

IX. DEFINITIONS AND ABBREVIATIONS

Less Than Number Shown (<)

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency.

Maximum Residual Disinfectant Level (MRDL): The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs are set by the U.S. Environmental Protection Agency.

Nephelometric Turbidity Unit (NTU): Nephelometric Turbidity Unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Non-Detects (ND): Laboratory analysis indicates that the contaminant is below detection level.

No Standards (NS)

Parts per billion (ppb) or Micrograms per liter (ug/l): One Part per billion corresponds to one minute in 2,000 years, or a single penny in \$10 million.

Parts per million (ppm) or Milligrams per liter (mg/l): One Part per million corresponds to one minute in two years, or a single penny in \$10,000.

Parts per trillion (PPT): One part per trillion corresponds to one minute in 2,000,000 years or a single penny in \$10 billion.

Picocuries per liter (pCi/L): Picocuries per liter is a measurement of the radioactivity in water.

Primary Drinking Water Standard (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Public Health Goal (PHG): The concentrations of drinking water contaminants that pose no significant health risk if consumed for a lifetime, based on current risk assessment principles, practices, and methods. PHGs are set by the California Environmental Protection Agency's (Cal/EPA) Office of Environmental Health Hazard Assessment (OEHHA).

Regulatory Action Levels (AL): The concentration of a contaminant which, when exceeded, triggers treatment or other requirements that a water system must follow.

Treatment Technique (TT): A treatment technique is a required process intended to reduce the level of contaminants in drinking water.

X. SYMBOLS

- (a) = Results are based on distribution system sampling of approximately 1,000 samples.
- (b) = Sources are blended to meet state MCL.
- (c) = Calculations on a running annual average in the distribution system.
- (e) = State level is dependent upon air temperature.
- (f) = To convert the data from NO₃ to N, divide by 4.43.
- (g) = Negative values occur when the background count, as part of the analytical result, exceeds the actual count.
- (h) = Standard is for Radium 226 & 228 combined.
- (j) = Figures are weighted averages based on percent of production.

XI. TEST RESULT TABLE HEALTH EFFECT LANGUAGE

The following health effect language is required for this report if any contaminant has been detected in the water supply. The City's domestic water supply meets all State and Federal Drinking Water Quality Standards.

The state allows us to monitor for some contaminants less than once per year because the concentration of these contaminants does not change frequently. Some of our data, though representative, are more than one year old.

Aluminum

Some people who drink water containing Aluminum in excess of the MCL over many years may experience short-term gastrointestinal tract effects.

Bromate

Some people who drink water containing Bromate in excess of the MCL over many years may have an increased risk of getting cancer.

Chloramines

Some people who use water containing chloramines well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chloramines well in excess of the MRDL could experience stomach discomfort.

Chlorine

Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.

Chlorine Dioxide

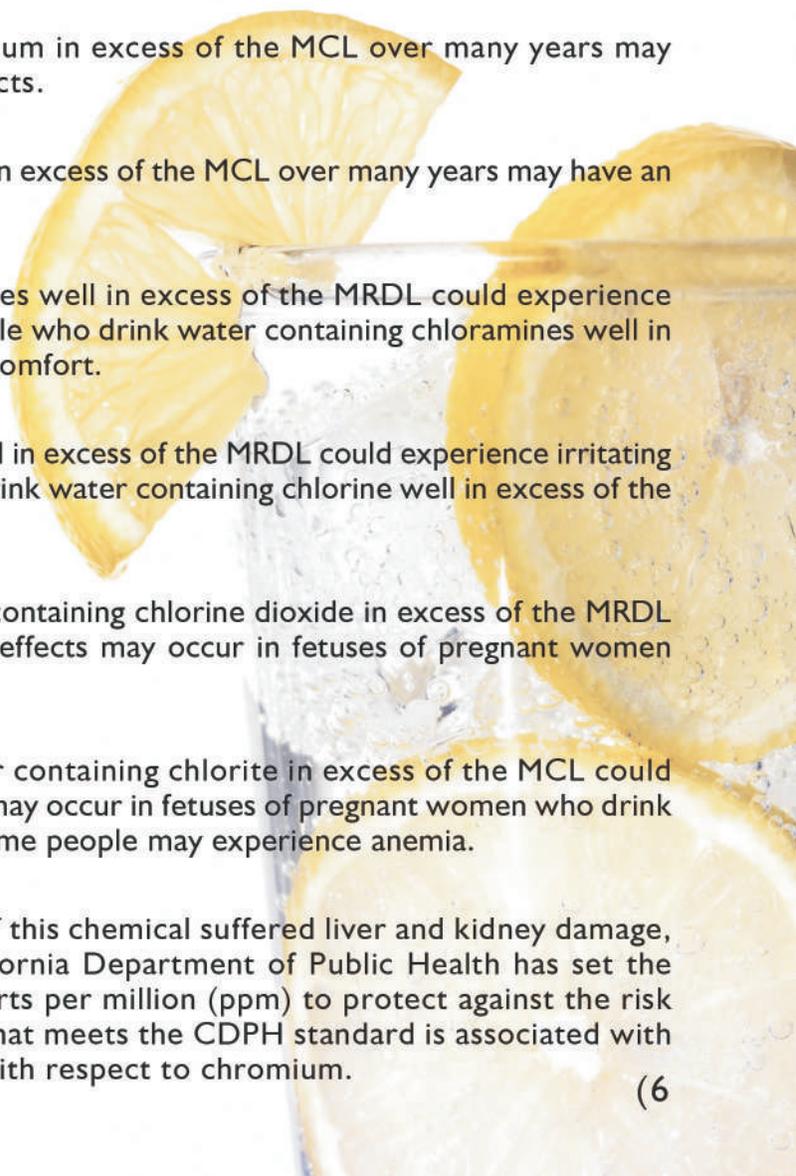
Some infants and young children who drink water containing chlorine dioxide in excess of the MRDL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink the water.

Chlorite

Some infants and young children who drink water containing chlorite in excess of the MCL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorite in excess of the MCL. Some people may experience anemia.

Chromium VI

Some humans who were exposed to high levels of this chemical suffered liver and kidney damage, dermatitis, and respiratory problems. The California Department of Public Health has set the drinking water standard for chromium at 0.05 parts per million (ppm) to protect against the risk of these adverse health effects. Drinking water that meets the CDPH standard is associated with little to none of this risk and is considered safe with respect to chromium.



Combined Radium 226/228

Some people who drink water containing Radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.

Cryptosporidium

Cryptosporidium is a microbial pathogen found in surface water throughout the United States. Although filtration removes Cryptosporidium, the most commonly used treatment methods cannot guarantee 100 percent removal. Ingestion of Cryptosporidium may cause Cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people, infants, small children, and the elderly are at a greater risk of developing life-threatening illness. Individuals at risk should consult their health care provider regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease and it may be spread through means other than drinking water.

Dibromochloropropane (DBCP)

Some people who use water containing Dibromochloropropane (DBCP) in excess of the MCL over many years may experience reproductive difficulties and may have an increased risk of getting cancer.

Fluoride

Some people who drink water containing Fluoride in excess of the Federal MCL of 4 mg/L over many years may get bone disease, including pain and tenderness of the bones. Children who drink water containing fluoride in excess of the state's MCL of 2 mg/L may get mottled teeth.

Gross Beta Particle Activity

Certain minerals are radioactive and may emit forms of radiation known as photons and beta radiation. Some people who drink water containing beta and photon emitters in excess of the MCL over many years may have an increased risk of getting cancer.

Haloacetic Acids

Some people who drink water containing Haloacetic Acids in excess of the MCL over many years may have an increased risk of getting cancer.

Lead

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Upland is responsible for providing high quality drinking water, however, the City cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap before using water for drinking or cooking. If you are concerned about lead in your drinking water, you may wish to have your water tested. Information on lead in drinking water testing methods and steps you can take to minimize exposure is available by contacting the Safe Drinking Water Hotline at 1-800-426-4791 or on-line at <http://www.epa.gov/safewater/lead>.

Nitrate

Nitrate in drinking water at levels above 45 mg/L is a health risk for infants less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant or you are pregnant, you should ask advice from your health care provider.

Tetrachloroethylene (PCE)

Some people who use water containing Tetrachloroethylene (PCE) in excess of the MCL over many years may experience liver problems, and may have an increased risk of getting cancer.

Total Organic Carbon

Total Organic Carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include Trihalomethanes (THMs) and Haloacetic acids, (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of cancer.

Trihalomethanes

Some people who drink water containing Trihalomethanes (THMs) in excess of the MCL over many years may experience liver, kidney or central nervous system problems and may have an increased risk of getting cancer.

Turbidity

Turbidity has no health effects. However, high levels of turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

Uranium

Some people who drink water-containing Uranium in excess of the MCL over many years may have kidney problems and may have an increased risk of getting cancer.

XII. Public Health Information

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material; it also can pick up substances resulting from the presence of animals or from human activity.

More information about contaminants and potential health effects can be obtained by calling **EPA's Safe Drinking Water Hotline (1-800-426-4791)**.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care provider. The **United States Environmental Protection Agency (USEPA)/Center for Disease Control (CDC)** guidelines on appropriate means to lessen the risk of infections by *Cryptosporidium* and/or other microbial contaminants are available by calling the **Safe Drinking Water Hotline (1-800-426-4791)**.

XIII. Contaminants That May Be Present In Source Water Include:

Inorganic contaminants, such as salt and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

Microbial contaminants, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations or wildlife.

Organic chemical contaminants, includes synthetic and volatile organic chemicals that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

Pesticides and herbicides, which may come from a variety of sources such as agricultural, urban storm water runoff, or residential use.

Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.