
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	10/11/1993	Findings:	7.600
Chemical:	PH (LABORATORY)		
Sample Collected:	10/11/1993	Findings:	159.000 MG/L
Chemical:	TOTAL ALKALINITY (AS CACO3)		
Sample Collected:	10/11/1993	Findings:	194.000 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	10/11/1993	Findings:	189.000 MG/L
Chemical:	TOTAL HARDNESS (AS CACO3)		
Sample Collected:	10/11/1993	Findings:	59.900 MG/L
Chemical:	CALCIUM		
Sample Collected:	10/11/1993	Findings:	10.200 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	10/11/1993	Findings:	14.400 MG/L
Chemical:	SODIUM		

Sample Collected:	10/11/1993	Findings:	1.670 MG/L
Chemical:	POTASSIUM		
Sample Collected:	10/11/1993	Findings:	12.300 MG/L
Chemical:	CHLORIDE		
Sample Collected:	10/11/1993	Findings:	.600 MG/L
Chemical:	FLUORIDE (TEMPERATURE DEPENDENT)		
Sample Collected:	10/11/1993	Findings:	234.000 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	10/11/1993	Findings:	16.000 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/21/1994	Findings:	.580 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	09/21/1994	Findings:	.580 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	10/13/1994	Findings:	16.200 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/06/1995	Findings:	15.200 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/04/1995	Findings:	.820 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	05/04/1995	Findings:	.820 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	06/26/1995	Findings:	390.000 UMHO
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	06/26/1995	Findings:	7.800
Chemical:	PH (LABORATORY)		
Sample Collected:	06/26/1995	Findings:	145.000 MG/L
Chemical:	TOTAL ALKALINITY (AS CACO3)		
Sample Collected:	06/26/1995	Findings:	177.000 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	06/26/1995	Findings:	.730 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	06/26/1995	Findings:	167.000 MG/L
Chemical:	TOTAL HARDNESS (AS CACO3)		
Sample Collected:	06/26/1995	Findings:	52.000 MG/L
Chemical:	CALCIUM		
Sample Collected:	06/26/1995	Findings:	9.000 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	06/26/1995	Findings:	17.000 MG/L
Chemical:	SODIUM		
Sample Collected:	06/26/1995	Findings:	1.800 MG/L
Chemical:	POTASSIUM		
Sample Collected:	06/26/1995	Findings:	8.100 MG/L
Chemical:	CHLORIDE		
Sample Collected:	06/26/1995	Findings:	.450 MG/L
Chemical:	FLUORIDE (TEMPERATURE DEPENDENT)		
Sample Collected:	06/26/1995	Findings:	12.000 UG/L
Chemical:	NICKEL		
Sample Collected:	06/26/1995	Findings:	6.000 UG/L
Chemical:	SELENIUM		

Sample Collected:	06/26/1995	Findings:	240.000 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	06/26/1995	Findings:	.300
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	06/26/1995	Findings:	.011 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	06/26/1995	Findings:	14.960 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/26/1995	Findings:	3400.000 UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	09/21/1995	Findings:	1.400 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	09/21/1995	Findings:	1.500 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	09/25/1995	Findings:	.720 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	09/25/1995	Findings:	.720 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	11/01/1995	Findings:	.590 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	11/01/1995	Findings:	.590 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	01/25/1996	Findings:	.830 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	01/25/1996	Findings:	.830 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	04/03/1996	Findings:	1.300 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	04/03/1996	Findings:	1.300 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	07/02/1996	Findings:	.720 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	07/02/1996	Findings:	.720 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	10/01/1996	Findings:	.600 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	10/01/1996	Findings:	11.440 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10/01/1996	Findings:	.600 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	01/09/1997	Findings:	.780 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	01/09/1997	Findings:	.780 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	01/09/1997	Findings:	13.200 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/23/1997	Findings:	387.000 UMHO
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09/23/1997	Findings:	7.630
Chemical:	PH (LABORATORY)		

Sample Collected:	09/23/1997	Findings:	152.000 MG/L
Chemical:	TOTAL ALKALINITY (AS CACO3)		
Sample Collected:	09/23/1997	Findings:	185.000 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	09/23/1997	Findings:	158.000 MG/L
Chemical:	TOTAL HARDNESS (AS CACO3)		
Sample Collected:	09/23/1997	Findings:	49.400 MG/L
Chemical:	CALCIUM		
Sample Collected:	09/23/1997	Findings:	8.400 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	09/23/1997	Findings:	18.600 MG/L
Chemical:	SODIUM		
Sample Collected:	09/23/1997	Findings:	1.240 MG/L
Chemical:	POTASSIUM		
Sample Collected:	09/23/1997	Findings:	8.100 MG/L
Chemical:	CHLORIDE		
Sample Collected:	09/23/1997	Findings:	.490 MG/L
Chemical:	FLUORIDE (TEMPERATURE DEPENDENT)		
Sample Collected:	09/23/1997	Findings:	2.500 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	09/23/1997	Findings:	245.000 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	09/23/1997	Findings:	11.700 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/23/1997	Findings:	2.500 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	09/23/1997	Findings:	.480 MG/L
Chemical:	FLUORIDE (TEMPERATURE DEPENDENT)		
Sample Collected:	09/23/1997	Findings:	2.300 UG/L
Chemical:	ARSENIC		
Sample Collected:	01/27/1998	Findings:	2.900 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	01/27/1998	Findings:	1.100 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	02/09/1998	Findings:	11.600 MG/L
Chemical:	NITRATE (AS NO3)		

A6
South
1/8 - 1/4 Mile
Lower

CA WELLS . 1109

Water System Information:

Prime Station Code:	01S/08W-03G02 S	User ID:	MET
FRDS Number:	1910024020	County:	Los Angeles
District Number:	15	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	340600.0 1174200.0	Precision:	Undefined
Source Name:	MILL WELL 01		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

System Number: 1910024
System Name: SCWC - CLAREMONT
Organization That Operates System:
P.O. BOX 9016
SAN DIMAS, CA 91773
Pop Served: 34028 Connections: 10187
Area Served: CLAREMONT

Sample Information: * Only Findings Above Detection Level Are Listed

Sample Collected:	Chemical:	Findings:
06/18/1986	GROSS ALPHA	1.100 PCI/L
06/18/1986	GROSS ALPHA COUNTING ERROR	.500 PCI/L
03/21/1989	SOURCE TEMPERATURE C	11.700 C
03/21/1989	SPECIFIC CONDUCTANCE	415.000 UMHO
03/21/1989	FIELD PH	7.510
03/21/1989	PH (LABORATORY)	7.510
03/21/1989	TOTAL ALKALINITY (AS CACO3)	144.400 MG/L
03/21/1989	BICARBONATE ALKALINITY	176.200 MG/L
03/21/1989	TOTAL HARDNESS (AS CACO3)	164.800 MG/L
03/21/1989	CALCIUM	54.000 MG/L
03/21/1989	MAGNESIUM	7.300 MG/L
03/21/1989	SODIUM	17.400 MG/L
03/21/1989	POTASSIUM	2.100 MG/L
03/21/1989	CHLORIDE	5.400 MG/L
03/21/1989	FLUORIDE (TEMPERATURE DEPENDENT)	.300 MG/L
03/21/1989	GROSS ALPHA COUNTING ERROR	.300 PCI/L
03/21/1989	TOTAL DISSOLVED SOLIDS	253.200 MG/L
03/21/1989	LANGELIER INDEX @ 60 C	.560
03/21/1989	LANGELIER INDEX @ SOURCE TEMP.	- .330
03/21/1989	NITRATE (AS NO3)	14.400 MG/L
03/21/1989	TURBIDITY (LAB)	.100 NTU

Sample Collected:	03/21/1989	Findings:	11.800
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	06/14/1989	Findings:	.700 UG/L
Chemical:	1,1,1-TRICHLOROETHANE		
Sample Collected:	03/30/1990	Findings:	.020 UG/L
Chemical:	DIBROMOCHLOROPROPANE (DBCP)		
Sample Collected:	04/24/1990	Findings:	.800 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	07/11/1990	Findings:	1.400 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	07/11/1990	Findings:	.900 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	08/24/1990	Findings:	2.000 TON
Chemical:	ODOR THRESHOLD @ 60 C		
Sample Collected:	08/24/1990	Findings:	430.000 UMHO
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	08/24/1990	Findings:	7.200
Chemical:	PH (LABORATORY)		
Sample Collected:	08/24/1990	Findings:	168.000 MG/L
Chemical:	TOTAL ALKALINITY (AS CACO3)		
Sample Collected:	08/24/1990	Findings:	205.000 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	08/24/1990	Findings:	200.800 MG/L
Chemical:	TOTAL HARDNESS (AS CACO3)		
Sample Collected:	08/24/1990	Findings:	58.000 MG/L
Chemical:	CALCIUM		
Sample Collected:	08/24/1990	Findings:	13.600 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	08/24/1990	Findings:	7.300 MG/L
Chemical:	SODIUM		
Sample Collected:	08/24/1990	Findings:	2.200 MG/L
Chemical:	POTASSIUM		
Sample Collected:	08/24/1990	Findings:	8.600 MG/L
Chemical:	CHLORIDE		
Sample Collected:	08/24/1990	Findings:	.400 MG/L
Chemical:	FLUORIDE (TEMPERATURE DEPENDENT)		
Sample Collected:	08/24/1990	Findings:	249.400 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	08/24/1990	Findings:	18.500 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/24/1990	Findings:	.100 NTU
Chemical:	TURBIDITY (LAB)		
Sample Collected:	02/20/1991	Findings:	2.500 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	02/20/1991	Findings:	1.400 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	05/08/1991	Findings:	1.400 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	05/08/1991	Findings:	1.300 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		

Sample Collected:	05/08/1991	Findings:	1.000 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	05/08/1991	Findings:	.040 UG/L
Chemical:	DIBROMOCHLOROPROPANE (DBCP)		
Sample Collected:	08/21/1991	Findings:	2.800 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	08/21/1991	Findings:	.600 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	02/12/1992	Findings:	18.330 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	02/12/1992	Findings:	15.000 UNITS
Chemical:	COLOR		
Sample Collected:	02/12/1992	Findings:	420.000 UMHO
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	02/12/1992	Findings:	7.600
Chemical:	FIELD PH		
Sample Collected:	02/12/1992	Findings:	7.600
Chemical:	PH (LABORATORY)		
Sample Collected:	02/12/1992	Findings:	142.000 MG/L
Chemical:	TOTAL ALKALINITY (AS CACO3)		
Sample Collected:	02/12/1992	Findings:	173.200 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	02/12/1992	Findings:	188.000 MG/L
Chemical:	TOTAL HARDNESS (AS CACO3)		
Sample Collected:	02/12/1992	Findings:	55.300 MG/L
Chemical:	CALCIUM		
Sample Collected:	02/12/1992	Findings:	12.200 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	02/12/1992	Findings:	7.300 MG/L
Chemical:	SODIUM		
Sample Collected:	02/12/1992	Findings:	1.800 MG/L
Chemical:	POTASSIUM		
Sample Collected:	02/12/1992	Findings:	11.300 MG/L
Chemical:	CHLORIDE		
Sample Collected:	02/12/1992	Findings:	.300 MG/L
Chemical:	FLUORIDE (TEMPERATURE DEPENDENT)		
Sample Collected:	02/12/1992	Findings:	201.400 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	02/12/1992	Findings:	.660
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	02/12/1992	Findings:	- .080
Chemical:	LANGELIER INDEX @ SOURCE TEMP.		
Sample Collected:	02/12/1992	Findings:	18.000 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/12/1992	Findings:	1.000 NTU
Chemical:	TURBIDITY (LAB)		
Sample Collected:	02/12/1992	Findings:	11.890
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	12/08/1993	Findings:	.900 UG/L
Chemical:	TRICHLOROETHYLENE		

Sample Collected:	02/09/1994	Findings:	20.700 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/29/1994	Findings:	1.300 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	11/09/1994	Findings:	1.200 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	11/09/1994	Findings:	1.100 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	12/13/1994	Findings:	2.100 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	12/13/1994	Findings:	1.400 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	01/22/1996	Findings:	390.000 UMHO
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	01/22/1996	Findings:	7.800
Chemical:	PH (LABORATORY)		
Sample Collected:	01/22/1996	Findings:	156.800 MG/L
Chemical:	TOTAL ALKALINITY (AS CACO3)		
Sample Collected:	01/22/1996	Findings:	191.300 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	01/22/1996	Findings:	192.000 MG/L
Chemical:	TOTAL HARDNESS (AS CACO3)		
Sample Collected:	01/22/1996	Findings:	59.300 MG/L
Chemical:	CALCIUM		
Sample Collected:	01/22/1996	Findings:	11.700 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	01/22/1996	Findings:	8.000 MG/L
Chemical:	SODIUM		
Sample Collected:	01/22/1996	Findings:	1.800 MG/L
Chemical:	POTASSIUM		
Sample Collected:	01/22/1996	Findings:	9.500 MG/L
Chemical:	CHLORIDE		
Sample Collected:	01/22/1996	Findings:	.300 MG/L
Chemical:	FLUORIDE (TEMPERATURE DEPENDENT)		
Sample Collected:	01/22/1996	Findings:	221.000 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	01/22/1996	Findings:	10.700 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/27/1996	Findings:	.160 MG/L
Chemical:	FLUORIDE (TEMPERATURE DEPENDENT)		
Sample Collected:	02/27/1996	Findings:	56.000 UG/L
Chemical:	ALUMINUM		
Sample Collected:	02/27/1996	Findings:	8.300 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/27/1996	Findings:	1900.000 UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	07/23/1996	Findings:	1.200 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	07/23/1996	Findings:	1.600 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		

Sample Collected:	11/27/1996	Findings:	.800 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	12/04/1996	Findings:	13.300 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	12/04/1996	Findings:	7.960
Chemical:	PH (LABORATORY)		
Sample Collected:	12/04/1996	Findings:	.100 NTU
Chemical:	TURBIDITY (LAB)		
Sample Collected:	02/19/1997	Findings:	5.700 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/26/1997	Findings:	3.900 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	02/26/1997	Findings:	3.900 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	03/05/1997	Findings:	3.400 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	03/05/1997	Findings:	1.140 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	07/09/1997	Findings:	2.400 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	07/09/1997	Findings:	1.300 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	07/09/1997	Findings:	7.430 MG/L
Chemical:	NITRATE (AS NO3)		

7
WNW
1/4 - 1/2 Mile
Higher

FED USGS **USGS0138280**

Agency:	USGS	Site ID:	340624117422101
Site Name:	001S008W10B001S		
Dec. Latitude:	34.10668		
Dec. Longitude:	-117.70672		
Coord Sys:	NAD83		
State:	CA		
County:	Los Angeles County		
Altitude:	Not Reported		
Hydrologic code:	18070203		
Topographic:	Not Reported		
Site Type:	Ground-water other than Spring		
Const Date:	Not Reported	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	Not Reported		
Aquifer type:	Not Reported		
Well depth:	800		
Hole depth:	Not Reported	Source:	Not Reported
Project no:	Not Reported		

Ground-water levels, Number of Measurements: 0

Map ID Direction Distance Elevation	Database	EDR ID Number
8 **SSE** **1/2 - 1 Mile** **Lower**	**FED USGS**	**USGS0155706**

Agency:	USGS	Site ID:	340532117414101
Site Name:	001S008W14D001S		
Dec. Latitude:	34.09223		
Dec. Longitude:	-117.69561		
Coord Sys:	NAD83		
State:	CA		
County:	San Bernardino County		
Altitude:	Not Reported		
Hydrologic code:	18070203		
Topographic:	Not Reported		
Site Type:	Ground-water other than Spring		
Const Date:	Not Reported	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	Not Reported		
Aquifer type:	Not Reported		
Well depth:	1055		
Hole depth:	Not Reported	Source:	Not Reported
Project no:	Not Reported		

Ground-water levels, Number of Measurements: 0

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9 **SW** **1/2 - 1 Mile** **Lower**	**CA WELLS**	**14205**

Water System Information:

Prime Station Code:	1910024-031	User ID:	MET
FRDS Number:	1910024031	County:	Los Angeles
District Number:	15	Station Type:	RESVR/WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	M	Well Status:	Combined Treated
Source Lat/Long:	340537.0 1174236.0	Precision:	100 Feet (one Second)
Source Name:	DEL MONTE BLENDING RESERVOIR - TREATED		
System Number:	1910024		
System Name:	SCWC - CLAREMONT		
Organization That Operates System:			
	P.O. BOX 9016		
	SAN DIMAS, CA 91773		
Pop Served:	34028	Connections:	10187
Area Served:	CLAREMONT		

Sample Information: * Only Findings Above Detection Level Are Listed

Sample Collected:	05/06/1992	Findings:	1.400 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06/10/1992	Findings:	12.000 UG/L
Chemical:	ARSENIC		
Sample Collected:	06/24/1992	Findings:	12.000 UG/L
Chemical:	ARSENIC		
Sample Collected:	01/27/1993	Findings:	1.000 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	02/03/1993	Findings:	.900 UG/L
Chemical:	1,1-DICHLOROETHYLENE		

Sample Collected:	02/10/1993	Findings:	2.000 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	02/17/1993	Findings:	1.400 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	02/24/1993	Findings:	1.700 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	03/03/1993	Findings:	.700 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	03/10/1993	Findings:	.700 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	03/16/1993	Findings:	1.600 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	03/24/1993	Findings:	.700 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	03/31/1993	Findings:	1.200 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	04/14/1993	Findings:	1.100 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	05/12/1993	Findings:	1.000 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	05/19/1993	Findings:	1.500 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	05/26/1993	Findings:	.700 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06/02/1993	Findings:	10.000 UG/L
Chemical:	ARSENIC		
Sample Collected:	06/02/1993	Findings:	.900 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06/09/1993	Findings:	.800 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06/16/1993	Findings:	1.100 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06/30/1993	Findings:	.800 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07/07/1993	Findings:	1.000 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07/14/1993	Findings:	1.000 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07/21/1993	Findings:	.800 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08/04/1993	Findings:	1.500 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08/11/1993	Findings:	1.500 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08/18/1993	Findings:	.600 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08/25/1993	Findings:	.800 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09/08/1993	Findings:	1.000 UG/L
Chemical:	1,1-DICHLOROETHYLENE		

Sample Collected:	09/15/1993	Findings:	.900 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09/29/1993	Findings:	1.000 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	10/06/1993	Findings:	.040 UG/L
Chemical:	DIBROMOCHLOROPROPANE (DBCP)		
Sample Collected:	10/06/1993	Findings:	.700 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	10/13/1993	Findings:	1.500 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	10/20/1993	Findings:	.600 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	10/27/1993	Findings:	1.500 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	11/17/1993	Findings:	.700 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	11/24/1993	Findings:	2.000 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	12/08/1993	Findings:	.900 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	12/15/1993	Findings:	1.700 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	12/22/1993	Findings:	1.500 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	01/12/1994	Findings:	1.400 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	01/19/1994	Findings:	.800 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	02/09/1994	Findings:	.700 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	02/15/1994	Findings:	1.400 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	02/16/1994	Findings:	1.600 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	03/02/1994	Findings:	1.100 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	03/16/1994	Findings:	1.100 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	04/13/1994	Findings:	1.100 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06/01/1994	Findings:	1.300 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06/08/1994	Findings:	1.500 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06/15/1994	Findings:	1.000 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06/22/1994	Findings:	.800 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06/29/1994	Findings:	1.000 UG/L
Chemical:	1,1-DICHLOROETHYLENE		

Sample Collected:	07/06/1994	Findings:	1.400 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07/13/1994	Findings:	1.500 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07/20/1994	Findings:	1.800 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07/27/1994	Findings:	1.300 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08/03/1994	Findings:	1.100 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08/10/1994	Findings:	1.100 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08/17/1994	Findings:	1.200 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08/24/1994	Findings:	1.700 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08/31/1994	Findings:	1.600 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09/07/1994	Findings:	1.700 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09/14/1994	Findings:	1.100 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09/21/1994	Findings:	1.600 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09/28/1994	Findings:	1.900 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	10/05/1994	Findings:	.700 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	10/12/1994	Findings:	1.200 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	10/19/1994	Findings:	1.200 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	10/26/1994	Findings:	1.600 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	11/02/1994	Findings:	.600 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	11/23/1994	Findings:	1.400 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	11/30/1994	Findings:	.800 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	12/07/1994	Findings:	.600 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	12/21/1994	Findings:	.600 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	01/04/1995	Findings:	1.000 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	01/11/1995	Findings:	1.100 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	01/18/1995	Findings:	2.200 UG/L
Chemical:	1,1-DICHLOROETHYLENE		

Sample Collected:	02/08/1995	Findings:	.800 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	02/22/1995	Findings:	.900 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	03/08/1995	Findings:	1.400 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	03/15/1995	Findings:	1.200 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	03/29/1995	Findings:	1.200 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	04/05/1995	Findings:	.900 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	04/12/1995	Findings:	1.100 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	04/19/1995	Findings:	1.300 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	04/26/1995	Findings:	1.000 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	05/10/1995	Findings:	.900 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	05/17/1995	Findings:	1.400 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	05/24/1995	Findings:	1.500 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	05/31/1995	Findings:	1.500 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06/07/1995	Findings:	1.500 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06/14/1995	Findings:	2.200 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06/21/1995	Findings:	1.400 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06/28/1995	Findings:	1.400 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07/12/1995	Findings:	2.100 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07/19/1995	Findings:	1.900 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07/26/1995	Findings:	2.100 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08/02/1995	Findings:	2.100 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09/12/1995	Findings:	2.100 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09/21/1995	Findings:	1.500 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09/27/1995	Findings:	1.600 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	10/04/1995	Findings:	1.500 UG/L
Chemical:	1,1-DICHLOROETHYLENE		

Sample Collected:	10/20/1995	Findings:	.700 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	10/25/1995	Findings:	1.000 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	11/01/1995	Findings:	1.300 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	11/08/1995	Findings:	1.200 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	11/15/1995	Findings:	1.200 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	12/06/1995	Findings:	.800 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	12/13/1995	Findings:	.800 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	04/24/1996	Findings:	.700 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	05/01/1996	Findings:	1.100 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	05/15/1996	Findings:	1.500 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	05/22/1996	Findings:	1.700 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	05/29/1996	Findings:	1.600 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06/05/1996	Findings:	2.000 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06/12/1996	Findings:	1.900 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06/19/1996	Findings:	1.900 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07/03/1996	Findings:	1.600 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07/10/1996	Findings:	2.200 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07/17/1996	Findings:	1.800 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07/24/1996	Findings:	1.400 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07/31/1996	Findings:	2.300 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08/07/1996	Findings:	2.000 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08/14/1996	Findings:	1.500 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08/21/1996	Findings:	2.300 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08/28/1996	Findings:	2.200 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09/04/1996	Findings:	1.500 UG/L
Chemical:	1,1-DICHLOROETHYLENE		

Sample Collected:	09/11/1996	Findings:	1.500 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09/18/1996	Findings:	1.800 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09/25/1996	Findings:	1.500 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	10/02/1996	Findings:	2.000 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	10/09/1996	Findings:	1.100 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	10/16/1996	Findings:	1.900 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	10/23/1996	Findings:	.700 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	10/30/1996	Findings:	.800 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	11/06/1996	Findings:	1.700 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	11/13/1996	Findings:	.900 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	11/20/1996	Findings:	1.400 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	11/27/1996	Findings:	1.000 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	12/04/1996	Findings:	2.100 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	12/11/1996	Findings:	2.800 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	12/18/1996	Findings:	1.400 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	12/26/1996	Findings:	1.400 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	01/15/1997	Findings:	.800 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	03/05/1997	Findings:	.800 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	03/12/1997	Findings:	3.600 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	03/19/1997	Findings:	1.100 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	03/26/1997	Findings:	1.000 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	04/02/1997	Findings:	1.700 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	04/09/1997	Findings:	1.400 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	04/16/1997	Findings:	1.600 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	04/23/1997	Findings:	1.400 UG/L
Chemical:	1,1-DICHLOROETHYLENE		

Sample Collected:	04/30/1997	Findings:	1.400 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	05/07/1997	Findings:	1.200 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	05/14/1997	Findings:	1.400 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	05/21/1997	Findings:	1.000 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	05/28/1997	Findings:	.900 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06/04/1997	Findings:	1.000 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06/11/1997	Findings:	1.000 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06/18/1997	Findings:	1.600 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07/02/1997	Findings:	.900 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07/30/1997	Findings:	1.100 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08/06/1997	Findings:	1.200 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08/13/1997	Findings:	.800 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08/20/1997	Findings:	1.600 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08/27/1997	Findings:	1.400 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09/03/1997	Findings:	1.700 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09/10/1997	Findings:	1.300 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09/17/1997	Findings:	1.600 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09/24/1997	Findings:	1.200 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	10/01/1997	Findings:	1.400 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	10/08/1997	Findings:	1.000 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	10/15/1997	Findings:	.700 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	10/22/1997	Findings:	.600 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	10/29/1997	Findings:	1.200 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	11/05/1997	Findings:	.700 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	11/26/1997	Findings:	.700 UG/L
Chemical:	1,1-DICHLOROETHYLENE		

Sample Collected:	12/31/1997	Findings:	.900 UG/L
Chemical:	1,1-DICHLOROETHYLENE		

B10
NW
1/2 - 1 Mile
Higher

FED USGS **USGS0138366**

Agency:	USGS	Site ID:	340652117423601
Site Name:	001S008W03F003S		
Dec. Latitude:	34.11445		
Dec. Longitude:	-117.71089		
Coord Sys:	NAD83		
State:	CA		
County:	Los Angeles County		
Altitude:	Not Reported		
Hydrologic code:	18070203		
Topographic:	Not Reported		
Site Type:	Ground-water other than Spring		
Const Date:	Not Reported	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	Not Reported		
Aquifer type:	Not Reported		
Well depth:	309		
Hole depth:	309	Source:	Not Reported
Project no:	Not Reported		

Ground-water levels, Number of Measurements: 0

B11
NW
1/2 - 1 Mile
Higher

CA WELLS **1108**

Water System Information:

Prime Station Code:	01S/08W-03F05 S	User ID:	MET
FRDS Number:	1910126035	County:	Los Angeles
District Number:	15	Station Type:	WELL/ABNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Untreated
Source Lat/Long:	340654.0 1174233.6	Precision:	1,000 Feet (10 Seconds)
Source Name:	TUNNEL WELL 04		
System Number:	1910126		
System Name:	POMONA-CITY, WATER DEPT.		
Organization That Operates System:	P O BOX 660 POMONA, CA 91769		
Pop Served:	131723	Connections:	27808
Area Served:	POMONA		

Sample Information: * Only Findings Above Detection Level Are Listed

Sample Collected:	03/04/1991	Findings:	1.100 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	03/10/1992	Findings:	361.000 UMHO
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/10/1992	Findings:	7.600
Chemical:	PH (LABORATORY)		
Sample Collected:	03/10/1992	Findings:	152.000 MG/L
Chemical:	TOTAL ALKALINITY (AS CACO3)		

Sample Collected:	03/10/1992	Findings:	185.000 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03/10/1992	Findings:	204.000 MG/L
Chemical:	TOTAL HARDNESS (AS CACO3)		
Sample Collected:	03/10/1992	Findings:	61.800 MG/L
Chemical:	CALCIUM		
Sample Collected:	03/10/1992	Findings:	10.900 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	03/10/1992	Findings:	11.300 MG/L
Chemical:	SODIUM		
Sample Collected:	03/10/1992	Findings:	1.940 MG/L
Chemical:	POTASSIUM		
Sample Collected:	03/10/1992	Findings:	17.800 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/10/1992	Findings:	.430 MG/L
Chemical:	FLUORIDE (TEMPERATURE DEPENDENT)		
Sample Collected:	03/10/1992	Findings:	1.100 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	03/10/1992	Findings:	243.000 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03/10/1992	Findings:	11.500 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10/11/1993	Findings:	352.000 UMHO
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	10/11/1993	Findings:	7.650
Chemical:	PH (LABORATORY)		
Sample Collected:	10/11/1993	Findings:	149.000 MG/L
Chemical:	TOTAL ALKALINITY (AS CACO3)		
Sample Collected:	10/11/1993	Findings:	182.000 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	10/11/1993	Findings:	138.000 MG/L
Chemical:	TOTAL HARDNESS (AS CACO3)		
Sample Collected:	10/11/1993	Findings:	44.200 MG/L
Chemical:	CALCIUM		
Sample Collected:	10/11/1993	Findings:	7.950 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	10/11/1993	Findings:	29.500 MG/L
Chemical:	SODIUM		
Sample Collected:	10/11/1993	Findings:	1.700 MG/L
Chemical:	POTASSIUM		
Sample Collected:	10/11/1993	Findings:	9.140 MG/L
Chemical:	CHLORIDE		
Sample Collected:	10/11/1993	Findings:	.900 MG/L
Chemical:	FLUORIDE (TEMPERATURE DEPENDENT)		
Sample Collected:	10/11/1993	Findings:	228.000 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	10/11/1993	Findings:	14.500 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/21/1994	Findings:	.900 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		

Sample Collected:	09/21/1994	Findings:	.760 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	09/21/1994	Findings:	.790 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	09/21/1994	Findings:	1.300 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	09/21/1994	Findings:	3.750 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	10/13/1994	Findings:	13.100 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10/17/1994	Findings:	1.500 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	10/17/1994	Findings:	1.300 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	10/17/1994	Findings:	1.900 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	10/17/1994	Findings:	2.600 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	10/17/1994	Findings:	7.300 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	02/06/1995	Findings:	9.740 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/26/1995	Findings:	340.000 UMHO
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	06/26/1995	Findings:	7.800
Chemical:	PH (LABORATORY)		
Sample Collected:	06/26/1995	Findings:	140.000 MG/L
Chemical:	TOTAL ALKALINITY (AS CACO3)		
Sample Collected:	06/26/1995	Findings:	71.000 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	06/26/1995	Findings:	.700 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	06/26/1995	Findings:	150.000 MG/L
Chemical:	TOTAL HARDNESS (AS CACO3)		
Sample Collected:	06/26/1995	Findings:	45.000 MG/L
Chemical:	CALCIUM		
Sample Collected:	06/26/1995	Findings:	9.200 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	06/26/1995	Findings:	14.000 MG/L
Chemical:	SODIUM		
Sample Collected:	06/26/1995	Findings:	1.900 MG/L
Chemical:	POTASSIUM		
Sample Collected:	06/26/1995	Findings:	3.400 MG/L
Chemical:	CHLORIDE		
Sample Collected:	06/26/1995	Findings:	.480 MG/L
Chemical:	FLUORIDE (TEMPERATURE DEPENDENT)		
Sample Collected:	06/26/1995	Findings:	210.000 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	06/26/1995	Findings:	.200
Chemical:	LANGELIER INDEX @ 60 C		

Sample Collected:	06/26/1995	Findings:	.011 MG/L
Chemical:	HYDROXIDE ALKALINITY		
Sample Collected:	06/26/1995	Findings:	8.360 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/26/1995	Findings:	.100 NTU
Chemical:	TURBIDITY (LAB)		
Sample Collected:	06/26/1995	Findings:	1900.000 UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	07/20/1995	Findings:	.890 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	07/20/1995	Findings:	.740 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	07/20/1995	Findings:	1.600 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	09/21/1995	Findings:	1.400 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	09/21/1995	Findings:	1.600 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	09/21/1995	Findings:	1.500 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	09/25/1995	Findings:	.640 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	09/25/1995	Findings:	.640 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	04/03/1996	Findings:	.810 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	04/03/1996	Findings:	3.300 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	04/03/1996	Findings:	4.100 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	07/02/1996	Findings:	.900 UG/L
Chemical:	BROMODICHLORMETHANE (THM)		
Sample Collected:	07/02/1996	Findings:	.730 UG/L
Chemical:	BROMOFORM (THM)		
Sample Collected:	07/02/1996	Findings:	1.400 UG/L
Chemical:	DIBROMOCHLOROMETHANE (THM)		
Sample Collected:	07/02/1996	Findings:	.900 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	07/02/1996	Findings:	4.000 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	10/01/1996	Findings:	.700 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	10/01/1996	Findings:	7.920 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10/01/1996	Findings:	.700 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	11/04/1997	Findings:	3.560 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	11/04/1997	Findings:	2.890 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		

Sample Collected:	11/04/1997	Findings:	352.000 UMHO
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	11/04/1997	Findings:	7.680
Chemical:	PH (LABORATORY)		
Sample Collected:	11/04/1997	Findings:	148.000 MG/L
Chemical:	TOTAL ALKALINITY (AS CACO3)		
Sample Collected:	11/04/1997	Findings:	181.000 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	11/04/1997	Findings:	159.000 MG/L
Chemical:	TOTAL HARDNESS (AS CACO3)		
Sample Collected:	11/04/1997	Findings:	48.100 MG/L
Chemical:	CALCIUM		
Sample Collected:	11/04/1997	Findings:	9.480 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	11/04/1997	Findings:	15.400 MG/L
Chemical:	SODIUM		
Sample Collected:	11/04/1997	Findings:	1.320 MG/L
Chemical:	POTASSIUM		
Sample Collected:	11/04/1997	Findings:	3.670 MG/L
Chemical:	CHLORIDE		
Sample Collected:	11/04/1997	Findings:	.420 MG/L
Chemical:	FLUORIDE (TEMPERATURE DEPENDENT)		
Sample Collected:	11/04/1997	Findings:	219.000 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	11/04/1997	Findings:	7.560 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/04/1997	Findings:	.510 MG/L
Chemical:	FLUORIDE (TEMPERATURE DEPENDENT)		
Sample Collected:	01/27/1998	Findings:	.700 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	02/09/1998	Findings:	8.320 MG/L
Chemical:	NITRATE (AS NO3)		

12
SW
1/2 - 1 Mile
Lower

FED USGS **USGS0138261**

Agency:	USGS	Site ID:	340538117424301
Site Name:	001S008W10N003S		
Dec. Latitude:	34.0939		
Dec. Longitude:	-117.71283		
Coord Sys:	NAD83		
State:	CA		
County:	Los Angeles County		
Altitude:	Not Reported		
Hydrologic code:	18070203		
Topographic:	Not Reported		
Site Type:	Ground-water other than Spring		
Const Date:	Not Reported	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		

Primary Aquifer:	Not Reported		
Aquifer type:	Not Reported		
Well depth:	644		
Hole depth:	Not Reported	Source:	Not Reported
Project no:	Not Reported		

Ground-water levels, Number of Measurements: 0

13
ESE
1/2 - 1 Mile
Higher

CA WELLS **1150**

Water System Information:

Prime Station Code:	01S/08W-11B02 S	User ID:	TAN
FRDS Number:	3610050031	County:	San Beernardino
District Number:	13	Station Type:	WELL/AMBNT
Water Type:	Well/Groundwater	Well Status:	Destroyed
Source Lat/Long:	340600.0 1174100.0	Precision:	1 Mile (One Minute)
Source Name:	WELL 14 - DESTROYED		
System Number:	3610050		
System Name:	CITY OF UPLAND		
Organization That Operates System:	PO BOX 460 UPLAND, CA 91786		
Pop Served:	66383	Connections:	16736
Area Served:	UPLAND VIC		

B14
NW
1/2 - 1 Mile
Higher

FED USGS **USGS0138369**

Agency:	USGS	Site ID:	340653117423701
Site Name:	001S008W03F002S		
Dec. Latitude:	34.11473		
Dec. Longitude:	-117.71117		
Coord Sys:	NAD83		
State:	CA		
County:	Los Angeles County		
Altitude:	Not Reported		
Hydrologic code:	18070203		
Topographic:	Not Reported		
Site Type:	Ground-water other than Spring		
Const Date:	Not Reported	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	Not Reported		
Aquifer type:	Not Reported		
Well depth:	300		
Hole depth:	300	Source:	Not Reported
Project no:	Not Reported		

Ground-water levels, Number of Measurements: 0

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for SAN BERNARDINO County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 91711

Number of sites tested: 1

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.600 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002. 7.5-Minute DEMs correspond to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW^R Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

ADDITIONAL ENVIRONMENTAL RECORD SOURCES

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STATE RECORDS

California Drinking Water Quality Database
Source: Department of Health Services
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

California Oil and Gas Well Locations for District 2, 3, 5 and 6
Source: Department of Conservation
Telephone: 916-323-1779

RADON

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

APPENDIX I

Phase II Environmental Site Assessment

PHASE II ENVIRONMENTAL SITE ASSESSMENT UPDATE

CUC Quarry Site
Claremont and Upland, California

Prepared for:

Claremont University Consortium
101 S. Mills Avenue
Claremont, CA 91711-3941

Prepared by:

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June 30, 2014

Project No. 009234003

PHASE II ENVIRONMENTAL SITE ASSESSMENT UPDATE
CUC Quarry Site
Claremont and Upland, California

June 30, 2014
Project 009234003

This report was prepared by the staff of AMEC under the supervision of the Engineer(s) and/or Geologist(s) whose seal(s) and signature(s) appear hereon.

The findings, recommendations, specifications, or professional opinions are presented within the limits described by the client, in accordance with generally accepted professional engineering and geologic practice. No warranty is expressed or implied.

G. Richard Rees, PG, CHg
Senior Associate Hydrogeologist

Craig Stewart, PG, CHg
Principal Hydrogeologist

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PHASE II ENVIRONMENTAL SITE ASSESSMENT UPDATE
CUC Quarry Site
Claremont and Upland, California

1.0 INTRODUCTION

AMEC Environment & Infrastructure, Inc. (AMEC), has prepared this report for the Claremont University Consortium (CUC) to document the findings of a Phase II Environmental Site Assessment (ESA) update conducted at a former aggregate quarry currently owned by CUC. The former quarry (also known as the CUC quarry, the Claremont Landfill, and the pit property, and also referred to in this report as the site) is located southeast of the intersection of Claremont and Foothill boulevards in the cities of Claremont and Upland, California. AMEC conducted this Phase II ESA update to address environmental issues identified in the Phase II ESA work conducted in July 2008 (AMEC Geomatrix, 2008). Our work included field reconnaissance; soil sampling, laboratory analyses of soil samples, assisting CUC in removal of soil impacted with elevated copper concentrations, and preparation of this report, and was performed in accordance with our proposal dated January 20, 2014, entitled "Proposal for Phase II Environmental Site Assessment (ESA) Update." CUC authorized AMEC to proceed with the Phase II ESA portion of the proposal on February 25, 2014.

This report provides information on the site description and project background, scope of work, summary of document review, field reconnaissance and soil sampling, laboratory analytical results for the soil samples collected, waste removal, and our recommendations.

2.0 BACKGROUND

The following subsections summarize relevant project background information.

2.1 SITE DESCRIPTION

The subject property occupies approximately 75 acres and straddles the boundary between the cities of Upland and Claremont, which coincides with the boundary between Los Angeles and San Bernardino counties. The site was formerly used as an aggregate quarry and more recently has been used as a landfill permitted to accept inert waste such as soil, rock, concrete, and asphalt. The pit excavation is approximately 50 to 80 feet deep with sloped sidewalls that are partially vegetated. Most of the landfilling activities have occurred in the northern portion of the property but more recently fill materials have been placed in the southern part of the pit. The base of the pit is irregular and stockpiles of boulders, debris, and other materials are scattered throughout. An archery range is located along the west-central

portion of the property. One water supply well is located in the northwestern portion of the property.

We are informed by CUC that the property will be subdivided for use by, and potential transfer to, members of The Claremont Colleges for the construction and use of sports fields, recreational activities areas, ancillary buildings, structures, and parking. Site development is planned to occur over a 10 to 15 year timeframe in accordance with the City of Upland Master Site Plan and City of Claremont Site Plan and development agreements with the cities.

2.2 SITE HISTORY AND PREVIOUS INVESTIGATIONS

The site history is described below. Information presented in the first two subsections (History and Investigations Prior to 2004, and Findings of the 2004 Phase I ESA) is based on a review of documents regarding the quarry as summarized in the Phase I ESA (Geomatrix, 2004).

2.2.1 History and Investigations Prior to 2004

Documents available for the subject property indicate that gravel mining began at the site in the 1920s (LeRoy Crandall, 1986), but did not provide information on pit operations until the 1970s. In 1972, Conrock, the operator and owner of the site at that time, stopped quarrying operations and permitted the property for use as an inert landfill (Claremont Facilities Corporation [CFC], 1987). Between 1978 and 1984, the site was leased by Tony Glavinick, who continued operation of the site as an inert landfill (LeRoy Crandall, 1986).

Based on documents reviewed, the landfill was classified to accept non-water-soluble, non-decomposable inert solids. Because the subject property lies within the two different Regional Water Quality Control Board (RWQCB) jurisdictions (Los Angeles and Santa Ana Regions), waste discharge requirements (WDRs) have been issued for the pit by both agencies (LeRoy Crandall, 1986):

- WDR Order No. 72-66, December 13, 1972, Los Angeles Region
- WDR Order No. 73-14, February 28, 1973, Los Angeles Region
- WDR Order No. 72-47, December 21, 1972, Santa Ana Region
- WDR Order No. 79-93, June 29, 1979, Santa Ana Region.

ATC (2001a) states that the two RWQCBs have agreed that the Los Angeles RWQCB (LARWQCB) will provide regulatory oversight of the subject property.

During 1983 and 1984, geotechnical investigations were conducted to evaluate the site for potential development (Converse, 1983 and 1984b). These investigation activities included geologic mapping, test borings and pits, soil sampling, observations of the landfill operation, hydrogeologic studies, and installation of at least 11 on-site piezometers ranging in depth from approximately 30 to 199 feet below ground surface (bgs) at the time of drilling. Records reviewed do not indicate that soil or groundwater samples were collected for chemical analysis as part of these investigations. Observations conducted between June 1983 and June 1984 indicated that landfill operations generally were not supervised (Converse, 1984a). Landfill materials reportedly consisted of approximately 50 to 70 percent clean soil, and 30 to 50 percent solid material including concrete, brick, and plaster board, with small amounts of wood and metal (LeRoy Crandall, 1986).

Documents reviewed suggest that landfill operations were suspended in 1984 in anticipation of possible development of the site as a business park. An environmental impact report (EIR) was prepared for CFC, which acquired the site in 1986 (EDAW, 1984). Subsequently, an environmental site assessment also was conducted to evaluate the potential presence of hazardous substances (LeRoy Crandall, 1986). This assessment included a site inspection, organic vapor screening in shallow (up to 3 feet deep) hand-pushed probes and within existing piezometer casings, collection and analysis of soil samples collected during completion of 17 soil borings advanced to depths as great as approximately 50 feet, and conversion of four of these borings to vapor monitoring wells. Organic vapor analyzer readings greater than background were reported at three sampling points located within a mound of fill near the southeast corner of the site. A layer of black soil with “a strong odor of septic waste” was encountered at a depth of approximately 2 feet in this area; subsequent laboratory analysis of this black soil reported that it did not contain petroleum hydrocarbons or VOCs above laboratory reporting limits. Composite soil samples collected in borings drilled at the site contained hydrocarbon concentrations between 280 and 1900 milligrams per kilogram (mg/kg), but these were attributed to asphalt fragments present in the samples analyzed. No VOCs were detected in soil samples analyzed; two samples that were also analyzed for polychlorinated biphenyls (PCBs) did not contain tested compounds above laboratory reporting limits. Organic vapor readings collected from the four vapor monitoring wells ranged from less than 10 to 80 parts per million (ppm) and were attributed to decomposing organic debris encountered during drilling.

In 1987, CFC evaluated closing the landfill (CFC, 1987). This landfill closure report summarized landfill closure issues, legal status and regulation issues, and technical requirements and costs of closing and/or sealing the landfill. The subject property was sold in 1987 to Arrow/Claremont Venture, and then to Claremont University Center in 1988 (Claremont University Center, 1991). In a 1991 letter to the LARWQCB, the Claremont

University Center states that it would like to maintain its existing waste discharge requirements as an inert materials landfill.

In response to a notification received from the LARWQCB in January 1988, Law Environmental (1989 and 1990) prepared solid waste assessment test (SWAT) reports on the pit for the CalMat Company (formerly Conrock). These assessments included groundwater monitoring results for a well located on the northern part of the pit property (Well A) and five other deep wells in the site vicinity. Direction and approximate distances from the pit to the five off-site SWAT monitoring wells are: one well almost 1 mile north; one well almost 0.25 mile west; one well approximately 0.25 mile south; and two wells approximately 0.75 mile southwest of the southwest corner of the pit. Low concentrations of xylenes (2 to 5 micrograms per liter [µg/L]) were detected in three off-site wells during one monitoring event, but Law Environmental (1990) noted that the presence of xylenes in groundwater is “a common occurrence throughout the basin” and the result of leaking fuel USTs. The current California Department of Public Health (CDPH) Maximum Contaminant Level (MCL) for total xylenes in drinking water is 1,750 µg/L (CDPH, 2014).

In December 2000, CUC applied to the County of San Bernardino for a Conditional Use Permit (CUP) to dispose of inert material from a large CalTrans project; however, CUC did not win its bid to purchase this inert material and disposal of this CalTrans waste at the pit did not occur (CUC, 2000 and 2001).

In May 2000, the LARWQCB requested that CUC demonstrate that material disposed of in the pit does not pose a threat to groundwater quality (ATC, 2001a). LARWQCB Order No. 00-070, dated May 4, 2000, and revised May 25, 2000, was issued to the Claremont University Center and replaced previous Order No. 73-014 (LARWQCB, 2000a). Documents reviewed indicate that following transmittal of the new LARWQCB order, a report on the operational history of the landfill was submitted by ATC to the LARWQCB in August 2000, but that the report did not present adequate information for the LARWQCB to conclude whether the landfill had impacted groundwater (LARWQCB, 2000b). The LARWQCB issued a notice of non-compliance and requested that Claremont University Center comply with Order No. 00-070 and implement a groundwater monitoring program for the site (LARWQCB, 2000b). Based on results of three quarterly groundwater monitoring events in 1989 and 1990, the LARWQCB approved the SWAT in March 2001 and agreed that these data indicate that waste disposal at the site has had no adverse impact on groundwater resources at the site (LARWQCB, 2001a), however, the LARWQCB requested that groundwater monitoring be continued according to current waste discharge requirements. In May 2001, ATC submitted a report to demonstrate that additional groundwater monitoring was not necessary (ATC, 2001a). That report contains inspection sheets for landfill operations when Conrock operated the site as well as pit disposal

records for 1998 to 2000 when the site was owned by CUC. According to the report, access to the landfill was limited to CUC contractors for disposal of excavation, construction, and demolition debris from CUC projects only. In response, the LARWQCB requested one additional groundwater monitoring event, which was conducted in August 2001. During this event, one groundwater sample from Pit Well No. 1 (Well A) was collected and analyzed; no constituents analyzed were detected above MCLs and metals and inorganic water quality parameters of the groundwater sample were similar to those of regional groundwater (ATC, 2001b). Based on these results, the LARWQCB approved an amended groundwater detection monitoring program (DMP) for compliance with LARWQCB Order No. 00-070 (LARWQCB, 2001b). The amended DMP requires that groundwater monitoring of Well A be conducted every third year during the month of October starting in 2004. The groundwater monitoring parameters include VOCs, metals, and general chemistry testing. In a letter from CUC to the California State Water Resources Control Board (SWRCB), CUC states that as of summer 2002, CUC no longer accepts waste generated by agencies other than CUC (CUC, 2002). In 2005, CUC made an exception to this restriction and allowed the City of Upland to dispose of inert construction debris under a special permit.

2.2.2 Findings of 2004 Phase I ESA

The findings from the ESA completed in June 2004 identified the landfill as a recognized environmental condition (REC) because of the uncertainty associated with the types and composition of materials disposed in the landfill and the inherent risks that the landfill creates for future use of the site and groundwater quality. Among the features related to the landfill that may contribute to these risks included potentially improperly decommissioned groundwater observation wells[1] and an orange-brown slag-like material of unknown composition observed during the March 2004 site reconnaissance. Recommendations for additional work based on the findings of the Phase I ESA included:

- complying with ongoing regulatory permit requirements (monitoring Well A every third October with the first sampling occurring in October 2004),
- conducting a visual survey and field screening for hazardous materials including sampling of slag-like material,
- locating on-site observation wells and maintaining or destroying them in accordance with state and local standards, and

[1] Throughout this document, small diameter groundwater wells that are not currently used for groundwater monitoring are referred to as observation wells.

- developing an environmental contingency plan for use during grading activities to address petroleum hydrocarbons or hazardous substances that may be encountered during grading, and developing a strategy to eventually close the pit.

2.2.3 Findings of 2008 Phase II ESA

General observations in the 2008 reconnaissance were similar to the observations described in the Phase I ESA site reconnaissance conducted in 2004. Fill material consisted of soil, concrete, concrete with rebar, wood debris (lumber and telephone or power poles), and some asphaltic concrete. Fill materials also included limited occurrences of plastic, fabric, ceramic, small diameter PVC pipe, and metal debris. The whitish material that appeared similar to dried plaster or grout described by Geomatrix (2004) as being found in a small pile (less than 5 feet in diameter) located approximately 300 feet south of the orange soil was not found during the 2008 site reconnaissance. A metal drum full of concrete or cement was found on the south-central area of the CUC quarry.

Well A, and two other observation wells or potential observation wells were identified by field geologists during the 2008 site reconnaissance and are shown on Figure 2. In addition, soil samples were collected from soils in the area of historic water accumulation in the pit "dry pond," imported soils with debris, orange soil, and what appeared to be soil stained with oil "stained soil" at the locations shown on Figure 2. Selected soil samples were analyzed for volatile organic compounds (VOCs) using EPA method 8260B; TPHcc using EPA Method 8015M; metals (antimony, arsenic, barium, beryllium, cadmium, total chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc) using EPA Methods 6010B and 7471A; organochlorine pesticides using EPA Method 8081A; semi-volatile organic compounds (SVOCs) using EPA Method 8270C, and polychlorinated biphenyls (PCBs) using EPA Method 8082. Analytical results indicated that VOCs, SVOCs, and PCBs were not detected at or above laboratory reporting limits in any of the soil samples analyzed for these constituents. With one exception, TPHcc in soil samples analyzed for this parameter was either not detected at or above the laboratory reporting limit or reported at a concentration below 100 mg/kg. With one exception, metals in soil samples analyzed for these constituents were either not detected at or above their respective laboratory reporting limits or were present at concentrations consistent with background concentrations in the soil samples. The exceptions identified for further actions are summarized below.

- A soil sample of the stained soil indicated TPHcc concentration of 51,800 mg/kg. Carbon-chain distinction indicated that the TPH in these soils was heavier-end carbon-chain range hydrocarbons (C23 to C35) that are more typically associated with motor oil or grease. Laboratory analytical results for carbon–chain hydrocarbons typically associated with gasoline and diesel (C4 to C10 and C11 to

C22, respectively) were not detected at the laboratory reporting limits. AMEC recommended removal of this soil by a qualified contractor.

- A soil sample of the orange stained soil first identified in a Phase I ESA conducted by Geomatrix in 2004 as “orange slag-like material” was collected during the field reconnaissance. Analytical results for this sample indicated a total copper concentration of 328 mg/kg. This analytical result was above 10 times its equivalent Soluble Threshold Limit Concentration (STLC) of 25 milligrams per liter (mg/L) as listed in Title 22 of the California Code of Regulations (CCR, 2005). Based on this result, the sample was analyzed for soluble copper using Waste Extraction Test (WET) methods. The results of this analysis indicated a soluble copper concentration of 26.2 mg/L, which if representative of the orange soil overall, would indicate that the material may need to be classified as a California hazardous waste during management, transportation, and disposal. AMEC recommended removal of this soil by a qualified contractor.

3.0 OBJECTIVES AND SCOPE OF WORK

The objectives of the Phase II ESA were to:

- update the site history narrative based on activities conducted at the site since the 2008 Phase II ESA,
- conduct a visual survey and field screening for hazardous materials including stained soils identified in the 2008 Phase II ESA,
- assist CUC in removal of hazardous materials, if found, and
- prepare a report of findings.

To meet these objectives, the scope of work for the Phase II ESA included:

- gathering additional information on activities conducted at the site since completion of the 2008 Phase II ESA;
- conducting a site reconnaissance for potential hazardous materials;
- sampling of soil or other materials in suspect or selected areas;

- assisting CUC in obtaining the services of a qualified contractor to remove hazardous materials from the site;

- collecting a confirmation sample to confirm hazardous materials were removed; and

- preparing this summary report of findings and recommendations for future work.

The following sections of this report present the findings and recommendations developed through implementation of this scope of work.

4.0 WORK CONDUCTED SINCE 2008

Based on documentation provided by CUC, CUC is currently in compliance with the reporting and monitoring requirements established in LARWQCB Order No. 00-070, Waste Discharge Requirements for Claremont University Center (Claremont Landfill), dated May 4, 2000, and revised May 25, 2000. Inert Waste Disposal reports are provided quarterly with an annual summary provided following the end of each calendar year. The most recent quarterly submittal to the LARWQCB was the 1st Quarter 2014 Inert Waste Disposal Report, dated May 4, 2014. The most recent annual summary submittal was the Annual 2013 Inert Waste Disposal Report, dated January 15, 2014.

CUC monitored Well A (also known as well MW-A or Pit Well No. 1) in two sampling events conducted in December 2010 and February 2011 by Miller Brooks Environmental Inc. (Miller Brooks, 2011). The December 2010 sampling event included only a subset of the analyses required to comply with the monitoring program; therefore, a follow-up sampling event was conducted in February 2012. Groundwater samples collected from these two sampling events, in aggregate, met the amended monitoring requirements of the groundwater detection monitoring program (LARWQCB, 2001b) that requires “monitoring of groundwater in monitoring well MW-A.” Miller Brooks indicated that the findings for these monitoring events were consistent with those of previous monitoring events and concluded that no impact to groundwater by site activities was evident based on monitoring results from Well A.

CUC conducted an additional monitoring event on April 23, 2014 by EarthCon Consultants CA, Inc. (EarthCon, 2014). Based on the results of this monitoring event, Earthcon concluded that the inert landfill is not affecting the quality of groundwater represented by Pit Well No. 1 (Well A).

5.0 SITE RECONNAISSANCE

The methods and observations of our site reconnaissance are described below. Photographs taken during the site reconnaissance are provided in Appendix A.

5.1 PRE-RECONNAISSANCE MAP COMPILATION AND RECONNAISSANCE METHODS

The pre-reconnaissance map compilation and reconnaissance methods are provided in the following subsections.

5.1.1 Map Compilation

In preparation for the field reconnaissance, AMEC compiled a map (Figure 2) showing the monitoring well and observation or potential observation wells and areas of interest identified in the 2008 Phase II ESA on a recent aerial photograph (May 2013). The purpose of preparing this map was to help field personnel locate areas identified for additional work in the 2008 Phase II ESA and to facilitate updating the findings of the 2008 Phase II ESA site reconnaissance.

5.1.2 Reconnaissance Methods

Two AMEC geologists conducted the site reconnaissance in the CUC quarry site on February 25, 2014. The geologists traversed the quarry to update previous findings and to identify any new areas of interest (e.g., observation well casings, stained soils). A Trimble XM Global Positioning System (GPS) unit was used to gather and record GPS coordinates for areas of interest. The GPS unit has an accuracy of approximately three to six feet after post processing corrections. GPS coordinates were obtained at three locations identifiable on the aerial photograph (e.g., the southwest arc of the curb at the northeast corner of the intersection of N. Claremont Boulevard and W. Arrow Route) as control points after completing the site reconnaissance. These control points were used to evaluate the GPS data for drift, instrument malfunction, or other potential anomalies.

5.2 RECONNAISSANCE OBSERVATIONS

General observations were similar to the observations described for the Phase II site reconnaissance conducted in 2008. Fill material consisted of soil, concrete, concrete with rebar, wood debris (lumber and telephone or power poles), and some asphaltic concrete. Fill materials also included limited occurrences of plastic, fabric, ceramic, small diameter PVC pipe, and metal debris. Gravel was present in medium to large piles, particularly on the west side of the quarry. Findings of the field reconnaissance including checking the status of previously identified monitoring/observation well locations and potential observation well locations, areas of interest from the 2008 field reconnaissance, and other observations are provided under their respective headings below.

5.2.1 Observation Wells and Monitoring Well Locations

The field geologists confirmed previous observations of the location of the groundwater monitoring well (Well A). Of the two potential observation wells identified in the 2008 Phase II ESA, only one (Well 12) was observed during the 2014 site reconnaissance. The well identified as "Well" at the south central area of the CUC quarry in 2008 (Figure 2) was not found during the site reconnaissance in 2014. A two-inch diameter polyvinyl chloride (PVC) pipe was identified approximately 75 feet east-southeast of Well A (Figure 2) and is considered a potential observation well or potential vapor monitoring well (Appendix A, Photograph 1).

5.2.2 Stained Soil

The area of stained soil consisting of darker-colored soil with a slight hydrocarbon odor observed in the southern central portion of the site and sampled during the 2008 Phase II site reconnaissance (Figure 2) was not observed during the 2014 site reconnaissance. The pattern of the stained area as observed in 2008 was consistent with a leak of oil from moving equipment and the stained soil was likely very limited in depth. According to CUC personnel, the staining was apparent for only a short period of time after it was observed in 2008; this is consistent with our observation that the staining was located in an area subject to heavy traffic at the quarry and was likely very limited in depth.

5.2.3 Imported Soil with Debris

An area identified as imported soil with debris was noted in the 2008 Phase II ESA field reconnaissance. Although no follow-up work was recommended in 2008, the area was observed again in 2014. No debris or empty containers were observed in this area in the 2014 field reconnaissance.

5.2.4 Orange Soil

The orange soil previously identified and sampled was not located in the area identified as the "Orange Soil Location 2008" on Figure 2. AMEC identified the likely location of this soil based on a previous photograph. Based on the photograph, the orange soil appeared to have been covered by various fill materials including soil, concrete, asphalt, and rocks. CUC personnel were informed of this finding and used the same photographs to uncover the orange soil at this location. A photograph of the orange soil after it had been uncovered is provided in Appendix A (Photograph 2). On April 15, 2014, AMEC collected a sample of the orange soil (20140415-P1) to confirm previous results and for waste disposal profiling. The soil sample was analyzed for TPHcc, VOCs, and metals. Following confirmation that the orange soils were elevated in total and soluble copper, the soils were removed and disposed of by a licensed contractor as described in Section 7 of this report. On June 9, 2014, following excavation and containment

of the orange soil, AMEC collected a confirmation sample (20140609-P1) of soil underlying the orange soil to confirm removal of soils with elevated copper concentrations.

5.2.5 Other Observations

A small volume of batch asphaltic concrete was observed at the central-west side of the site (Figure 2 and Appendix A Photograph 3). The LARWQCB Waste Discharge permit allows for "asphalt paving fragments" in the fill but does not specify batch asphaltic concrete. CUC personal were notified of this observation, indicated that they were unaware that this material had been placed in the quarry, and they removed the material.

6.0 SOIL SAMPLING AND LABORATORY ANALYSES

Descriptions of soil sampling and laboratory analytical results are provided in the following subsections. Laboratory results are summarized in Tables 1 through 3.

6.1 SOIL SAMPLING

Soil samples were collected in laboratory-supplied, eight-ounce glass jars. A sample of the orange soil was collected for waste disposal profiling of the orange soil on April 15, 2014 and the subsequent confirmation sample of the soil underlying the orange soil was collected on June 9, 2014. The sample collected for profiling the soil for waste disposal was analyzed for VOCs using EPA Method 8260B, TPHcc using EPA Method 8015B, metals using EPA Methods 6010B and 7471A, and soluble copper using Waste Extraction Test (WET) methods. All samples were stored on ice and submitted following chain-of-custody procedures to ENVIRO-CHEM, Inc. (ENVIRO-CHEM), of Pomona, California, which is accredited through the California Environmental Laboratory Accreditation Program (CA-ELAP) for the analyses performed.

6.2 LABORATORY ANALYTICAL RESULTS

The following sections summarize the laboratory analytical results of the soil samples collected in the CUC quarry and a description of laboratory quality assurance (QA) program and our review of the laboratory data. The laboratory analytical reports with laboratory QA and chain-of-custody forms are provided in Appendix B. A memorandum describing a review of the laboratory data is provided in Appendix C.

6.2.1 Soil Sample Analytical Results

Table 1 summarizes analytical results for VOCs and TPHcc in the soil sample collected for waste profiling of the orange soil. VOCs were not detected at or above the laboratory reporting limits for the corresponding analytes. The laboratory reported TPHcc was not detected at or above laboratory reporting limit for carbon-chain ranges of C4 to C10 (gasoline

fuel range) and C11 to C22 (diesel fuel range) in the sample. Heavier carbon-chain range of C23 to C35 (motor oil range) was reported in the sample at a concentration of 60 mg/kg.

Table 2 summarizes analytical results for total metals detected in the waste profiling sample of the orange soil. As with previous analyses of this material, laboratory results indicate that with the exception of copper, the metals were either not detected at their respective laboratory reporting limits or were present at concentrations in the range consistent with the concentrations of metals in “B” horizon soils in the western United States (Connor and Shacklette, 1975). Total copper was reported in the sample at a concentration of 602 mg/kg. The confirmation soil sample collected in underlying soils after removing the orange soil indicated a total copper concentration of 40.5 mg/kg which is consistent with a typical concentration that might be expected to occur naturally in soil.

Table 3 summarizes the analytical result for soluble copper in the soil samples. The laboratory reported a soluble copper concentration of 46.9 mg/L in the orange soil sample, which if representative of the orange soil overall, would indicate that the material would be classified as a California hazardous waste during management, transportation, and disposal. The confirmation soil sample collected in underlying soils after removing the orange soil indicated a soluble copper concentration of 1.55 mg/L, which is well below the hazardous threshold of 25 mg/L.

6.2.2 Data Quality Review

The laboratory QA program included recording sample condition, analytical method holding time requirements, and an evaluation of surrogate recoveries, reagent and matrix spikes, matrix spike duplicates, and laboratory control samples (LCS). The QA program also consists of data validation performed in accordance with established guidelines (U.S. EPA, 1999; 2002) for the review and validation of laboratory analytical data. No problems were found with the data reported by the laboratory or in our review of the laboratory data. The memorandum summarizing the data validation is provided in Appendix C.

7.0 WASTE REMOVAL

American Integrated Services, Inc. (AIS) of Long Beach, California provided profiling and waste removal services, under direct contract with CUC. CUC worked with AIS to excavate and place approximately 10 cubic yards of soil in a 20-cubic yard containment bin. The orange soil was easily distinguishable from surrounding and underlying soil based on color. CUC personnel also stated that the underlying soil was a much denser “hard pan.” AMEC conducted a reconnaissance of the area and collected a confirmation sample of the underlying soil on June 9, 2014 (Appendix A, Photograph 4). No orange soil was observed remaining in

place during this reconnaissance. The orange soil was removed from the site by AIS under hazardous waste manifest on June 10, 2014, and transported to the US Ecology Inc. (US Ecology) disposal facility in Beatty, Nevada for disposal. A copy of the waste manifest and receiving facility receipt is provided in Appendix D.

8.0 SUMMARY AND CONCLUSIONS

The scope of work proposed for the Phase II ESA was completed with minor adjustments to account for actual conditions encountered (e.g., orange soil previously identified needed to be uncovered by CUC). Observations made during the site reconnaissance on February 25, 2014 indicated conditions similar to those encountered in the 2008 site reconnaissance for the Phase II ESA (AMEC, 2008) with a few exceptions. These exceptions are noted as follows:

- An observation well located in the central part of the quarry during the 2008 field reconnaissance was not observed in the 2014 field reconnaissance.

- A 2-inch diameter PVC casing was identified at the northern part of the property near Well A and is considered a potential observation well or vapor monitoring well.

- Stained soils impacted with heavy petroleum hydrocarbons identified in the 2008 reconnaissance were not observed in the 2014 field reconnaissance, and, according to CUC personnel, were apparent for only a short period of time after being observed in 2008. Based on the location and limited extent of the stained soils observed, and the likelihood that petroleum hydrocarbons, if remaining in the area, will degrade over time, no additional actions are recommended to address the previously-observed stained soil in this area.

- Orange soil with elevated concentrations of total and soluble copper identified during the 2004 site reconnaissance and verified and sampled during the 2008 site reconnaissance had been subsequently covered by concrete and other debris. Based on a photograph of the orange soil taken during the 2008 field reconnaissance, AMEC and CUC identified the likely location of the orange soil, and CUC was able to uncover the orange soil at this location. A soil sample collected for waste disposal profiling confirmed elevated total and soluble copper concentrations in the orange soil. CUC contracted with AIS and transported the orange soil, under hazardous waste manifest, to the US Ecology facility in Beatty, Nevada for disposal. A confirmation soil sample was collected from soil below the orange soil and analyzed for total and soluble copper. Results of these analyses indicated that the soil remaining in place following removal of the orange soil did

not contain elevated concentrations of total or soluble copper. No additional actions are recommended for this area.

9.0 RECOMMENDATIONS

Based on the findings of the review of documents, site reconnaissance, and soil sampling results described above, AMEC recommends the following:

- LARWQCB Order No. 00-070, Waste Discharge Requirements for Claremont University Center (Claremont Landfill), dated May 4, 2000, and revised May 25, 2000, established requirements for operation of the site as a waste disposal site (LARWQCB, 2000a). The monitoring requirements of this order were amended in October 2001 to include an amended groundwater detection monitoring program (LARWQCB, 2001b). CUC is currently in compliance with requirements for monitoring and reporting for ongoing disposal operations. CUC will need to plan for any land use change, as Order No. 00-070 also specifies (general provision no. 10) that "Ninety (90) days prior to cessation of disposal operations at this site, the discharger shall submit a technical report to the Regional Board describing the methods and controls to be used to assure protection of the quality of receiving waters during final operations and with any proposed subsequent use of the land." A copy of LARWQCB Order No. 00-070 and Amended Groundwater Detection Monitoring program are provided as Appendixes E and F, respectively. We understand that CUC plans to subdivide the property in the near future for development as recreational/sports facilities and as part of this process will need to implement the notification, reporting, and future land use planning aspects of the Order with the LARWQCB. We recommend that CUC, as part of planning for this project, meet with the LARWQCB and discuss the current status of the quarry and potential regulatory requirements for closing the quarry as an inert disposal site and transitioning the quarry to its planned future land use. If grading or other earthwork is required, we recommend development of a soils monitoring and contingency plan for use during the earthwork. This plan would outline segregation and sampling procedures to be followed if soils with staining or odors indicative of chemical impacts are encountered during the earthwork activities.

- One of the two potential observation wells identified in the 2008 site reconnaissance was not found during the 2014 site reconnaissance. This observation well and other observation wells may be exposed during grading or other site work. All of the observation wells at the site should be secured and maintained for future use or destroyed in accordance with California Well

Standards and local agency requirements. Both Los Angeles and San Bernardino counties require permits for destruction of observation wells.

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TABLES

TABLE 1

SUMMARY OF ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS AND TOTAL PETROLEUM HYDROCARBONS IN SOIL SAMPLES

CUC Quarry Site

Claremont and Upland, California

Results reported in milligrams per kilogram (mg/kg)

Sample Area	Sample Identification	Date Sampled	VOCs[1]	Sum in Carbon Chain Range C4-C35[2]	TPH Carbon Chain[3]		
					C4-C10	C11-C22	C23-C35
Orange Soil	20140515-P1	4/15/2014	ND[4]	60	ND (<10)[5]	ND (<10)	60

Notes

1. VOCs = Volatile organic compounds. VOCs samples analyzed using EPA Method 8260B.
2. Sum of carbon range as calculated by adding individual laboratory results for carbon chain analysis.
3. TPH Carbon Chain = total petroleum hydrocarbons with carbon chain speciation analyzed using EPA Method 8015B Carbon chain ranges quantitated using gasoline fuel standard, diesel fuel standard, and motor oil standard for carbon chain ranges C4-C10, C11-C22, and C23-C35, respectively.
4. ND = Not detected at or above the laboratory reporting limits, see laboratory report for list of analytes and reporting limits.
5. ND(<) = Not detected at or above laboratory reporting limit indicated in parentheses.

TABLE 2

SUMMARY OF ANALYTICAL RESULTS FOR METALS DETECTED IN SOIL SAMPLES

CUC Quarry Site
Claremont and Upland, California

Results reported in milligrams per kilogram (mg/kg)

Sample Area	Sample Identification	Date Sampled	Arsenic	Barium	Chromium	Cobalt	Copper	Lead	Nickel	Vanadium	Zinc
Orange Soil	20140515-P1	4/15/2014	2.33	6.71	7.39	5.29	602	19.1	2.53	7.33	120
OS Confirmation[1]	20140609-P1	6/9/2014	---[2]	---	---	---	40.5	---	---	---	---
Mean[3] *(observed range)*			***6.1*** *(<0.2 -* ***97****)*	***560*** *(****70 - 5000****)*	***38*** *(****3 - 1500****)*	***8*** *(<3 -* ***50****)*	***21*** *(****2 - 300****)*	***18*** *(<7 -* ***700****)*	***16*** *(<3 -* ***700****)*	***66*** ***(7 - 500)***	***51*** *(<10 -* ***2000****)*

Notes

1. OS Confirmation = Confirmation soil sample collected in underlying soils after removal and containment of the Orange Soil.
2. --- = Sample was not analyzed for the constituent.
3. Mean and observed range of "B" horizon soils in the western United States (U.S.) (Conner and Schacklette, 1975).

TABLE 3

SUMMARY OF ANALYTICAL RESULT FOR SOLUBLE THRESHOLD LIMIT CONCENTRATION OF COPPER IN SOIL

CUC Quarry Site

Claremont and Upland, California

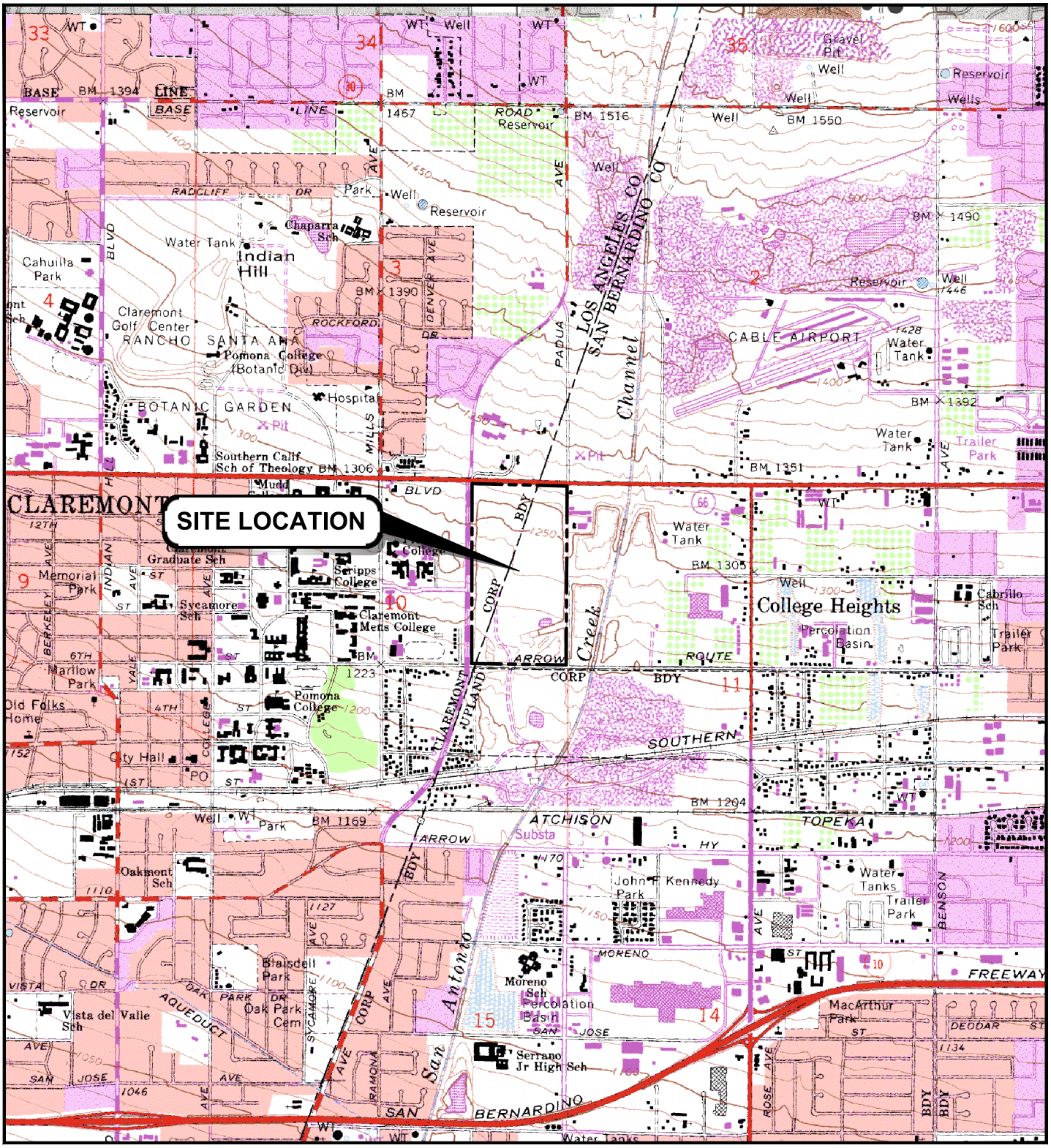
Results reported in milligrams per Liter (mg/L) in STLC[1] Leachate

Sample Area	Sample Date	Sample Identification	STLC - Soluble Copper EPA Method 6010B
Orange Soil	4/15/2014	20140415-P1	46.9
OS Confirmation[2]	4/15/2014	20140415-P1	1.55

Notes

1. STLC = Soluble Threshold Limit Concentration.
2. OS Confirmation = Confirmation soil sample collected in underlying soils after removal and containment of the Orange Soil.

FIGURES



0 1000 2000

Approximate scale in feet

Explanation

Site boundary

REFERENCE:

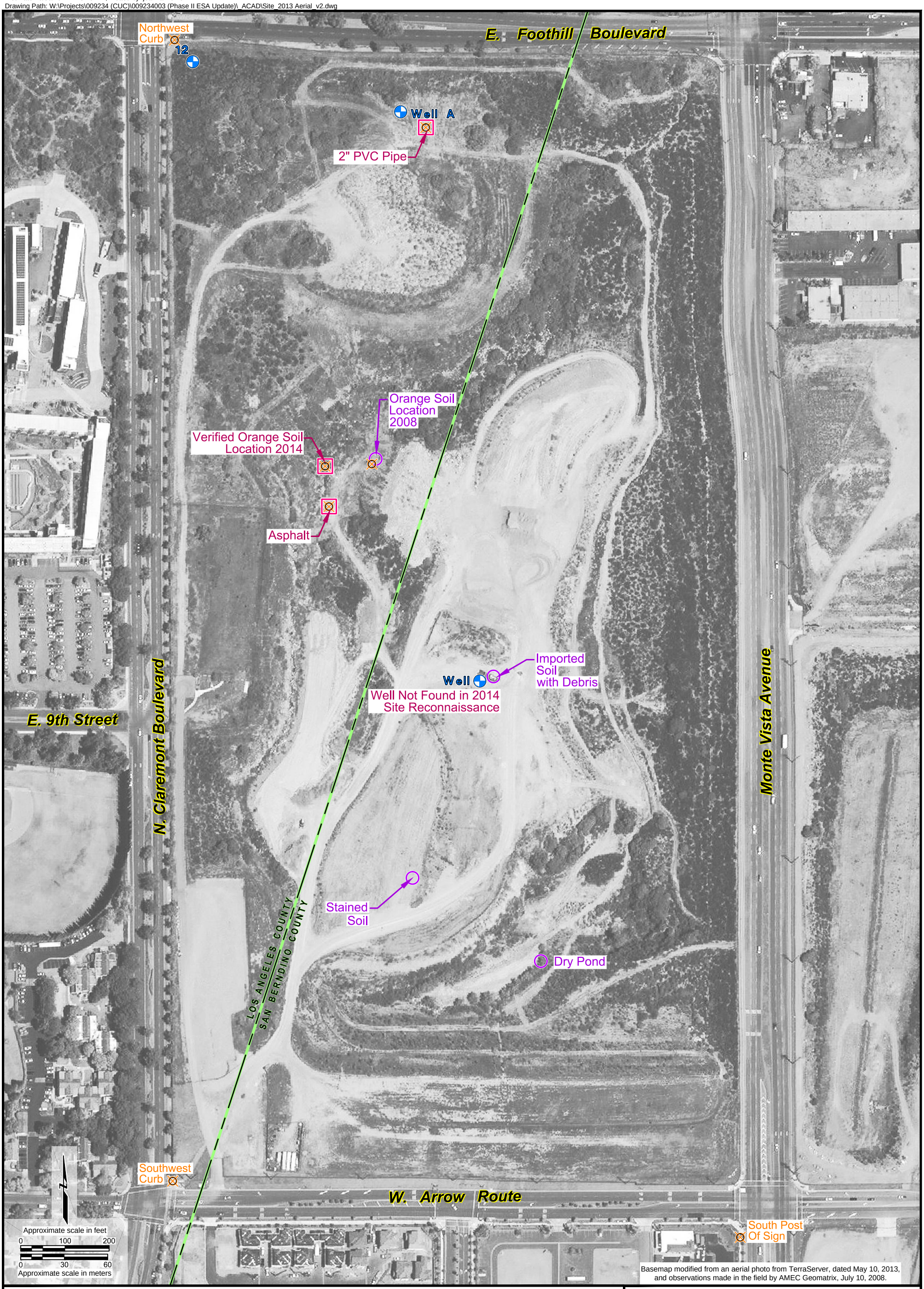
USGS 7.5 Minute Quadrangle Maps ONTARIO, California, 1967; photorevised 1981, & MT. BALDY, California, 1995.

SITE LOCATION MAP
CUC Quarry Site
Claremont and Upland, California

By: jrw	Date: 06/30/14	Project No. 92340003
amec		Figure 1

Plot Date: 6/30/2014 4:36:41 PM, Plotted by: joanna.worker
Drawing Path: W:\Projects\009234 (CUC)\009234003 (Phase II ESA Update)\ ACAD\CUC Site Location.dwg

Plot Date: 6/30/2014 4:28:43 PM, Plotted by: joanna.worker
Drawing Path: W:\Projects\009234 (CUC)\009234003 (Phase II ESA Update)_ACAD\Site_2013 Aerial_v2.dwg



Explanation

- Well or potential well (field checked by AMEC Geomatrix, July 2008); designation shown if well is near a historically mapped well location
- Area of interest identified in 2008 field reconnaissance
- Area of interest identified in 2014 field reconnaissance
- Global Positioning System (GPS) control point location taken February 25, 2014

Note:

All locations are approximate.

SITE MAP SHOWING FINDINGS DURING SITE RECONNAISSANCE
FEBRUARY 25, 2014
OVER MAY 2013 AERIAL
CUC Quarry Site
Claremont and Upland, California

By: jrw	Date: 06/30/14	Project No. 92340003
amec		Figure 2

APPENDIX A

Photo Log

Photograph 1: 2-inch PVC pipe, potential monitoring well. View looking northeast.

Photograph 2: Orange soil after being uncovered by CUC. View looking west.

Photograph 3: Batch asphaltic concrete. View looking west.

Photograph 4: Area of orange soil after excavation and placement in a containment bin. Glass jar shows location of confirmation soil sample. View looking west.

APPENDIX B

Laboratory Analytical Results and Chain-of-Custody Forms

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

Date: April 21, 2014

Mr. Richard Rees
AMEC
250 E. Rincon, Suite 204
Corona, CA 92879
Tel(951)273-7400 Fax(951)273-7420

Project: **CUC Quarry**
Lab I.D.: **140415-6**

Dear Mr. Rees:

The **analytical results** for the soil sample, received by our laboratory on April 15, 2014, are attached. The sample was received chilled, intact and with chain of custody.

Enviro-Chem appreciates the opportunity to provide you and your company this and other services. Please do not hesitate to call us if you have any questions.

Sincerely,

Curtis Desilets
Vice President/Program Manager

Andy Wang
Laboratory Manager

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: **AMEC**
250 E. Rincon, Suite 204, Corona, CA 92879
Tel(951)273-7400 Fax(951)273-7420

PROJECT: **CUC Quarry**
MATRIX: SOIL
SAMPLING DATE: 04/15/14
REPORT TO: Mr. RICHARD REES

DATE RECEIVED: 04/15/14
DATE EXTRACTED: 04/16/14
DATE ANALYZED: 04/16/14
DATE REPORTED: 04/21/14

TOTAL PETROLEUM HYDROCARBONS(TPH) - CARBON CHAIN ANALYSIS
METHOD: EPA 8015B
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

SAMPLE I.D.	LAB I.D.	C4-C10	C11-C22	C23-C35	DF
20140415-P1	140415-6	ND	ND	60.0	1
METHOD BLANK		ND	ND	ND	1
	PQL	10	10	50	

COMMENTS
C4-C10 = GASOLINE RANGE
C11-C22 = DIESEL RANGE
C23-C35 = MOTOR OIL RANGE
DF = DILUTION FACTOR
PQL = PRACTICAL QUANTITATION LIMIT
ACTUAL DETECTION LIMIT = DF X PQL
ND = NON-DETECTED OR BELOW THE ACTUAL DETECTION LIMIT

Data Reviewed and Approved by: _____
CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro Chem, Inc

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909)590-5905 Fax (909)590-5907

8015B QA/QC Report

Date Analyzed: 4/16/2014 Units: mg/Kg (ppm)

Matrix: **Soil/Solid/Sludge/Liquid**

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

Spiked Sample Lab I.D.: **140415-1 MS/MSD**

Analyte	SR	spk conc	MS	%MS	MSD	%MSD	%RPD	ACP %MS	ACP RPD
C11~C22 Range	0	200	246	123%	234	117%	5%	75-125	0-20%

LCS STD RECOVERY:

Analyte	spk conc	LCS	% REC	ACP
C11~C22 Range	200	177	89%	75-125

Analyzed and Reviewed By: _____

Final Reviewer: _____

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: **AMEC**
250 E. Rincon, Suite 204, Corona, CA 92879
Tel(951)273-7400 Fax(951)273-7420

PROJECT: **CUC Quarry**
MATRIX: SOIL
SAMPLING DATE: 04/15/14
REPORT TO: Mr. RICHARD REES

DATE RECEIVED: 04/15/14
DATE ANALYZED: 04/15-16/14
DATE REPORTED: 04/21/14

SAMPLE I.D.: **20140415-P1**

LAB I.D.: 140415-6

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD
Antimony(Sb)	ND	1.0	1	500	15	6010B
Arsenic(As)	2.33	0.3	1	500	5.0	6010B
Barium(Ba)	6.71	5.0	1	10,000	100	6010B
Beryllium(Be)	ND	0.5	1	75	0.75	6010B
Cadmium(Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total(Cr)	7.39	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	1	500	5.0	7196A
Cobalt(Co)	5.29	1.0	1	8,000	80	6010B
Copper(Cu)	602 *	1.0	10	2,500	25	6010B
Lead(Pb)	19.1	0.5	1	1,000	5.0	6010B
Mercury(Hg)	ND	0.01	1	20	0.2	7471A
Molybdenum(Mo)	ND	5.0	1	3,500	350	6010B
Nickel(Ni)	2.53	2.5	1	2,000	20	6010B
Selenium(Se)	ND	1.0	1	100	1.0	6010B
Silver(Ag)	ND	1.0	1	500	5.0	6010B
Thallium(Tl)	ND	1.0	1	700	7.0	6010B
Vanadium(V)	7.33	5.0	1	2,400	24	6010B
Zinc(Zn)	120	0.5	1	5,000	250	6010B

COMMENTS
DF = Dilution Factor
PQL = Practical Quantitation Limit
Actual Detection Limit = PQL X DF
ND = Below the Actual Detection Limit or non-detected
TTLC = Total Threshold Limit Concentration
STLC = Soluble Threshold Limit Concentration
@ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
* = STLC analysis for the metal is recommended (if marked)
** = Additional Analysis required, please call to discuss (if marked)
*** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
-- = Not analyzed/not requested

Data Reviewed and Approved by: _____
CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

METHOD BLANK REPORT

CUSTOMER: **AMEC**
250 E. Rincon, Suite 204, Corona, CA 92879
Tel(951)273-7400 Fax(951)273-7420

PROJECT: **CUC Quarry**
MATRIX: SOIL
SAMPLING DATE: 04/15/14
REPORT TO: Mr. RICHARD REES

DATE RECEIVED: 04/15/14
DATE ANALYZED: 04/15-16/14
DATE REPORTED: 04/21/14

METHOD BLANK FOR LAB I.D.: 140415-6

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD
Antimony(Sb)	ND	1.0	1	500	15	6010B
Arsenic(As)	ND	0.3	1	500	5.0	6010B
Barium(Ba)	ND	5.0	1	10,000	100	6010B
Beryllium(Be)	ND	0.5	1	75	0.75	6010B
Cadmium(Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total(Cr)	ND	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	1	500	5.0	7196A
Cobalt(Co)	ND	1.0	1	8,000	80	6010B
Copper(Cu)	ND	1.0	1	2,500	25	6010B
Lead(Pb)	ND	0.5	1	1,000	5.0	6010B
Mercury(Hg)	ND	0.01	1	20	0.2	7471A
Molybdenum(Mo)	ND	5.0	1	3,500	350	6010B
Nickel(Ni)	ND	2.5	1	2,000	20	6010B
Selenium(Se)	ND	1.0	1	100	1.0	6010B
Silver(Ag)	ND	1.0	1	500	5.0	6010B
Thallium(Tl)	ND	1.0	1	700	7.0	6010B
Vanadium(V)	ND	5.0	1	2,400	24	6010B
Zinc(Zn)	ND	0.5	1	5,000	250	6010B

COMMENTS
DF = Dilution Factor
PQL = Practical Quantitation Limit
Actual Detection Limit = PQL X DF
ND = Below the Actual Detection Limit or non-detected
TTLC = Total Threshold Limit Concentration
STLC = Soluble Threshold Limit Concentration
@ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
* = STLC analysis for the metal is recommended (if marked)
** = Additional Analysis required, please call to discuss (if marked)
*** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
-- = Not analyzed/not requested

Data Reviewed and Approved by: _____
CAL-DHS ELAP CERTIFICATE No.: 1555

QA/QC for Metals Analysis --TTLC--SOLID/SOIL MATRIX

Matrix Spike/ Matrix Spike Duplicate/ LCS :

ANALYSIS DATE: 4/16/2014

Unit : mg/Kg(ppm)

Analysis	Spk.Sample ID	CONC.	LCS %Rec.	LCS STATUS	Sample Result	Spike Conc.	MS	% Rec MS	MSD	% Rec MSD	% RPD
Arsenic(As)	140415-6	50.0	101	PASS	2.33	50.0	50.3	96%	52.9	101%	5%
Chromium(Cr)	140415-6	50.0	101	PASS	7.39	50.0	53.9	93%	55.6	96%	4%
Lead(Pb)	140415-6	50.0	101	PASS	19.1	50.0	67.1	96%	69.3	100%	4%

ANALYSIS DATE. : 4/15/2014

Analysis	Spk.Sample ID	LCS CONC.	LCS %Rec.	LCS STATUS	Sample Result	Spike Conc.	MS	% Rec MS	MSD	% Rec MSD	% RPD
Mercury (Hg)	140415-5	0.125	94	PASS	0	0.125	0.107	85%	0.102	82%	4%

MS/MSD Status:

Analysis	%MS	%MSD	%LCS	%RPD
Arsenic(As)	PASS	PASS	PASS	PASS
Chromium(Cr)	PASS	PASS	PASS	PASS
Lead(Pb)	PASS	PASS	PASS	PASS
Mercury (Hg)	PASS	PASS	PASS	PASS
Accepted Range	75 ~ 125	75 ~ 125	85 ~ 115	0 ~ 20

ANALYST: _____

FINAL REVIEWER: _____

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: **AMEC**
250 E. Rincon, Suite 204, Corona, CA 92879
Tel(951)273-7400 Fax(951)273-7420

PROJECT: **CUC Quarry**
MATRIX: SOIL
SAMPLING DATE: 04/15/14
REPORT TO: Mr. RICHARD REES

DATE RECEIVED: 04/15/14
DATE ANALYZED: 04/15/14
DATE REPORTED: 04/21/14

SAMPLE I.D.: **20140415-P1**

LAB I.D.: 140415-6

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5030B/8260B, PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: _____

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LABORATORY REPORT

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PROJECT: **CUC Quarry**
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SAMPLING DATE: 04/15/14
REPORT TO: Mr. RICHARD REES

DATE RECEIVED: 04/15/14
DATE ANALYZED: 04/15/14
DATE REPORTED: 04/21/14

SAMPLE I.D.: **20140415-P1**

LAB I.D.: 140415-6

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5030B/8260B, PAGE 2 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
ND = NON-DETECTED OR BELOW THE PQL
DATA REVIEWED AND APPROVED BY:
CAL-DHS CERTIFICATE # 1555

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

METHOD BLANK REPORT

CUSTOMER: **AMEC**
250 E. Rincon, Suite 204, Corona, CA 92879
Tel(951)273-7400 Fax(951)273-7420

PROJECT: **CUC Quarry**
MATRIX: SOIL
SAMPLING DATE: 04/15/14
REPORT TO: Mr. RICHARD REES

DATE RECEIVED: 04/15/14
DATE ANALYZED: 04/15/14
DATE REPORTED: 04/21/14

METHOD BLANK FOR LAB I.D.: 140415-6

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5030B/8260B, PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: _____

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DATE RECEIVED: 04/15/14
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DATE REPORTED: 04/21/14

METHOD BLANK FOR LAB I.D.: 140415-6

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5030B/8260B, PAGE 2 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
ND = NON-DETECTED OR BELOW THE PQL
DATA REVIEWED AND APPROVED BY:
CAL-DHS CERTIFICATE # 1555

Enviro-Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909)590-5905 Fax (909)590-5907

8260B QA/QC Report

Date Analyzed: 4/15/2014
Machine: C

Matrix: Solid/Soil/Liquid
Unit: mg/Kg (PPM)

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)
Spiked Sample Lab I.D.: 140415-1 MS/MSD

Analyte	S.R.	spk conc	MS	%RC	MSD	%RC	%RPD	ACP %RC	ACP RPD
Benzene	0	0.050	0.042	84%	0.049	98%	14%	75-125	0-20
Chlorobenzene	0	0.050	0.052	104%	0.058	116%	12%	75-125	0-20
1,1-Dichloroethene	0	0.050	0.047	94%	0.048	96%	2%	75-125	0-20
Toluene	0	0.050	0.046	92%	0.051	102%	10%	75-125	0-20
Trichloroethene (TCE)	0	0.050	0.041	82%	0.046	92%	10%	75-125	0-20

Lab Control Spike (LCS):

Analyte	spk conc	LCS	%RC	ACP %RC
Benzene	0.050	0.053	106%	75-125
Chlorobenzene	0.050	0.060	120%	75-125
Chloroform	0.050	0.061	122%	75-125
1,1-Dichlorothene	0.050	0.051	102%	75-125
Ethylbenzene	0.050	0.058	116%	75-125
o-Xylene	0.050	0.061	122%	75-125
m,p-Xylene	0.100	0.122	122%	75-125
Toluene	0.050	0.054	108%	75-125
1,1,1-Trichloroethane	0.050	0.057	114%	75-125
Trichloroethene (TCE)	0.050	0.047	94%	75-125

Surrogate Recovery	spk conc	ACP %RC	MB %RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			**M-BLK**	**140415-1**	**140415-2**	**140415-3**	**140415-4**	**140415-6**	**140415-9**
Dibromofluoromethane	50.0	70-130	125%	107%	115%	108%	117%	116%	116%
Toluene-d8	50.0	70-130	93%	92%	93%	92%	89%	92%	93%
4-Bromofluorobenzene	50.0	70-130	92%	89%	89%	91%	83%	86%	91%

Surrogate Recovery	spk conc	ACP %RC	%RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			**140415-7**						
Dibromofluoromethane	50.0	70-130	112%						
Toluene-d8	50.0	70-130	98%						
4-Bromofluorobenzene	50.0	70-130	97%						

Surrogate Recovery	spk conc	ACP %RC	%RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.									
Dibromofluoromethane	50.0	70-130							
Toluene-d8	50.0	70-130							
4-Bromofluorobenzene	50.0	70-130							

** = Surrogate fail due to matrix interference; LCS, MS, MSD are in control therefore the analysis is in control.*
S.R. = Sample Results
spk conc = Spike Concentration
MS = Matrix Spike
%RC = Percent Recovery
ACP %RC = Accepted Percent Recovery
MSD = Matrix Spike Duplicate

Analyzed/Reviewed By: _____

Final Reviewer: _____

NB 33840

CHAIN-OF-CUSTODY RECORD

PROJECT NAME: CUC Quarry

DATE: April 15, 2014 PAGE 1 OF 1

PROJECT NUMBER:

RESULTS TO: Richard Rees

TURNAROUND TIME: Normal

SAMPLE SHIPMENT METHOD: Courier

LABORATORY NAME: Envirochem

LABORATORY ADDRESS: 1214 E Lexington Ave Pomona, CA 91766

LABORATORY CONTACT: Curtis

LABORATORY PHONE NUMBER: 909 590-5905

CLIENT INFORMATION:

REPORTING REQUIREMENTS:

GEOTRACKER REQUIRED YES NO

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): R Rees

ANALYSES

DATE	TIME	SAMPLE NUMBER	CAM Metals	TPHd 8015	VOCs 8260B	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
4-15-2014	8:15	20140415-P1	X	X	X	Glass 4 OZ	S			X		1	

140415-6

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: R Rees	4/15/2014	10:00	SIGNATURE: [illegible]	4/15/14	10:00
PRINTED NAME: Richard Rees			PRINTED NAME: Curtis Dasilva		
COMPANY: AMEC			COMPANY: Envirochem		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS: 1

SAMPLING COMMENTS: CAM Metals Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Hg, Mo, Ni, Se, Ag, Tl, V, Zn by EPA 6010B Hg by EPA 7470A

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

Date: April 21, 2014

Mr. Richard Rees
AMEC
250 E. Rincon, Suite 204
Corona, CA 92879
Tel(951)273-7400 Fax(951)273-7420

Project: **CUC Quarry**
Lab I.D.: **140415-6**

Dear Mr. Rees:

The **additional STLC-Cu results** for the soil sample, received by our laboratory on April 15, 2014, are attached. The sample was received chilled, intact, accompanying chain of custody and also stored per the EPA protocols.

Enviro-Chem appreciates the opportunity to provide you and your company this and other services. Please do not hesitate to call us if you have any questions.

Sincerely,

Curtis Desilets
Vice President/Program Manager

Andy Wang
Laboratory Manager

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: **AMEC**
250 E. Rincon, Suite 204, Corona, CA 92879
Tel(951)273-7400 Fax(951)273-7420

PROJECT: **CUC Quarry**
MATRIX: SOIL
SAMPLING DATE: 04/15/14
REPORT TO: Mr. RICHARD REES

DATE RECEIVED: 04/15/14
DATE ANALYZED: 04/21-23/14
DATE REPORTED: 04/23/14

SAMPLE I.D.: **20140415-P1**
LAB I.D.: 140415-6

SOLUBLE THRESHOLD LIMIT CONCENTRATION (STLC) ANALYSIS
UNIT: mg/L IN THE STLC LEACHATE

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD USED
Copper (Cu)	46.9 ***	0.1	5	2,500	25	6010B

COMMENTS
DF = Dilution Factor
PQL = Practical Quantitation Limit
Actual Detection Limit = PQL X DF
TTLC = Total Threshold Limit Concentration
STLC = Soluble Threshold Limit Concentration
*** = The concentration exceeds the STLC Limit, and the sample is defined as hazardous waste as per CAL-TITLE 22 (if marked)

Data Reviewed and Approved by: _____
CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

METHOD BLANK REPORT

CUSTOMER: **AMEC**
250 E. Rincon, Suite 204, Corona, CA 92879
Tel(951)273-7400 Fax(951)273-7420

PROJECT: **CUC Quarry**
MATRIX: SOIL
SAMPLING DATE: 04/15/14
REPORT TO: Mr. RICHARD REES

DATE RECEIVED: 04/15/14
DATE ANALYZED: 04/21-23/14
DATE REPORTED: 04/23/14

METHOD BLANK FOR LAB I.D.: 140415-6

SOLUBLE THRESHOLD LIMIT CONCENTRATION (STLC) ANALYSIS
UNIT: mg/L IN THE STLC LEACHATE

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD USED
Copper (Cu)	ND	0.1	1	2,500	25	6010B

COMMENTS
DF = Dilution Factor
PQL = Practical Quantitation Limit
Actual Detection Limit = PQL X DF
ND = Below the actual detection limit or non-detected
TTLC = Total Threshold Limit Concentration
STLC = Soluble Threshold Limit Concentration
*** = The concentration exceeds the STLC Limit, and the sample is defined as hazardous waste as per CAL-TITLE 22 (if marked)

Data Reviewed and Approved by: _____
CAL-DHS ELAP CERTIFICATE No.: 1555

QA/QC for Metals Analysis --STLC

Matrix Spike/ Matrix Spike Duplicate/ LCS :

ANALYSIS DATE: 4/23/2014 Unit : mg/L (ppm)

Analysis	Spk.Sample ID	LCS CONC.	LCS %Rec.	LCS STATUS	Sample Result	Spike Conc.	MS	% Rec MS	MSD	% Rec MSD	% RPD
Arsenic(As)	140418-27	5.00	101	PASS	0.167	5.00	4.55	88%	4.60	89%	1%
Chromium(Cr)	140418-27	5.00	95	PASS	0.249	5.00	4.37	82%	4.37	82%	0%
Lead(Pb)	140418-27	5.00	100	PASS	0.185	5.00	3.34	63%	3.35	63%	0%

ANALYSIS DATE: 4/21/2014

Analysis	Spk.Sample ID	LCS CONC.	LCS %Rec.	LCS STATUS	Sample Result	Spike Conc.	MS	% Rec MS	MSD	% Rec MSD	% RPD
Mercury (Hg)	140418-28	0.0125	94	PASS	0	0.0125	0.0110	88%	0.0102	82%	8%

MS/MSD Status:

Analysis	%MS	%MSD	%LCS	%RPD
Arsenic(As)	PASS	PASS	PASS	PASS
Chromium(Cr)	PASS	PASS	PASS	PASS
Lead(Pb)	FAIL	FAIL	PASS	PASS
Mercury (Hg)	PASS	PASS	PASS	PASS
Accepted Range	75 ~ 125	75 ~ 125	85 ~ 115	0 ~ 20

ANALYST: _____

FINAL REVIEWER: _____

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

CUC Quarry

Rees, Richard <Richard.Rees@amec.com> Mon, Apr 21, 2014 at 3:54 PM
To: "Curtis B. Desilets" <curt.envirocheminc@gmail.com>

Curt,

Please run an STLC for Copper.

Thanks

Rick Rees

From: Curtis B. Desilets [mailto:curt.envirocheminc@gmail.com]
Sent: Monday, April 21, 2014 3:45 PM
To: Rees, Richard
Subject: CUC Quarry

[Quoted text hidden]

The information contained in this e-mail is intended only for the individual or entity to w hom it is addressed.
Its contents (including any attachments) may contain confidential and/or privileged information.
If you are not an intended recipient you must not use, disclose, disseminate, copy or print its contents.
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Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

Date: June 16, 2014

Mr. Richard Rees
AMEC
250 E. Rincon, Suite 204
Corona, CA 92879
Tel(951)273-7400 Fax(951)273-7420

Project: **CUC Quarry**
Lab I.D.: **140610-15**

Dear Mr. Rees:

The **analytical results** for the soil sample, received by our laboratory on June 10, 2014, are attached. The sample was received chilled, intact and with chain of custody.

Enviro-Chem appreciates the opportunity to provide you and your company this and other services. Please do not hesitate to call us if you have any questions.

Sincerely,

Curtis Desilets
Vice President/Program Manager

Andy Wang
Laboratory Manager

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: **AMEC**
250 E. Rincon, Suite 204, Corona, CA 92879
Tel(951)273-7400 Fax(951)273-7420

PROJECT: **CUC Quarry**
MATRIX: SOIL
SAMPLING DATE: 06/09/14
REPORT TO: Mr. RICHARD REES

DATE RECEIVED: 06/10/14
DATE ANALYZED: 06/11/14
DATE REPORTED: 06/16/14

SAMPLE I.D.: **20140609-P1**
LAB I.D.: 140610-15

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD
Copper(Cu)	40.5	1.0	10	2,500	25	6010B

COMMENTS
DF = Dilution Factor
PQL = Practical Quantitation Limit
Actual Detection Limit = PQL X DF
TTLC = Total Threshold Limit Concentration
STLC = Soluble Threshold Limit Concentration
* = STLC analysis for the metal is recommended (if marked)
*** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)

Data Reviewed and Approved by: _____
CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

METHOD BLANK REPORT

CUSTOMER: **AMEC**
250 E. Rincon, Suite 204, Corona, CA 92879
Tel(951)273-7400 Fax(951)273-7420

PROJECT: **CUC Quarry**
MATRIX: SOIL
SAMPLING DATE: 06/09/14
REPORT TO: Mr. RICHARD REES

DATE RECEIVED: 06/10/14
DATE ANALYZED: 06/11/14
DATE REPORTED: 06/16/14

METHOD BLANK FOR LAB I.D.: 140610-15

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD
Copper(Cu)	ND	1.0	1	2,500	25	6010B

COMMENTS
DF = Dilution Factor
PQL = Practical Quantitation Limit
Actual Detection Limit = PQL X DF
ND = Below the Actual Detection Limit or non-detected
TTLC = Total Threshold Limit Concentration
STLC = Soluble Threshold Limit Concentration
* = STLC analysis for the metal is recommended (if marked)
*** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR TITLE 22 (if marked)

Data Reviewed and Approved by: _____
CAL-DHS ELAP CERTIFICATE No.: 1555

QA/QC for Metals Analysis --TTLC--SOLID/SOIL MATRIX

Matrix Spike/ Matrix Spike Duplicate/ LCS :

ANALYSIS DATE: 6/11/2014

Unit : mg/Kg(ppm)

Analysis	Spk.Sample ID	CONC.	LCS %Rec.	LCS STATUS	Sample Result	Spike Conc.	MS	% Rec MS	MSD	% Rec MSD	% RPD
Arsenic(As)	140610-9	50.0	101	PASS	8.80	50.0	55.6	94%	56.6	96%	2%
Copper(Cu)	140610-9	50.0	98	PASS	30.7	50.0	82.0	103%	83.5	106%	3%
Chromium(Cr)	140610-9	50.0	97	PASS	71.3	50.0	117	91%	118	93%	2%

ANALYSIS DATE. : 6/10/2014

Analysis	Spk.Sample ID	LCS CONC.	LCS %Rec.	LCS STATUS	Sample Result	Spike Conc.	MS	% Rec MS	MSD	% Rec MSD	% RPD
Mercury (Hg)	140610-18	0.125	96	PASS	0	0.125	0.109	87%	0.111	89%	2%

MS/MSD Status:

Analysis	%MS	%MSD	%LCS	%RPD
Arsenic(As)	PASS	PASS	PASS	PASS
Copper(Cu)	PASS	PASS	PASS	PASS
Chromium(Cr)	PASS	PASS	PASS	PASS
Mercury (Hg)	PASS	PASS	PASS	PASS
Accepted Range	**75 ~ 125**	**75 ~ 125**	**85 ~ 115**	**0 ~ 20**

ANALYST: _____

FINAL REVIEWER: _____

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: **AMEC**
250 E. Rincon, Suite 204, Corona, CA 92879
Tel(951)273-7400 Fax(951)273-7420

PROJECT: **CUC Quarry**
MATRIX: SOIL
SAMPLING DATE: 06/09/14
REPORT TO: Mr. RICHARD REES

DATE RECEIVED: 06/10/14
DATE ANALYZED: 06/10-12/14
DATE REPORTED: 06/16/14

SAMPLE I.D.: **20140609-P1**
LAB I.D.: 140610-15

SOLUBLE THRESHOLD LIMIT CONCENTRATION (STLC) ANALYSIS
UNIT: mg/L IN THE STLC LEACHATE

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD USED
Copper (Cu)	1.55	0.1	1	2,500	25	6010B

COMMENTS
DF = Dilution Factor
PQL = Practical Quantitation Limit
Actual Detection Limit = PQL X DF
TTLC = Total Threshold Limit Concentration
STLC = Soluble Threshold Limit Concentration
*** = The concentration exceeds the STLC Limit, and the sample is defined as hazardous waste as per CAL-TITLE 22 (if marked)

Data Reviewed and Approved by: _____
CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

METHOD BLANK REPORT

CUSTOMER: **AMEC**
250 E. Rincon, Suite 204, Corona, CA 92879
Tel(951)273-7400 Fax(951)273-7420

PROJECT: **CUC Quarry**
MATRIX: SOIL
SAMPLING DATE: 06/09/14
REPORT TO: Mr. RICHARD REES

DATE RECEIVED: 06/10/14
DATE ANALYZED: 06/10-12/14
DATE REPORTED: 06/16/14

METHOD BLANK FOR LAB I.D.: 140610-15

SOLUBLE THRESHOLD LIMIT CONCENTRATION (STLC) ANALYSIS
UNIT: mg/L IN THE STLC LEACHATE

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD USED
Copper (Cu)	ND	0.1	1	2,500	25	6010B

COMMENTS
DF = Dilution Factor
PQL = Practical Quantitation Limit
Actual Detection Limit = PQL X DF
ND = Below the actual detection limit or non-detected
TTLC = Total Threshold Limit Concentration
STLC = Soluble Threshold Limit Concentration
*** = The concentration exceeds the STLC Limit, and the sample is defined as hazardous waste as per CAL-TITLE 22 (if marked)

Data Reviewed and Approved by: _____
CAL-DHS ELAP CERTIFICATE No.: 1555

QA/QC for Metals Analysis --STLC

Matrix Spike/ Matrix Spike Duplicate/ LCS :

ANALYSIS DATE: 6/12/2014

Unit : mg/L (ppm)

Analysis	Spk.Sample ID	LCS CONC.	LCS %Rec.	LCS STATUS	Sample Result	Spike Conc.	MS	% Rec MS	MSD	% Rec MSD	% RPD
Chromium(Cr)	140610-15	5.00	100	PASS	0.076	5.00	5.14	101%	5.24	103%	2%
Copper(Cu)	140610-15	5.00	103	PASS	1.55	5.00	6.61	101%	6.62	101%	0%
Lead(Pb)	140610-15	5.00	102	PASS	0.263	5.00	4.23	79%	4.32	81%	2%

ANALYSIS DATE: 6/6/2014

Analysis	Spk.Sample ID	LCS CONC.	LCS %Rec.	LCS STATUS	Sample Result	Spike Conc.	MS	% Rec MS	MSD	% Rec MSD	% RPD
Mercury (Hg)	140604-8	0.0125	94	PASS	0	0.0125	0.0110	88%	0.0113	90%	3%

MS/MSD Status:

Analysis	%MS	%MSD	%LCS	%RPD
Chromium(Cr)	PASS	PASS	PASS	PASS
Copper(Cu)	PASS	PASS	PASS	PASS
Lead(Pb)	PASS	PASS	PASS	PASS
Mercury (Hg)	PASS	PASS	PASS	PASS
Accepted Range	75 ~ 125	75 ~ 125	85 ~ 115	0 ~ 20

ANALYST: _____

FINAL REVIEWER: _____

CHAIN-OF-CUSTODY RECORD

NB33842

PROJECT NAME: CUC Quarry		DATE:	PAGE 1 OF 1
PROJECT NUMBER: 92340003	LABORATORY NAME: EnviroChem	CLIENT INFORMATION:	REPORTING REQUIREMENTS:
RESULTS TO: Richard Rees	LABORATORY ADDRESS: 1314 E Lexington		
TURNAROUND TIME: Normal	Pomona, CA 91766		
SAMPLE SHIPMENT METHOD:	LABORATORY CONTACT: Curtis		GEOTRACKER REQUIRED YES (NO)
	LABORATORY PHONE NUMBER: 909-590-5905		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE): R Rees

ANALYSES

DATE	TIME	SAMPLE NUMBER	Total Copper	Soluble Copper (STLC)	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
6-9-2014	8:35	20140609-P1	X	X	4oz glass	S			X		1	140610-15

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: R Rees	6-10-14	8:30	SIGNATURE: [illegible]	6/10/14	830
PRINTED NAME: G. Richard Rees			PRINTED NAME: Jessica Lin		
COMPANY: AMEC			COMPANY: Enviro-chem.Inc		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS: 1

SAMPLING COMMENTS: Total and Soluble Copper by EPA Method 6010B

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

APPENDIX C

Summary of Data Quality Review of Laboratory Analyses

Memorandum

TO:	Rick Rees	**DATE:**	June 19, 2014
FROM:	Sarah Schneider	**PROJ. NO.:**	9234003
CC:	Project File	**PROJ. NAME:**	CUC Quarry Site
SUBJECT:	**CUC Quarry Site - Soil Sampling Summary Data Quality Review**		

This memorandum presents a summary data quality review of two primary soil samples collected April 15 and June 9, 2014. The samples were submitted to Enviro-Chem, Inc., a State of California certified laboratory, located in Pomona, California. The samples were analyzed for the following organic and/or inorganic analyses:

- Total Petroleum Hydrocarbons (TPH) by EPA Method 8015B
- Total Threshold Limit Concentration (TTLC) Metals by EPA Method 6010B, with Mercury by EPA Method 7471A
- Soluble Threshold Limit Concentration (STLC) Metals (copper) by EPA Method 6010B
- Volatile Organic Compounds (VOCs) by EPA Method 8260B

The sample IDs, sample dates and times, and the analyses requested are listed in the table below.

Sample ID	Sample Date/Time	Analyses Requested
20140415-P1	04/15/2014 08:15	TPH Carbon Chain Analysis, TTLC Metals, VOCs, STLC Copper
20140609-P1	06/09/2014 08:35	TTLC Copper, STLC Copper

Upon receipt by Enviro-Chem, the sample container information was compared to the chain-of-custody form. The samples were received chilled and intact.

Data were reviewed in accordance with the appropriate method procedures. Hold times, method blanks, surrogate recoveries, laboratory control samples (LCS), matrix spike/matrix spike duplicate (MS/MSD) results, and reporting limits were reviewed to assess compliance with applicable methods. If data qualification was required, data were qualified in general accordance with the definitions and use of qualifying flags outlined in the following EPA documents: USEPA Contract Laboratory Program (CLP) National Functional Guidelines for Organic Data

Review, October 1999, and USEPA Contract Laboratory Program (CLP) National Functional Guidelines for Inorganic Data Review, October 2004.

ORGANIC ANALYSES

Samples were analyzed for TPH and VOCs by the methods identified in the introduction to this report, and were evaluated for the following criteria.

1. Holding Times – Acceptable

2. Blanks – Acceptable

   A trip blank was not submitted with the VOC samples. Sample results were not qualified.

3. Surrogates – Acceptable

4. Laboratory Control Samples (LCS) – Acceptable

5. Matrix Spike/Matrix Spike Duplicate (MS/MSD) – Acceptable

6. Reporting Limits – Acceptable

INORGANIC ANALYSES

Samples were analyzed for TTLC metals and STLC metals by the methods identified in the introduction to this report and were evaluated for the following criteria.

1. Holding Times – Acceptable

2. Blanks – Acceptable

3. Laboratory Control Samples (LCS) – Acceptable

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD) – Acceptable except as noted: (STLC) Metals (copper) by EPA Method 6010B: The MS/MSD associated with sample 20140415-P1 was performed with a sample not associated with this project and included in the data package for informational purposes. The MS/MSD % recoveries of lead were greater than the control limit. The project sample is not affected and is not qualified.

5. Reporting Limits – Acceptable

OVERALL ASSESSMENT OF DATA

The results submitted by Enviro-Chem are 100 percent complete. The data usability is based on EPA's guidance documents. Few problems were identified and analytical performance was generally within specified limits. The data are not qualified and meet the project's data quality objectives.

Sample ID	Qualified Analyte	Qualified Result	Units	Qualifier Reason
20140415-P1	none			
20140609-P1	none			

APPENDIX D

Hazardous Waste Manifest for Orange Soil Removal

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: CAL000273528
2. Page 1 of: 1
3. Emergency Response Phone: 888-423-6060
4. Manifest Tracking Number: 013210067 JJK

5. Generator's Name and Mailing Address
The Claremont Colleges
101 S. Mills Ave
Claremont, CA 91711
Generator's Phone: 909-621-8061

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: American Integrated Services, Inc
U.S. EPA ID Number: CAR000148338

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
US Ecology
Highway 95, 11 miles South of Beatty
Beatty, NV 89003
Facility's Phone: 800-239-3943
U.S. EPA ID Number: NVT330010000

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. Non-RCRA Hazardous Waste Solid (STLC Copper)	1	CM	10	Y	611
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
Wear protective equipment while handling. Weights or volumes are approximate.
24 hour emergency number (888) 423-6060
Soil with STLC Copper
Job# 34011-11-3 Profile# 070214621-0 Bin # B-16029

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: TIM MORRISON
Signature: [signature]
Month: 10 Day: 14 Year:

16. International Shipments ☐ Import to U.S. ☐ Export from U.S.
Port of entry/exit:
Transporter signature (for exports only):
Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: FRANCISCO SANCHEZ
Signature: [signature]
Month: 06 Day: 10 Year: 14
Transporter 2 Printed/Typed Name
Signature
Month Day Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H132 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Amber Park
Signature: [signature]
Month: 6 Day: 10 Year: 14

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

TRANSPORTER'S COPY

USEcology, Inc.

Ticket: 138929

US Ecology Nevada
11 Miles South of Beatty
Beatty, NV 89003

Vehicle: 533

Manifest #:013210067JJK

Date: 6/10/2014
Time In: 02:14 PM
Time Out: 03:30 PM

In: 59840 lb
Out: 39820 lb
Net: 20020 lb

Net Tons:10.01 tons
Net Kg: 9081 kilograms

APPENDIX E

LARWQCB Order No. 00-070

California Regional Water Quality Control Board

Los Angeles Region

Vinston H. Hickox
Secretary for Environmental Protection

320 W. 4th Street, Suite 200, Los Angeles, California 90013
Phone (213) 576-6600 FAX (213) 576-6640
Internet Address: http://www.swrcb.ca.gov/~rwqcb4

Gray Davis
Governor

June 23, 2000

FINANCIAL PLANT RECEIVED 00 JUN 30 PM 1:47

Mr. Dale Klein
Physical Plant Director
Claremont University Center
303 E. First Street
Claremont, CA 91711

Dear Mr. Klein:

WASTE DISCHARGE REQUIREMENTS – CLAREMONT INERT LANDFILL (FILE NO. 66-016)

Reference is made to our letter of May 4, 2000, which transmitted a copy of tentative waste discharge requirements and a monitoring and reporting program for the Claremont Inert Landfill.

Pursuant to Section 13263 of the California Water Code, this Regional Board, at a public meeting held on May 25, 2000, reviewed the tentative Order, considered all factors in the case, and adopted Order No. 00-070 and Monitoring and Reporting Program No. 5766 (copy attached) as revised at the meeting, relative to the discharge.

If you have any questions, please call Paul Cho at (213) 576-6721.

Sincerely,

Rodney H. Nelson

Rodney H. Nelson, Head
Landfills Unit

Enclosures

cc: Lisa Babcock, State Water Resources Control Board; Division of Clean Water Programs
Dixie Lass, California Regional Water Quality Control Board, Santa Ana Region
Richard Hanson, Los Angeles County Department of Health Services

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

ORDER NO. 00-070

WASTE DISCHARGE REQUIREMENTS
For
CLAREMONT UNIVERSITY CENTER
(CLAREMONT LANDFILL)
(File No. 66-16)

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board), finds:

1. Claremont University Center (hereafter "discharger") owns and operates the Claremont Landfill, a 118-acre inert waste disposal site located at the northeast corner of the intersection of Claremont Boulevard and Arrow Route, within Chino Hydrologic Subarea (Figure 1), under waste discharge requirements contained in Order 73-014, adopted by this Regional Board on February 28, 1973.

2. The California Water Code Section 13263 provides that all requirements shall be reviewed periodically and, upon such review, may be revised by the Regional Board. These requirements are being revised to incorporate ground and surface water monitoring and a waste load checking program.

3. The Los Angeles-San Bernardino County line passes through the disposal site. The northwest portion comprising 30 acres is situated in the City of Claremont, Los Angeles County. The southeast portion comprising the remaining 88 acres is situated partly in the City of Upland, San Bernardino County, and partly in unincorporated San Bernardino County territory, within the jurisdiction of the California Regional Water Quality Control Board, Santa Ana Region.

4. This Regional Board assumes responsibilities for the entire Claremont Landfill site including the areas which fall under the jurisdiction of the California Regional Water Quality Control Board, Santa Ana Region, as stated in this Regional Board staff's Memorandum dated December 14, 1987.

5. The site is not open to the public and is being used by the discharger only. The material disposed at this site is clean earth or suitable fill material from construction sites or projects within Claremont University Center. Since no material disposed at this landfill will come from public or off-site sources, it will not be necessary for the waste load checking program required by Provision C.6. to include chemical characterization of the inert waste.

6. The discharger disposed approximately 4,000 cubic yards of fill material during the last two years. The estimated remaining life for the landfill is unknown due to the sporadic availability of fill material.

7. The site is located on the alluvial cone of San Antonio Wash in the Upper Santa Ana Valley Basin, and is underlain by water-bearing alluvial deposits. These deposits include an upper Recent alluvium of unconsolidated sand, gravels, and boulders; and a lower, thicker phase of finer-grained alluvium of Pleistocene Age containing numerous reddish-brown clayey horizons.

8. This Regional Board adopted a revised Water Quality Control Plan for the Los Angeles Region on June 13, 1994. The Plan contains beneficial uses and water quality objectives for ground water in the Upper Santa Ana Valley Basin. Beneficial uses of the ground water in the Upper Santa Ana Valley Basin include municipal, agricultural, and industrial services and process supply. The requirements contained in this Order, as they are met, will be in conformance with the goals of the Water Quality Control Plan.

9. The revision of these waste discharge requirements constitutes an ongoing project as defined in Section 15261, Chapter 3, Title 14, California Administrative Code, and is therefore exempt from the provisions of the California Environmental Quality Act (Public Resource Code, Section 21100 et seq.).

The Regional Board has notified the discharger and interested agencies and persons of its intent to adopt waste discharge requirements for this discharge, and has provided them with an opportunity to submit their written views and recommendations.

The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharge and to the tentative requirements.

IT IS HEREBY ORDERED, that Claremont University Center (discharger) shall comply with the following:

A. Discharge Specifications

1. Claremont Landfill is an inert waste landfill capable of accepting inert wastes only. Inert waste does not contain hazardous waste or soluble pollutants at concentrations in excess of applicable water quality objectives, and does not contain significant quantities of decomposable waste. Inert wastes do not need to be discharged at classified waste management units.

2. Wastes disposed at this site shall be limited to inert wastes only, such as, but are not limited to:

a. Earth, rock, gravel, and concrete
b. Asphalt paving fragments
c. Glass
c. Plaster products (excluding plasterboard)
d. Brick
e. Clay and clay products
f. Inert plastics

3. Prohibitions:

a. No hazardous wastes, designated wastes, or liquid wastes shall be deposited at this disposal site.
b. Non-hazardous solid wastes (decomposable organic refuse such as, but not necessarily limited to, ordinary household and commercial refuse, tin cans, metals, paper and paper products, plasterboard, cloth and clothing, wood and wood products, lawn clippings, sod, shrubbery, hair, hide, bones, dead animals, roofing paper, tar paper, unquenched ashes mixed, with refuse, market refuse, garbage, etc.) shall not be deposited at this site.
c. No materials of a toxic nature such as insecticides, poisons, or radioactive materials, shall be deposited at this site.
d. No asbestos or asbestos products shall be deposited at this site.
e. Wastes deposited at this site shall be confined thereto, and shall not be permitted to enter drainage ditches or watercourses.
f. Erosion of deposited materials by surface flow shall be prevented.
g. Neither the discharge nor any treatment of wastes shall cause pollution or nuisance.

4. The discharger shall remove and relocate at a legal disposal site any wastes that are discharged in violation of these requirements. For the purpose of these requirements, a legal point of disposal is defined as one for which Waste Discharge Requirements have been established by a California Regional Water Quality Control Board, and is in full compliance therewith.

B. Water Quality Protection Limits

No groundwater protection limits have been prescribed at this time because no background water quality is currently available. Water quality protection limits will be established after one year of quarterly background water quality monitoring using the monitoring system as described in Provision C.1. of this Order and Section III of the Monitoring and Reporting Program No. 5766 (Attachment T).

C. General Provision

1. By August 31, 2000, the discharger shall submit a technical report, to be approved by the Executive Officer, to install a groundwater and surface water monitoring system to ensure that it can detect the water quality impact if pollutants are released from the landfill to groundwater. The report shall also include a time schedule for implementation. Prior to August 31, 2000, the discharger may submit a report documenting the disposal and operational history of this site, including a technical justification describing why groundwater monitoring is not necessary. Based on review of this report, the Executive Officer may determine that groundwater monitoring is not required. Surface water monitoring shall be done in a manner consistent with the requirements for the storm water pollution prevention plans and monitoring program described on pages IX and X of Attachment V.

2. The effectiveness of all monitoring wells and monitoring devices shall be maintained for the active life of this site. If any of the monitoring wells and/or monitoring devices are damaged, destroyed, or abandoned for any reason, the discharger shall provide substitutes acceptable to the Executive Officer to meet the monitoring requirements of the Order.

3. The discharger shall provide for the proper handling and disposal of water purged from the monitoring wells during sampling. Water purged from the wells shall not be returned to that well (or any other well).

4. For any monitoring wells or piezometers installed in the future, the discharger shall submit technical reports for approval by the Executive Officer, prior to installation. These technical reports shall be submitted at least 60 days prior to the anticipated date of installation of the wells or piezometers. These reports shall be accompanied by:

   a. Maps and cross sections showing the locations of the monitoring points;

   b. Drawings and data showing construction details of the monitoring points. These data shall include:

      (i) casing and test hole diameter;
      (ii) casing materials;
      (iii) depth of each hole;
      (iv) the means by which the size and position of perforations shall be determined, or verified, in the field;
      (v) method of joining sections of casing;
      (vi) nature of filter material;
      (vii) depth and composition of seals; and
      (viii) method and length of time of well development.

If a well or piezometer is proposed to replace an inoperative well or piezometer, the discharger shall not delay replacement while waiting for Executive Officer approval. However, the technical report shall be submitted within the required time schedule.

5. The discharger shall conduct required monitoring and response programs in accordance with Section 20385 of Title 27. (A detection monitoring program per Section 20420 of Title 27, an evaluation monitoring program per Section 20425 of Title 27, and a corrective action program per Section 20430 of Title 27.)

6. The discharger shall take any and all necessary measures to prevent unauthorized disposal of wastes at this site by instituting a waste load-checking program. A waste load-checking program must be submitted to the Executive Officer for approval within ninety (90) days after adoption of this Order.

7. The discharger shall maintain copies of this Order and the waste load-checking program at the site so as to be available at all times to personnel operating the site.

8. The discharger shall file with this Regional Board a report of any material change or proposed change in the character, location, boundaries or quantity of this waste discharge at least 120 days prior to the date of such proposed change.

9. In the event of any change in name of operator or in control or ownership of land or waste disposal facilities owned or controlled by the discharger, the discharger shall:

   a. Notify this Regional Board in writing of such a change; and
   b. Notify the succeeding owner or operator by letter, a copy of which shall be filed with this Regional Board, of the existence of this order.

10. Ninety (90) days prior to cessation of disposal operations at this site, the discharger shall submit a technical report to the Regional Board describing the methods and controls to be used to assure protection of the quality of receiving waters during final operations and with any proposed subsequent use of the land. Such methods and controls shall comply with the foregoing and the waste discharge requirements. The report shall be prepared under the direct supervision of a California-registered geologist or engineer, or a California-certified engineering geologist.

11. This Regional Board considers the property owner to have continuing responsibility for correcting any problems which may arise in the future as a result of this waste discharge or water applied to this property during subsequent use of the land for other purposes.

12. These requirements do not exempt the operator of this waste disposal facility from compliance with any other laws, regulations, or ordinances which may be applicable; they

do not legalize this waste disposal facility, and they leave unaffected any further restraint on the disposal of wastes at this site which may be contained in other statutes or required by other agencies.

13. The discharger shall furnish, under penalty of perjury, technical or monitoring program reports in accordance with Section 13267 of the California Water Code. Failure or refusal to furnish these reports, or falsifying any information provided therein, renders the discharger guilty of a misdemeanor and subject to the penalties stated in Section 13268 of the California Water Code. Monitoring reports shall be submitted in accordance with the specifications contained in the attached Monitoring and Reporting Program, as directed by the Executive Officer. The attached Monitoring and Reporting Program is subject to periodic revisions, as warranted and approved by the Executive Officer.

14. This Order includes the attached "Standard Provisions Applicable to Waste Discharge Requirements" (Attachment W). If there is any conflict between provisions stated hereinbefore and the attached "Standard Provisions Applicable to Waste Discharge Requirements", those provisions attached hereinbefore prevail.

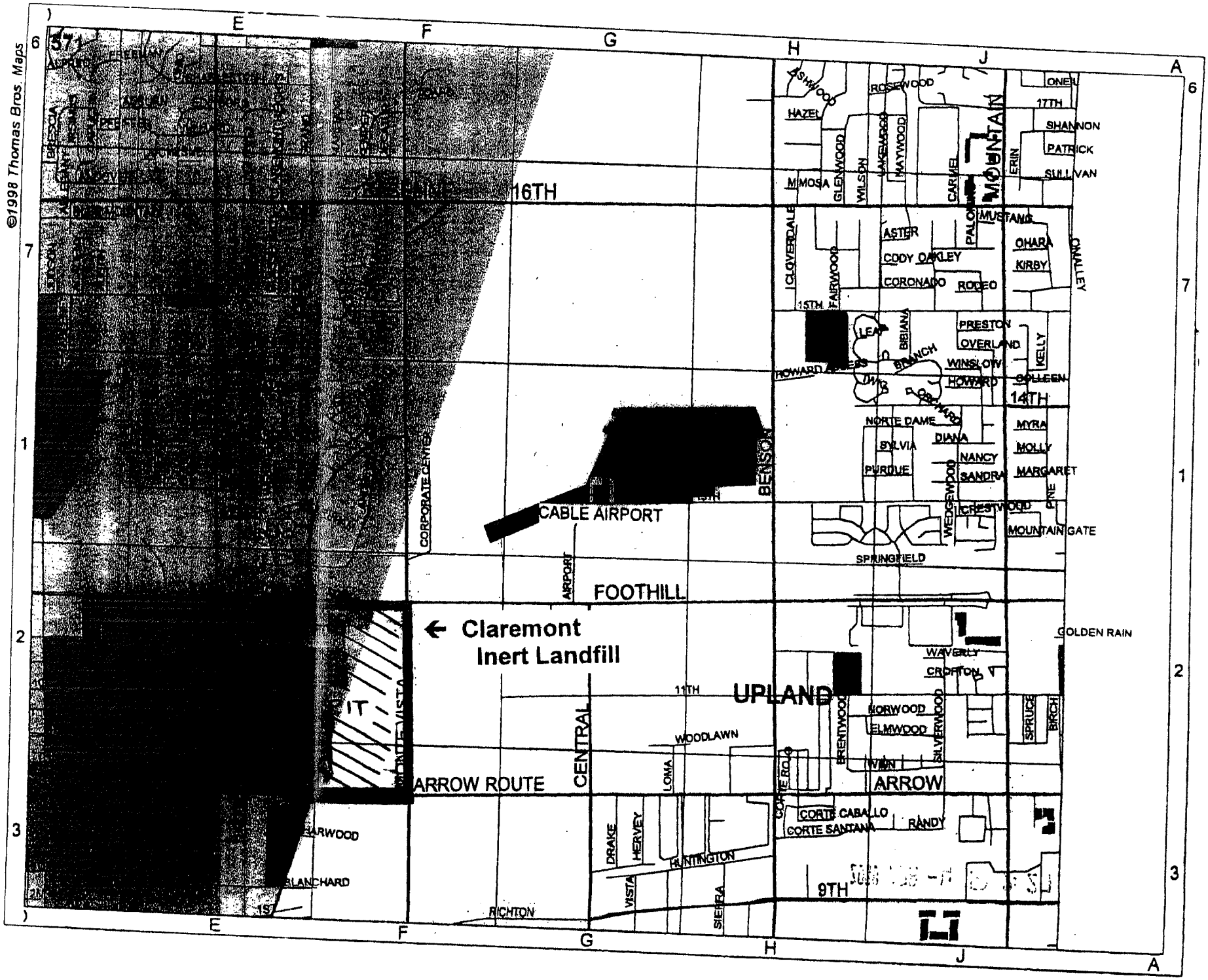
15. In accordance with Section 13263 of the California Water Code, these requirements are subject to periodic review and revision by this Regional Board.

16. Order No. 73-014, adopted by the Regional Board on February 28, 1973, is hereby rescinded.

I, Dennis A. Dickerson, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region on May 25, 2000.

Dennis A. Dickerson
Executive Officer

FIGURE 1


©1998 Thomas Bros. Maps
Claremont
Inert Landfill
CABLE AIRPORT
FOOTHILL
ARROW ROUTE
UPLAND
ARROW
16TH
15TH
14TH
11TH
9TH
CENTRAL
BENSON
CORPORATE CENTER
AIRPORT
WOODLAWN
HUNTINGTON
RICHTON
MOUNTAIN
ASHWOOD
ROSEWOOD
HAZEL
MIMOSA
GLENWOOD
WILSON
LAKEWOOD
MAYWOOD
CARMEL
ERIN
ONEIL
17TH
SHANNON
PATRICK
SULLIVAN
CLOVERDALE
FAIRWOOD
ASTER
CODY
OAKLEY
CORONADO
RODEO
MUSTANG
OHARA
KIRBY
O'NALLEY
LEAF
BIBIANA
BRANCH
PRESTON
OVERLAND
WINSLOW
HOWARD
KELLY
COLLEEN
NORTE DAME
SYLVIA
PURDUE
DIANA
NANCY
SANDRA
WEDGEWOOD
MYRA
MOLLY
MARGARET
CRESTWOOD
MOUNTAIN GATE
PINE
SPRINGFIELD
GOLDEN RAIN
WAVERLY
CROFTON
NORWOOD
ELMWOOD
WIN
BRENTWOOD
SILVERWOOD
SPRUCE
BIRCH
CORTE ROJO
CORTE CABALLO
CORTE SANTANA
RANDY
DRAKE
HERVEY
LOMA
VISTA
SIERRA
BRESCIA
PERRIS
BLANCHARD
FAIRWOOD
571

ATTACHMENT T

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

MONITORING AND REPORTING PROGRAM NO. 5766
FOR
CLAREMONT UNIVERSITY CENTER
(Claremont Landfill)
(File No. 67-20)

I. REPORTING

A. The discharger shall implement this Monitoring and Reporting Program beginning May 25, 2000. A technical report is due August 31, 2000, as required by Provision C.1. of Order 00-070, to install a groundwater monitoring system.

B. The discharger shall submit waste disposal reports to the Regional Board quarterly on the following schedule: the first quarter reports by May 15 of each year, the second quarter reports by August 15 of each year, the third quarter reports by November 15 of each year, and the fourth quarter reports by February 15 of each year.

C. Quarterly monitoring of groundwater shall be performed during the months of January, April, July, and October. In the event monitoring is not performed as above because of unforeseen circumstances, substitute monitoring shall be performed as soon as possible after these times, and the reason for the delay shall also be given.

D. By March 1 of each year, the discharger shall submit an annual report to the Regional Board. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous year. In addition, the discharger shall discuss the compliance record.

E. All chemical, bacteriological, and toxicity analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health Services Environmental Laboratory Accreditation Program, or approved by the Executive Officer. Laboratory analyses must follow methods approved by the United States Environmental Protection Agency, and the laboratory must meet EPA Quality Assurance/Quality Control criteria.

F. For any analyses performed for which no procedures are specified in the EPA guidelines or in this Monitoring and Reporting Program, the constituent or parameter analyzed, and the method or procedure used, must be specified in the report.

G. The discharger may submit additional data to the Regional Board not required by this program in order to simplify reporting to other regulatory agencies.

H. Analytical data reported as "less than ..." shall be reported as less than a numeric value, or below the limit of detection for that particular analytical method. Also, method detection limit for each monitoring parameter shall be reported.

I. If the discharger performs analyses for any parameter more frequently than required by this Program using approved analytical methods, the results of those analyses shall be included in the monitoring report.

J. The results of the waste load checking program shall be reported in each waste disposal report.

K. For every item where the requirements are not met, the discharger shall submit a statement of the actions undertaken or proposed which will bring the discharge into full compliance with requirements at the earliest time and submit a timetable for correction.

L. The discharger shall retain records of all monitoring information, including all calibration and maintenance records regarding monitoring instrumentation and copies of all data submitted to regulatory agencies for a period of at least five years. This period may be extended by request of the Regional Board at any time, and shall be extended during the course of any unresolved litigation regarding all or any part of the entire waste management facility.

M. This Monitoring and Reporting Program includes the attached "Standard Provisions Applicable to Waste Discharge Requirements" (Attachment I). If there is any conflict between provisions stated herein and the "Standard Provisions Applicable to Waste Discharge Requirements", these provisions stated herein will prevail.

N. Records of monitoring information shall include:

1. The date, exact place, procedure, and time of sampling or measurement;
2. The individual(s) who performed the sampling or measurement;
3. The date(s) analyses were performed on the samples;
4. The individual(s) who performed the analyses;
5. The analytical techniques or methods used;
6. The results of the analyses or measurements, including both statistical and non-statistical analyses;
7. The method detection limits;
8. The executive summary of the key findings;

9. The laboratory QA/QC data and chain of custody records (except for annual reports);
10. The laboratory certification information;
11. The velocity and direction of groundwater flow; and,
12. The measurement of the static water levels of all monitoring wells.

O. In reporting the monitoring data, the discharger shall arrange the data in tabular form.

P. Monitoring reports shall be signed by:

a. In the case of corporations, by a principal executive officer at least of the level of vice-president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates;

b. In the case of a partnership, by a general partner;

c. In the case of a sole proprietorship, by the proprietor;

d. In the case of a municipal, state or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.

Q. Each report shall contain the following completed declaration:

"I declare under penalty of perjury that the following is true and correct.

Executed on the _____ day of _____ at _____.

_____ (Signature)

_____(Title)"

II. WASTE DISPOSAL REPORTING

A. The reports to the Regional Board shall include a map of the site, and shall indicate the area(s) where disposal is taking place or will begin. This map shall be updated quarterly, and summarized and submitted with the annual report due March 1 of each year. If a new area is landfilled, it shall be identified in the corresponding quarterly report.

B. A waste disposal report containing the following information shall be filed with this Regional Board each quarter:

1. A tabular list of the estimated average monthly quantities (in cubic yards or tons) and types of materials deposited each month.

2. An estimate of remaining capacity (in cubic yards and tons), and the remaining life of the site in years and months.

3. A certification that all wastes deposited were deposited in compliance with the Regional Board's requirements, and that no wastes were deposited outside of the boundaries of the waste management facility as specified in the Regional Board's requirements.

4. A description of the location and an estimate of the seepage rate or flow of all known seeps and springs at the site.

5. The estimated amount of water used at the waste management area for landscape irrigation, compaction, dust control, etc., during the month. (If a source other than potable water is used, the sources and amounts of water from each source shall also be reported.)

6. The discharger shall report all unacceptable (to this site) wastes inadvertently received at this site and their disposition. The following details shall be included:

   a. The source (if known), including the hauler, of the unacceptable wastes and date received and/or discovered.

   b. Identification of waste (if known) and the amount of waste.

   c. The name and address of the hauler who removed the waste from this site

   d. The ultimate point of disposal for the waste.

   e. The discharger's actions to prevent recurrence of the attempted depositing of unacceptable wastes by this source or individual (if applicable). If no unacceptable wastes were received (or discovered) during the month, the report shall so state.

III. GROUND WATER MONITORING

1. Provisions and General Requirements

A. All sampling, sample preservation, and analyses shall be performed in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants", promulgated by the United States Environmental Protection Agency

B. The discharger shall calibrate and perform maintenance procedures on all monitoring instruments and equipment to ensure accuracy of measurements, or shall ensure that both activities will be conducted.

C. No filtering of samples taken for organics analyses shall be permitted. Samples for organic analyses shall be taken with a sampling method which minimizes volatilization and degradation of potential constituents.

D. Analytical results for ground water monitoring shall be submitted with the corresponding semi-annual monitoring report. If a well was not sampled (or measured) during the reporting period, the reason for the omission shall be given. If no fluid was detected in a monitoring well, a statement to that effect (in lieu of analyses) shall be submitted.

E. Quarterly observations and measurements of the static water levels shall be made on all monitoring wells, and records of such observations shall be submitted with the semi-annual monitoring reports.

F. All monitoring wells shall be sounded each third quarter to determine total depth. Wells affected by pumping shall be measured prior to pumping insofar as is possible.

G. Duplicate samples shall be taken for constituents of concern metals analyses only. Unfiltered samples shall be tested for total metals, and field-filtered samples (.45 microns) shall be tested for dissolved metals. Both samples must be preserved with nitric acid; however, care shall be taken that the dissolved metals samples are not exposed to acids until after filtering.

H. The laboratory QA/QC report shall include, at a minimum, method blanks, calibration checks, surrogate recoveries. matrix spikes, and matrix spike duplicates, spiking concentrations, and laboratory quality control samples. Spiking concentration must be no more than 10 times of method detection limit.

I. Practical quantitation limits shall be below the current maximum Contaminant Levels listed in Title 22 of California Code of Regulations or Action Levels

APPENDIX F

LARWQCB Amended Monitoring and Reporting Program
No. 5766

California Regional Water Quality Control Board

Los Angeles Region

Over 50 Years Serving Coastal Los Angeles and Ventura Counties
Recipient of the 2001 *Environmental Leadership Award* from Keep California Beautiful

320 W. 4th Street, Suite 200, Los Angeles, California 90013
Phone (213) 576-6600 FAX (213) 576-6640 - Internet Address: http://www.swrcb.ca.gov/rwqcb4

Winston H. Hickox
Secretary for Environmental Protection

Gray Davis
Governor

October 15, 2001

H. Martin Olsen
Claremont University Center
303 E. First Street
Claremont, CA 91711-4487

Dear Mr. Olsen:

AMENDED GROUNDWATER DETECTION MONITORING PROGRAM, CLAREMONT LANDFILL (FILE NO. 66-016)

We have reviewed the August 30, 2001, "Review of Disposal and Operational History Report" (Report) and all groundwater quality data for the Claremont Landfill received to date. The purpose of this Report was to propose an updated groundwater detection and reporting program for the landfill based upon results from recently completed detection monitoring performed at the site.

The Report is found to be complete and acceptable, and the proposed updated groundwater detection monitoring and reporting program is hereby approved. Attached is the amended Monitoring and Reporting Program (CI-5766) for the Claremont Landfill.

Should you have any questions, please contact Rodney Nelson at (213) 236-2469 or Enrique Casas at (213) 236-2468.

Sincerely,

Dennis A. Dickerson
Executive Director

Attachment

cc: Joe Mello, State Water Resources Control Board
Robert Sams, Office of Chief Counsel, SWRCB
Permitting and Enforcement Division, Integrated Waste Management Board
Virginia Maloles, County of Los Angeles, Department of Health Services, Solid Waste Management Department
Belle Newman, City of Claremont Planning Department

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

AMENDED MONITORING AND REPORTING PROGRAM NO. 5766
FOR
CLAREMONT UNIVERSITY CENTER
(Claremont Landfill)
(Order No. 00-070)
(File No. 66-016)

Monitoring and Reporting Program No. 5766 for the Claremont Landfill is being amended to revise the groundwater Detection Monitoring Program (DMP), pursuant to the satisfactory completion of Provision C.1. of Order 00-070. This Monitoring and Reporting Program supersedes the May 25, 2000 revised monitoring provisions.

The Claremont University Center shall implement this amended Monitoring and Reporting Program immediately:

I. REPORTING

A. The discharger shall submit waste disposal reports to the Regional Board quarterly on the following schedule: the first quarter reports by May 15 of each year, the second quarter reports by August 15 of each year, the third quarter reports by November 15 of each year, and the fourth quarter reports by February 15 of each year.

B. All chemical, bacteriological, and toxicity analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health Services Environmental Laboratory Accreditation Program, or approved by the Executive Officer. Laboratory analyses must follow methods approved the United States Environmental Protection Agency (USEPA), and the laboratory must meet USEPA Quality Assurance/Quality Control (QA/QC) criteria.

C. For all analyses performed for which no procedures are specified in the USEPA guidelines or in this Monitoring and Reporting Program, the constituent or parameter analyzed, and the method or procedure used, must be specified in the report.

D. The discharger may submit additional data to the Regional Board not required by this program in order to simplify reporting to other regulatory agencies.

E. Analytical data reported as "less than ..." shall be reported as less than a numeric value, or below the limit of detection for that particular analytical method. Also, the method detection limit for each monitoring parameter shall be reported.

F. If the discharger performs analyses for any parameter more frequently than required by this Monitoring and Reporting Program using approved analytical methods, the results of those analyses shall be included in the monitoring report.

G. The results of the waste load checking program shall be reported in each waste disposal report.

H. For every item where the requirements are not met, the discharger shall submit a statement of the actions undertaken or proposed which will bring the discharge into full compliance with requirements at the earliest time and submit a timetable for correction.

I. The discharger shall retain records of all monitoring information, including all calibration and maintenance records regarding monitoring instrumentation and copies of all data submitted to regulatory agencies for a period of at least five years. This period may be extended by request of the Regional Board at any time, and shall be extended during the course of any unresolved litigation regarding all or any part of the entire waste management facility.

J. This Monitoring and Reporting Program includes the attached "Standard Provisions Applicable to Waste Discharge Requirements" (Attachment 1). If there is any conflict between provisions stated herein and the "Standard Provisions Applicable to Waste Discharge Requirements", these provisions stated herein will prevail.

K. Records of monitoring information shall include:

1. The date, exact place, procedure, and time of sampling or measurement;
2. The individual(s) who performed the sampling or measurement;
3. The dates(s) analyses were performed on the samples;
4. The individual(s) who performed the analyses;
5. The analytical techniques or methods used;
6. The results of the analyses or measurements, including both statistical and non-statistical analyses;
7. The method detection limits;
8. The executive summary of the key findings;
9. The laboratory QA/QC data and chain of custody records;
10. The laboratory certification information;
11. The measurement of the static water level of monitoring well MW-A.

L. In reporting the monitoring data, the discharger shall arrange the data in tabular form.

M. Monitoring reports shall be signed by:

a. In the case of corporations, by a principal executive officer at least of the level of vice-president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates;

b. In the case of a partnership, by a general partner;

c. In the case of a sole proprietorship, by the proprietor;

d. In the case of a municipal, state or other public facility, by either a principal executive officer, ranking elected official or other duly authorized employee.

N. Each report shall contain the following completed declaration:

"I declare under penalty of perjury that the following is true and correct.

Executed on the _____day of _____at _____.

_____(Signature)

_____(Title)"

II. WASTE DISPOSAL REPORTING

A. The reports to the Regional Board shall include a map of the site, and shall indicate the area(s) where disposal is taking place or will begin. This map shall be updated quarterly. If a new area is landfilled, it shall be identified in the corresponding quarterly report.

B. A waste disposal report containing the following information shall be filed with this Regional Board each quarter:

1. A tabular list of the estimated average monthly quantities (in cubic yards or tons) and types of materials deposited each moth.

2. An estimate of remaining capacity (in cubic yards or tons), and the remaining life of the site in years and months.

3. A certification that all wastes deposited were deposited in compliance with the Regional Board's requirements, and that no wastes were deposited outside of the boundaries of the waste management facility as specified in the Regional Board's requirements.

4. A description of the location and an estimate of the seepage rate or flow of all known seeps and springs at the site.

5. The estimated amount of water used at the waste management area for landscape irrigation, compaction, dust control, etc., during the month. (If a source other than potable water is used, the sources and amounts of water from each source shall also be reported).

6. The discharger shall report all unacceptable (to this site) wastes inadvertently received at this site and their disposition. The following details shall be included:

   a. The source (if known), including the hauler, of the unacceptable wastes and date received and/or discovered.

   b. Identification of waste (if known) and the amount of waste.

   c. The name and address of the hauler who removed the waste from the site.

   d. The ultimate point of disposal for the waste.

   e. The discharger's actions to prevent recurrence of the attempted depositing of unacceptable wastes by this source or individual (if applicable). If no unacceptable wastes were received (or discovered) during the month, the report shall so state.

III. GROUNDWATER MONITORING

1. Provisions and General Requirements

A. Monitoring of groundwater in monitoring well MW-A shall be performed every third year during the month of October starting in 2004. Groundwater monitoring results shall be reported with the November 15 quarterly reports.

B. All sampling, sample preservation, and analyses shall be performed in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants", promulgated by the USEPA.

C. The discharger shall calibrate and perform maintenance procedures on all monitoring instruments and equipment to ensure accuracy of measurements, or shall ensure that both activities will be conducted.

D. No filtering of samples taken for organics analyses shall be permitted. Samples for organics analyses shall be taken with a sampling method that minimizes volatilization and degradation of potential constituents.

E. Analytical results for groundwater monitoring shall be submitted with the corresponding monitoring report.

F. Duplicate samples shall be taken for constituents of concern metals analyses only. Unfiltered samples shall be tested for total metals, and field–filtered samples (0.45 microns) shall be tested for dissolved metals. Both samples must be preserved with nitric acid; however, care shall be taken that the dissolved metals samples are not exposed to acids until after filtering.

G. The laboratory QA/QC report shall include, at a minimum, method blanks, calibration checks, surrogate recoveries, matrix spikes, and matrix spike duplicates, spiking concentrations, and laboratory QC samples. Spiking concentrations must be no more than 10 times the method detection limit.

H. Practical quantitation limits shall be below the current Maximum Contaminant Levels listed in Title 22 of the California Code of Regulations or Action Levels recommended by the California Department of Health Services, whenever it is possible.

I. Proper chain of custody procedures shall be used.

J. Constituents detected between the method detection limits and the practical quantitation limits must be reported, but may be reported as a trace.

2. Sampling and Analyses

Sampling and analyses of groundwater shall consist of the monitoring parameters listed below:

Claremont University Center **Order No. 00-070**
Claremont Landfill
Amended Monitoring and Reporting Program No. 5776

Monitoring Parameters	Test Method
Bicarbonate ($CaCO_3$)	Standard Method 2320B
Boron	EPA 6010
Chemical Oxygen Demand	EPA 410.4
Chloride	EPA 300.0
Electrical Conductivity	Field
Nitrate (as N)	EPA 300.0
Nitrite	EPA 300.0
pH	Field
Priority Pollutant Metals	EPA 6000/7000
Sodium	EPA 6010
Sulfate	EPA 300.0
Total Dissolved Solids	EPA 160.1
Total Hardness (as $CaCO_3$)	Standard Method 2320B
Volatile Organics	EPA 8260

Ordered By: Dennis A. Dickerson
DENNIS A. DICKERSON
Executive Officer

Date: October 15, 2001

Attachment 1:

**STANDARD PROVISIONS
APPLICABLE TO WASTE DISCHARGE REQUIREMENTS**

STANDARD PROVISIONS
APPLICABLE TO WASTE DISCHARGE REQUIREMENTS

1. DUTY TO COMPLY

The discharger must comply with all conditions of these waste discharge requirements. A responsible party has been designated in the Order for this project, and is legally bound to maintain the monitoring program and permit. Violations may result in enforcement actions, including Regional Board orders or court orders requiring corrective action or imposing civil monetary liability, or in modification or revocation of these waste discharge requirements by the Regional Board. [CWC Section 13261, 13263, 13265, 13268, 13300, 13301, 13304, 13340, 13350]

2. GENERAL PROHIBITION

Neither the treatment nor the discharge of waste shall create a pollution, contamination or nuisance, as defined by Section 13050 of the California Water Code (CWC). [H&SC Section 5411, CWC Section 13263]

3. AVAILABILITY

A copy of these waste discharge requirements shall be maintained at the discharge facility and be available at all times to operating personnel. [CWC Section 13263]

4. CHANGE IN OWNERSHIP

The discharger must notify the Executive Officer, in writing at least 30 days in advance of any proposed transfer of this Order's responsibility and coverage to a new discharger containing a specific date for the transfer of this Order's responsibility and coverage between the current discharger and the new discharger. This agreement shall include an acknowledgement that the existing discharger is liable for violations up to the transfer date and that the new discharger is liable from the transfer date on. [CWC Sections 13267 and 13263]

5. CHANGE IN DISCHARGE

In the event of a material change in the character, location, or volume of a discharge, the discharger shall file with this Regional Board a new Report of Waste Discharge. [CWC Section 13260(c)]. A material change includes, but is not limited to, the following:

(a) Addition of a major industrial waste discharge to a discharge of essentially domestic sewage, or the addition of a new process or product by an industrial facility resulting in a change in the character of the Waste.

(b) Significant change in disposal method, e.g., change from a land disposal to a direct discharge to water, or change in the method of treatment which would significantly alter the characteristics of the waste.

(c) Significant change in the disposal area, e.g., moving the discharge to another drainage area, to a different water body, or to a disposal area significantly removed from the original area potentially causing different water quality or nuisance problems.

(d) Increase in flow beyond that specified in the waste discharge requirements.

(e) Increase in the area or depth to be used for solid waste disposal beyond that specified in the waste discharge requirements. [CCR Title 23 Section 2210]

6. REVISION

These waste discharge requirements are subject to review and revision by the Regional Board. [CCR Section 13263]

7. TERMINATION

Where the discharger becomes aware that it failed to submit any relevant facts in a Report of Waste Discharge or submitted incorrect information in a Report of Waste Discharge or in any report to the Regional Board, it shall promptly submit such facts or information. [CWC Sections 13260 and 13267]

8. VESTED RIGHTS

This Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, do not protect the discharger from his liability under Federal, State or local laws, nor do they create a vested right for the discharger to continue the waste discharge. [CWC Section 13263(g)]

9. SEVERABILITY

Provisions of these waste discharge requirements are severable. If any provision of these requirements are found invalid, the remainder of the requirements shall not be affected. [CWC Section 921]

10. OPERATION AND MAINTENANCE

The discharger shall, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the discharger to achieve compliance with conditions of this Order. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls including appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this Order. [CWC Section 13263(f)]

11. HAZARDOUS RELEASES

Except for a discharge which is in compliance with these waste discharge requirements, any person who, without regard to intent or negligence, causes or permits any hazardous substance or sewage to be discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State, shall, as soon as (a) that person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the Office of Emergency Services of the discharge in accordance with the spill reporting provision of the State toxic disaster contingency plan adopted pursuant to Article 3.7 (commencing with Section 8574.7) of Chapter 7 of Division 1 of Title 2 of the Government Code, and immediately notify the State Board or the appropriate Regional Board of the discharge. This provision does not require reporting of any discharge of less than a reportable quantity as provided for under subdivisions (f) and (g) of Section 13271 of the Water Code unless the discharger is in violation of a prohibition in the applicable Water Quality Control plan. [CWC Section 1327(a)]

12. PETROLEUM RELEASES

Except for a discharge which is in compliance with these waste discharge requirements, any person who without regard to intent or negligence, causes or permits any oil or petroleum product to be discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State, shall, as soon as (a) such person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the Office of Emergency Services of the discharge in accordance with the spill reporting provision of the State oil spill contingency plan adopted pursuant to Article 3.5 (commencing with Section 8574.1) of Chapter 7 of Division 1 of Title 2 of the Government Code. This provision does not require reporting of any discharge of less than 42 gallons unless the discharge is also required to be reported pursuant to Section 311 of the Clean Water Act or the discharge is in violation of a prohibition in the applicable Water Quality Control Plan. [CWC Section 13272]

13. ENTRY AND INSPECTION

The discharger shall allow the Regional Board, or an authorized representative upon the presentation of credentials and other documents as may be required by law, to:

(a) Enter upon the discharger's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Order;

(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order;

(c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and

(d) Sample or monitor at reasonable times, for the purposes of assuring compliance with this Order, or as otherwise authorized by the California Water Code, any substances or parameters at any location. [CWC Section 13267]

14. MONITORING PROGRAM AND DEVICES

The discharger shall furnish, under penalty of perjury, technical monitoring program reports; such reports shall be submitted in accordance with specifications prepared by the Executive Officer, which specifications are subject to periodic revisions as may be warranted. [CWC Section 13267]

All monitoring instruments and devices used by the discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. All flow measurement devices shall be calibrated at least once per year, or more frequently, to ensure continued accuracy of the devices. Annually, the discharger shall submit to the Executive Office a written statement, signed by a registered professional engineer, certifying that all flow measurement devices have been calibrated and will reliably achieve the accuracy required.

Unless otherwise permitted by the Regional Board Executive officer, all analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health Services. The Regional Board Executive Officer may allow use of an uncertified laboratory under exceptional circumstances, such as when the closest laboratory to the monitoring location is outside the State boundaries and therefore not subject to certification. All analyses shall be required to be conducted in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants" [40CFR Part 136] promulgated by the U.S. Environmental Protection Agency. [CCR Title 23, Section 2230]

15. TREATMENT FAILURE

In an enforcement action, it shall not be a defense for the discharger that it would have been necessary to halt or to reduce the permitted activity in order to maintain compliance with this Order. Upon reduction, loss, or failure of the treatment facility, the discharger shall, to the extent necessary to maintain compliance with this Order, control production or all discharges, or both, until the facility is restored or an alternative method of treatment is provided. This provision applies, for example, when the primary source of power of the treatment facility fails, is reduced, or is lost. [CWC Section 13263(f)]

16. DISCHARGE TO NAVIGABLE WATERS

Any person discharging or proposing to discharge to navigable waters from a point source (except for discharge of dredged or fill material subject to Section 404 fo the Clean Water Act and discharge subject to a general NPDES permit) must file an NPDES permit application with the Regional Board. [CCR Title 2 Section 22357]

17. ENDANGERMENT TO HEALTH AND ENVIRONMENT

The discharger shall report any noncompliance which may endanger health or the environment. Any such information shall be provided verbally to the Executive Officer within 24 hours from the time the discharger becomes aware of the circumstances. A written submission shall also be provided within five days of the time the discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected; the anticipated time it is expected to continue and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Executive officer, or an authorized representative, may waive the written report on a case-by-case basis if the oral report has been received within 24 hours. The following occurrence(s) must be reported to the Executive Office within 24 hours:

(a) Any bypass from any portion of the treatment facility.

(b) Any discharge of treated or untreated wastewater resulting from sewer line breaks, obstruction, surcharge or any other circumstances.

(c) Any treatment plan upset which causes the effluent limitation of this Order to be exceeded. [CWC Sections 13263 and 13267]

18. MAINTENANCE OF RECORDS

The discharger shall retain records of all monitoring information including all calibration and maintenance records, all original strip chart recordings for continuous monitoring instrumentation, copies off all reports required by this Order, and record of all data used

to complete the application for this Order. Records shall be maintained for a minimum of three years from the date of the sample, measurement, report, or application. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board Executive Officer.

Records of monitoring information shall include:

(a) The date, exact place, and time of sampling or measurement;

(b) The individual(s) who performed the sampling or measurement;

(c) The date(s) analyses were performed;

(d) The individual(s) who performed the analyses;

(e) The analytical techniques or method used; and

(f) The results of such analyses.

19. (a) All application reports or information to be submitted to the Executive Office shall be signed and certified as follows:

(1) For a corporation – by a principal executive officer or at least the level of vice president.

(2) For a partnership or sole proprietorship – by a general partner or the proprietor, respectively.

(3) For a municipality, state, federal, or other public agency – by either a principal executive officer or ranking elected official.

(b) A duly authorized representative of a person designated in paragraph (a) of this provision may sign documents if:

(1) The authorization is made in writing by a person described in paragraph (a) of this provision.

(2) The authorization specifies either an individual or position having responsibility for the overall operation of the regulated facility or activity; and

(3) The written authorization is submitted to the Executive Officer.

Any person signing a document under this Section shall make the following certification:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. [CWC Sections 13263, 13267, and 13268]"

20. OPERATOR CERTIFICATION

Supervisors and operators of municipal wastewater treatment plants and privately owned facilities regulated by the PUC, used in the treatment or reclamation of sewage and industrial waste shall possess a certificate of appropriate grade in accordance with Title 23, California Code of Regulations Section 3680. State Boards may accept experience in lieu of qualification training. In lieu of a properly certified wastewater treatment plant operator, the State Board may approve use of a water treatment plan operator of appropriate grade certified by the State Department of Health Services where reclamation is involved.

Each plan shall be operated and maintained in accordance with the operation and maintenance manual prepared by the municipality through the Clean Water Grant Program [CWC Title 23, Section 2233(d)]

ADDITIONAL PROVISIONS APPLICABLE TO
PUBLICLY OWNED TREATEMENT WORKS' ADEQUATE CAPACITY

21. Whenever a publicly owned wastewater treatment plant will reach capacity within four years the discharger shall notify the Regional Board. A copy of such notification shall be sent to appropriate local elected officials, local permitting agencies and the press. The discharger must demonstrate that adequate steps are being taken to address the capacity problem. The discharger shall submit a technical report to the Regional Board showing flow volumes will be prevented from exceeding capacity, or how capacity will be increased, within 120 days after providing notification to the Regional Board, or within 120 days after receipt of notification from the Regional Board, of a finding that the treatment plant will reach capacity within four years. The time for filing the required technical report may be extended by the Regional Board. An extension of 30 days may be granted by the Executive Officer, and longer extensions may be granted by the Regional Board itself. [CCR Title 23, Section 2232]

RESULTS OF PHASE II ENVIRONMENTAL SITE ASSESSMENT

CUC Quarry Site
Claremont and Upland, California

Submitted to:

Claremont University Consortium, Claremont, CA

Submitted by:

AMEC Geomatrix, Inc., Corona, CA

September 19, 2008

Project No. 009234.001.0

AMEC Geomatrix

RESULTS OF PHASE II ENVIRONMENTAL SITE ASSESSMENT
CUC Quarry Site
Claremont and Upland, California

September 19, 2008
Project 009234.001.0

This report was prepared by the staff of AMEC Geomatrix, Inc., under the supervision of the Engineer(s) and/or Geologist(s) whose seal(s) and signature(s) appear hereon.

The findings, recommendations, specifications, or professional opinions are presented within the limits described by the client, in accordance with generally accepted professional engineering and geologic practice. No warranty is expressed or implied.

G. Richard Rees, PG, CHG
Senior Hydrogeologist

Craig Stewart, PG, CHG
Principal Hydrogeologist

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RESULTS OF PHASE II ENVIRONMENTAL SITE ASSESSMENT
CUC Quarry Site
Claremont and Upland, California

1.0 INTRODUCTION

AMEC Geomatrix, Inc. (AMEC), formerly known as Geomatrix Consultants, Inc. (Geomatrix), has prepared this report for the Claremont University Consortium (CUC) to document the findings of a Phase II Environmental Site Assessment (ESA) conducted at a former aggregate quarry currently owned by CUC. The former quarry (also known as the CUC quarry, the Claremont Landfill, and the pit property, and also referred to in this report as the site) is located southeast of the intersection of Claremont and Foothill boulevards in the cities of Claremont and Upland, California. Our work included field reconnaissance, soil sampling, laboratory analyses of soil samples, and preparation of this report, and was performed in accordance with our proposal dated May 29, 2008, entitled "Proposal for Phase II Environmental Site Assessment (ESA) and Phase I ESA Update." CUC authorized AMEC to proceed with the Phase II ESA portion of the proposal on June 2, 2008.

This report provides the site description and background, scope of work, summary of document review, field reconnaissance findings, laboratory analytical results, and our recommendations.

2.0 BACKGROUND

The following subsections summarize relevant project background information.

2.1 SITE DESCRIPTION

The subject property occupies approximately 80 acres and straddles the boundary between the cities of Upland and Claremont, which coincides with the boundary between Los Angeles and San Bernardino counties. The site was formerly used as an aggregate quarry and more recently has been used as a landfill permitted to accept inert waste such as soil, rock, concrete, and asphalt. The pit excavation is approximately 50 to 80 feet deep with sloped sidewalls that are partially vegetated. Most of the landfilling activities have occurred in the northern portion of the property but more recently fill materials have been placed in the southern part of the pit. The base of the pit is irregular and stockpiles of boulders, debris, and other materials are scattered throughout. An archery range is located along the west-central portion of the property. One water supply well is located in the northwest portion of the property.

Based on information provided by CUC, (Gruen Associates, 2007), we understand that the property will be subdivided and developed as recreational/sports facilities. Development plans are in their preliminary stages.

2.2 SITE HISTORY AND PREVIOUS INVESTIGATIONS

The site history is described below. Information presented in the first two subsections (History and Investigations Prior to 2004, and Findings of the 2004 Phase I ESA) is based on a review of documents regarding the quarry as summarized in the Phase I ESA (Geomatrix, 2004).

2.2.1 History and Investigations Prior to 2004

Documents available for the subject property indicate that gravel mining began at the site in the 1920s (LeRoy Crandall, 1986), but did not provide information on pit operations until the 1970s. In 1972, Conrock, the operator and owner of the site at that time, stopped quarrying operations and permitted the property for use as an inert landfill (Claremont Facilities Corporation [CFC], 1987). Between 1978 and 1984, the site was leased by Tony Glavinick, who continued operation of the site as an inert landfill (LeRoy Crandall, 1986).

Based on documents reviewed, the landfill was classified to accept non-water-soluble, non-decomposable inert solids. Because the subject property lies within the two different Regional Water Quality Control Board jurisdictions (Los Angeles and Santa Ana Regions), waste discharge requirements (WDRs) have been issued for the pit by both agencies (LeRoy Crandall, 1986):

- WDR Order No. 72-66, December 13, 1972, Los Angeles Region
- WDR Order No. 73-14, February 28, 1973, Los Angeles Region
- WDR Order No. 72-47, December 21, 1972, Santa Ana Region
- WDR Order No. 79-93, June 29, 1979, Santa Ana Region.

ATC (2001a) states that the two water boards have agreed that the Los Angeles RWQCB will provide regulatory oversight of the subject property.

During 1983 and 1984, geotechnical investigations were conducted to evaluate the site for potential development (Converse, 1983 and 1984b). These investigation activities included geologic mapping, test borings and pits, soil sampling, observations of the landfill operation, hydrogeologic studies, and installation of at least 11 on-site piezometers ranging in depth from approximately 30 to 199 feet below ground surface (bgs) at the time of drilling. Records

reviewed do not indicate that soil or groundwater samples were collected for chemical analysis as part of these investigations. Observations conducted between June 1983 and June 1984 indicated that landfill operations generally were not supervised (Converse, 1984a). Landfill materials reportedly consisted of approximately 50 to 70 percent clean soil, and 30 to 50 percent solid material including concrete, brick, and plaster board with small amounts of wood and metal (LeRoy Crandall, 1986).

Documents reviewed suggest that landfill operations were suspended in 1984 in anticipation of possible development of the site as a business park. An environmental impact report (EIR) was prepared for CFC, which acquired the site in 1986 (EDAW, 1984). Subsequently, an environmental site assessment also was conducted to evaluate the potential presence of hazardous substances (LeRoy Crandall, 1986). This assessment included a site inspection, organic vapor screening in shallow (up to 3 feet deep) hand-pushed probes and within existing piezometer casings, collection and analysis of soil samples collected during completion of 17 soil borings up to approximately 50 feet deep, and conversion of four of these borings to vapor monitoring wells. OVA readings greater than background were reported at three sampling points located within a mound of fill near the southeast corner of the site. A layer of black soil with “a strong odor of septic waste” was encountered at a depth of approximately 2 feet in this area; subsequent laboratory analysis of this black soil reported that it did not contain petroleum hydrocarbons or VOCs above laboratory reporting limits. Composite soil samples collected in borings drilled at the site contained hydrocarbon concentrations between 280 and 1900 milligrams per kilogram (mg/kg), but these were attributed to asphalt fragments present in the samples analyzed. No VOCs were detected in soil samples analyzed; two samples also analyzed for polychlorinated biphenyls (PCBs) also did not contain tested compounds above laboratory reporting limits. Organic vapor readings collected from the four vapor monitoring wells ranged from less than 10 to 80 parts per million (ppm) and were attributed to decomposing organic debris encountered during drilling.

In 1987, CFC evaluated closing the landfill (CFC, 1987). This landfill closure report summarized landfill closure issues, legal status and regulation issues, and technical requirements and costs of closing and/or sealing the landfill. The subject property was sold in 1987 to Arrow/Claremont Venture, and then to Claremont University Center in 1988 (Claremont University Center, 1991). In a 1991 letter to the RWQCB, the Claremont University Center states that it would like to maintain its existing waste discharge requirements as an inert materials landfill.

In response to a notification received from the RWQCB in January 1988, Law Environmental (1989 and 1990) prepared solid waste assessment test (SWAT) reports on the pit for the CalMat Company (formerly Conrock). These assessments included groundwater monitoring

results for a well located on the northern part of the pit property (Well A) and five other deep wells in the site vicinity. Direction and approximate distances from the pit to the five off-site SWAT monitoring wells are: one well almost 1 mile north; one well almost 0.25 mile west; one well approximately 0.25 mile south; and two wells approximately 0.75 mile southwest of the southwest corner of the pit. Low concentrations of xylenes (2 to 5 micrograms per liter [µg/L]) were detected in three off-site wells during one monitoring event, but Law Environmental (1990) noted that the presence of xylenes in groundwater is "a common occurrence throughout the basin" and the result of leaking fuel USTs. The current MCL for total xylenes is 1,750 µg/L.

In December 2000, CUC applied to the County of San Bernardino for a Conditional Use Permit (CUP) to dispose of inert material from a large CalTrans project; however, CUC did not win its bid to purchase this inert material and disposal of this CalTrans waste at the pit did not occur (CUC, 2000 and 2001).

In May 2000, the RWQCB requested that CUC demonstrate that material disposed of in the pit does not pose a threat to groundwater quality (ATC, 2001a). RWQCB Order No. 00-070, dated May 4, 2000, and revised May 25, 2000, was issued to the Claremont University Center and replaced previous Order No. 73-014 (RWQCB, 2000a). Documents reviewed indicate that following transmittal of the new RWQCB order, a report on the operational history of the landfill was submitted by ATC to the RWQCB in August 2000, but that the report did not present adequate information for the RWQCB to conclude whether the landfill had impacted groundwater (RWQCB, 2000b). The RWQCB issued a notice of non-compliance and requested that Claremont University Center comply with Order No. 00-070 and implement a groundwater monitoring program for the site (RWQCB, 2000b). Based on results of three quarterly groundwater monitoring events in 1989 and 1990, the RWQCB approved the SWAT in March 2001 and agreed that these data indicate that waste disposal at the site has had no adverse impact on groundwater resources at the site (RWQCB, 2001a), however, the RWQCB requested that groundwater monitoring be continued according to current waste discharge requirements. In May 2001, ATC submitted a report to demonstrate that additional groundwater monitoring was not necessary (ATC, 2001a). That report contains inspection sheets for landfill operations when Conrock operated the site as well as pit disposal records for 1998 to 2000 when the site was owned by CUC. According to the report, access to the landfill was limited to CUC contractors for disposal of excavation, construction, and demolition debris from CUC projects only. In response, the RWQCB requested one additional groundwater monitoring event, which was conducted in August 2001. During this event, one groundwater sample from Pit Well No. 1 (Well A) was collected and analyzed; no constituents analyzed were detected above MCLs and metals and inorganic water quality parameters of the groundwater sample were similar to those of regional groundwater (ATC, 2001b). Based on

these results, the RWQCB approved an amended groundwater detection monitoring program (DMP) for compliance with RWQCB Order No. 00-070 (RWQCB, 2001b). The amended DMP requires that groundwater monitoring of Well A be conducted every third year during the month of October starting in 2004. The groundwater monitoring parameters include VOCs, metals, and general chemistry testing. In a letter from CUC to the California State Water Resources Control Board (SWRCB), CUC states that as of summer 2002, CUC no longer accepts waste generated by agencies other than CUC (CUC, 2002).

2.2.2 Findings of 2004 Phase I ESA

The findings from the ESA completed in June 2004 identified the landfill as a recognized environmental condition (REC) because of the uncertainty associated with the types and composition of materials disposed in the landfill and the inherent risks that the landfill creates for future use of the site and groundwater quality. Among the features related to the landfill that may contribute to these risks included potentially improperly decommissioned groundwater monitoring wells and an orange-brown slag-like material of unknown composition observed during the March 2004 site reconnaissance. Recommendations for additional work based on the findings of the Phase I ESA included:

- complying with ongoing regulatory permit requirements (monitoring Well A every third October with the first sampling occurring in October 2004),
- conducting a visual survey and field screening for hazardous materials including sampling of slag-like material,
- locating on-site monitoring wells and maintaining or destroying them in accordance with state and local standards, and
- developing an environmental contingency plan for use during grading activities to address petroleum hydrocarbons or hazardous substances that may be encountered during grading, and developing a strategy to eventually close the pit.

2.2.3 Work Conducted Since 2004

Based on our conversations with CUC and Hogle-Ireland, Inc. (HI) representatives, no additional environmental site assessment activities have been completed at the CUC quarry since the June 2004 Phase I ESA was completed. CUC files did not contain groundwater monitoring data for Well A for 2004 or later.

HI is assisting the CUC with planning for the property sale and subsequent development. RMA Group (2007) conducted a preliminary geotechnical investigation and mapped the geology of the pit property.

3.0 OBJECTIVES AND SCOPE OF WORK

The objectives of the Phase II ESA were to:

- conduct a visual survey and field screening for hazardous materials including sampling of slag-like material identified in the Phase I ESA,
- conduct site reconnaissance to locate on-site water level observation wells and the monitoring well, and
- gather data to identify additional work needed to support the sale and/or development planning of the properties.

To meet these objectives, the scope of work for the Phase II ESA included:

- reviewing historical information and current plans for the pit property;
- conducting a site reconnaissance for potential hazardous materials and existing wells and piezometers;
- sampling of soil, water, and/or other materials in suspect or selected areas; and
- preparing this summary report of findings and recommendations for future work.

The results of our review of historical information and current plans for the property are summarized in preceding section 2.2 of this report. The following sections of this report present the findings and recommendations developed through implementation of this scope of work.

4.0 SITE RECONNAISSANCE

The methods and observations of our site reconnaissance are described below. Photographs taken during the site reconnaissance are provided in Appendix A.

4.1 PRE-RECONNAISSANCE MAP COMPILATION AND RECONNAISSANCE METHODS

The pre-reconnaissance map compilation and reconnaissance methods are provided in the following subsections.

4.1.1 Map Compilation

In preparation for the field reconnaissance, AMEC compiled a map (Figure 2) showing historical monitoring and testing locations in the CUC quarry based on maps from previous reports. The purpose of preparing this map was to help the field personnel search for monitoring wells and to facilitate the identification of monitoring wells, if found. The map includes water level observation wells and the groundwater monitoring well. AMEC was unable to locate a map showing the location of vapor monitoring wells MW-1, MW-2, MW-3, and MW-4 described by LeRoy Crandall and Associates (1986). Those vapor monitoring wells reportedly were constructed of 1.5- to 2-inch diameter, schedule 40, polyvinyl chloride (PVC) casings installed to depths of 32.5 to 42.5 feet bgs at the time of drilling.

4.1.2 Reconnaissance Methods

Two AMEC geologists conducted the site reconnaissance in the CUC quarry site on July 10, 2008. The geologists spent a field day transversing the quarry and mapping areas of interest (e.g., well casings, stained soils). A Trimble XM Global Positioning System (GPS) unit was used to gather GPS coordinates for areas of interest. The GPS unit has an accuracy of approximately three to six feet after post processing corrections. GPS coordinates were obtained at three locations identifiable on the aerial photograph (e.g., the south end of the median of Claremont Boulevard at the intersection of Claremont Boulevard and W. Arrow Route) as control points before beginning site reconnaissance. These control points were used to evaluate the GPS data for drift, instrument malfunction, or other potential anomalies while collecting field data. The control points were also used to adjust the GPS data to the aerial photograph.

4.2 RECONNAISSANCE OBSERVATIONS

Findings of the field reconnaissance including verification of the area of mapped fill, field check for monitoring, observation, and test wells; and other observations are provided under their respective headings below.

4.2.1 Mapped Fill

The field geologists compared the RMA Group (2007) geologic map with the field observations and noted that the occurrence of fill in the quarry at the time of the reconnaissance appeared to be in general agreement with this map, except that the geologic unit identified by RMA Group (2007) as uncompacted fill (and identified on a geologic map by RMA Group as “afu -

dumped fill") had expanded east and south of the area shown by RMA Group. The expanded area of interpreted "dumped fill" was mapped by AMEC and is shown on Figure 3 as "afu_1" in a distinct color and pattern from the "afu" map unit by RMA Group.

4.2.2 Water Level Observation Wells and Monitoring Well Locations

The field geologists made an effort to locate each of the on-site water level observation wells and the monitoring well shown on Figure 2 with the exception of those on the eastern part of the quarry that was backfilled for the construction of Monte Visa Avenue; no attempt was made to locate Wells 5 and 6 located east of the current property boundary. Only three wells or potential wells were identified during the site reconnaissance and their locations are shown on Figure 4. Observations at these locations are provided below.

- The first well is located in the northwest corner of the CUC quarry. The well was dry and is constructed of two-inch black polyvinyl chloride (PVC) casing. The total depth of this well was sounded at approximately 91 feet below ground surface (bgs). The well is located in close proximity to Well 12 as mapped by Converse (1983a) and shown on Figure 2.

- The second well was located in the north-central area of the CUC quarry. The well appears to be constructed of a 12-inch outer steel casing and an eight-inch inner steel casing. The well appears to have pump in it based on electrical conduit and piping exiting the top of the eight-inch well casing. A power pole and electrical control box are located immediately to the west of the well. This well is believed to be Well A due to the close proximity of the historically mapped location of Well A (ATC, 2001) as shown on Figure 2. The electronic water level meter probe would not extend past 361 feet bgs and no water was detected at this depth. This measured depth may be the top of the downhole pump if present, an obstruction, or total depth.

- The third well was located in the south-central area of the CUC quarry (Figure 4). The well was constructed of four-inch, white, PVC casing and was sounded at a total depth of approximately 53 feet bgs. No water was detected in the well. The casing was adjacent to recently dumped fill and the aboveground part of the casing appeared to be leaning as a result of the fill placed against the casing. The well observed was located approximately half way between Well 18 and Well 20 (Figure 2).

In addition to the three wells described above, fragments of 4-inch diameter, white, PVC pipe were found at two locations near historically mapped well locations. One was found near

Well 1 and the other near Well 20 shown on Figure 2. This PVC may have been part of the aboveground casing for these wells, however, no other evidence of either Well 1 or Well 20 was found near the areas of broken casing.

4.2.3 Stained Soil

Two areas with stained soil were observed during the site reconnaissance and are described below.

- The area of the orange stained soil was first identified in a Phase I ESA conducted by Geomatrix in 2004 as "orange slag-like material." The material was located east of north fence of the archery range in the north-central area of the CUC quarry at the location identified as "orange soil" on Figure 4. The orange soil was observed to consist primarily of iron oxide scale and fine, bead-like material similar to ion exchange resin beads in a water softener mixed with soil. The orange soil covered an irregular area and was estimated to cover an approximately 200 square feet area on the surface.

- An area of stained soil consisting of darker-colored soil with a slight hydrocarbon odor was identified during this site reconnaissance. The staining was approximately 43 feet in length with a maximum width of approximately six feet. The stained soil is located on the southwest area of dumped fill (afu) in the CUC Quarry at the location identified as "stained soil" on Figure 4.

4.2.4 Other Observations

General observations were similar to the observations described in the Phase I ESA site reconnaissance conducted in 2004. Fill material consisted of soil, concrete, concrete with rebar, wood debris (lumber and telephone or power poles), and some asphaltic concrete. Fill materials also included limited occurrences of plastic, fabric, ceramic, small diameter PVC pipe, and metal debris. The whitish material that appeared similar to dried plaster or grout described by Geomatrix (2004) as being found in a small pile (less than 5 feet in diameter) located approximately 300 feet south of the orange soil was not found during this site reconnaissance. A steel drum full of concrete or cement was found on the south-central area of the CUC quarry.

More recently-placed imported or dumped fill (afu and afu_1) in the southeastern portion of the quarry consisted primarily of soil. One area on the northeast slope of the recently dumped fill (afu_1) had several empty containers that indicated the potential presence of petroleum hydrocarbons or volatile organic compounds (VOCs). Containers included an empty plastic oil container, empty grease gun container, and a crushed container with a label indicating it

previously had contained PVC cement. This area was identified as the "imported soil with debris" area shown on Figure 4.

Ponded water observed during the site reconnaissance in 2004 (Geomatrix, 2004) was not observed during this site reconnaissance. In the general southern area of the quarry where water was observed to have ponded in 2004, dried mud cracks were observed as well as a staff gauge for measuring the height of water when present.

5.0 SOIL SAMPLING AND LABORATORY ANALYSES

Descriptions of soil sampling and laboratory analytical results are provided in the following subsections. Laboratory results are summarized in Tables 1 through 4.

5.1 SOIL SAMPLING

Soil samples were collected in laboratory supplied, eight-ounce glass jars for all laboratory analyses with the exception of samples collected for analyses of VOCs using EPA Method 8260B. Samples for VOC analyses were collected using EPA Method 5035 sampling kits prepared and provided by the laboratory. All samples were stored on ice and submitted following chain-of-custody procedures to ENVIRO-CHEM, Inc. (ENVIRO-CHEM), of Pomona, California, which is accredited through the California Environmental Laboratory Accreditation Program (CA-ELAP) for the analyses performed.

Soil samples were collected at four locations in the CUC quarry. These locations are described above in the Reconnaissance Observations section and are shown at locations identified as "orange soil," "imported soil with debris," "stained soil," and "dry pond "on Figure 4. The sampling and laboratory analyses conducted for each of these locations are described below.

- A sample of the orange soil (20080710-P-1) was collected on July 10, 2008, and submitted to the laboratory for the analyses of Title 22 metals (antimony, arsenic, barium, beryllium, cadmium, total chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc) using EPA Methods 6010B and 7471A, organochlorine pesticides using EPA Method 8081A, and semi-volatile organic compounds (SVOCs) using EPA Method 8270C.

- Samples of the imported soil with debris (20080710-P-3) were collected to assess whether soils in the immediate area of the observed empty containers had been impacted with petroleum hydrocarbons or VOCs. One sample was collected from this area on July 10, 2008 and submitted to the laboratory for analyses of total petroleum hydrocarbons with carbon chain distinction (TPHcc) using EPA Method

8015M. On July 11, 2008, AMEC returned and collected a second soil sample (20080711-P-3) from same area using EPA Method 5035 preparation method. This soil sample was submitted to the laboratory for analyses of VOCs.

- A sample of the stained soil (20080710-P-4) was collected on July 10, 2008 and submitted to the laboratory for analyses of Title 22 metals, perchlorate using EPA Method 314.0, TPHcc, and VOCs. After petroleum hydrocarbons were reported by the laboratory in sample 20080710-P-4, the laboratory was directed to analyze this sample for PCBs using EPA Method 8082.

- The Phase I ESA (Geomatrix, 2004) recommended sampling of ponded water in the quarry, or if ponded water was not encountered, sampling of soil where there was evidence that water had ponded in the recent past. The "dry pond" sample was collected from southeast part of the CUC quarry at the location shown on Figure 4. Sample 20080710-P-2 was collected on July 10, 2008, and submitted to the laboratory for analyses of metals, perchlorate, TPHcc, pesticides, and SVOCs. Soil sample 20080711-P-2 was collected from the same area on July 11, 2008, and submitted to the laboratory for analyses of VOCs. After petroleum hydrocarbons were reported by the laboratory in sample 20080711-P-2, the laboratory was directed to analyze this sample for PCBs.

5.2 LABORATORY ANALYTICAL RESULTS

The following sections summarizes the laboratory analytical results of the soil samples collected in the CUC quarry and a description of laboratory quality assurance (QA) program and our review of the laboratory data. The laboratory analytical reports with laboratory QA and chain-of-custody forms are provided in Appendix B. A memorandum describing a review of the laboratory data is provided in Appendix C.

5.2.1 Soil Sample Analytical Results

Table 1 summarizes analytical results for VOCs, SVOCs, organochlorine pesticides, and PCBs in soil samples as follows: soil samples from the dry pond, imported soil with debris, and stained soil were analyzed for VOCs; soil samples from the orange soil and stained soil were analyzed for SVOCs and organochlorine pesticides; and soil samples from the dry pond and stained soil were analyzed for PCBs. All of samples analyzed for these parameters were reported as not detected at or above the laboratory reporting limits for the corresponding analytes.

Table 2 summarizes analytical results for soil samples from imported soil with debris, stained soil, and dry pond soil that were analyzed for TPHcc. Prior to analyses, the sample extracts

were subjected to a silica gel treatment to filter out naturally occurring organics such as those that occur from the decomposition of organic matter. The laboratory reported TPHcc was not detected at or above the laboratory reporting limits in the soil sample collected at the imported soil with debris area. The laboratory reported TPHcc was not detected at or above laboratory reporting limit for carbon chain ranges of C4 to C10 (gasoline fuel range) and C11 to C22 (diesel fuel range) in any of the samples analyzed. The laboratory reported concentrations of 83.2 mg/kg and 51,800 mg/kg for the heavier carbon chain range of C23 to C35 (motor oil range) for the soil samples from dry pond and stained soil area, respectively.

Table 3 summarizes analytical results for metals. Soil samples collected from orange soil, dry pond, and stained soil were analyzed for Title 22 metals. With one exception, laboratory results indicate metals were either not detected at their respective laboratory reporting limits or were present at concentrations in the range consistent with the concentrations of metals in “B” horizon soils in the western United States (Connor and Shacklette, 1975). The one exception was total copper in the orange soil, reported at a concentration of 328 mg/kg. Based on the concentration of total copper exceeding 10 times its Soluble Threshold Limit Concentration (STLC) of 25 milligrams per liter (mg/L) as listed in Title 22 of the California Code of Regulations (CCR, 2005), the sample was analyzed for soluble copper using Waste Extraction Test (WET) methods.

Table 4 summarizes the analytical result for soluble copper in the soil sample from the orange soil. The laboratory reported a soluble copper concentration of 26.2 mg/L in this sample, which if representative of the orange soil overall, would indicate that the material may need to be classified as a California hazardous waste during management, transportation, and disposal. Actual waste classification of the orange soil should be based on more comprehensive waste characterization, which would involve additional sampling and analyses of the soil after it has been excavated.

5.2.2 Data Quality Review

The laboratory QA program included recording sample condition, analytical method holding time requirements, and an evaluation of surrogate recoveries, reagent and matrix spikes, matrix spike duplicates, and laboratory control samples (LCS). The QA program also consists of data validation performed by a qualified chemist in accordance with established guidelines (U.S. EPA, 1999; 2002) for the review and validation of laboratory analytical data. No problems were found with the data reported by the laboratory or in our review of the laboratory data. The memorandum summarizing the data validation is provided in Appendix C.

6.0 SUMMARY AND CONCLUSIONS

The scope of work proposed for the Phase II ESA was completed with minor adjustments to account for actual conditions encountered (e.g., an additional analysis for the soluble component of copper in one soil sample was needed based on elevated concentrations of total copper detected, and analyses for PCBs were conducted on two samples that indicated the presence of TPH). Observations made during the site reconnaissance on July 10, 2008 indicated similar conditions as those encountered in the 2004 site reconnaissance for the Phase I ESA (Geomatrix, 2004). Recently-placed uncompacted fill was observed to cover a larger area to the northeast and south than mapped by RMA Group in its report dated 2007. No ponded water was observed in the quarry although evidence of ponded water (i.e., mud cracks) was observed in what appeared to be the topographic low of the quarry.

Three wells or potential wells were found during the site reconnaissance. These include observation Well A at the north part of the property, a well in the vicinity of monitoring Well 12 in the northwest part of the quarry, and a well in the central part of the quarry. Fragments of PVC pipe, potentially corresponding to broken casings of former monitoring wells, were found at two separate locations but no evidence of in-place wells was observed in either of these areas.

Stained soil was observed at two locations and included the orange soil identified in the Phase I ESA (Geomatrix, 2004) and an area of dark stained soil with hydrocarbon odor. No other staining was observed, however, one area of the imported soil had debris that included an empty oil container, empty grease gun container, and crushed PVC cement can.

Soil samples were collected at specific locations selected based on reconnaissance observations and submitted for laboratory analyses. The results of laboratory analyses of these soil samples did not indicated elevated concentrations of constituents analyzed with the following exceptions: (1) TPHcc (motor oil carbon chain range) was detected at elevated concentrations in an area of dark staining and hydrocarbon odor, (2) elevated total and soluble copper concentrations were detected in orange colored soil at a second location, and (3) relatively low concentrations (less than 100 mg/kg) of TPHcc (motor oil carbon chain range) were detected in soil sample from the soil with evidence of ponded water. The concentrations TPHcc and soluble copper in the respective stained areas indicate concentrations indicating limited excavation and removal of impacted soil would be appropriate.

7.0 RECOMMENDATIONS

Based on the findings of the review of documents, site reconnaissance and soil sampling results described above, AMEC Geomatrix recommends the following:

- RWQCB Order No. 00-070, Waste Discharge Requirements for Claremont University Center (Claremont Landfill), dated May 4, 2000, and revised May 25, 2000, established requirements for operation of the site as a waste disposal site (RWQCB, 2000a). The monitoring requirements of this order were amended in an amended groundwater detection monitoring program (RWQCB, 2001b). Specific requirements listed in documents we reviewed include submittal of waste disposal reports to the RWQCB every quarter and sampling and analyses of monitoring Well A during the month of October every third year starting in 2004. Order No. 00-070 also specifies (general provision no. 10) that "Ninety (90) days prior to cessation of disposal operations at this site, the discharger shall submit a technical report to the Regional Board describing the methods and controls to be used to assure protection of the quality of receiving waters during final operations and with any proposed subsequent use of the land." A copy of RWQCB Order No. 00-070 and Amended Groundwater Detection Monitoring program are provided as Appendixes D and E, respectively. We recommend that CUC meet with the RWQCB and discuss the current status of the quarry and potential regulatory requirements for monitoring and closure of this site.

- Three wells were found during the site reconnaissance. Additional wells may be exposed during grading or other site work. All wells at the site should be secured and maintained for future use or destroyed in accordance with California Well Standards and local agency requirements. Both Los Angeles and San Bernardino counties require permits for destruction of groundwater wells.

- Two areas of impacted soils were identified in the site reconnaissance and through laboratory analyses. One of the areas was soil impacted with heavy petroleum hydrocarbons. The other had elevated concentrations of total and soluble copper. We recommend that the affected soils in these two areas be excavated by a qualified contractor, characterized for waste classification, and transported to an appropriate facility for treatment and/or disposal. Based on reconnaissance observations, chemical impacts in both areas are of relatively limited areal extent and likely are limited to surficial and near–surface soils. In addition, impacted soils in both areas have distinguishing characteristics that allow them to be identified visually. Consequently, no additional sampling appears to be necessary, other than for waste characterization and for confirmation of conditions remaining in place following excavation and removal of the impacted soil. In addition, we recommend that CUC consider obtaining RWQCB concurrence with this planned approach prior to implementing this work.

- To address the potential that chemically-impacted soil not identified to-date may be encountered during future earthwork or other activities at the site, we recommend development of a soils monitoring and contingency plan. The plan would outline procedures to be followed during grading and construction and steps to identify and mitigate impacted soil.

8.0 REFERENCES

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TABLES

TABLE 1

SUMMARY OF ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS, SEMI-VOLATILE ORGANIC COMPOUNDS, PESTICIDES, AND PCBs IN SOIL SAMPLES

CUC Quarry Site

Claremont and Upland, California

Results reported in milligrams per kilogram (mg/kg)

Sample Area	Sample Identification	Date Sampled	VOCs[1]	SVOCs[2]	Organochlorine Pesticides[3]	PCBs[4]
Orange Soil	20080710-P-1	7/10/2008	---[5]	ND[6]	ND	---
Dry Pond	20080710-P-2	7/10/2008	---	---	---	ND(<0.01)[7]
	20080711-P-2	7/11/2008	ND	---	---	---
Imported Soil with Debris	20080711-P-3	7/11/2008	ND	---	---	---
Stained Soil	20080710-P-4	7/10/2008	ND	ND	ND	ND (<1)

Notes

1 VOCs = Volatile organic compounds. VOCs samples collected and prepared using EPA Method 5035 and analyzed using EPA Method 8260B.

2 SVOCs = Semi volatile organic compounds. SVOCs analyzed using EPA Method 8270C.

3 Pesticides = Organochlorine pesticides analyzed using EPA Method 8081A.

4 PCBs = Polychlorinated biphenyls speciated PCB-1016, PCB-1221, PCB-1232, PCB-1242, PCB-1248, PCB-1254, and PCB-1260 and analyzed using EPA Method 8082.

5 --- Sample not analyzed for constituents indicated.

6 ND = Not detected at or above the laboratory reporting limits, see laboratory report for list of analytes and reporting limits.

7 ND(<) = Not detected above laboratory reporting limit indicated in parentheses.

TABLE 2

SUMMARY OF ANALYTICAL RESULTS FOR TOTAL PETROLEUM HYDROCARBONS IN SOIL SAMPLES

CUC Quarry Site

Claremont and Upland, California

Results reported in milligrams per kilogram (mg/kg)

Sample Area	Sample Identification	Date Sampled	Sum in Carbon Chain Range C4-C35[2]	TPH Carbon Chain[1]		
				C4-C10	C11-C22	C23-C35
Dry Pond	20080710-P-2	7/10/2008	83.2	ND (<10)[3]	ND (<10)	83.2
Imported Soil with Debris	20080710-P-3	7/10/2008	ND[4]	ND (<10)	ND (<10)	(ND<50)
Stained Soil	20080710-P-4	7/10/2008	51,800	ND (<10)	ND (<10)	51,800

Notes

1 TPH Carbon Chain = total petroleum hydrocarbons with carbon chain speciation analyzed using EPA Method 8015M after silica gel treatment of the sample extract. Carbon chain ranges quantitated using gasoline fuel standard, diesel fuel standard, and motor oil standard for carbon chain ranges C4-C10, C11-C22, and C23-C35, respectively.

2 Sum of carbon range as calculated by adding individual laboratory results for carbon chain analysis.

3 ND(<) = Not detected at or above laboratory reporting limit indicated in parentheses.

4 ND = Not detected. Laboratory did not provide reporting limits for total carbon chain range results.

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR METALS IN SOIL SAMPLES
CUC Quarry Site
Claremont and Upland, California

Results reported in milligrams per kilogram (mg/kg)

Sample Area	Sample Identification	Date Sampled	EPA Method 6010B									
			Arsenic	Barium	Cadmium	Chromium	Cobalt	Copper	Lead	Nickel	Vanadium	Zinc
Orange Soil	20080710-P-1	7/10/2008	1.06	40.9	ND(<0.5)[1]	2.28	2.28	328	12.0	ND(<2.5)	6.65	87.0
Dry Pond	20080710-P-2	7/10/2008	ND(<0.3)	134	ND(<0.5)	28.7	10.2	29.6	18.3	19.2	59.2	94.8
Stained Soil	20080710-P-4	7/10/2008	ND(<0.3)	42.3	ND(<0.5)	16.1	3.59	9.98	11.3	8.39	24.1	90.9
Mean[2]			***6.1***	***560***	*<1*	***38***	***8***	***21***	***18***	***16***	***66***	***51***
(observed range)			*(<0.2 -* ***97****)*	*(****70 - 5000****)*	*(<1 -* ***10****)*	*(****3 - 1500****)*	*(<3 -* ***50****)*	*(****2 - 300****)*	*(<7 -* ***700****)*	*(<3 -* ***700****)*	***(7 - 500)***	*(<10 -* ***2000****)*

Notes
1 ND(<) = Not detected above laboratory reporting limit indicated in parentheses.
2 Mean and observed range of "B" horizon soils in the western United States (U.S.) (Conner and Schacklette, 1975).

TABLE 4

SUMMARY OF ANALYTICAL RESULT FOR SOLUBLE THRESHOLD LIMIT CONCENTRATION OF COPPER IN SOIL SAMPLES

CUC Quarry Site

Claremont and Upland, California

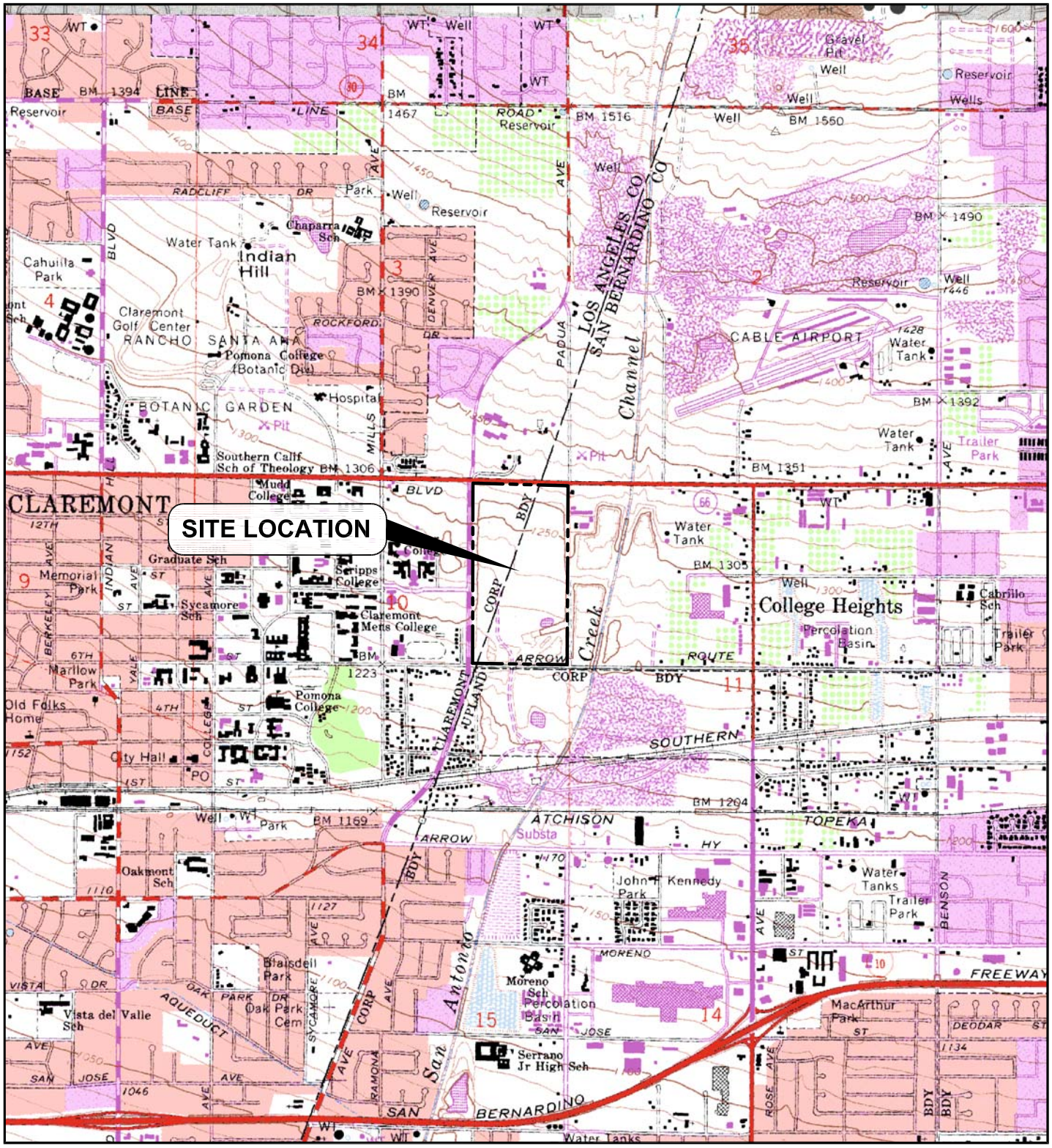
Results reported in milligrams per Liter (mg/L) in STLC[1] Leachate

Sample Area	Sample Identification	STLC - Soluble Copper EPA Method 6010B
Orange Soil	20080710-P-1	26.2

Notes

1 STLC = Soluble Threshold Limit Concentration.

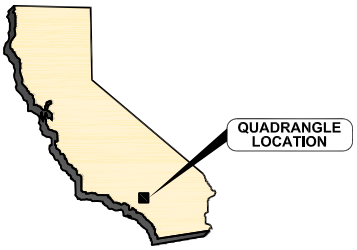
FIGURES



N

0 1000 2000

Approximate scale in feet



Explanation

Site boundary

REFERENCE:

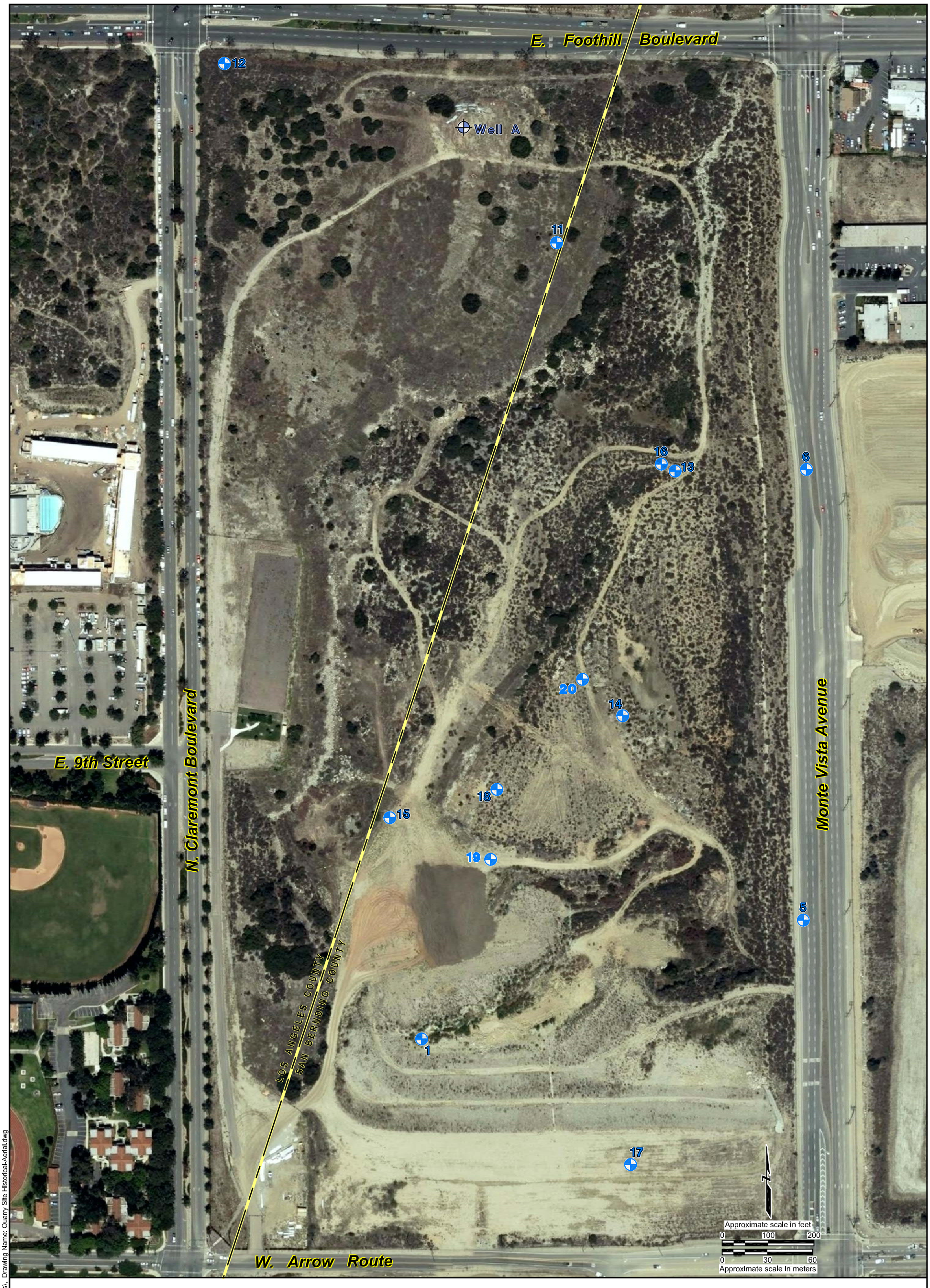
USGS 7.5 Minute Quadrangle Maps ONTARIO, California, 1967; photorevised 1981, & MT. BALDY, California, 1995.

SITE LOCATION MAP

CUC Quarry Site
Claremont and Upland, California

By: jrw	Date: 9/3/08	Project No. 9234.001
AMEC Geomatrix		Figure 1

Plot Date: 09/03/08 - 10:35am, Plotted by: jworker
Drawing Path: W:\Projects\009234 (CUC)\ACAD - Graphics\, Drawing Name: CUC Site Location.dwg



Basemap modified from an aerial photo from Google Earth © 2007, figures by Converse Consultants, "Site Exploration & Geologic Map" dated 4-1-83, and "Site Exploration & Groundwater Map", dated 10-5-83, a figure by RMA Group, "Geologic Map", dated August 2007, and a figure by ATC Associates, "Drawing 2 Site Plan", dated 4/17/01.

Explanation

19 Water level observation well (Converse, 1983)

Well A Groundwater monitoring well used for SWAT monitoring (ATC, 2001)

Note:

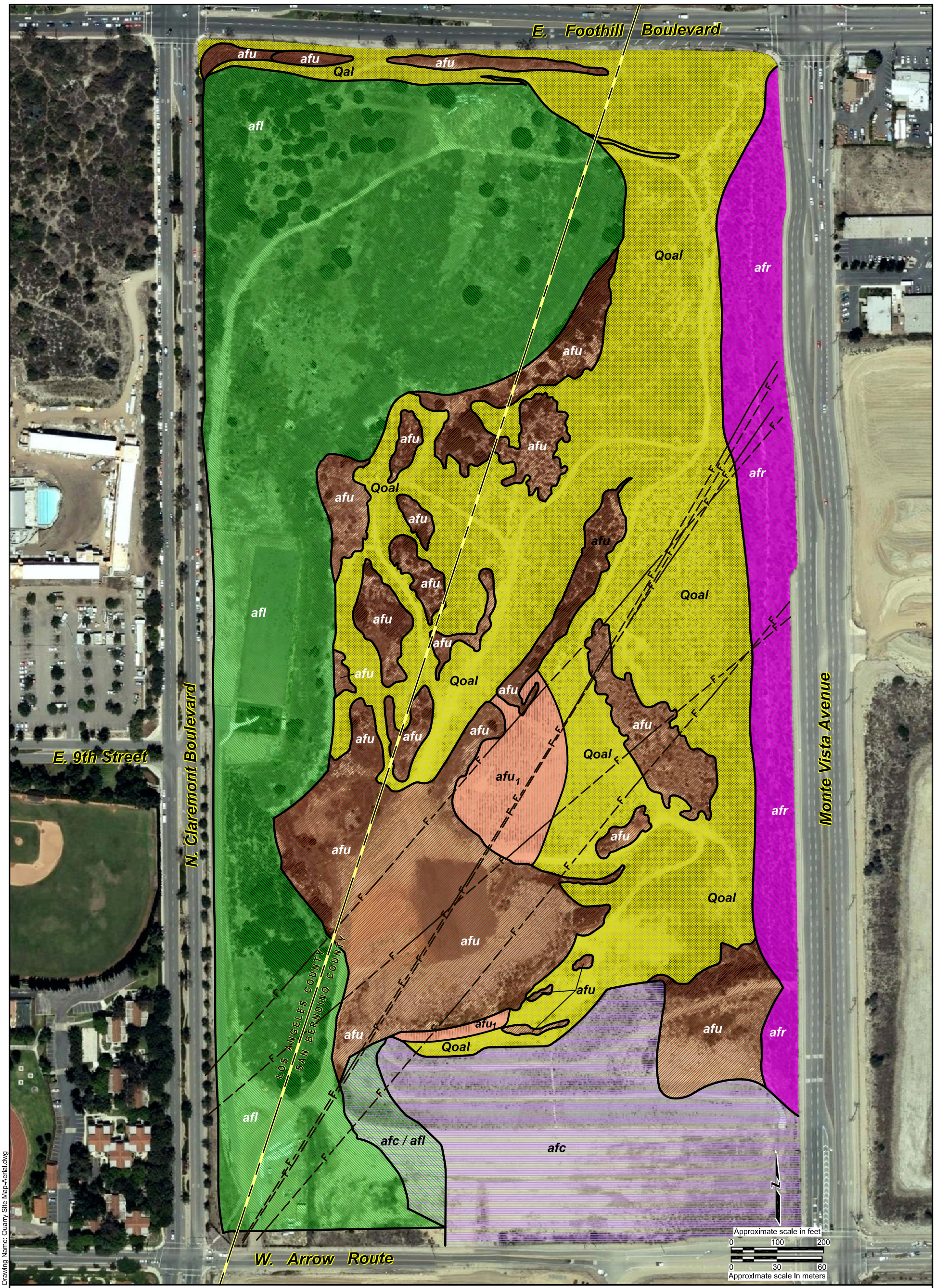
1. All locations are approximate.

SITE MAP WITH HISTORICAL WATER LEVEL OBSERVATION WELLS AND MONITORING WELL

CUC Quarry Site
Claremont and Upland, California

By: jrw	Date: 9/19/08	Project No. 9234.001
AMEC Geomatrix		Figure 2

Plot Date: 09/19/08 - 1:43pm, Plotted by: jworker
Drawing Path: W:\Projects\009234 (CUC)\ACAD - Graphics\, Drawing Name: Quarry Site Historical-Aerial.dwg



Explanation

afu_1	Updated dumped fill (AMEC Geomatrix, 2008)
afu	Dumped fill
afc	Compacted fill
afr	Road fill
afl	Landfill
Qal Qoal	Alluvium / Older alluvium locally covered by thin fill
———	Approximate geologic contact
—— —F—	Postulated fault; see RMA Group Geologic Map for sources

Note:

1. All geologic units, contacts, and features as interpreted by RMA Group (2007) except for afu_1, which is shown as interpreted by AMEC Geomatrix as of July 10, 2008.

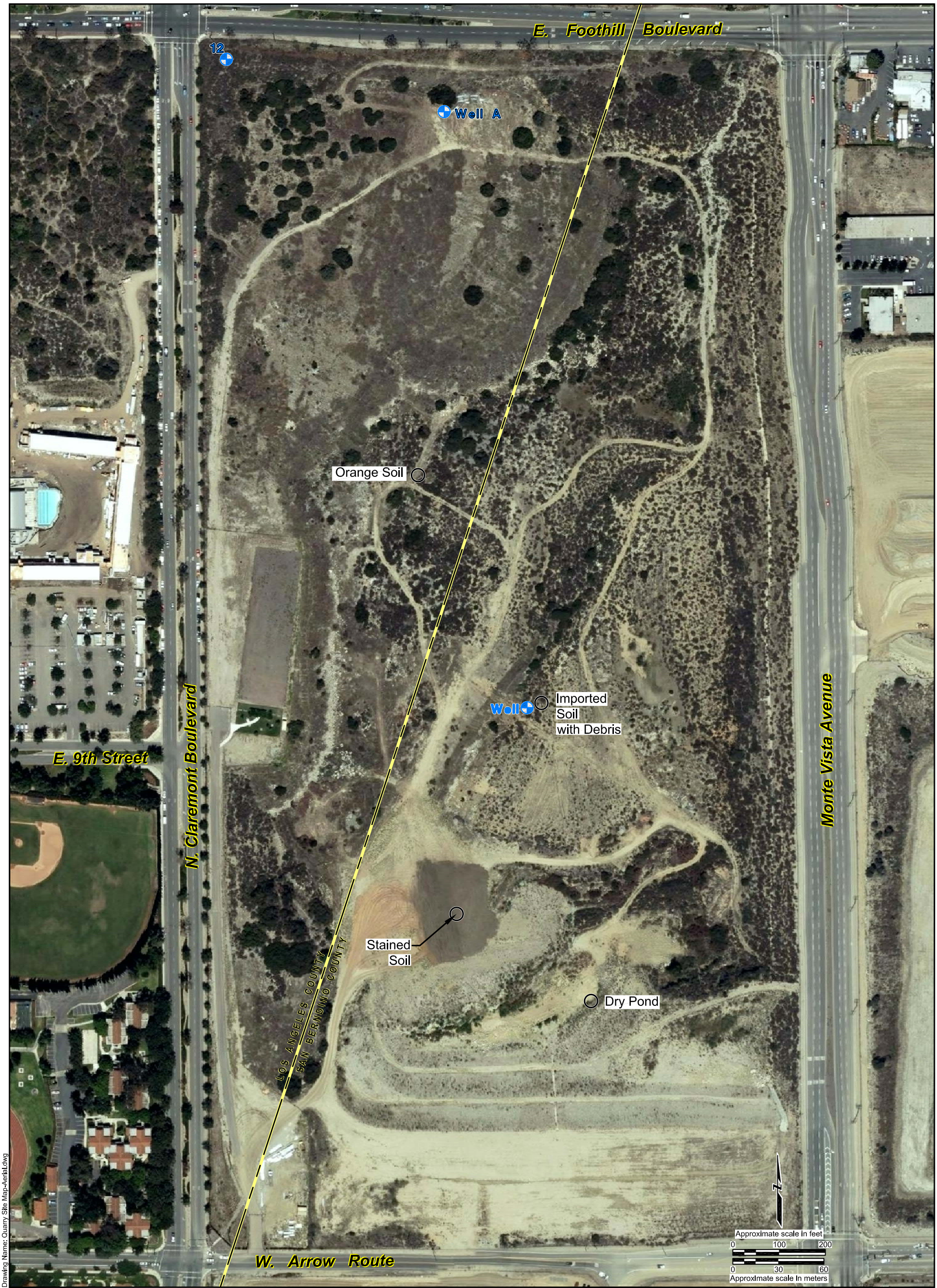
Basemap modified from an aerial photo from Google Earth © 2007, a figure by RMA Group, "Geologic Map", dated August 2007, and observations made in the field by AMEC Geomatrix, July 10, 2008.

SITE MAP WITH GEOLOGY

CUC Quarry Site
Claremont and Upland, California

By: jrw	Date: 9/19/08	Project No. 9234.001
AMEC Geomatrix		Figure 3

Plot Date: 09/19/08 - 1:46pm, Plotted by: jworker
Drawing Path: W:\Projects\009234 (CUC)\ACAD - Graphics\, Drawing Name: Quarry Site Map-Aerial.dwg



Basemap modified from an aerial photo from Google Earth © 2007, a figure by RMA Group, "Geologic Map", and observations made in the field by AMEC Geomatrix, July 10, 2008.

Explanation

Well or potential well (field checked by AMEC Geomatrix, July 2008); designation shown if well is near a historically mapped well location shown on Figure 2

Area of interest with soil sample

Note:

1. All locations are approximate.

SITE MAP SHOWING FINDINGS DURING SITE RECONNAISSANCE ON JULY 10, 2008

CUC Quarry Site
Claremont and Upland, California

By: jrw	Date: 9/19/08	Project No. 9234.001
AMEC Geomatrix		Figure 4

Plot Date: 09/19/08 - 1:55pm, Plotted by: jworker
Drawing Path: W:\Projects\009234 (CUC)\ACAD - Graphics\, Drawing Name: Quarry Site Map-Aerial.dwg

APPENDIX A

Photo Log

Northeast view of Well A

Southwest view of dry pond area

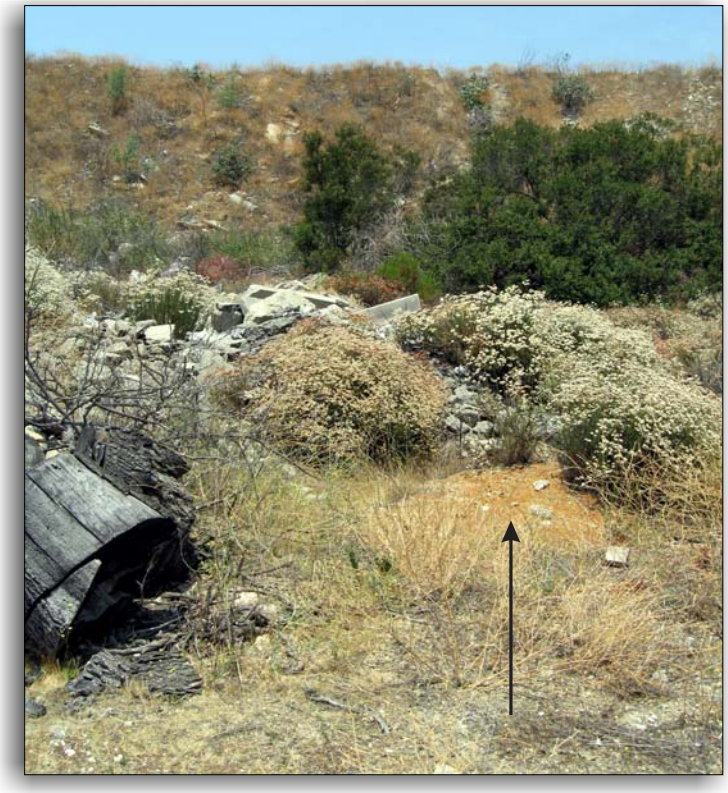
Photographs taken on July 10, 2008 by AMEC Geomatrix

SITE PHOTOGRAPHS

CUC Quarry Site
Claremont and Upland, California

By: jrw	Date: 9/5/08	Project No. 9234.001.0
AMEC Geomatrix		Page 1 of 3

W:\Projects\013892.000.0 (La Sierra Holdings, LLC)\13982.003 (phase1)\Site Inspection Pics\\Photolog.cdr



Northwest view of orange soil (see arrow)

Southwest view of imported soil

SITE PHOTOGRAPHS

CUC Quarry Site
Claremont and Upland, California

By: jrw	Date: 9/5/08	Project No. 9234.001.0
AMEC Geomatrix		Page 2 of 3

Photographs taken on July 10, 2008 by AMEC Geomatrix

W:\Projects\013892.000.0 (La Sierra Holdings, LLC)\13982.003 (phase1)\Site Inspection Pics\\Photolog.cdr

Southeast view of stained soil

Southwest view of imported soil with debris

Photographs taken on July 10, 2008 by AMEC Geomatrix

SITE PHOTOGRAPHS

CUC Quarry Site
Claremont and Upland, California

By: jrw	Date: 9/5/08	Project No. 9234.001.0
AMEC Geomatrix		Page 3 of 3

W:\Projects\013892.000.0 (La Sierra Holdings, LLC)\13982.003 (phase1)\Site Inspection Pics\\Photolog.cdr

APPENDIX B

Laboratory Analytical Results and Chain-of-Custody Forms

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

Date: July 17, 2008

Mr. G. Richard Rees
AMEC Geomatrix, Inc.
250 E. Rincon, Suite 204
Corona, CA 92879
Tel(951)273-7400 Fax(951)273-7420

Project: **CUC Quarry Pit**
Project No.: **9234.001**
Lab I.D.: **080711-133, -134**

Dear Mr. Rees:

The **analytical results** for the soil samples, received by our laboratory on July 11, 2008, are attached. All samples were received chilled, intact and with chain of custody.

Enviro-Chem appreciates the opportunity to provide you and your company this and other services. Please do not hesitate to call us if you have any questions.

Sincerely,

Curtis Desilets
Vice President/Program Manager

Jesse Tu, Ph.D.
Laboratory Manager

Enviro – Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: **AMEC Geomatrix, Inc.**
250 E. Rincon, Suite 204
Corona, CA 92879
Tel(951)273-7400 Fax(951)273-7420

PROJECT: **CUC Quarry Pit** PROJECT No.: **9234.001**
MATRIX: SOIL DATE RECEIVED: 07/11/08
SAMPLING DATE: 07/11/08 DATE ANALYZED: 07/15/08
REPORT TO: Mr. G. RICHARD REES DATE REPORTED: 07/17/08
SAMPLE I.D.: **20080711-P-3** LAB I.D.: 080711-133

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
UNIT: MG/KG = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: _____

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: AMEC Geomatrix, Inc.
250 E. Rincon, Suite 204
Corona, CA 92879
Tel(951)273-7400 Fax(951)273-7420

PROJECT: CUC Quarry Pit
MATRIX: SOIL
SAMPLING DATE: 07/11/08
REPORT TO: Mr. G. RICHARD REES
SAMPLE I.D.: 20080711-P-3

PROJECT No.: 9234.001
DATE RECEIVED: 07/11/08
DATE ANALYZED: 07/15/08
DATE REPORTED: 07/17/08
LAB I.D.: 080711-133

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
UNIT: MG/KG = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
ND = NON-DETECTED OR BELOW THE PQL
DATA REVIEWED AND APPROVED BY:
CAL-DHS CERTIFICATE # 1555

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: **AMEC Geomatrix, Inc.**
250 E. Rincon, Suite 204
Corona, CA 92879
Tel(951)273-7400 Fax(951)273-7420

PROJECT: **CUC Quarry Pit** PROJECT No.: **9234.001**
MATRIX: SOIL DATE RECEIVED: 07/11/08
SAMPLING DATE: 07/11/08 DATE ANALYZED: 07/15/08
REPORT TO: Mr. G. RICHARD REES DATE REPORTED: 07/17/08
SAMPLE I.D.: **20080711-P-2** LAB I.D.: 080711-134

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
UNIT: MG/KG = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: _____

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PROJECT: CUC Quarry Pit
MATRIX: SOIL
SAMPLING DATE: 07/11/08
REPORT TO: Mr. G. RICHARD REES
SAMPLE I.D.: 20080711-P-2

PROJECT No.: 9234.001
DATE RECEIVED: 07/11/08
DATE ANALYZED: 07/15/08
DATE REPORTED: 07/17/08
LAB I.D.: 080711-134

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
UNIT: MG/KG = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
ND = NON-DETECTED OR BELOW THE PQL
DATA REVIEWED AND APPROVED BY:
CAL-DHS CERTIFICATE # 1555

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

METHOD BLANK REPORT

CUSTOMER: **AMEC Geomatrix, Inc.**
250 E. Rincon, Suite 204
Corona, CA 92879
Tel(951)273-7400 Fax(951)273-7420

PROJECT: **CUC Quarry Pit** PROJECT No.: **9234.001**
MATRIX: SOIL DATE RECEIVED: 07/11/08
SAMPLING DATE: 07/11/08 DATE ANALYZED: 07/14/08
REPORT TO: Mr. G. RICHARD REES DATE REPORTED: 07/17/08

METHOD BLANK FOR LAB I.D.: 080711-133, -134

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
UNIT: MG/KG = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: _____

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

METHOD BLANK REPORT

CUSTOMER: **AMEC Geomatrix, Inc.**
250 E. Rincon, Suite 204
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PROJECT: **CUC Quarry Pit** PROJECT No.: **9234.001**
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METHOD BLANK FOR LAB I.D.: 080711-133, -134

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
UNIT: MG/KG = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
ND = NON-DETECTED OR BELOW THE PQL
DATA REVIEWED AND APPROVED BY:
CAL-DHS CERTIFICATE # 1555

Enviro-Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909)590-5905 Fax (909)590-5907

8260B QA/QC Report

Date Analyzed: 7/14~15/2008
Machine: C

Matrix: Solid/Soil/Sludge
Unit: mg/Kg (PPM)

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)
Spiked Sample Lab I.D.: 080714-LCS5/6

Analyte	S.R.	spk conc	MS	%RC	MSD	%RC	%RPD	ACP %RC	ACP RPD
Benzene	0	0.050	0.042	83%	0.042	85%	2%	75-125	0-20
Chlorobenzene	0	0.050	0.057	114%	0.058	115%	2%	75-125	0-20
1,1-Dichloroethene	0	0.050	0.044	88%	0.041	82%	6%	75-125	0-20
Toluene	0	0.050	0.047	95%	0.047	93%	1%	75-125	0-20
Trichloroethene (TCE)	0	0.050	0.059	118%	0.059	118%	0%	75-125	0-20

Lab Control Spike (LCS):

Analyte	spk conc	LCS	%RC	ACP %RC
Benzene	0.050	0.043	86%	75-125
Chlorobenzene	0.050	0.056	112%	75-125
Chloroform	0.050	0.047	94%	75-125
1,1-Dichlorothene	0.050	0.043	86%	75-125
Ethylbenzene	0.050	0.055	111%	75-125
o-Xylene	0.050	0.057	115%	75-125
m,p-Xylene	0.100	0.116	116%	75-125
Toluene	0.050	0.049	98%	75-125
1,1,1-Trichloroethane	0.050	0.056	112%	75-125
Trichloroethene (TCE)	0.050	0.058	117%	75-125

Surrogate Recovery	spk conc	ACP %RC	MB %RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.				080711-10	080711-40	080711-43	080711-44	080711-48	080711-49
Dibromofluoromethane	50.0	70-130	90%	91%	84%	86%	84%	91%	117%
Toluene-d8	50.0	70-130	84%	98%	94%	94%	89%	98%	120%
4-Bromofluorobenzene	50.0	70-130	95%	88%	90%	88%	90%	96%	89%

Surrogate Recovery	spk conc	ACP %RC	%RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			080711-119	080711-123	080711-125	080711-133	080711-134	080711-135	080711-138
Dibromofluoromethane	50.0	70-130	112%	86%	70%	107%	110%	80%	84%
Toluene-d8	50.0	70-130	94%	79%	83%	91%	95%	89%	94%
4-Bromofluorobenzene	50.0	70-130	84%	86%	101%	81%	80%	92%	91%

Surrogate Recovery	spk conc	ACP %RC	%RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			080711-140	080711-144	080711-145	080711-148	080711-151	080711-153	080711-154
Dibromofluoromethane	50.0	70-130	106%	95%	95%	85%	113%	84%	85%
Toluene-d8	50.0	70-130	104%	90%	117%	111%	90%	118%	80%
4-Bromofluorobenzene	50.0	70-130	79%	89%	87%	80%	90%	87%	90%

** = Surrogate fail due to matrix interference; LCS, MS, MSD are in control therefore the analysis is in control.*
S.R. = Sample Results
spk conc = Spike Concentration
MS = Matrix Spike
%RC = Percent Recovery
ACP %RC = Accepted Percent Recovery
MSD = Matrix Spike Duplicate

Analyzed/Reviewed By: _____

Final Reviewer: _____

CHAIN-OF-CUSTODY RECORD

COR 11000

PROJECT NAME: CUC Quarry Pit			DATE: 11 July 2008 — PAGE 1 OF 1
PROJECT NUMBER: 9234.001	LABORATORY NAME: Enviro-Chem	CLIENT INFORMATION:	REPORTING REQUIREMENTS:
RESULTS TO: Rick Rees	LABORATORY ADDRESS:		
TURNAROUND TIME: Standard			
SAMPLE SHIPMENT METHOD: Client Drop Off	LABORATORY CONTACT: Curtis		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER: 909-		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE):

ANALYSES

DATE	TIME	SAMPLE NUMBER	EPA 8260B VOCs														CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
07-11-08	1530	20080711-P-3	X														40-mL VOA	S		*	X		4	080711-133
07-11-08	1536	20080711-P-2	X														40-mL VOA	S		*	X		4	-134

07-11-08

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE:	07-11-08	1625	SIGNATURE: Jessica Lin	7/11/08	1625
PRINTED NAME: Lucas Budny			PRINTED NAME: Jessica Lin		
COMPANY: Geomatrix			COMPANY: Enviro-Chem, Inc		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS: 8

SAMPLING COMMENTS:

* 1 VOA MeOH, 2 VOA $NaHSO_4$, 1 VOA unpreserved

250 East Rincon Street, Suite 204
Corona, California 92879-1363
Tel 951.273.7400 Fax 951.273.7420

Geomatrix

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

Date: July 21, 2008

Mr. G. Richard Rees
AMEC Geomatrix, Inc.
250 E. Rincon, Suite 204
Corona, CA 92879
Tel(951)273-7400 Fax(951)273-7420

Project: **CUC Quarry Site**
Project No.: **9234.001**
Lab I.D.: **080711-115 through -119**

Dear Mr. Rees:

The **analytical results** for the soil samples, received by our laboratory on July 11, 2008, are attached. All samples were received chilled, intact and with chain of custody.

Enviro-Chem appreciates the opportunity to provide you and your company this and other services. Please do not hesitate to call us if you have any questions.

Sincerely,

Curtis Desilets
Vice President/Program Manager

Jesse Tu, Ph.D.
Laboratory Manager

Enviro – Chem, Inc.
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LABORATORY REPORT

CUSTOMER: **AMEC Geomatrix, Inc.**
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PROJECT: **CUC Quarry Site**

PROJECT No.: **9234.001**
DATE RECEIVED: 07/11/08
DATE EXTRACTED: 07/17/08
DATE ANALYZED: 07/17/08
DATE REPORTED: 07/21/08

MATRIX: SOIL
SAMPLING DATE: 07/10/08
REPORT TO: Mr. G. RICHARD REES

TOTAL PETROLEUM HYDROCARBONS(TPH) - CARBON CHAIN ANALYSIS
METHOD: EPA 8015B*
UNIT: MG/KG = MILLIGRAM PER KILOGRAM = PPM

SAMPLE I.D.	LAB I.D.	C4-C10	C11-C22	C23-C35	DF
20080710-P-2	080711-116	ND	ND	83.2	1
20080710-P-3	080711-117	ND	ND	ND	1
20080710-P-4	080711-118	ND	ND	51800	200
METHOD BLANK		ND	ND	ND	1
	PQL	**10**	**10**	**50**	

COMMENTS
C4-C10 = GASOLINE RANGE
C11-C22 = DIESEL RANGE
C23-C35 = MOTOR OIL RANGE
DF = DILUTION FACTOR
PQL = PRACTICAL QUANTITATION LIMIT
ACTUAL DETECTION LIMIT = DF X PQL
ND = NON-DETECTED OR BELOW THE ACTUAL DETECTION LIMIT
* = SILICA GEL TREATED AS PER CLIENT INSTRUCTION

Data Reviewed and Approved by: _____
CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro Chem, Inc

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8015B Soil/Solid/Sludge QC

Date Analyzed: 7/17/2008 **Units:** mg/Kg (PPM)

Matrix: **Solid/Solid/Sludge**

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

Spiked Sample Lab I.D.: **080714-77 MS/MSD**

Analyte	SR	spk conc	MS	%MS	MSD	%MSD	%RPD	ACP %MS	ACP RPD
C11~C22 Range	0	2500	2366	95%	2393	96%	1%	75-125	0-20%

LCS STD RECOVERY:

Analyte	spk conc	LCS	% REC	ACP
C11~C22 Range	200	197	99%	75-125

Analyzed and Reviewed By: _____

Final Reviewer: _____

Enviro – Chem, Inc.
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LABORATORY REPORT

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PROJECT: **CUC Quarry Site** PROJECT No.: **9234.001**
MATRIX: SOIL DATE RECEIVED: 07/11/08
SAMPLING DATE: 07/10/08 DATE ANALYZED: 07/14/08
REPORT TO: Mr. G. RICHARD REES DATE REPORTED: 07/21/08

SAMPLE I.D.: **20080710-P-1** LAB I.D.: 080711-115

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
UNIT: MG/KG = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD
Antimony(Sb)	ND	1.0	1	500	15	6010B
Arsenic(As)	1.06	0.3	1	500	5.0	6010B
Barium(Ba)	40.9	5.0	1	10,000	100	6010B
Beryllium(Be)	ND	0.5	1	75	0.75	6010B
Cadmium(Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total(Cr)	2.28	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	1	500	5.0	7196A
Cobalt(Co)	2.28	1.0	1	8,000	80	6010B
Copper(Cu)	328 *	1.0	1	2,500	25	6010B
Lead(Pb)	12.0	0.5	1	1,000	5.0	6010B
Mercury(Hg)	ND	0.1	1	20	0.2	7471A
Molybdenum(Mo)	ND	5.0	1	3,500	350	6010B
Nickel(Ni)	ND	2.5	1	2,000	20	6010B
Selenium(Se)	ND	1.0	1	100	1.0	6010B
Silver(Ag)	ND	1.0	1	500	5.0	6010B
Thallium(Tl)	ND	1.0	1	700	7.0	6010B
Vanadium(V)	6.65	5.0	1	2,400	24	6010B
Zinc(Zn)	87.0	0.5	1	5,000	250	6010B

COMMENTS
DF = Dilution Factor
PQL = Practical Quantitation Limit
Actual Detection Limit = PQL X DF
ND = Below the Actual Detection Limit or non-detected
TTLC = Total Threshold Limit Concentration
STLC = Soluble Threshold Limit Concentration
@ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
* = STLC analysis for the metal is recommended (if marked)
** = Additional Analysis required, please call to discuss (if marked)
*** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
-- = Not analyzed/not requested

Data Reviewed and Approved by: _____
CAL-DHS ELAP CERTIFICATE No.: 1555

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LABORATORY REPORT

CUSTOMER: **AMEC Geomatrix, Inc.**
250 E. Rincon, Suite 204
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Tel(951)273-7400 Fax(951)273-7420

PROJECT: **CUC Quarry Site** PROJECT No.: **9234.001**
MATRIX: SOIL DATE RECEIVED: 07/11/08
SAMPLING DATE: 07/10/08 DATE ANALYZED: 07/14/08
REPORT TO: Mr. G. RICHARD REES DATE REPORTED: 07/21/08

SAMPLE I.D.: **20080710-P-2** LAB I.D.: 080711-116

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
UNIT: MG/KG = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD
Antimony(Sb)	ND	1.0	1	500	15	6010B
Arsenic(As)	ND	0.3	1	500	5.0	6010B
Barium(Ba)	134	5.0	1	10,000	100	6010B
Beryllium(Be)	ND	0.5	1	75	0.75	6010B
Cadmium(Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total(Cr)	28.7	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	1	500	5.0	7196A
Cobalt(Co)	10.2	1.0	1	8,000	80	6010B
Copper(Cu)	29.6	1.0	1	2,500	25	6010B
Lead(Pb)	18.3	0.5	1	1,000	5.0	6010B
Mercury(Hg)	ND	0.1	1	20	0.2	7471A
Molybdenum(Mo)	ND	5.0	1	3,500	350	6010B
Nickel(Ni)	19.2	2.5	1	2,000	20	6010B
Selenium(Se)	ND	1.0	1	100	1.0	6010B
Silver(Ag)	ND	1.0	1	500	5.0	6010B
Thallium(Tl)	ND	1.0	1	700	7.0	6010B
Vanadium(V)	59.2	5.0	1	2,400	24	6010B
Zinc(Zn)	94.8	0.5	1	5,000	250	6010B

COMMENTS
DF = Dilution Factor
PQL = Practical Quantitation Limit
Actual Detection Limit = PQL X DF
ND = Below the Actual Detection Limit or non-detected
TTLC = Total Threshold Limit Concentration
STLC = Soluble Threshold Limit Concentration
@ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
* = STLC analysis for the metal is recommended (if marked)
** = Additional Analysis required, please call to discuss (if marked)
*** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
-- = Not analyzed/not requested

Data Reviewed and Approved by: _____
CAL-DHS ELAP CERTIFICATE No.: 1555

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LABORATORY REPORT

CUSTOMER: **AMEC Geomatrix, Inc.**
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Tel(951)273-7400 Fax(951)273-7420

PROJECT: **CUC Quarry Site** PROJECT No.: **9234.001**
MATRIX: SOIL DATE RECEIVED: 07/11/08
SAMPLING DATE: 07/10/08 DATE ANALYZED: 07/14/08
REPORT TO: Mr. G. RICHARD REES DATE REPORTED: 07/21/08

SAMPLE I.D.: **20080710-P-4** LAB I.D.: 080711-118

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
UNIT: MG/KG = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD
Antimony(Sb)	ND	1.0	1	500	15	6010B
Arsenic(As)	ND	0.3	1	500	5.0	6010B
Barium(Ba)	42.3	5.0	1	10,000	100	6010B
Beryllium(Be)	ND	0.5	1	75	0.75	6010B
Cadmium(Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total(Cr)	16.1	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	1	500	5.0	7196A
Cobalt(Co)	3.59	1.0	1	8,000	80	6010B
Copper(Cu)	9.98	1.0	1	2,500	25	6010B
Lead(Pb)	11.3	0.5	1	1,000	5.0	6010B
Mercury(Hg)	ND	0.1	1	20	0.2	7471A
Molybdenum(Mo)	ND	5.0	1	3,500	350	6010B
Nickel(Ni)	8.39	2.5	1	2,000	20	6010B
Selenium(Se)	ND	1.0	1	100	1.0	6010B
Silver(Ag)	ND	1.0	1	500	5.0	6010B
Thallium(Tl)	ND	1.0	1	700	7.0	6010B
Vanadium(V)	24.1	5.0	1	2,400	24	6010B
Zinc(Zn)	90.9	0.5	1	5,000	250	6010B

COMMENTS
DF = Dilution Factor
PQL = Practical Quantitation Limit
Actual Detection Limit = PQL X DF
ND = Below the Actual Detection Limit or non-detected
TTLC = Total Threshold Limit Concentration
STLC = Soluble Threshold Limit Concentration
@ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
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*** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
-- = Not analyzed/not requested

Data Reviewed and Approved by: _____
CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

METHOD BLANK REPORT

CUSTOMER: **AMEC Geomatrix, Inc.**
250 E. Rincon, Suite 204
Corona, CA 92879
Tel(951)273-7400 Fax(951)273-7420

PROJECT: **CUC Quarry Site** PROJECT No.: **9234.001**
MATRIX: SOIL DATE RECEIVED: 07/11/08
SAMPLING DATE: 07/10/08 DATE ANALYZED: 07/14/08
REPORT TO: Mr. G. RICHARD REES DATE REPORTED: 07/21/08

METHOD BLANK FOR LAB I.D.: 080711-115, -116, -118

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
UNIT: MG/KG = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD
Antimony(Sb)	ND	1.0	1	500	15	6010B
Arsenic(As)	ND	0.3	1	500	5.0	6010B
Barium(Ba)	ND	5.0	1	10,000	100	6010B
Beryllium(Be)	ND	0.5	1	75	0.75	6010B
Cadmium(Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total(Cr)	ND	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	1	500	5.0	7196A
Cobalt(Co)	ND	1.0	1	8,000	80	6010B
Copper(Cu)	ND	1.0	1	2,500	25	6010B
Lead(Pb)	ND	0.5	1	1,000	5.0	6010B
Mercury(Hg)	ND	0.1	1	20	0.2	7471A
Molybdenum(Mo)	ND	5.0	1	3,500	350	6010B
Nickel(Ni)	ND	2.5	1	2,000	20	6010B
Selenium(Se)	ND	1.0	1	100	1.0	6010B
Silver(Ag)	ND	1.0	1	500	5.0	6010B
Thallium(Tl)	ND	1.0	1	700	7.0	6010B
Vanadium(V)	ND	5.0	1	2,400	24	6010B
Zinc(Zn)	ND	0.5	1	5,000	250	6010B

COMMENTS
DF = Dilution Factor
PQL = Practical Quantitation Limit
Actual Detection Limit = PQL X DF
ND = Below the Actual Detection Limit or non-detected
TTLC = Total Threshold Limit Concentration
STLC = Soluble Threshold Limit Concentration
@ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
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** = Additional Analysis required, please call to discuss (if marked)
*** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
-- = Not analyzed/not requested

Data Reviewed and Approved by: _____
CAL-DHS ELAP CERTIFICATE No.: 1555

QA/QC for Metals Analysis --TTLC--SOLID/SOIL MATRIX

Matrix Spike/ Matrix Spike Duplicate/ LCS :

ANALYSIS DATE: 7/14/2008

Unit : mg/kg(ppm)

Analysis	Spk.Sample ID	LCS CONC.	LCS %Rec.	LCS STATUS	Sample Result	Spike Conc.	MS	% Rec MS	MSD	% Rec MSD	% RPD
Copper (Cu)	080711-69	1.00	100	PASS	1.29	50.0	50.6	99%	50.5	98%	0%
Lead (Pb)	080711-69	1.00	102	PASS	0	50.0	47.1	94%	46.6	93%	1%
Zinc (Zn)	080711-69	1.00	102	PASS	23.6	50.0	73.8	100%	73.8	100%	0%

ANALYSIS DATE. : 7/14/2008

Analysis	Spk.Sample ID	LCS CONC.	LCS %Rec.	LCS STATUS	Sample Result	Spike Conc.	MS	% Rec MS	MSD	% Rec MSD	% RPD
Mercury (Hg)	080711-118	0.125	94.7	PASS	0	0.125	0.105	84%	0.109	87%	4%

MS/MSD Status:

Analysis	%MS	%MSD	%LCS	%RPD
Copper (Cu)	PASS	PASS	PASS	PASS
Lead (Pb)	PASS	PASS	PASS	PASS
Zinc (Zn)	PASS	PASS	PASS	PASS
Mercury (Hg)	PASS	PASS	PASS	PASS
Accepted Range	75 ~ 125	75 ~ 125	85 ~ 115	0 ~ 20

ANALYST: _____

FINAL REVIEWER: _____

Enviro – Chem, Inc.
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LABORATORY REPORT

CUSTOMER: **AMEC Geomatrix, Inc.**
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Corona, CA 92879
Tel(951)273-7400 Fax(951)273-7420

PROJECT: **CUC Quarry Site**
PROJECT No.: **9234.001**
DATE RECEIVED: 07/11/08
MATRIX: SOIL
DATE EXTRACTED: 07/14/08
SAMPLING DATE: 07/10/08
DATE ANALYZED: 07/15/08
REPORT TO: Mr. G. RICHARD REES
DATE REPORTED: 07/21/08

SAMPLE I.D.: **20080710-P-1**
LAB I.D.: 080711-115

Organochlorine Pesticides Analysis
Method: EPA 8081A
Unit: Mg/Kg = Milligram Per Kilogram = PPM

PARAMETER	SAMPLE RESULT	PQL	DF
Aldrin	ND	0.001	1
alpha-BHC	ND	0.001	1
beta-BHC	ND	0.001	1
gamma-BHC (Lindane)	ND	0.001	1
delta-BHC	ND	0.001	1
alpha-Chlordane	ND	0.001	1
gamma-Chlordane	ND	0.001	1
4,4'-DDD	ND	0.001	1
4,4'-DDE	ND	0.001	1
4,4'-DDT	ND	0.001	1
Dieldrin	ND	0.001	1
Endosulfan I	ND	0.001	1
Endosulfan II	ND	0.001	1
Endosulfan Sulfate	ND	0.001	1
Endrin	ND	0.001	1
Endrin Aldehyde	ND	0.001	1
Endrin Ketone	ND	0.001	1
Heptachlor Epoxide	ND	0.001	1
Heptachlor	ND	0.001	1
Methoxyclor	ND	0.001	1
Toxaphene	ND	0.020	1

COMMENTS:
DF = DILUTION FACTOR
PQL = PRACTICAL QUANTITATION LIMIT
ACTUAL DETECTION LIMIT = PQL X DF
ND = NON-DETECTED OR BELOW THE ACTUAL DETECTION LIMIT

DATA REVIEWED AND APPROVED BY: _____
CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro – Chem, Inc.
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LABORATORY REPORT

CUSTOMER: **AMEC Geomatrix, Inc.**
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Corona, CA 92879
Tel(951)273-7400 Fax(951)273-7420

PROJECT: **CUC Quarry Site**
PROJECT No.: **9234.001**
DATE RECEIVED: 07/11/08
MATRIX: SOIL
DATE EXTRACTED: 07/14/08
SAMPLING DATE: 07/10/08
DATE ANALYZED: 07/15/08
REPORT TO: Mr. G. RICHARD REES
DATE REPORTED: 07/21/08

SAMPLE I.D.: **20080710-P-4**
LAB I.D.: 080711-118

Organochlorine Pesticides Analysis
Method: EPA 8081A
Unit: Mg/Kg = Milligram Per Kilogram = PPM

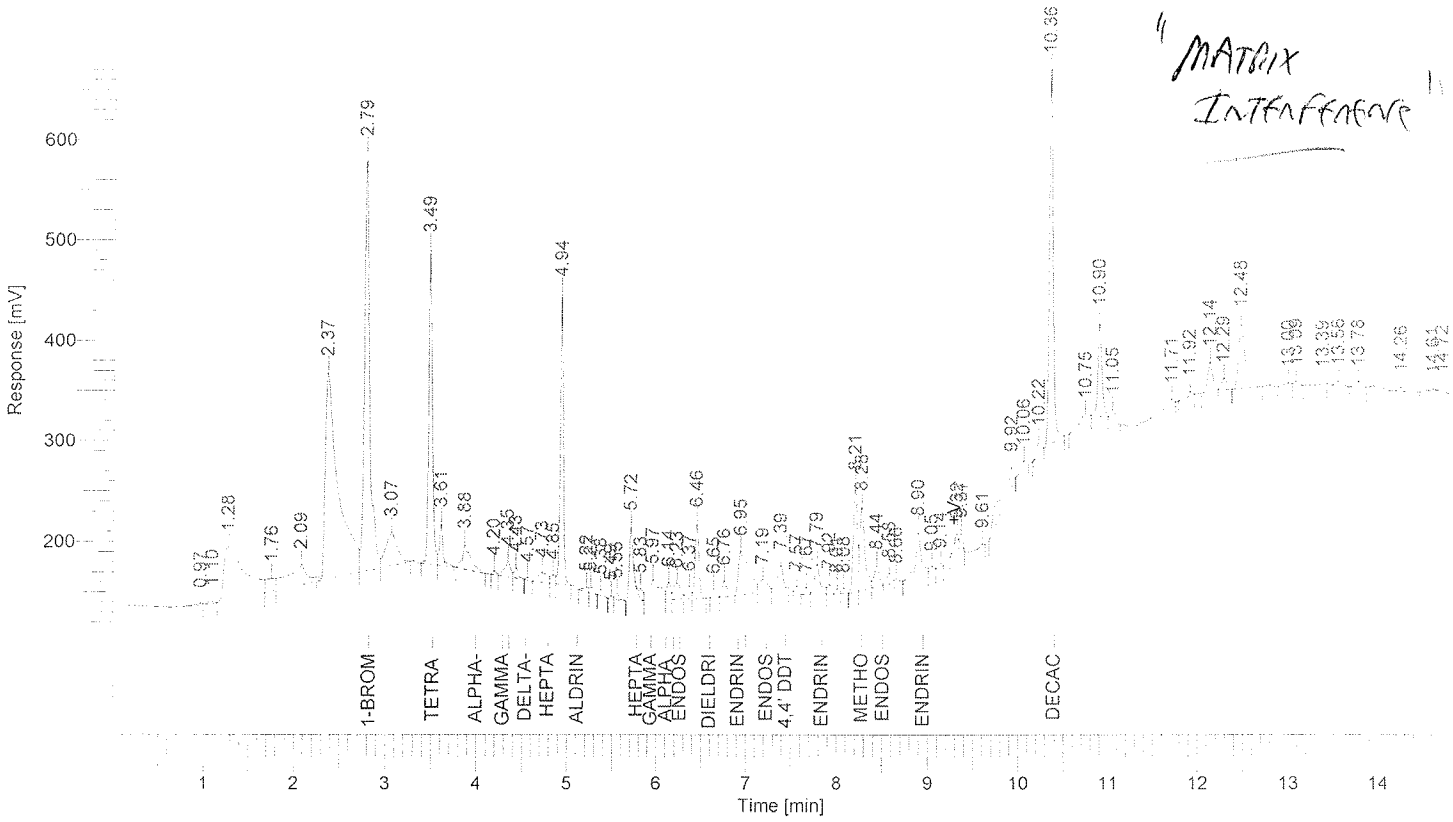
PARAMETER	SAMPLE RESULT	PQL	DF
Aldrin	ND	0.001	100*
alpha-BHC	ND	0.001	100*
beta-BHC	ND	0.001	100*
gamma-BHC (Lindane)	ND	0.001	100*
delta-BHC	ND	0.001	100*
alpha-Chlordane	ND	0.001	100*
gama-Chlordane	ND	0.001	100*
4,4'-DDD	ND	0.001	100*
4,4'-DDE	ND	0.001	100*
4,4'-DDT	ND	0.001	100*
Dieldrin	ND	0.001	100*
Endosulfan I	ND	0.001	100*
Endosulfan II	ND	0.001	100*
Endosulfan Sulfate	ND	0.001	100*
Endrin	ND	0.001	100*
Endrin Aldehyde	ND	0.001	100*
Endrin Ketone	ND	0.001	100*
Heptachlor Epoxide	ND	0.001	100*
Heptachlor	ND	0.001	100*
Methoxyclor	ND	0.001	100*
Toxaphene	ND	0.020	100*

COMMENTS:
DF = DILUTION FACTOR
PQL = PRACTICAL QUANTITATION LIMIT
ACTUAL DETECTION LIMIT = PQL X DF
* = ACTUAL DETECTION LIMIT RAISED DUE TO MATRIX INTERFERENCE
ND = NON-DETECTED OR BELOW THE ACTUAL DETECTION LIMIT

DATA REVIEWED AND APPROVED BY: _____
CAL-DHS ELAP CERTIFICATE No.: 1555

Software Version	: 6.3.1.0504		Date	: 7/17/2008 9:14:28 AM
Sample Name	: 080711-118	20/200 RE	Data Acquisition Time	: 7/16/2008 7:57:22 AM
Instrument Name	: GC-J		Channel	: A
Rack/Vial	: 0/20		Operator	: manager
Sample Amount	: 1.000000		Dilution Factor	: 1.000000
Cycle	: 50			

Result File : D:\GC DATA\GC-J\J080715\A050.rst
Sequence File : D:\GC DATA\GC-J\J080715\J080715.seq



Results

Component Name	Time [min]	Area [uV*sec]	Height [uV]	Adjusted Amount
1-Bromo-2-Nitrobenze	2.79	1674505	408345	----------
Tetra chloro-meta-xy	3.49	863719	302671	77.7923
Alpha-BHC	3.88	157411	24012	0.0062
Beta-BHC	4.35	74900	15314	0.0044
Delta-BHC	4.57	6500	2359	0.0031
Heptachlor	4.85	31501	8347	0.0035
Aldrin	5.22	18077	4511	0.0025
Gamma Chlordane	5.97	182307	20076	0.0049
Alpha Chlordane	6.14	53394	16822	0.0015
Endosulfan I	6.23	89915	15774	0.0025
Dieldrin	6.65	25170	8569	0.0030
Endrin	6.95	350158	43400	0.0122
Endosulfan II	7.19	73804	11253	0.0024
4,4' DDT	7.39	95239	22940	0.0039
Endrin Aldhyde	7.79	127298	29076	0.0047
Methoxychlor	8.28	327303	82059	0.0221
Endosulfan Sulfate	8.58	38762	10146	0.0048
Endrin Ketone	8.90	185534	42929	0.0079
Decachlorobiphenyl	10.36	1088828	366218	67.2680
		5464324	1434823	145.1499

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

METHOD BLANK REPORT

CUSTOMER: **AMEC Geomatrix, Inc.**
250 E. Rincon, Suite 204
Corona, CA 92879
Tel(951)273-7400 Fax(951)273-7420

PROJECT: **CUC Quarry Site**
PROJECT No.: **9234.001**
DATE RECEIVED: 07/11/08
MATRIX: SOIL
DATE EXTRACTED: 07/14/08
SAMPLING DATE: 07/10/08
DATE ANALYZED: 07/14/08
REPORT TO: Mr. G. RICHARD REES
DATE REPORTED: 07/21/08

METHOD BLANK FOR LAB I.D.: 080711-115, -118

Organochlorine Pesticides Analysis
Method: EPA 8081A
Unit: Mg/Kg = Milligram Per Kilogram = PPM

PARAMETER	SAMPLE RESULT	PQL	DF
Aldrin	ND	0.001	1
alpha-BHC	ND	0.001	1
beta-BHC	ND	0.001	1
gamma-BHC (Lindane)	ND	0.001	1
delta-BHC	ND	0.001	1
alpha-Chlordane	ND	0.001	1
gamma-Chlordane	ND	0.001	1
4,4'-DDD	ND	0.001	1
4,4'-DDE	ND	0.001	1
4,4'-DDT	ND	0.001	1
Dieldrin	ND	0.001	1
Endosulfan I	ND	0.001	1
Endosulfan II	ND	0.001	1
Endosulfan Sulfate	ND	0.001	1
Endrin	ND	0.001	1
Endrin Aldehyde	ND	0.001	1
Endrin Ketone	ND	0.001	1
Heptachlor Epoxide	ND	0.001	1
Heptachlor	ND	0.001	1
Methoxyclor	ND	0.001	1
Toxaphene	ND	0.020	1

COMMENTS:
DF = DILUTION FACTOR
PQL = PRACTICAL QUANTITATION LIMIT
ACTUAL DETECTION LIMIT = PQL X DF
ND = NON-DETECTED OR BELOW THE ACTUAL DETECTION LIMIT

DATA REVIEWED AND APPROVED BY: _____
CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro-Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909)590-5905 Fax (909)590-5907

EPA 8081 QA/QC Report

Matrix: **Soil/Solid** Date Analyzed: 7/14-15/2008

Unit: mg/Kg

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

Spiked Sample Lab I.D.: 080711-115 MS/MSD

Analyte	S.R.	spk conc	MS	%REC	MSD	%REC	%RPD	ACP %RPD	ACP %REC
Gamma-BHC	0.000	0.0500	0.0441	**88%**	0.0430	**86%**	**3%**	**0-20%**	**70-130**
Aldrin	0.000	0.0500	0.0411	**82%**	0.0399	**80%**	**3%**	**0-20%**	**70-130**
4,4-DDE	0.000	0.0500	0.0406	**81%**	0.0390	**78%**	**4%**	**0-20%**	**70-130**

Lab Control Spike (LCS) Recovery:

Analyte	spk conc	LCS	% REC	ACP %REC
Gamma-BHC	0.00500	0.00450	**90%**	**75-125**
Aldrin	0.00500	0.00419	**84%**	**75-125**
4,4-DDE	0.00500	0.00380	**76%**	**75-125**
Dieldrin	0.00500	0.00458	**92%**	**75-125**

Surrogate Recovery	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.		MB	080711-51	080711-52	080711-53	080711-54	080711-67	080711-68
Tetra-chloro-meta-xylene	50-150	91%	86%	98%	98%	90%	90%	90%
Decachlorobiphenyl	50-150	82%	86%	82%	84%	84%	85%	86%

Surrogate Recovery	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.	080711-69	080711-70	080711-83	080711-84	080711-85	080711-86	080711-105	080711-106
Tetra-chloro-meta-xylene	90%	92%	92%	91%	93%	88%	92%	89%
Decachlorobiphenyl	86%	87%	88%	89%	90%	89%	79%	83%

Surrogate Recovery	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.	080711-115	080711-118				
Tetra-chloro-meta-xylene	91%	78%				
Decachlorobiphenyl	89%	67%				

S.R. = Sample Result

spk conc = Spike Concentration

%REC = Percent Recovery

ACP %RPD = Acceptable Percent RPD Range

ACP %REC = Acceptable Percent Recovery Range

** = Surrogate fail due to matrix interference (If Marked)*

Note: ***LCS, MS, MSD are in control therefore results are in control.***

Analyzed and Reviewed By: AW

Final Reviewer: _____

Enviro – Chem, Inc.
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LABORATORY REPORT

CUSTOMER: **AMEC Geomatrix, Inc.**
250 E. Rincon, Suite 204
Corona, CA 92879
Tel(951)273-7400 Fax(951)273-7420

PROJECT: **CUC Quarry Site**
PROJECT No.: **9234.001**
DATE RECEIVED: 07/11/08
MATRIX: SOIL
DATE EXTRACTED: 07/15/08
SAMPLING DATE: 07/10/08
DATE ANALYZED: 07/16/08
REPORT TO: Mr. G. RICHARD REES
DATE REPORTED: 07/21/08

SAMPLE I.D.: **20080710-P-1**
LAB I.D.: 080711-115

SEMI-VOLATILE ORGANICS, EPA 8270C, PAGE 1 OF 2
UNIT: MG/KG = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
Acenaphthene	ND	0.50
Acenaphthylene	ND	0.50
Anthracene	ND	0.50
Benzo(a)anthracene	ND	0.50
Benzo(b)fluoranthene	ND	0.50
Benzo(a)pyrene	ND	0.50
Benzo(g,h,i)perylene	ND	0.50
Benzo(k)fluoranthene	ND	0.50
Benzoic Acid	ND	0.50
Benzyl Alcohol	ND	0.50
Bis(2-Chloroethoxy)methane	ND	0.50
Bis(2-Chloroethyl)ether	ND	0.50
Bis(2-Chloroisopropyl)ether	ND	0.50
Bis(2-Ethylhexyl)Phthalate	ND	0.50
4-Bromophenyl Phenyl Ether	ND	0.50
Butylbenzylphthalate	ND	0.50
4-Chloro-3-Methylphenol	ND	0.50
4-Chloroaniline	ND	0.50
2-Chloronaphthalene	ND	0.50
2-Chlorophenol	ND	0.50
4-Chlorophenyl Phenyl Ether	ND	0.50
Chrysene	ND	0.50
Di-n-butylphthalate	ND	0.50
Di-n-octylphthalate	ND	0.50
Dibenzo(a,h)anthracene	ND	0.50
Dibenzofuran	ND	0.50
1,2-Dichlorobenzene	ND	0.50
1,3-Dichlorobenzene	ND	0.50
1,4-Dichlorobenzene	ND	0.50
3,3-Dichlorobenzidine	ND	0.50
2,4-Dichlorophenol	ND	0.50
Diethyl Phthalate	ND	0.50
2,4-Dimethylphenol	ND	0.50
Dimethyl Phthalate	ND	0.50

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: _____

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DATE REPORTED: 07/21/08

SAMPLE I.D.: **20080710-P-1**
LAB I.D.: 080711-115

SEMI-VOLATILE ORGANICS, EPA 8270C, PAGE 2 OF 2
UNIT: MG/KG = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
4,6-Dinitro-2-methylphenol	ND	0.50
2,4-Dinitrophenol	ND	0.50
2,4-Dinitrotoluene	ND	0.50
2,6-Dinitrotoluene	ND	0.50
Fluoranthene	ND	0.50
Fluorene	ND	0.50
Hexachlorobenzene	ND	0.50
Hexachlorobutadiene	ND	0.50
Hexachlorocyclopentadiene	ND	0.50
Hexachloroethane	ND	0.50
Indeno(1,2,3-cd)pyrene	ND	0.50
Isophorone	ND	0.50
2-Methyl Phenol	ND	0.50
3-Methyl Phenol	ND	0.50
4-Methyl Phenol	ND	0.50
2-Methylnaphthalene	ND	0.50
N-Nitroso-di-n-dipropylamine	ND	0.50
N-Nitrosodimethylamine	ND	0.50
N-Nitrosodiphenylamine	ND	0.50
Naphthalene	ND	0.50
2-Nitroaniline	ND	0.50
3-Nitroaniline	ND	0.50
4-Nitroaniline	ND	0.50
Nitrobenzene	ND	0.50
2-Nitrophenol	ND	0.50
4-Nitrophenol	ND	0.50
Pentachlorophenol	ND	0.50
Phenanthrene	ND	0.50
Phenol	ND	0.50
Pyrene	ND	0.50
1,2,4-Trichlorobenzene	ND	0.50
2,4,5-Trichlorophenol	ND	0.50
2,4,6-Trichlorophenol	ND	0.50

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
ND = NON-DETECTED OR BELOW THE PQL
DATA REVIEWED AND APPROVED BY:
CAL-DHS CERTIFICATE # 1555

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

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PROJECT: **CUC Quarry Site**
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MATRIX: SOIL
DATE EXTRACTED: 07/15/08
SAMPLING DATE: 07/10/08
DATE ANALYZED: 07/16/08
REPORT TO: Mr. G. RICHARD REES
DATE REPORTED: 07/21/08

SAMPLE I.D.: **20080710-P-4**
LAB I.D.: 080711-118

SEMI-VOLATILE ORGANICS, EPA 8270C, PAGE 1 OF 2
UNIT: MG/KG = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X200*
Acenaphthene	ND	0.50
Acenaphthylene	ND	0.50
Anthracene	ND	0.50
Benzo(a)anthracene	ND	0.50
Benzo(b)fluoranthene	ND	0.50
Benzo(a)pyrene	ND	0.50
Benzo(g,h,i)perylene	ND	0.50
Benzo(k)fluoranthene	ND	0.50
Benzoic Acid	ND	0.50
Benzyl Alcohol	ND	0.50
Bis(2-Chloroethoxy)methane	ND	0.50
Bis(2-Chloroethyl)ether	ND	0.50
Bis(2-Chloroisopropyl)ether	ND	0.50
Bis(2-Ethylhexyl)Phthalate	ND	0.50
4-Bromophenyl Phenyl Ether	ND	0.50
Butylbenzylphthalate	ND	0.50
4-Chloro-3-Methylphenol	ND	0.50
4-Chloroaniline	ND	0.50
2-Chloronaphthalene	ND	0.50
2-Chlorophenol	ND	0.50
4-Chlorophenyl Phenyl Ether	ND	0.50
Chrysene	ND	0.50
Di-n-butylphthalate	ND	0.50
Di-n-octylphthalate	ND	0.50
Dibenzo(a,h)anthracene	ND	0.50
Dibenzofuran	ND	0.50
1,2-Dichlorobenzene	ND	0.50
1,3-Dichlorobenzene	ND	0.50
1,4-Dichlorobenzene	ND	0.50
3,3-Dichlorobenzidine	ND	0.50
2,4-Dichlorophenol	ND	0.50
Diethyl Phthalate	ND	0.50
2,4-Dimethylphenol	ND	0.50
Dimethyl Phthalate	ND	0.50

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: _____

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LABORATORY REPORT

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PROJECT: **CUC Quarry Site**
PROJECT No.: **9234.001**
DATE RECEIVED: 07/11/08
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SAMPLING DATE: 07/10/08
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REPORT TO: Mr. G. RICHARD REES
DATE REPORTED: 07/21/08

SAMPLE I.D.: **20080710-P-4**
LAB I.D.: 080711-118

SEMI-VOLATILE ORGANICS, EPA 8270C, PAGE 2 OF 2
UNIT: MG/KG = MILLIGRAM PER KILOGRAM = PPM

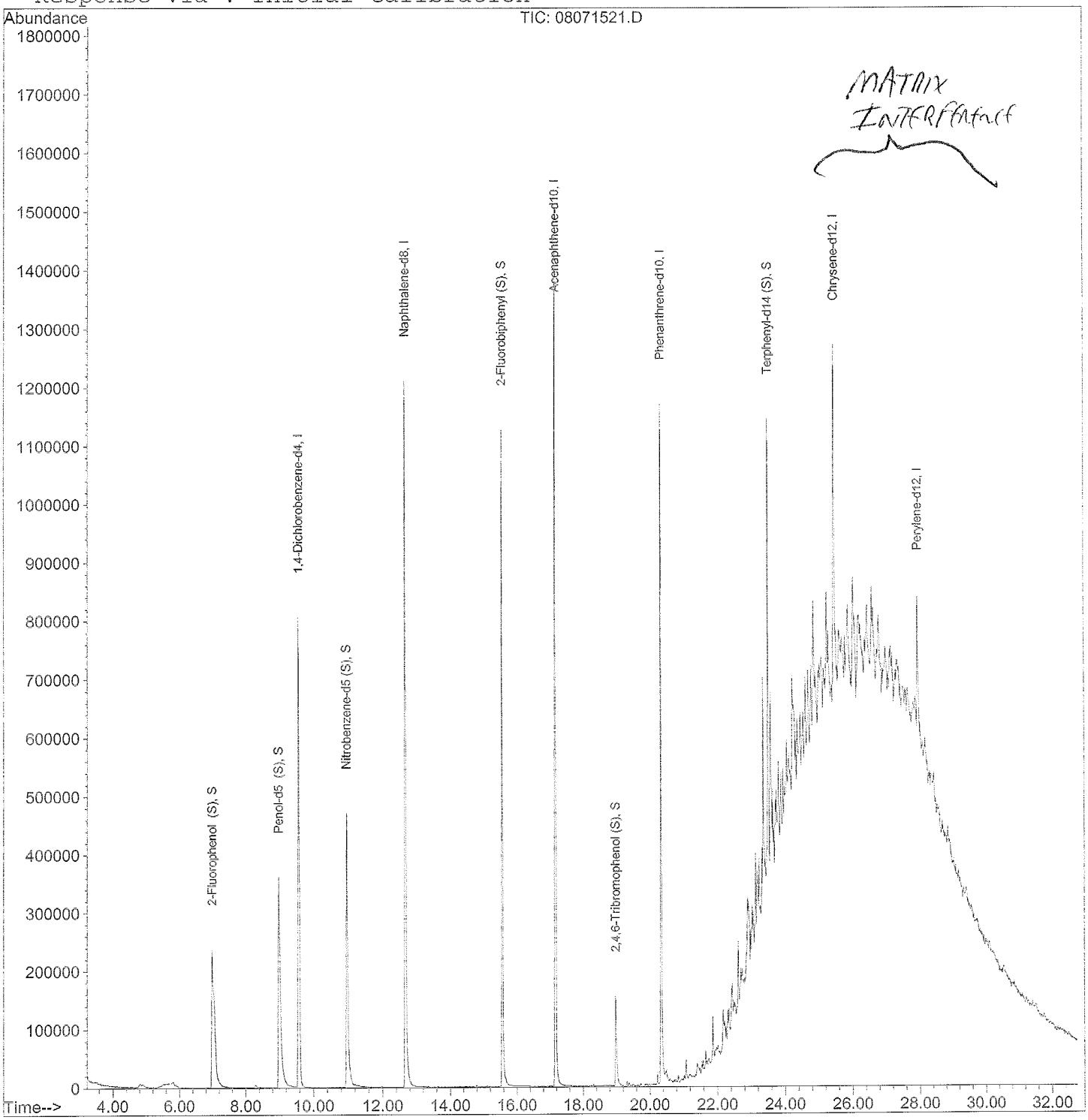
PARAMETER	SAMPLE RESULT	PQL X200*
4,6-Dinitro-2-methylphenol	ND	0.50
2,4-Dinitrophenol	ND	0.50
2,4-Dinitrotoluene	ND	0.50
2,6-Dinitrotoluene	ND	0.50
Fluoranthene	ND	0.50
Fluorene	ND	0.50
Hexachlorobenzene	ND	0.50
Hexachlorobutadiene	ND	0.50
Hexachlorocyclopentadiene	ND	0.50
Hexachloroethane	ND	0.50
Indeno(1,2,3-cd)pyrene	ND	0.50
Isophorone	ND	0.50
2-Methyl Phenol	ND	0.50
3-Methyl Phenol	ND	0.50
4-Methyl Phenol	ND	0.50
2-Methylnaphthalene	ND	0.50
N-Nitroso-di-n-dipropylamine	ND	0.50
N-Nitrosodimethylamine	ND	0.50
N-Nitrosodiphenylamine	ND	0.50
Naphthalene	ND	0.50
2-Nitroaniline	ND	0.50
3-Nitroaniline	ND	0.50
4-Nitroaniline	ND	0.50
Nitrobenzene	ND	0.50
2-Nitrophenol	ND	0.50
4-Nitrophenol	ND	0.50
Pentachlorophenol	ND	0.50
Phenanthrene	ND	0.50
Phenol	ND	0.50
Pyrene	ND	0.50
1,2,4-Trichlorobenzene	ND	0.50
2,4,5-Trichlorophenol	ND	0.50
2,4,6-Trichlorophenol	ND	0.50

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
* = PQL RAISED DUE TO MATRIX INTERFERENCE
ND = NON-DETECTED OR BELOW THE PQL
DATA REVIEWED AND APPROVED BY:
CAL-DHS CERTIFICATE # 1555

Quantitation Report

Data File : C:\HPCHEM\1\DATA\080715\08071521.D Vial: 21
Acq On : 16 Jul 2008 4:44 Operator:
Sample : 080711-118 20/200 Inst : GC/MS Ins
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jul 16 15:02 19108 Quant Results File: 8270C165.RES

Method : C:\HPCHEM\1\METHODS\8270C165.M (RTE Integrator)
Title : EPA 8270 ANALYSIS
Last Update : Fri Jun 29 13:08:03 2007
Response via : Initial Calibration



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METHOD BLANK REPORT

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METHOD BLANK FOR LAB I.D.: 080711-115, -118

SEMI-VOLATILE ORGANICS, EPA 8270C, PAGE 1 OF 2
UNIT: MG/KG = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
Acenaphthene	ND	0.50
Acenaphthylene	ND	0.50
Anthracene	ND	0.50
Benzo(a)anthracene	ND	0.50
Benzo(b)fluoranthene	ND	0.50
Benzo(a)pyrene	ND	0.50
Benzo(g,h,i)perylene	ND	0.50
Benzo(k)fluoranthene	ND	0.50
Benzoic Acid	ND	0.50
Benzyl Alcohol	ND	0.50
Bis(2-Chloroethoxy)methane	ND	0.50
Bis(2-Chloroethyl)ether	ND	0.50
Bis(2-Chloroisopropyl)ether	ND	0.50
Bis(2-Ethylhexyl)Phthalate	ND	0.50
4-Bromophenyl Phenyl Ether	ND	0.50
Butylbenzylphthalate	ND	0.50
4-Chloro-3-Methylphenol	ND	0.50
4-Chloroaniline	ND	0.50
2-Chloronaphthalene	ND	0.50
2-Chlorophenol	ND	0.50
4-Chlorophenyl Phenyl Ether	ND	0.50
Chrysene	ND	0.50
Di-n-butylphthalate	ND	0.50
Di-n-octylphthalate	ND	0.50
Dibenzo(a,h)anthracene	ND	0.50
Dibenzofuran	ND	0.50
1,2-Dichlorobenzene	ND	0.50
1,3-Dichlorobenzene	ND	0.50
1,4-Dichlorobenzene	ND	0.50
3,3-Dichlorobenzidine	ND	0.50
2,4-Dichlorophenol	ND	0.50
Diethyl Phthalate	ND	0.50
2,4-Dimethylphenol	ND	0.50
Dimethyl Phthalate	ND	0.50

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: _____

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METHOD BLANK REPORT

CUSTOMER: **AMEC Geomatrix, Inc.**
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PROJECT: **CUC Quarry Site**
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REPORT TO: Mr. G. RICHARD REES
DATE REPORTED: 07/21/08

METHOD BLANK FOR LAB I.D.: 080711-115, -118

SEMI-VOLATILE ORGANICS, EPA 8270C, PAGE 2 OF 2
UNIT: MG/KG = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
4,6-Dinitro-2-methylphenol	ND	0.50
2,4-Dinitrophenol	ND	0.50
2,4-Dinitrotoluene	ND	0.50
2,6-Dinitrotoluene	ND	0.50
Fluoranthene	ND	0.50
Fluorene	ND	0.50
Hexachlorobenzene	ND	0.50
Hexachlorobutadiene	ND	0.50
Hexachlorocyclopentadiene	ND	0.50
Hexachloroethane	ND	0.50
Indeno(1,2,3-cd)pyrene	ND	0.50
Isophorone	ND	0.50
2-Methyl Phenol	ND	0.50
3-Methyl Phenol	ND	0.50
4-Methyl Phenol	ND	0.50
2-Methylnaphthalene	ND	0.50
N-Nitroso-di-n-dipropylamine	ND	0.50
N-Nitrosodimethylamine	ND	0.50
N-Nitrosodiphenylamine	ND	0.50
Naphthalene	ND	0.50
2-Nitroaniline	ND	0.50
3-Nitroaniline	ND	0.50
4-Nitroaniline	ND	0.50
Nitrobenzene	ND	0.50
2-Nitrophenol	ND	0.50
4-Nitrophenol	ND	0.50
Pentachlorophenol	ND	0.50
Phenanthrene	ND	0.50
Phenol	ND	0.50
Pyrene	ND	0.50
1,2,4-Trichlorobenzene	ND	0.50
2,4,5-Trichlorophenol	ND	0.50
2,4,6-Trichlorophenol	ND	0.50

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
ND = NON-DETECTED OR BELOW THE PQL
DATA REVIEWED AND APPROVED BY:
CAL-DHS CERTIFICATE # 1555

Enviro-Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909)590-5905 Fax (909)590-5907

8270 QA/QC Report

Matrix: **Soil/Solid/Sludge** Unit: mg/Kg (PPM)

Date Analyzed: 7/15-16/2008

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

Spiked Sample Lab I.D.: **080711-97 MS/MSD**

Analyte	SR	spk conc	MS	%MS	MSD	%MSD	%RPD	ACP %MS	ACP RPD
Phenol	0.0	40.0	39.8	99%	39.7	99%	0%	50-150	0-20
Pyrene	0.0	40.0	36.0	90%	36.9	92%	3%	50-150	0-20

Laboratory Control Spike (LCS):

Analyte	spk conc	LCS	% RC	ACP %RC
Phenol	2.00	2.05	102%	75-125
1,4-Dichlorobenzene	2.00	1.66	83%	75-125
2,4-Dichlorophenol	2.00	1.61	80%	75-125
Hexachlorobutadiene	2.00	1.57	79%	75-125
4-Chloro-3-methylphenol	2.00	1.78	89%	75-125
Fluoranthene	2.00	1.72	86%	75-125

Surrogate Recovery	spk conc	ACP%	%RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			MB	080711-83	080711-84	080711-85	080711-86	080711-88	080711-90
2-Fluorophenol	40	25-121	96%	98%	94%	103%	106%	95%	95%
Phenol-d5	40	24-113	97%	101%	95%	99%	100%	96%	94%
Nitrobenzene-d5	40	23-120	97%	104%	90%	98%	99%	98%	92%
2-Fluorobiphenyl	40	30-115	86%	84%	84%	89%	90%	78%	84%
2,4,6-Tribromophenol	40	19-122	50%	63%	52%	58%	65%	53%	53%
Terphenyl-d14	40	18-137	64%	62%	60%	64%	65%	59%	59%

Surrogate Recovery	spk conc	ACP%	%RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			080711-91A	080711-93	080711-95	080711-97	080711-115	080711-118	080711-105
2-Fluorophenol	40	25-121	95%	104%	100%	93%	98%	96%	97%
Phenol-d5	40	24-113	102%	99%	99%	98%	98%	101%	97%
Nitrobenzene-d5	40	23-120	101%	99%	93%	97%	98%	96%	98%
2-Fluorobiphenyl	40	30-115	84%	87%	86%	80%	82%	82%	83%
2,4,6-Tribromophenol	40	19-122	54%	51%	64%	49%	65%	67%	59%
Terphenyl-d14	40	18-137	59%	60%	63%	57%	59%	60%	64%

Surrogate Recovery	spk conc	ACP%	%RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			080711-106	080711-125	080710-179				
2-Fluorophenol	40	25-121	98%	107%	74%				
Phenol-d5	40	24-113	100%	109%	84%				
Nitrobenzene-d5	40	23-120	99%	101%	82%				
2-Fluorobiphenyl	40	30-115	83%	92%	82%				
2,4,6-Tribromophenol	40	19-122	61%	119%	97%				
Terphenyl-d14	40	18-137	62%	49%	81%				

** = Surrogate fail due to matrix interference*

Analyzed and Reviewed By: AVV

Note: ***LCS, MS, MSD are in control therefore results are in control.***

Final Reviewer: _____

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: **AMEC Geomatrix, Inc.**
250 E. Rincon, Suite 204
Corona, CA 92879
Tel(951)273-7400 Fax(951)273-7420

PROJECT: **CUC Quarry Site** PROJECT No.: **9234.001**
MATRIX: SOIL DATE RECEIVED: 07/11/08
SAMPLING DATE: 07/10/08 DATE ANALYZED: 07/15/08
REPORT TO: Mr. G. RICHARD REES DATE REPORTED: 07/21/08
SAMPLE I.D.: **20080710-P-4** LAB I.D.: 080711-119

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
UNIT: MG/KG = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: _____

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: **AMEC Geomatrix, Inc.**
250 E. Rincon, Suite 204
Corona, CA 92879
Tel(951)273-7400 Fax(951)273-7420

PROJECT: **CUC Quarry Site** PROJECT No.: **9234.001**
MATRIX: SOIL DATE RECEIVED: 07/11/08
SAMPLING DATE: 07/10/08 DATE ANALYZED: 07/15/08
REPORT TO: Mr. G. RICHARD REES DATE REPORTED: 07/21/08
SAMPLE I.D.: **20080710-P-4** LAB I.D.: 080711-119

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
UNIT: MG/KG = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
ND = NON-DETECTED OR BELOW THE PQL
DATA REVIEWED AND APPROVED BY:
CAL-DHS CERTIFICATE # 1555

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

METHOD BLANK REPORT

CUSTOMER: **AMEC Geomatrix, Inc.**
250 E. Rincon, Suite 204
Corona, CA 92879
Tel(951)273-7400 Fax(951)273-7420

PROJECT: **CUC Quarry Site** PROJECT No.: **9234.001**
MATRIX: SOIL DATE RECEIVED: 07/11/08
SAMPLING DATE: 07/10/08 DATE ANALYZED: 07/14/08
REPORT TO: Mr. G. RICHARD REES DATE REPORTED: 07/21/08

METHOD BLANK FOR LAB I.D.: 080711-119

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
UNIT: MG/KG = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: _____

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

METHOD BLANK REPORT

CUSTOMER: **AMEC Geomatrix, Inc.**
250 E. Rincon, Suite 204
Corona, CA 92879
Tel(951)273-7400 Fax(951)273-7420

PROJECT: **CUC Quarry Site** PROJECT No.: **9234.001**
MATRIX: SOIL DATE RECEIVED: 07/11/08
SAMPLING DATE: 07/10/08 DATE ANALYZED: 07/14/08
REPORT TO: Mr. G. RICHARD REES DATE REPORTED: 07/21/08

METHOD BLANK FOR LAB I.D.: 080711-119

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
UNIT: MG/KG = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
ND = NON-DETECTED OR BELOW THE PQL
DATA REVIEWED AND APPROVED BY:
CAL-DHS CERTIFICATE # 1555

Enviro-Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909)590-5905 Fax (909)590-5907

8260B QA/QC Report

Date Analyzed: 7/14~15/2008
Machine: C

Matrix: Solid/Soil/Sludge
Unit: mg/Kg (PPM)

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)
Spiked Sample Lab I.D.: 080714-LCS5/6

Analyte	S.R.	spk conc	MS	%RC	MSD	%RC	%RPD	ACP %RC	ACP RPD
Benzene	0	0.050	0.042	83%	0.042	85%	2%	75-125	0-20
Chlorobenzene	0	0.050	0.057	114%	0.058	115%	2%	75-125	0-20
1,1-Dichloroethene	0	0.050	0.044	88%	0.041	82%	6%	75-125	0-20
Toluene	0	0.050	0.047	95%	0.047	93%	1%	75-125	0-20
Trichloroethene (TCE)	0	0.050	0.059	118%	0.059	118%	0%	75-125	0-20

Lab Control Spike (LCS):

Analyte	spk conc	LCS	%RC	ACP %RC
Benzene	0.050	0.043	86%	75-125
Chlorobenzene	0.050	0.056	112%	75-125
Chloroform	0.050	0.047	94%	75-125
1,1-Dichlorothene	0.050	0.043	86%	75-125
Ethylbenzene	0.050	0.055	111%	75-125
o-Xylene	0.050	0.057	115%	75-125
m,p-Xylene	0.100	0.116	116%	75-125
Toluene	0.050	0.049	98%	75-125
1,1,1-Trichloroethane	0.050	0.056	112%	75-125
Trichloroethene (TCE)	0.050	0.058	117%	75-125

Surrogate Recovery	spk conc	ACP %RC	MB %RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.				080711-10	080711-40	080711-43	080711-44	080711-48	080711-49
Dibromofluoromethane	50.0	70-130	90%	91%	84%	86%	84%	91%	117%
Toluene-d8	50.0	70-130	84%	98%	94%	94%	89%	98%	120%
4-Bromofluorobenzene	50.0	70-130	95%	88%	90%	88%	90%	96%	89%

Surrogate Recovery	spk conc	ACP %RC	%RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			080711-119	080711-123	080711-125	080711-133	080711-134	080711-135	080711-138
Dibromofluoromethane	50.0	70-130	112%	86%	70%	107%	110%	80%	84%
Toluene-d8	50.0	70-130	94%	79%	83%	91%	95%	89%	94%
4-Bromofluorobenzene	50.0	70-130	84%	86%	101%	81%	80%	92%	91%

Surrogate Recovery	spk conc	ACP %RC	%RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			080711-140	080711-144	080711-145	080711-148	080711-151	080711-153	080711-154
Dibromofluoromethane	50.0	70-130	106%	95%	95%	85%	113%	84%	85%
Toluene-d8	50.0	70-130	104%	90%	117%	111%	90%	118%	80%
4-Bromofluorobenzene	50.0	70-130	79%	89%	87%	80%	90%	87%	90%

** = Surrogate fail due to matrix interference; LCS, MS, MSD are in control therefore the analysis is in control.*
S.R. = Sample Results
spk conc = Spike Concentration
MS = Matrix Spike
%RC = Percent Recovery
ACP %RC = Accepted Percent Recovery
MSD = Matrix Spike Duplicate

Analyzed/Reviewed By: _____

Final Reviewer: _____

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: **AMEC Geomatrix, Inc.**
250 E. Rincon, Suite 204
Corona, CA 92879
Tel(951)273-7400 Fax(951)273-7420

PROJECT: **CUC Quarry Site** PROJECT No.: **9234.001**
MATRIX: SOIL DATE RECEIVED: 07/11/08
SAMPLING DATE: 07/10/08 DATE ANALYZED: 07/17/08
REPORT TO: Mr. G. RICHARD REES DATE REPORTED: 07/21/08

PERCHLORATE ANALYSIS *
METHOD: EPA 314.0M
UNIT: MG/KG = MILLIGRAM PER KILOGRAM = PPM

SAMPLE I.D.	LAB I.D.	PERCHLORATE RESULT	DF
20080710-P-2	080711-116	ND	1
20080710-P-4	080711-118	ND	1
METHOD BLANK	---	ND	1
	PQL	0.04	

COMMENTS
DF = DILUTION FACTOR
PQL = PRACTICAL QUANTITATION LIMIT
ACTUAL DETECTION LIMIT = DF X PQL
ND = NON-DETECTED OR BELOW THE ACTUAL DETECTION LIMIT
M = MODIFIED
* = ANALYSIS PERFORMED BY ASSOCIATED LABS, ORANGE, CA

DATA REVIEWED AND APPROVED BY: _____
CAL-DHS ELAP CERTIFICATE No.: 1555

ASSOCIATED LABS RESULTS WORKSHEET FOR LAB REQUEST 216,066

Order #: 914637 **Client Smpl ID:** 080711-116 **Matrix:** SOLID

Test #	Analyte	An. Date	Init.	DF	Result	DLR	Units
314	Perchlorate	7/17	[illegible]	1	ND	0.04	mg/Kg

Comments:

Order #: 914638 **Client Smpl ID:** 080711-118 **Matrix:** SOLID

Test #	Analyte	An. Date	Init.	DF	Result	DLR	Units
314	Perchlorate	7/17		1	ND	0.04	mg/Kg

Comments:

Order #: 914639 **Client Smpl ID:** Laboratory Method Blank **Matrix:** SOLID

Test #	Analyte	An. Date	Init.	DF	Result	DLR	Units
314	Perchlorate	7/17		1	ND	0.04	mg/Kg

Comments:

DLR = Detection limit for reporting purposes. DF = Dilution factor. An. Date = Date of analysis. Init = Analyst initials

07/18/2008 14:34 7147719933 ASSOCIATED LABS PAGE 02/03

CHAIN-OF-CUSTODY RECORD

COR 10815

PROJECT NAME: CUC Quarry Site

DATE: 10 July 2008

PAGE 1 OF 1

PROJECT NUMBER: 9234.001

RESULTS TO: Rick Rees

TURNAROUND TIME: Standard

SAMPLE SHIPMENT METHOD: Courier

LABORATORY NAME: Enviro-Chem

LABORATORY ADDRESS:

LABORATORY CONTACT: Curtis

LABORATORY PHONE NUMBER: 909-590-5905

CLIENT INFORMATION:

REPORTING REQUIREMENTS:

GEOTRACKER REQUIRED YES NO

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE):

ANALYSES

DATE	TIME	SAMPLE NUMBER	CAM Metals	EPA 8081A Pesticides	EPA 8270C SVOCs	EPA 8015M TPHcc	EPA 314 Perchlorate	EPA 8260B VOCs	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
07-10-08	1230	20080710-P-1	X	X	X				8-oz glass jar	S			/		1	080711-115
07-10-08	1341	20080710-P-2	X			X	X			S			/		1	-116
07-10-08	1414	20080710-P-3				X				S			/		1	EPA 8015M only -117
07-10-08	1542	20080710-P-4	X	X	X	X	X		8-oz glass jar	S			/		1	-118
07-10-08	1542	20080710-P-4						X	40-mL VOA	S		☆	/		4	-119
															VOAs	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE:	7/11/08	1120	SIGNATURE:	7/11/08	1120
PRINTED NAME: Lucas Bailey			PRINTED NAME: J ACKERMAN		
COMPANY: AMEC Geomatrix			COMPANY: ENVIRO-CHEM		
SIGNATURE:	7/11/08	1400	SIGNATURE:	7/11/08	14:00
PRINTED NAME: J ACKERMAN			PRINTED NAME: Ping Wang		
COMPANY: ENV. CHEM LAB			COMPANY: Enviro-Chem		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS: 8

SAMPLING COMMENTS:
- For EPA 8015M TPHcc include silicage cleanup
- CAM Metals = Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Mo, Ni, Se, Ag, Tl, V, Zn by EPA 6010B and Hg by EPA 7470A
- ☆ 1 VOA MeOH, 2 VOA NaHSO4, 1 VOA unpreserved.

250 East Rincon Street, Suite 204
Corona, California 92879-1363
Tel 951.273.7400 Fax 951.273.7420
Geomatrix

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

Date: August 6, 2008

Mr. G. Richard Rees
AMEC Geomatrix, Inc.
250 E. Rincon, Suite 204
Corona, CA 92879
Tel(951)273-7400 Fax(951)273-7420

Project: **CUC Quarry Site**
Project No.: **9234.001**
Lab I.D.: **080711-115 through -119**

Dear Mr. Rees:

The **additional PCBs & STLC-Cu results** for the soil samples, received by our laboratory on July 11, 2008, are attached. All samples were received chilled, intact, accompanying chain of custody and also stored per the EPA protocols.

Enviro-Chem appreciates the opportunity to provide you and your company this and other services. Please do not hesitate to call us if you have any questions.

Sincerely,

Curtis Desilets
Vice President/Program Manager

Jesse Tu, Ph.D.
Laboratory Manager

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: AMEC Geomatrix, Inc.
250 E. Rincon, Suite 204
Corona, CA 92879
Tel(951)273-7400 Fax(951)273-7420

PROJECT: CUC Quarry Site
PROJECT No.: 9234.001
DATE RECEIVED: 07/11/08
MATRIX: SOIL
DATE EXTRACTED: 07/24/08
SAMPLING DATE: 07/10/08
DATE ANALYZED: 07/25/08
REPORT TO: Mr. G. RICHARD REES
DATE REPORTED: 08/06/08

PCBs ANALYSIS
METHOD: EPA 8082
UNIT: MG/KG = MILLIGRAM PER KILOGRAM = PPM

SAMPLE I.D.	LAB I.D.	PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260	TOTAL PCBs*	DF
20080710-P-2	080711-116	ND	ND	ND	ND	ND	ND	ND	ND	1
20080710-P-4	080711-118	ND	ND	ND	ND	ND	ND	ND	ND	100^
Method Blank		ND	ND	ND	ND	ND	ND	ND	ND	1
	PQL	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	

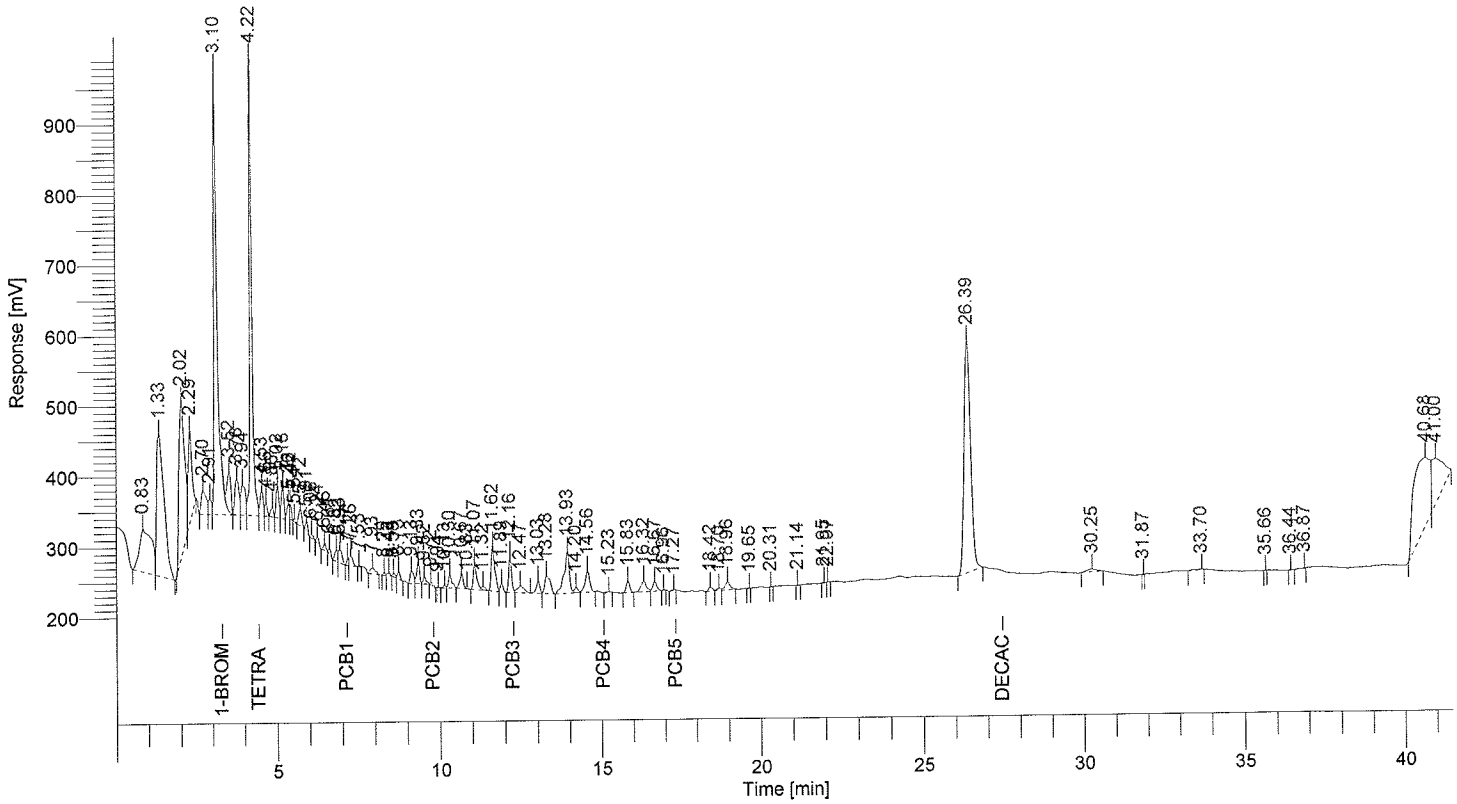
COMMENTS
DF = Dilution Factor
PQL = Practical Quantitation Limit
Actual Detection Limit = DF X PQL
ND = Non-Detected Or Below the Actual Detection Limit
* = Sum of the PCB 1016, 1221, 1232, 1242, 1248, 1254 and 1260
*** = The concentration exceeds the TTLC Limit of 50, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
^ = Actual Detection Limit raised due to matrix interference

Data Reviewed and Approved by: _____
CAL-DHS ELAP CERTIFICATE No.: 1555

Software Version : 6.3.1.0504
Sample Name : 080711-118 20/200
Instrument Name : GC-E
Rack/Vial : 0/29
Sample Amount : 1.000000
Cycle : 33

Date : 8/6/2008 2:59:00 PM
Data Acquisition Time : 7/25/2008 11:03:30 AM
Channel : A
Operator : manager
Dilution Factor : 1.000000

Result File : D:\GC DATA\GC-E\E080724\A033.rst
Sequence File : D:\GC DATA\GC-E\E080724\E080724.seq



PCB Results

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [µV]	Adjusted Amount
7	1-Bromo-2-Nitrobenzene	3.10	4951829.18	632167.00	----------
11	Tetra chloro-meta-xylene	4.22	3547457.98	665632.38	86.896
	PCB (1016+1260)	12.16	412038.25	68587.77	0.035
			8911325.42	1366387.14	86.930

Enviro-Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909)590-5905 Fax (909)590-5907

QA/QC Report

Analysis: EPA 8082 (PCB)

Matrix: **Soil/Solid** Date Analyzed: **7/25-26/2008**

Unit: mg/Kg (PPM)

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

Spiked Sample Lab I.D.: **080724-LCS 1/2**

Analyte	spk conc	MS	%REC	MSD	%REC	%RPD	ACP % RPD	ACP %REC
PCB (1016+1260)	1.00	0.874	**87%**	0.859	**86%**	**2%**	**0-20%**	**70-130**

LCS STD RECOVERY:

Analyte	spk conc	LCS	% REC	ACP %REC
PCB (1016+1260)	0.100	0.098	**98%**	**75-125**

spk conc = Spike Concentration
%REC = Percent Recovery
ACP %RPD = Acceptable Percent RPD Range
ACP %REC = Acceptable Percent Recovery Range

Analyzed and Reviewed By: AW

Final Reviewer: P

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: AMEC Geomatrix, Inc.
250 E. Rincon, Suite 204
Corona, CA 92879
Tel(951)273-7400 Fax(951)273-7420

PROJECT: CUC Quarry Site
MATRIX: SOIL
SAMPLING DATE: 07/10/08
REPORT TO: Mr. G. RICHARD REES

PROJECT No.: 9234.001
DATE RECEIVED: 07/11/08
DATE ANALYZED: 07/23-25/08
DATE REPORTED: 08/06/08

SAMPLE I.D.: 20080710-P-1
LAB I.D.: 080711-115

SOLUBLE THRESHOLD LIMIT CONCENTRATION (STLC) ANALYSIS
UNIT: MG/L IN THE STLC LEACHATE

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD USED
Copper (Cu)	26.2 ***	0.1	1	2,500	25	6010B

COMMENTS
DF = Dilution Factor
PQL = Practical Quantitation Limit
Actual Detection Limit = PQL X DF
TTLC = Total Threshold Limit Concentration
STLC = Soluble Threshold Limit Concentration
*** = The concentration exceeds the STLC Limit, and the sample is defined as hazardous waste as per CAL-TITLE 22 (if marked)

Data Reviewed and Approved by: _____
CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro – Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

METHOD BLANK REPORT

CUSTOMER: AMEC Geomatrix, Inc.
250 E. Rincon, Suite 204
Corona, CA 92879
Tel(951)273-7400 Fax(951)273-7420

PROJECT: CUC Quarry Site
MATRIX: SOIL
SAMPLING DATE: 07/10/08
REPORT TO: Mr. G. RICHARD REES

PROJECT No.: 9234.001
DATE RECEIVED: 07/11/08
DATE ANALYZED: 07/23-25/08
DATE REPORTED: 08/06/08

METHOD BLANK FOR LAB I.D.: 080711-115

SOLUBLE THRESHOLD LIMIT CONCENTRATION (STLC) ANALYSIS
UNIT: MG/L IN THE STLC LEACHATE

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD USED
Copper (Cu)	ND	0.1	1	2,500	25	6010B

COMMENTS
DF = Dilution Factor
PQL = Practical Quantitation Limit
Actual Detection Limit = PQL X DF
ND = Below the actual detection limit or non-detected
TTLC = Total Threshold Limit Concentration
STLC = Soluble Threshold Limit Concentration
*** = The concentration exceeds the STLC Limit, and the sample is defined as hazardous waste as per CAL-TITLE 22 (if marked)

Data Reviewed and Approved by: _____
CAL-DHS ELAP CERTIFICATE No.: 1555

QA/QC for Metals Analysis --STLC

Matrix Spike/ Matrix Spike Duplicate/ LCS :

ANALYSIS DATE: 7/25/2008

Unit : mg/L (ppm)

Analysis	Spk.Sample ID	LCS CONC.	LCS %Rec.	LCS STATUS	*Sample Result*	Spike Conc.	MS	% Rec MS	MSD	% Rec MSD	% RPD
Copper (Cu)	080724-22	1.00	101	*PASS*	*0*	5.00	4.89	98%	4.95	99%	1%
Chromium (Cr)	080724-22	1.00	104	*PASS*	*0*	5.00	5.12	102%	5.10	102%	0%
Lead (Pb)	080724-22	1.00	109	*PASS*	*0*	5.00	5.09	102%	5.11	102%	0%

ANALYSIS DATE: 7/23/2008

Analysis	Spk.Sample ID	LCS CONC.	LCS %Rec.	LCS STATUS	*Sample Result*	Spike Conc.	MS	% Rec MS	MSD	% Rec MSD	% RPD
Mercury (Hg)	080721-7	0.0125	94.6	*PASS*	*0*	0.0125	0.0112	90%	0.0107	86%	5%

MS/MSD Status:

Analysis	%MS	%MSD	%LCS	%RPD
Copper (Cu)	*PASS*	*PASS*	*PASS*	*PASS*
Chromium (Cr)	*PASS*	*PASS*	*PASS*	*PASS*
Lead (Pb)	*PASS*	*PASS*	*PASS*	*PASS*
Mercury (Hg)	*PASS*	*PASS*	*PASS*	*PASS*
Accepted Range	**75 ~ 125**	**75 ~ 125**	**85 ~ 115**	**0 ~ 20**

ANALYST: _____

FINAL REVIEWER: _____

COR 10815

CHAIN-OF-CUSTODY RECORD

DATE: 10 July 2008 | PAGE 1 OF 1

PROJECT NAME: CUC Quarry Site

PROJECT NUMBER: 9234.001

RESULTS TO: Rick Rees

TURNAROUND TIME: Standard

SAMPLE SHIPMENT METHOD: Courier

LABORATORY NAME: Envirolab-Chem

LABORATORY ADDRESS:

LABORATORY CONTACT: Curtis

LABORATORY PHONE NUMBER: 909-590-5905

CLIENT INFORMATION:

REPORTING REQUIREMENTS:

GEOTRACKER REQUIRED YES NO

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE):

ANALYSES

DATE	TIME	SAMPLE NUMBER	CAM Metals	EPA 8081A Pesticides	EPA 8270C SVOCs	EPA 8015M TPHcc	EPA 314 Perchlorate	EPA 8260B VOCs	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
07-10-08	1230	20080710-P-1	X	X	X				8-oz glass jar	S			/		1	C80711-115
07-10-08	1341	20080710-P-2	X			X	X		↓	S			/		1	-116
07-10-08	1414	20080710-P-3				X				S			/		1	EPA 8015M only -117
07-10-08	1542	20080710-P-4	X	X	X	X	X		8-oz glass jar	S			/		1	-118
07-10-08	1542	20080710-P-4						X	40-ml VOA	S		*	/		4 VOAs	-119

TOTAL NUMBER OF CONTAINERS: 8

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE:	7/11/08	1120	SIGNATURE:	7/11/08	1120
PRINTED NAME: Lucas Budy			PRINTED NAME: J Ackerman		
COMPANY: AMEC Geomatrix			COMPANY: ENVIRO-CHEM		
SIGNATURE:	7/11/08	1400	SIGNATURE:	7/11/08	1400
PRINTED NAME: J ACKERMAN			PRINTED NAME: Ping Wang		
COMPANY: ENV. CHEM LAB			COMPANY: Envirolab-Chem		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

SAMPLING COMMENTS:
- For EPA 8015M TPHcc, include silica gel cleanup
- CAM Metals = Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Mo, Ni, Se, Ag, Tl, V, Zn by EPA 6010B and Hg by EPA 7470A
- * 1 VOA MeOH, 2 VOA $NaHSO_4$, 1 VOA unpreserved

250 East Rincon Street, Suite 204
Corona, California 92879-1363
Tel 951.273.7400 Fax 951.273.7420
Geomatrix

Enviro-Chem, Inc.

From: Richard Rees [RRees@geomatrix.com]
Sent: Wednesday, July 23, 2008 4:24 PM
To: envirocheminc@yahoo.com
Subject: FW: Additional Analyses CUC Project 9234

From: Richard Rees
Sent: Wednesday, July 23, 2008 1:50 PM
To: Curtis B. Desilents (envirochemlabs@yahoo.com)
Subject: Additional Analyses CUC Project 9234

Hello Jessica,

We would like to add the following analyses for our project number 9234.001 sampled on July 10, 2008.

Lab ID 080711-115 – add STLC analyses for copper.

Check hold time for PCB analyses and if within hold time, run sample ID 080711-116 and 080711-118 for PCBs.

Thank you,

Rick Rees

G. Richard Rees, PG, CHG
Senior Hydrogeologist

AMEC Geomatrix, Inc.
250 East Rincon Street; Suite 204
Corona, California 92879
Tel: 951-273-7400 | Fax: 951-273-7420 | Cell: 951-757-0802 | richard.rees@amec.com
http://www.amecgeomatrixinc.com

Please note that my email has changed to richard.rees@amec.com as a result of AMEC's acquisition of Geomatrix. My old email address will continue to be active until the end of the year, but please update my contact information with the new email address. Our physical address and phone numbers will remain the same.

The materials transmitted by this electronic mail are confidential, are only for the use of the intended recipient, and subject to applicable privileges. Any dissemination, distribution, or copying of this communication is strictly prohibited by anyone other than the intended recipient. If you have received this communication in error, please immediately notify the sender. Please also remove this message from your hard drive, diskette, and any other storage device.

APPENDIX C

Summary of Data Quality

Review of Laboratory

Memorandum

TO:	Rick Rees	**DATE:**	August 11, 2008
FROM:	Crystal Neirby	**PROJ. NO.:**	9234.001
CC:	Project File	**PROJ. NAME:**	CUC Quarry Site
SUBJECT:	**CUC Quarry Site - Soil Sampling Summary Data Quality Review**		

This memorandum presents a summary data quality review of six primary soil samples collected July 10 and 11, 2008. The samples were submitted to Enviro-Chem, Inc., a State of California certified laboratory, located in Pomona, California. The samples were analyzed for the following organic and/or inorganic analyses:

- Total Petroleum Hydrocarbons (TPH) by EPA Method 8015B
- Total Threshold Limit Concentration (TTLC) Metals by EPA Method 6010B, with Mercury by EPA Method 7496A
- Soluble Threshold Limit Concentration (STLC) Metals (copper) by EPA Method 6010B
- Organochlorine Pesticides by EPA Method 8081A
- Semivolatile Organic Compounds by EPA Method 8270C
- Volatile Organic Compounds (VOCs) by EPA Method 8260B
- Perchlorate by EPA Method 314.0(M)
- Polychlorinated Biphenyls (PCBs) by EPA Method 8082

The sample IDs, sample dates and times, and the analyses requested are listed in the table below.

Sample ID	Sample Date/Time	Analyses Requested
20080710-P-1	07/10/2008 12:30	TTLC Metals, pesticides, SVOCs, STLC copper
20080710-P-2	07/10/2008 13:41	TTLC Metals, TPH, perchlorate, PCBs
20080710-P-3	07/10/2008 14:14	TPH
20080710-P-4	7/10/2008 15:42	TTLC Metals, pesticides, SVOCs, TPH, perchlorate, VOCs, PCBs

Sample ID	Sample Date/Time	Analyses Requested
20080711-P-3	7/11/2008 15:30	VOCs
20080711-P4	7/11/2008 15:36	VOCs

Upon receipt by Enviro-Chem, the sample container information was compared to the chain-of-custody form. The samples were received chilled and intact.

Data were reviewed in accordance with the appropriate method procedures. Hold times, method blanks, surrogate recoveries, laboratory control samples (LCS), matrix spike/matrix spike duplicate (MS/MSD) results, and reporting limits were reviewed to assess compliance with applicable methods. If data qualification was required, data were qualified in general accordance with the definitions and use of qualifying flags outlined in the following EPA documents: USEPA Contract Laboratory Program (CLP) National Functional Guidelines for Organic Data Review, October 1999, and USEPA Contract Laboratory Program (CLP) National Functional Guidelines for Inorganic Data Review, October 2004.

ORGANIC ANALYSES

Samples were analyzed for TPH, pesticides. SVOCs, VOCs, and PCBs by the methods identified in the introduction to this report, and were evaluated for the following criteria.

1. Holding Times – Acceptable

2. Blanks – Acceptable

   A trip blank was not submitted with the VOC samples. Sample results were not qualified.

3. Surrogates – Acceptable

4. Laboratory Control Samples (LCS) – Acceptable

5. Matrix Spike/Matrix Spike Duplicate (MS/MSD) – Acceptable

6. Reporting Limits – Acceptable

INORGANIC ANALYSES

Samples were analyzed for TTLC metals, STLC metals, and perchlorate by the methods identified in the introduction to this report and were evaluated for the following criteria.

1. Holding Times – Acceptable

2. Blanks – Acceptable

3. Laboratory Control Samples (LCS) – Acceptable

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD) – Acceptable

5. Reporting Limits – Acceptable

OVERALL ASSESSMENT OF DATA

The results submitted by Enviro-Chem are 100 percent complete. The data usability is based on EPA's guidance documents. No problems were identified and analytical performance was generally within specified limits. The data are not qualified and meet the project's data quality objectives.

Sample ID	Qualified Analyte	Qualified Result	Units	Qualifier Reason
20080710-P-1	none			
20080710-P-2	none			
20080710-P-3	none			
20080710-P-4	none			
20080711-P-3	none			
20080711-P4	none			

APPENDIX D

RWQCB Order No. 00-070

California Regional Water Quality Control Board

Los Angeles Region

Winston H. Hickox
Secretary for Environmental Protection

320 W. 4th Street, Suite 200, Los Angeles, California 90013
Phone (213) 576-6600 FAX (213) 576-6640
Internet Address: http://www.swrcb.ca.gov/~rwqcb4

Gray Davis
Governor

June 23, 2000

PHYSICAL PLANT
RECEIVED
00 JUN 30 PM 1:47

Mr. Dale Klein
Physical Plant Director
Claremont University Center
303 E. First Street
Claremont, CA 91711

Dear Mr. Klein:

WASTE DISCHARGE REQUIREMENTS – CLAREMONT INERT LANDFILL (FILE NO. 66-016)

Reference is made to our letter of May 4, 2000, which transmitted a copy of tentative waste discharge requirements and a monitoring and reporting program for the Claremont Inert Landfill.

Pursuant to Section 13263 of the California Water Code, this Regional Board, at a public meeting held on May 25, 2000, reviewed the tentative Order, considered all factors in the case, and adopted Order No. 00-070 and Monitoring and Reporting Program No. 5766 (copy attached) as revised at the meeting, relative to the discharge.

If you have any questions, please call Paul Cho at (213) 576-6721.

Sincerely,

Rodney H. Nelson

Rodney H. Nelson, Head
Landfills Unit

Enclosures

cc: Lisa Babcock, State Water Resources Control Board; Division of Clean Water Programs
Dixie Lass, California Regional Water Quality Control Board, Santa Ana Region
Richard Hanson, Los Angeles County Department of Health Services

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

ORDER NO. 00-070

WASTE DISCHARGE REQUIREMENTS
For
CLAREMONT UNIVERSITY CENTER
(CLAREMONT LANDFILL)
(File No. 66-16)

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board), finds:

1. Claremont University Center (hereafter "discharger") owns and operates the Claremont Landfill, a 118-acre inert waste disposal site located at the northeast corner of the intersection of Claremont Boulevard and Arrow Route, within Chino Hydrologic Subarea (Figure 1), under waste discharge requirements contained in Order 73-014, adopted by this Regional Board on February 28, 1973.

2. The California Water Code Section 13263 provides that all requirements shall be reviewed periodically and, upon such review, may be revised by the Regional Board. These requirements are being revised to incorporate ground and surface water monitoring and a waste load checking program.

3. The Los Angeles-San Bernardino County line passes through the disposal site. The northwest portion comprising 30 acres is situated in the City of Claremont, Los Angeles County. The southeast portion comprising the remaining 88 acres is situated partly in the City of Upland, San Bernardino County, and partly in unincorporated San Bernardino County territory, within the jurisdiction of the California Regional Water Quality Control Board, Santa Ana Region.

4. This Regional Board assumes responsibilities for the entire Claremont Landfill site including the areas which fall under the jurisdiction of the California Regional Water Quality Control Board, Santa Ana Region, as stated in this Regional Board staff's Memorandum dated December 14, 1987.

5. The site is not open to the public and is being used by the discharger only. The material disposed at this site is clean earth or suitable fill material from construction sites or projects within Claremont University Center. Since no material disposed at this landfill will come from public or off-site sources, it will not be necessary for the waste load checking program required by Provision C.6. to include chemical characterization of the inert waste.

6. The discharger disposed approximately 4,000 cubic yards of fill material during the last two years. The estimated remaining life for the landfill is unknown due to the sporadic availability of fill material.

7. The site is located on the alluvial cone of San Antonio Wash in the Upper Santa Ana Valley Basin, and is underlain by water-bearing alluvial deposits. These deposits include an upper Recent alluvium of unconsolidated sand, gravels, and boulders; and a lower, thicker phase of finer-grained alluvium of Pleistocene Age containing numerous reddish-brown clayey horizons.

8. This Regional Board adopted a revised Water Quality Control Plan for the Los Angeles Region on June 13, 1994. The Plan contains beneficial uses and water quality objectives for ground water in the Upper Santa Ana Valley Basin. Beneficial uses of the ground water in the Upper Santa Ana Valley Basin include municipal, agricultural, and industrial services and process supply. The requirements contained in this Order, as they are met, will be in conformance with the goals of the Water Quality Control Plan.

9. The revision of these waste discharge requirements constitutes an ongoing project as defined in Section 15261, Chapter 3, Title 14, California Administrative Code, and is therefore exempt from the provisions of the California Environmental Quality Act (Public Resource Code, Section 21100 et seq.).

The Regional Board has notified the discharger and interested agencies and persons of its intent to adopt waste discharge requirements for this discharge, and has provided them with an opportunity to submit their written views and recommendations.

The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharge and to the tentative requirements.

IT IS HEREBY ORDERED, that Claremont University Center (discharger) shall comply with the following:

A. Discharge Specifications

1. Claremont Landfill is an inert waste landfill capable of accepting inert wastes only. Inert waste does not contain hazardous waste or soluble pollutants at concentrations in excess of applicable water quality objectives, and does not contain significant quantities of decomposable waste. Inert wastes do not need to be discharged at classified waste management units.

2. Wastes disposed at this site shall be limited to inert wastes only, such as, but are not limited to:

a. Earth, rock, gravel, and concrete
b. Asphalt paving fragments
c. Glass
c. Plaster products (excluding plasterboard)
d. Brick
e. Clay and clay products
f. Inert plastics

3. Prohibitions:

a. No hazardous wastes, designated wastes, or liquid wastes shall be deposited at this disposal site.
b. Non-hazardous solid wastes (decomposable organic refuse such as, but not necessarily limited to, ordinary household and commercial refuse, tin cans, metals, paper and paper products, plasterboard, cloth and clothing, wood and wood products, lawn clippings, sod, shrubbery, hair, hide, bones, dead animals, roofing paper, tar paper, unquenched ashes mixed, with refuse, market refuse, garbage, etc.) shall not be deposited at this site.
c. No materials of a toxic nature such as insecticides, poisons, or radioactive materials, shall be deposited at this site.
d. No asbestos or asbestos products shall be deposited at this site.
e. Wastes deposited at this site shall be confined thereto, and shall not be permitted to enter drainage ditches or watercourses.
f. Erosion of deposited materials by surface flow shall be prevented.
g. Neither the discharge nor any treatment of wastes shall cause pollution or nuisance.

4. The discharger shall remove and relocate at a legal disposal site any wastes that are discharged in violation of these requirements. For the purpose of these requirements, a legal point of disposal is defined as one for which Waste Discharge Requirements have been established by a California Regional Water Quality Control Board, and is in full compliance therewith.

B. Water Quality Protection Limits

No groundwater protection limits have been prescribed at this time because no background water quality is currently available. Water quality protection limits will be established after one year of quarterly background water quality monitoring using the monitoring system as described in Provision C.1. of this Order and Section III of the Monitoring and Reporting Program No. 5766 (Attachment T).

C. General Provision

1. By August 31, 2000, the discharger shall submit a technical report, to be approved by the Executive Officer, to install a groundwater and surface water monitoring system to ensure that it can detect the water quality impact if pollutants are released from the landfill to groundwater. The report shall also include a time schedule for implementation. Prior to August 31, 2000, the discharger may submit a report documenting the disposal and operational history of this site, including a technical justification describing why groundwater monitoring is not necessary. Based on review of this report, the Executive Officer may determine that groundwater monitoring is not required. Surface water monitoring shall be done in a manner consistent with the requirements for the storm water pollution prevention plans and monitoring program described on pages IX and X of Attachment V.

2. The effectiveness of all monitoring wells and monitoring devices shall be maintained for the active life of this site. If any of the monitoring wells and/or monitoring devices are damaged, destroyed, or abandoned for any reason, the discharger shall provide substitutes acceptable to the Executive Officer to meet the monitoring requirements of the Order.

3. The discharger shall provide for the proper handling and disposal of water purged from the monitoring wells during sampling. Water purged from the wells shall not be returned to that well (or any other well).

4. For any monitoring wells or piezometers installed in the future, the discharger shall submit technical reports for approval by the Executive Officer, prior to installation. These technical reports shall be submitted at least 60 days prior to the anticipated date of installation of the wells or piezometers. These reports shall be accompanied by:

   a. Maps and cross sections showing the locations of the monitoring points;

   b. Drawings and data showing construction details of the monitoring points. These data shall include:

      (i) casing and test hole diameter;
      (ii) casing materials;
      (iii) depth of each hole;
      (iv) the means by which the size and position of perforations shall be determined, or verified, in the field;
      (v) method of joining sections of casing;
      (vi) nature of filter material;
      (vii) depth and composition of seals; and
      (viii) method and length of time of well development.

If a well or piezometer is proposed to replace an inoperative well or piezometer, the discharger shall not delay replacement while waiting for Executive Officer approval. However, the technical report shall be submitted within the required time schedule.

5. The discharger shall conduct required monitoring and response programs in accordance with Section 20385 of Title 27. (A detection monitoring program per Section 20420 of Title 27, an evaluation monitoring program per Section 20425 of Title 27, and a corrective action program per Section 20430 of Title 27.)

6. The discharger shall take any and all necessary measures to prevent unauthorized disposal of wastes at this site by instituting a waste load-checking program. A waste load-checking program must be submitted to the Executive Officer for approval within ninety (90) days after adoption of this Order.

7. The discharger shall maintain copies of this Order and the waste load-checking program at the site so as to be available at all times to personnel operating the site.

8. The discharger shall file with this Regional Board a report of any material change or proposed change in the character, location, boundaries or quantity of this waste discharge at least 120 days prior to the date of such proposed change.

9. In the event of any change in name of operator or in control or ownership of land or waste disposal facilities owned or controlled by the discharger, the discharger shall:

   a. Notify this Regional Board in writing of such a change; and
   b. Notify the succeeding owner or operator by letter, a copy of which shall be filed with this Regional Board, of the existence of this order.

10. Ninety (90) days prior to cessation of disposal operations at this site, the discharger shall submit a technical report to the Regional Board describing the methods and controls to be used to assure protection of the quality of receiving waters during final operations and with any proposed subsequent use of the land. Such methods and controls shall comply with the foregoing and the waste discharge requirements. The report shall be prepared under the direct supervision of a California-registered geologist or engineer, or a California-certified engineering geologist.

11. This Regional Board considers the property owner to have continuing responsibility for correcting any problems which may arise in the future as a result of this waste discharge or water applied to this property during subsequent use of the land for other purposes.

12. These requirements do not exempt the operator of this waste disposal facility from compliance with any other laws, regulations, or ordinances which may be applicable; they

do not legalize this waste disposal facility, and they leave unaffected any further restraint on the disposal of wastes at this site which may be contained in other statutes or required by other agencies.

13. The discharger shall furnish, under penalty of perjury, technical or monitoring program reports in accordance with Section 13267 of the California Water Code. Failure or refusal to furnish these reports, or falsifying any information provided therein, renders the discharger guilty of a misdemeanor and subject to the penalties stated in Section 13268 of the California Water Code. Monitoring reports shall be submitted in accordance with the specifications contained in the attached Monitoring and Reporting Program, as directed by the Executive Officer. The attached Monitoring and Reporting Program is subject to periodic revisions, as warranted and approved by the Executive Officer.

14. This Order includes the attached "Standard Provisions Applicable to Waste Discharge Requirements" (Attachment W). If there is any conflict between provisions stated hereinbefore and the attached "Standard Provisions Applicable to Waste Discharge Requirements", those provisions attached hereinbefore prevail.

15. In accordance with Section 13263 of the California Water Code, these requirements are subject to periodic review and revision by this Regional Board.

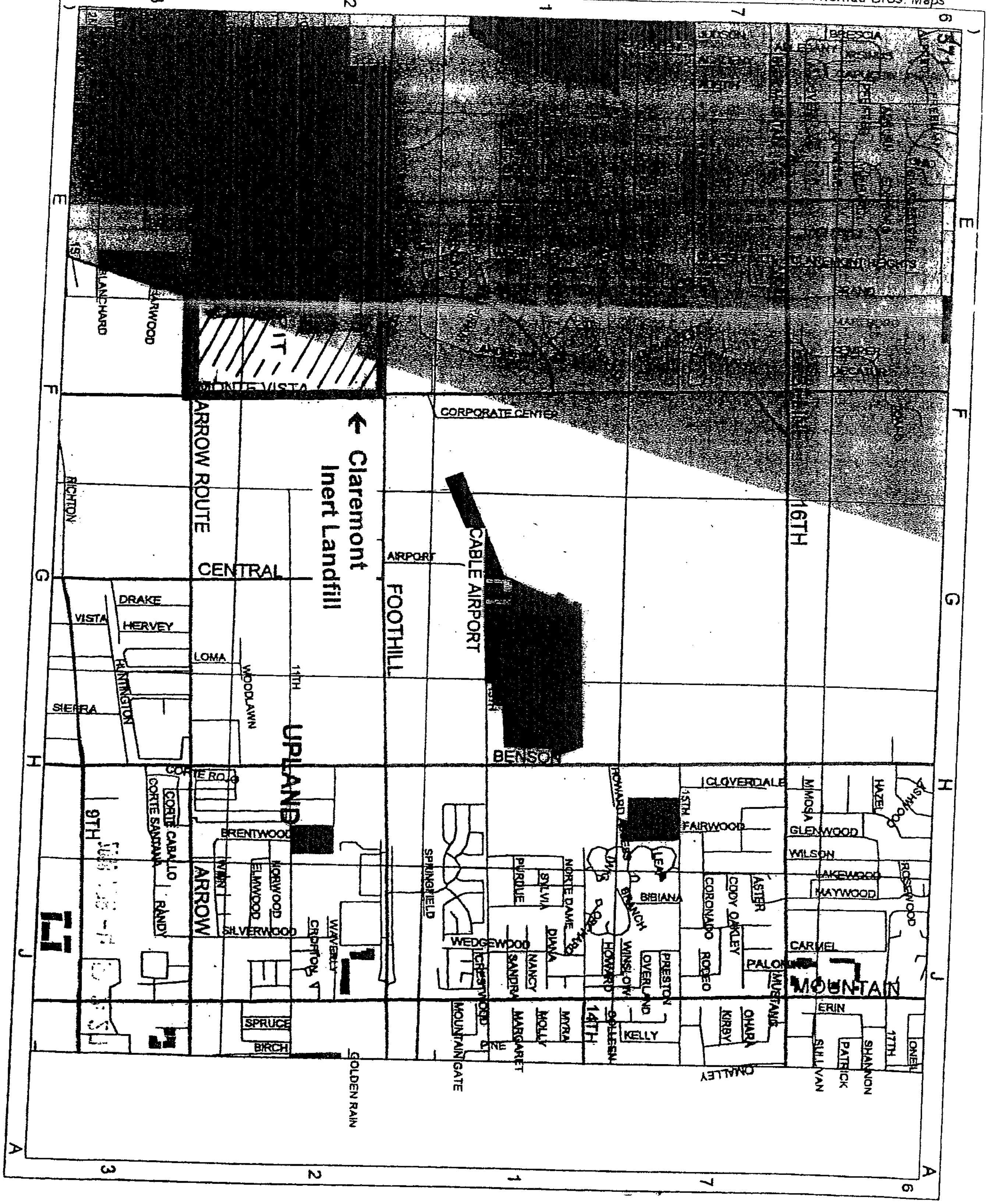
16. Order No. 73-014, adopted by the Regional Board on February 28, 1973, is hereby rescinded.

I, Dennis A. Dickerson, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region on May 25, 2000.

Dennis A. Dickerson
Executive Officer

FIGURE 1

©1998 Thomas Bros. Maps



ATTACHMENT T

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

MONITORING AND REPORTING PROGRAM NO. 5766
FOR
CLAREMONT UNIVERSITY CENTER
(Claremont Landfill)
(File No. 67-20)

I. REPORTING

A. The discharger shall implement this Monitoring and Reporting Program beginning May 25, 2000. A technical report is due August 31, 2000, as required by Provision C.1. of Order 00-070, to install a groundwater monitoring system.

B. The discharger shall submit waste disposal reports to the Regional Board quarterly on the following schedule: the first quarter reports by May 15 of each year, the second quarter reports by August 15 of each year, the third quarter reports by November 15 of each year, and the fourth quarter reports by February 15 of each year.

C. Quarterly monitoring of groundwater shall be performed during the months of January, April, July, and October. In the event monitoring is not performed as above because of unforeseen circumstances, substitute monitoring shall be performed as soon as possible after these times, and the reason for the delay shall also be given.

D. By March 1 of each year, the discharger shall submit an annual report to the Regional Board. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous year. In addition, the discharger shall discuss the compliance record.

E. All chemical, bacteriological, and toxicity analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health Services Environmental Laboratory Accreditation Program, or approved by the Executive Officer. Laboratory analyses must follow methods approved by the United States Environmental Protection Agency, and the laboratory must meet EPA Quality Assurance/Quality Control criteria.

F. For any analyses performed for which no procedures are specified in the EPA guidelines or in this Monitoring and Reporting Program, the constituent or parameter analyzed, and the method or procedure used, must be specified in the report.

G. The discharger may submit additional data to the Regional Board not required by this program in order to simplify reporting to other regulatory agencies.

H. Analytical data reported as "less than ..." shall be reported as less than a numeric value, or below the limit of detection for that particular analytical method. Also, method detection limit for each monitoring parameter shall be reported.

I. If the discharger performs analyses for any parameter more frequently than required by this Program using approved analytical methods, the results of those analyses shall be included in the monitoring report.

J. The results of the waste load checking program shall be reported in each waste disposal report.

K. For every item where the requirements are not met, the discharger shall submit a statement of the actions undertaken or proposed which will bring the discharge into full compliance with requirements at the earliest time and submit a timetable for correction.

L. The discharger shall retain records of all monitoring information, including all calibration and maintenance records regarding monitoring instrumentation and copies of all data submitted to regulatory agencies for a period of at least five years. This period may be extended by request of the Regional Board at any time, and shall be extended during the course of any unresolved litigation regarding all or any part of the entire waste management facility.

M. This Monitoring and Reporting Program includes the attached "Standard Provisions Applicable to Waste Discharge Requirements" (Attachment I). If there is any conflict between provisions stated herein and the "Standard Provisions Applicable to Waste Discharge Requirements", these provisions stated herein will prevail.

N. Records of monitoring information shall include:

1. The date, exact place, procedure, and time of sampling or measurement;
2. The individual(s) who performed the sampling or measurement;
3. The date(s) analyses were performed on the samples;
4. The individual(s) who performed the analyses;
5. The analytical techniques or methods used;
6. The results of the analyses or measurements, including both statistical and non-statistical analyses;
7. The method detection limits;
8. The executive summary of the key findings;

9. The laboratory QA/QC data and chain of custody records (except for annual reports);
10. The laboratory certification information;
11. The velocity and direction of groundwater flow; and,
12. The measurement of the static water levels of all monitoring wells.

O. In reporting the monitoring data, the discharger shall arrange the data in tabular form.

P. Monitoring reports shall be signed by:

a. In the case of corporations, by a principal executive officer at least of the level of vice-president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates;

b. In the case of a partnership, by a general partner;

c. In the case of a sole proprietorship, by the proprietor;

d. In the case of a municipal, state or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.

Q. Each report shall contain the following completed declaration:

"I declare under penalty of perjury that the following is true and correct.

Executed on the _____ day of _____ at _____.

_____ (Signature)

_____(Title)"

II. WASTE DISPOSAL REPORTING

A. The reports to the Regional Board shall include a map of the site, and shall indicate the area(s) where disposal is taking place or will begin. This map shall be updated quarterly, and summarized and submitted with the annual report due March 1 of each year. If a new area is landfilled, it shall be identified in the corresponding quarterly report.

B. A waste disposal report containing the following information shall be filed with this Regional Board each quarter:

1. A tabular list of the estimated average monthly quantities (in cubic yards or tons) and types of materials deposited each month.

2. An estimate of remaining capacity (in cubic yards and tons), and the remaining life of the site in years and months.

3. A certification that all wastes deposited were deposited in compliance with the Regional Board's requirements, and that no wastes were deposited outside of the boundaries of the waste management facility as specified in the Regional Board's requirements.

4. A description of the location and an estimate of the seepage rate or flow of all known seeps and springs at the site.

5. The estimated amount of water used at the waste management area for landscape irrigation, compaction, dust control, etc., during the month. (If a source other than potable water is used, the sources and amounts of water from each source shall also be reported.)

6. The discharger shall report all unacceptable (to this site) wastes inadvertently received at this site and their disposition. The following details shall be included:

   a. The source (if known), including the hauler, of the unacceptable wastes and date received and/or discovered.

   b. Identification of waste (if known) and the amount of waste.

   c. The name and address of the hauler who removed the waste from this site

   d. The ultimate point of disposal for the waste.

   e. The discharger's actions to prevent recurrence of the attempted depositing of unacceptable wastes by this source or individual (if applicable). If no unacceptable wastes were received (or discovered) during the month, the report shall so state.

III. GROUND WATER MONITORING

1. Provisions and General Requirements

A. All sampling, sample preservation, and analyses shall be performed in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants", promulgated by the United States Environmental Protection Agency

B. The discharger shall calibrate and perform maintenance procedures on all monitoring instruments and equipment to ensure accuracy of measurements, or shall ensure that both activities will be conducted.

C. No filtering of samples taken for organics analyses shall be permitted. Samples for organic analyses shall be taken with a sampling method which minimizes volatilization and degradation of potential constituents.

D. Analytical results for ground water monitoring shall be submitted with the corresponding semi-annual monitoring report. If a well was not sampled (or measured) during the reporting period, the reason for the omission shall be given. If no fluid was detected in a monitoring well, a statement to that effect (in lieu of analyses) shall be submitted.

E. Quarterly observations and measurements of the static water levels shall be made on all monitoring wells, and records of such observations shall be submitted with the semi-annual monitoring reports.

F. All monitoring wells shall be sounded each third quarter to determine total depth. Wells affected by pumping shall be measured prior to pumping insofar as is possible.

G. Duplicate samples shall be taken for constituents of concern metals analyses only. Unfiltered samples shall be tested for total metals, and field-filtered samples (.45 microns) shall be tested for dissolved metals. Both samples must be preserved with nitric acid; however, care shall be taken that the dissolved metals samples are not exposed to acids until after filtering.

H. The laboratory QA/QC report shall include, at a minimum, method blanks, calibration checks, surrogate recoveries. matrix spikes, and matrix spike duplicates, spiking concentrations, and laboratory quality control samples. Spiking concentration must be no more than 10 times of method detection limit.

I. Practical quantitation limits shall be below the current maximum Contaminant Levels listed in Title 22 of California Code of Regulations or Action Levels

APPENDIX E

RWQCB Amended Monitoring and

Reporting Program No. 5766

California Regional Water Quality Control Board

Los Angeles Region

Over 50 Years Serving Coastal Los Angeles and Ventura Counties

Recipient of the 2001 *Environmental Leadership Award* from Keep California Beautiful

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Phone (213) 576-6600 FAX (213) 576-6640 - Internet Address: http://www.swrcb.ca.gov/rwqcb4

October 15, 2001

H. Martin Olsen
Claremont University Center
303 E. First Street
Claremont, CA 91711-4487

Dear Mr. Olsen:

AMENDED GROUNDWATER DETECTION MONITORING PROGRAM, CLAREMONT LANDFILL (FILE NO. 66-016)

We have reviewed the August 30, 2001, "Review of Disposal and Operational History Report" (Report) and all groundwater quality data for the Claremont Landfill received to date. The purpose of this Report was to propose an updated groundwater detection and reporting program for the landfill based upon results from recently completed detection monitoring performed at the site.

The Report is found to be complete and acceptable, and the proposed updated groundwater detection monitoring and reporting program is hereby approved. Attached is the amended Monitoring and Reporting Program (CI-5766) for the Claremont Landfill.

Should you have any questions, please contact Rodney Nelson at (213) 236-2469 or Enrique Casas at (213) 236-2468.

Sincerely,

Dennis A. Dickerson
Executive Director

Attachment

cc: Joe Mello, State Water Resources Control Board
Robert Sams, Office of Chief Counsel, SWRCB
Permitting and Enforcement Division, Integrated Waste Management Board
Virginia Maloles, County of Los Angeles, Department of Health Services, Solid Waste Management Department
Belle Newman, City of Claremont Planning Department

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

AMENDED MONITORING AND REPORTING PROGRAM NO. 5766
FOR
CLAREMONT UNIVERSITY CENTER
(Claremont Landfill)
(Order No. 00-070)
(File No. 66-016)

Monitoring and Reporting Program No. 5766 for the Claremont Landfill is being amended to revise the groundwater Detection Monitoring Program (DMP), pursuant to the satisfactory completion of Provision C.1. of Order 00-070. This Monitoring and Reporting Program supersedes the May 25, 2000 revised monitoring provisions.

The Claremont University Center shall implement this amended Monitoring and Reporting Program immediately:

I. REPORTING

A. The discharger shall submit waste disposal reports to the Regional Board quarterly on the following schedule: the first quarter reports by May 15 of each year, the second quarter reports by August 15 of each year, the third quarter reports by November 15 of each year, and the fourth quarter reports by February 15 of each year.

B. All chemical, bacteriological, and toxicity analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health Services Environmental Laboratory Accreditation Program, or approved by the Executive Officer. Laboratory analyses must follow methods approved the United States Environmental Protection Agency (USEPA), and the laboratory must meet USEPA Quality Assurance/Quality Control (QA/QC) criteria.

C. For all analyses performed for which no procedures are specified in the USEPA guidelines or in this Monitoring and Reporting Program, the constituent or parameter analyzed, and the method or procedure used, must be specified in the report.

D. The discharger may submit additional data to the Regional Board not required by this program in order to simplify reporting to other regulatory agencies.

E. Analytical data reported as "less than ..." shall be reported as less than a numeric value, or below the limit of detection for that particular analytical method. Also, the method detection limit for each monitoring parameter shall be reported.

F. If the discharger performs analyses for any parameter more frequently than required by this Monitoring and Reporting Program using approved analytical methods, the results of those analyses shall be included in the monitoring report.

G. The results of the waste load checking program shall be reported in each waste disposal report.

H. For every item where the requirements are not met, the discharger shall submit a statement of the actions undertaken or proposed which will bring the discharge into full compliance with requirements at the earliest time and submit a timetable for correction.

I. The discharger shall retain records of all monitoring information, including all calibration and maintenance records regarding monitoring instrumentation and copies of all data submitted to regulatory agencies for a period of at least five years. This period may be extended by request of the Regional Board at any time, and shall be extended during the course of any unresolved litigation regarding all or any part of the entire waste management facility.

J. This Monitoring and Reporting Program includes the attached "Standard Provisions Applicable to Waste Discharge Requirements" (Attachment 1). If there is any conflict between provisions stated herein and the "Standard Provisions Applicable to Waste Discharge Requirements", these provisions stated herein will prevail.

K. Records of monitoring information shall include:

1. The date, exact place, procedure, and time of sampling or measurement;
2. The individual(s) who performed the sampling or measurement;
3. The dates(s) analyses were performed on the samples;
4. The individual(s) who performed the analyses;
5. The analytical techniques or methods used;
6. The results of the analyses or measurements, including both statistical and non-statistical analyses;
7. The method detection limits;
8. The executive summary of the key findings;
9. The laboratory QA/QC data and chain of custody records;
10. The laboratory certification information;
11. The measurement of the static water level of monitoring well MW-A.

L. In reporting the monitoring data, the discharger shall arrange the data in tabular form.

M. Monitoring reports shall be signed by:

a. In the case of corporations, by a principal executive officer at least of the level of vice-president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates;

b. In the case of a partnership, by a general partner;

c. In the case of a sole proprietorship, by the proprietor;

d. In the case of a municipal, state or other public facility, by either a principal executive officer, ranking elected official or other duly authorized employee.

N. Each report shall contain the following completed declaration:

"I declare under penalty of perjury that the following is true and correct.

Executed on the _____day of _____at _____.

_____(Signature)

_____(Title)"

II. WASTE DISPOSAL REPORTING

A. The reports to the Regional Board shall include a map of the site, and shall indicate the area(s) where disposal is taking place or will begin. This map shall be updated quarterly. If a new area is landfilled, it shall be identified in the corresponding quarterly report.

B. A waste disposal report containing the following information shall be filed with this Regional Board each quarter:

1. A tabular list of the estimated average monthly quantities (in cubic yards or tons) and types of materials deposited each moth.

2. An estimate of remaining capacity (in cubic yards or tons), and the remaining life of the site in years and months.

3. A certification that all wastes deposited were deposited in compliance with the Regional Board's requirements, and that no wastes were deposited outside of the boundaries of the waste management facility as specified in the Regional Board's requirements.

4. A description of the location and an estimate of the seepage rate or flow of all known seeps and springs at the site.

5. The estimated amount of water used at the waste management area for landscape irrigation, compaction, dust control, etc., during the month. (If a source other than potable water is used, the sources and amounts of water from each source shall also be reported).

6. The discharger shall report all unacceptable (to this site) wastes inadvertently received at this site and their disposition. The following details shall be included:

   a. The source (if known), including the hauler, of the unacceptable wastes and date received and/or discovered.

   b. Identification of waste (if known) and the amount of waste.

   c. The name and address of the hauler who removed the waste from the site.

   d. The ultimate point of disposal for the waste.

   e. The discharger's actions to prevent recurrence of the attempted depositing of unacceptable wastes by this source or individual (if applicable). If no unacceptable wastes were received (or discovered) during the month, the report shall so state.

III. GROUNDWATER MONITORING

1. Provisions and General Requirements

A. Monitoring of groundwater in monitoring well MW-A shall be performed every third year during the month of October starting in 2004. Groundwater monitoring results shall be reported with the November 15 quarterly reports.

B. All sampling, sample preservation, and analyses shall be performed in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants", promulgated by the USEPA.

C. The discharger shall calibrate and perform maintenance procedures on all monitoring instruments and equipment to ensure accuracy of measurements, or shall ensure that both activities will be conducted.

D. No filtering of samples taken for organics analyses shall be permitted. Samples for organics analyses shall be taken with a sampling method that minimizes volatilization and degradation of potential constituents.

E. Analytical results for groundwater monitoring shall be submitted with the corresponding monitoring report.

F. Duplicate samples shall be taken for constituents of concern metals analyses only. Unfiltered samples shall be tested for total metals, and field–filtered samples (0.45 microns) shall be tested for dissolved metals. Both samples must be preserved with nitric acid; however, care shall be taken that the dissolved metals samples are not exposed to acids until after filtering.

G. The laboratory QA/QC report shall include, at a minimum, method blanks, calibration checks, surrogate recoveries, matrix spikes, and matrix spike duplicates, spiking concentrations, and laboratory QC samples. Spiking concentrations must be no more than 10 times the method detection limit.

H. Practical quantitation limits shall be below the current Maximum Contaminant Levels listed in Title 22 of the California Code of Regulations or Action Levels recommended by the California Department of Health Services, whenever it is possible.

I. Proper chain of custody procedures shall be used.

J. Constituents detected between the method detection limits and the practical quantitation limits must be reported, but may be reported as a trace.

2. Sampling and Analyses

Sampling and analyses of groundwater shall consist of the monitoring parameters listed below:

Claremont University Center **Order No. 00-070**
Claremont Landfill
Amended Monitoring and Reporting Program No. 5776

Monitoring Parameters	Test Method
Bicarbonate ($CaCO_3$)	Standard Method 2320B
Boron	EPA 6010
Chemical Oxygen Demand	EPA 410.4
Chloride	EPA 300.0
Electrical Conductivity	Field
Nitrate (as N)	EPA 300.0
Nitrite	EPA 300.0
pH	Field
Priority Pollutant Metals	EPA 6000/7000
Sodium	EPA 6010
Sulfate	EPA 300.0
Total Dissolved Solids	EPA 160.1
Total Hardness (as $CaCO_3$)	Standard Method 2320B
Volatile Organics	EPA 8260

Ordered By: Dennis A. Dickerson
DENNIS A. DICKERSON
Executive Officer

Date: October 15, 2001

Attachment 1:

**STANDARD PROVISIONS
APPLICABLE TO WASTE DISCHARGE REQUIREMENTS**

STANDARD PROVISIONS
APPLICABLE TO WASTE DISCHARGE REQUIREMENTS

1. DUTY TO COMPLY

The discharger must comply with all conditions of these waste discharge requirements. A responsible party has been designated in the Order for this project, and is legally bound to maintain the monitoring program and permit. Violations may result in enforcement actions, including Regional Board orders or court orders requiring corrective action or imposing civil monetary liability, or in modification or revocation of these waste discharge requirements by the Regional Board. [CWC Section 13261, 13263, 13265, 13268, 13300, 13301, 13304, 13340, 13350]

2. GENERAL PROHIBITION

Neither the treatment nor the discharge of waste shall create a pollution, contamination or nuisance, as defined by Section 13050 of the California Water Code (CWC). [H&SC Section 5411, CWC Section 13263]

3. AVAILABILITY

A copy of these waste discharge requirements shall be maintained at the discharge facility and be available at all times to operating personnel. [CWC Section 13263]

4. CHANGE IN OWNERSHIP

The discharger must notify the Executive Officer, in writing at least 30 days in advance of any proposed transfer of this Order's responsibility and coverage to a new discharger containing a specific date for the transfer of this Order's responsibility and coverage between the current discharger and the new discharger. This agreement shall include an acknowledgement that the existing discharger is liable for violations up to the transfer date and that the new discharger is liable from the transfer date on. [CWC Sections 13267 and 13263]

5. CHANGE IN DISCHARGE

In the event of a material change in the character, location, or volume of a discharge, the discharger shall file with this Regional Board a new Report of Waste Discharge. [CWC Section 13260(c)]. A material change includes, but is not limited to, the following:

(a) Addition of a major industrial waste discharge to a discharge of essentially domestic sewage, or the addition of a new process or product by an industrial facility resulting in a change in the character of the Waste.

(b) Significant change in disposal method, e.g., change from a land disposal to a direct discharge to water, or change in the method of treatment which would significantly alter the characteristics of the waste.

(c) Significant change in the disposal area, e.g., moving the discharge to another drainage area, to a different water body, or to a disposal area significantly removed from the original area potentially causing different water quality or nuisance problems.

(d) Increase in flow beyond that specified in the waste discharge requirements.

(e) Increase in the area or depth to be used for solid waste disposal beyond that specified in the waste discharge requirements. [CCR Title 23 Section 2210]

6. REVISION

These waste discharge requirements are subject to review and revision by the Regional Board. [CCR Section 13263]

7. TERMINATION

Where the discharger becomes aware that it failed to submit any relevant facts in a Report of Waste Discharge or submitted incorrect information in a Report of Waste Discharge or in any report to the Regional Board, it shall promptly submit such facts or information. [CWC Sections 13260 and 13267]

8. VESTED RIGHTS

This Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, do not protect the discharger from his liability under Federal, State or local laws, nor do they create a vested right for the discharger to continue the waste discharge. [CWC Section 13263(g)]

9. SEVERABILITY

Provisions of these waste discharge requirements are severable. If any provision of these requirements are found invalid, the remainder of the requirements shall not be affected. [CWC Section 921]

10. OPERATION AND MAINTENANCE

The discharger shall, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the discharger to achieve compliance with conditions of this Order. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls including appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this Order. [CWC Section 13263(f)]

11. HAZARDOUS RELEASES

Except for a discharge which is in compliance with these waste discharge requirements, any person who, without regard to intent or negligence, causes or permits any hazardous substance or sewage to be discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State, shall, as soon as (a) that person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the Office of Emergency Services of the discharge in accordance with the spill reporting provision of the State toxic disaster contingency plan adopted pursuant to Article 3.7 (commencing with Section 8574.7) of Chapter 7 of Division 1 of Title 2 of the Government Code, and immediately notify the State Board or the appropriate Regional Board of the discharge. This provision does not require reporting of any discharge of less than a reportable quantity as provided for under subdivisions (f) and (g) of Section 13271 of the Water Code unless the discharger is in violation of a prohibition in the applicable Water Quality Control plan. [CWC Section 1327(a)]

12. PETROLEUM RELEASES

Except for a discharge which is in compliance with these waste discharge requirements, any person who without regard to intent or negligence, causes or permits any oil or petroleum product to be discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State, shall, as soon as (a) such person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the Office of Emergency Services of the discharge in accordance with the spill reporting provision of the State oil spill contingency plan adopted pursuant to Article 3.5 (commencing with Section 8574.1) of Chapter 7 of Division 1 of Title 2 of the Government Code. This provision does not require reporting of any discharge of less than 42 gallons unless the discharge is also required to be reported pursuant to Section 311 of the Clean Water Act or the discharge is in violation of a prohibition in the applicable Water Quality Control Plan. [CWC Section 13272]

13. ENTRY AND INSPECTION

The discharger shall allow the Regional Board, or an authorized representative upon the presentation of credentials and other documents as may be required by law, to:

(a) Enter upon the discharger's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Order;

(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order;

(c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and

(d) Sample or monitor at reasonable times, for the purposes of assuring compliance with this Order, or as otherwise authorized by the California Water Code, any substances or parameters at any location. [CWC Section 13267]

14. MONITORING PROGRAM AND DEVICES

The discharger shall furnish, under penalty of perjury, technical monitoring program reports; such reports shall be submitted in accordance with specifications prepared by the Executive Officer, which specifications are subject to periodic revisions as may be warranted. [CWC Section 13267]

All monitoring instruments and devices used by the discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. All flow measurement devices shall be calibrated at least once per year, or more frequently, to ensure continued accuracy of the devices. Annually, the discharger shall submit to the Executive Office a written statement, signed by a registered professional engineer, certifying that all flow measurement devices have been calibrated and will reliably achieve the accuracy required.

Unless otherwise permitted by the Regional Board Executive officer, all analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health Services. The Regional Board Executive Officer may allow use of an uncertified laboratory under exceptional circumstances, such as when the closest laboratory to the monitoring location is outside the State boundaries and therefore not subject to certification. All analyses shall be required to be conducted in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants" [40CFR Part 136] promulgated by the U.S. Environmental Protection Agency. [CCR Title 23, Section 2230]

15. TREATMENT FAILURE

In an enforcement action, it shall not be a defense for the discharger that it would have been necessary to halt or to reduce the permitted activity in order to maintain compliance with this Order. Upon reduction, loss, or failure of the treatment facility, the discharger shall, to the extent necessary to maintain compliance with this Order, control production or all discharges, or both, until the facility is restored or an alternative method of treatment is provided. This provision applies, for example, when the primary source of power of the treatment facility fails, is reduced, or is lost. [CWC Section 13263(f)]

16. DISCHARGE TO NAVIGABLE WATERS

Any person discharging or proposing to discharge to navigable waters from a point source (except for discharge of dredged or fill material subject to Section 404 fo the Clean Water Act and discharge subject to a general NPDES permit) must file an NPDES permit application with the Regional Board. [CCR Title 2 Section 22357]

17. ENDANGERMENT TO HEALTH AND ENVIRONMENT

The discharger shall report any noncompliance which may endanger health or the environment. Any such information shall be provided verbally to the Executive Officer within 24 hours from the time the discharger becomes aware of the circumstances. A written submission shall also be provided within five days of the time the discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected; the anticipated time it is expected to continue and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Executive officer, or an authorized representative, may waive the written report on a case-by-case basis if the oral report has been received within 24 hours. The following occurrence(s) must be reported to the Executive Office within 24 hours:

(a) Any bypass from any portion of the treatment facility.

(b) Any discharge of treated or untreated wastewater resulting from sewer line breaks, obstruction, surcharge or any other circumstances.

(c) Any treatment plan upset which causes the effluent limitation of this Order to be exceeded. [CWC Sections 13263 and 13267]

18. MAINTENANCE OF RECORDS

The discharger shall retain records of all monitoring information including all calibration and maintenance records, all original strip chart recordings for continuous monitoring instrumentation, copies off all reports required by this Order, and record of all data used

to complete the application for this Order. Records shall be maintained for a minimum of three years from the date of the sample, measurement, report, or application. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board Executive Officer.

Records of monitoring information shall include:

(a) The date, exact place, and time of sampling or measurement;

(b) The individual(s) who performed the sampling or measurement;

(c) The date(s) analyses were performed;

(d) The individual(s) who performed the analyses;

(e) The analytical techniques or method used; and

(f) The results of such analyses.

19. (a) All application reports or information to be submitted to the Executive Office shall be signed and certified as follows:

(1) For a corporation – by a principal executive officer or at least the level of vice president.

(2) For a partnership or sole proprietorship – by a general partner or the proprietor, respectively.

(3) For a municipality, state, federal, or other public agency – by either a principal executive officer or ranking elected official.

(b) A duly authorized representative of a person designated in paragraph (a) of this provision may sign documents if:

(1) The authorization is made in writing by a person described in paragraph (a) of this provision.

(2) The authorization specifies either an individual or position having responsibility for the overall operation of the regulated facility or activity; and

(3) The written authorization is submitted to the Executive Officer.

Any person signing a document under this Section shall make the following certification:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. [CWC Sections 13263, 13267, and 13268]"

20. OPERATOR CERTIFICATION

Supervisors and operators of municipal wastewater treatment plants and privately owned facilities regulated by the PUC, used in the treatment or reclamation of sewage and industrial waste shall possess a certificate of appropriate grade in accordance with Title 23, California Code of Regulations Section 3680. State Boards may accept experience in lieu of qualification training. In lieu of a properly certified wastewater treatment plant operator, the State Board may approve use of a water treatment plan operator of appropriate grade certified by the State Department of Health Services where reclamation is involved.

Each plan shall be operated and maintained in accordance with the operation and maintenance manual prepared by the municipality through the Clean Water Grant Program [CWC Title 23, Section 2233(d)]

ADDITIONAL PROVISIONS APPLICABLE TO
PUBLICLY OWNED TREATEMENT WORKS' ADEQUATE CAPACITY

21. Whenever a publicly owned wastewater treatment plant will reach capacity within four years the discharger shall notify the Regional Board. A copy of such notification shall be sent to appropriate local elected officials, local permitting agencies and the press. The discharger must demonstrate that adequate steps are being taken to address the capacity problem. The discharger shall submit a technical report to the Regional Board showing flow volumes will be prevented from exceeding capacity, or how capacity will be increased, within 120 days after providing notification to the Regional Board, or within 120 days after receipt of notification from the Regional Board, of a finding that the treatment plant will reach capacity within four years. The time for filing the required technical report may be extended by the Regional Board. An extension of 30 days may be granted by the Executive Officer, and longer extensions may be granted by the Regional Board itself. [CCR Title 23, Section 2232]