

2020 Annual Drinking Water Quality Report

City of Long Beach Water Treatment Plant

Report Period: January 1 – December 31, 2020

We're pleased to present this annual quality report, which is designed to inform you about the quality of the water we provide daily. We strive to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we continually make to improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

Our raw water reservoirs are spring and run-off fed (Dohman and Main Impoundment), and our other source (Matticks Creek) is pumped to the Main Impoundment as a supplement during the drier and busier summer months. This water is pumped to the treatment facility, filtered to a clear well, injected with chlorine, and then pumped to storage for the distribution system.

The City of Long Beach routinely monitors for contaminants in your drinking water according to federal and state laws. The table shows the results of our monitoring for the period of January 1st to December 31st, 2020. All drinking water, including bottled water, may be reasonably expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily pose a health risk.

MCL's are set at very stringent levels. To put them in perspective, the Environmental Protection Agency sets MCLs at levels where a person would have to drink 2 liters of water everyday at the MCL level for many years to have an elevated chance of developing the described health effects.

Total Coliform – Bacteria that are naturally present in the environment and are used as an indicator that other potentially harmful bacteria may be present.

Fecal Coliforms & E. Coli – are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these waters can cause short term effects, such as diarrhea, cramps, nausea, and headaches. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.

Turbidity – has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms.

THMs and HAA5 (Trihalomethanes and Haloacetic Acids – Byproducts of chlorination) – The MCL's for these compounds are based off the average of four quarterly samples. Some people who drink water containing THMs or HAA5s in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

Lead and Copper – These contaminants tend to originate from plumbing fittings inside the customer's home. If the water supplied to a particular home is below pH 7.0 (acidic), it can cause lead and copper to dissolve from these fittings into the water. To combat this, all water is pH adjusted to around 7.5 before it is pumped to our storage tanks.

Asbestos – Measured in Million Fibers per Liter (MFL), asbestos in drinking water comes from decay of asbestos-cement water mains. Long term exposure to asbestos in drinking water may result in increased risk of developing benign intestinal polyps.

Iron – Naturally occurring in many rocks and soils, can cause undesirable taste. High levels of iron can also stain plumbing fixtures and discolor laundered clothes.

All sources of drinking water are subject to potential contaminants that are naturally occurring or man made. Those contaminants can be microbes, organic or inorganic chemicals or radioactive materials. More information about contaminants and potential health effects can be obtained by calling EPA'S Hotline at 800-426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-compromised persons such as people with cancer undergoing chemotherapy, people who have undergone organ

transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk of infection. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Contaminant	Violation Y/N	Level Detected	MCLG	MCL	Likely Source
Total Coliform Bacteria	N	0	0	0	Naturally present in the environment
Fecal Coliform & E. Coli	N	0	0	0	Animal & Human fecal waste
Turbidity	N	0.091 NTU on May 31	N/A	1.0 NTU	Soil Runoff
Iron	N	0	0	0.3 mg/L (secondary MCL)	Naturally occurring, also corrosion of iron-containing metals
TTHM Trihalomethanes	Y	Highest annual average: 100.25 ug/L High: 130 ug/L Low: 41 ug/L	0 ug/L	80 ug/L Annual average	Byproduct of drinking water chlorination
HAA5 Haloacetic Acids	N	Highest annual average: 42.5 ug/L High: 71 ug/L Low: 15 ug/L	0 ug/L	60 ug/L Annual average	Byproduct of drinking water chlorination
Lead	N	High: 0.0076 mg/L Avg: 0.00062 mg/L	0 mg/L	0.015 mg/L	Plumbing fixtures exposed to low pH water
Nitrate	N	0	10 mg/L	10 mg/L	Septic tanks or fertilizers
Copper	N	High: 0.13 mg/L Avg: 0.04415 mg/L	1.3 mg/L	1.3 mg/L	Plumbing fixtures exposed to low pH water
Asbestos	N	<0.117 MFL	7 MFL	7 MFL	Degradation of asbestos-cement water mains
VOC	<p>Volatile Organic Chemicals are a subcategory of organic chemicals. These are termed volatile because they evaporate easily. Most commonly found in drinking water as a byproduct of chlorination.</p> <p><u>No Violation</u></p>				

As you can see from the table above, the City water system violated the MCL for levels of Total Trihalomethanes. This violation existed from the fourth quarter of 2019 through the third quarter of 2020. In response, the City replaced all of the filter modules at the water treatment plant in early March 2020, and also worked with the Department of Ecology to select an approved treatment for algae growth at the raw water reservoirs. To date, these measures have alleviated the elevated levels of Total Trihalomethanes. The City will continue to monitor this issue closely, testing levels of organic growth in the raw water 3-5 days per week.

The City of Long Beach is committed to providing top quality water to every tap. We ask our customers to help us protect our water sources, which are the heart of our community, our way of life and our children's future. Please call the water plant if you have any questions at 360-642-3163 or email us at jbinion@longbeachwa.gov. Ask for Jake Binion or Matt Wood.

Jake Binion
 City of Long Beach Water Treatment Plant Operator
 4/22/2021