

## Annual Drinking Water Quality Report For 2009

### City of Long Beach Water Treatment Plant

The City of Long Beach is pleased to present this annual drinking water quality report which is designed to inform you about the quality of the water we deliver to you everyday. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

We routinely monitor for contaminants in your drinking water according to federal and state laws. The table below shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup> 2009. 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.

Maximum Contaminant Levels (MCL) are set at very stringent levels. To understand the possible health effects described, a person would have to drink 2 liters of water everyday at the MCL level for a lifetime to have a one in a million chance of having the described health effects.

While our Disinfection By-Products (DBP's) did not pass, in the future we'll use chlorine dioxide to oxidize our raw water instead of chlorine gas. Chlorine dioxide does not produce Trihalomethanes (THM) or Haloacetic Acids (HAA5) when it reacts with organic material in water, whereas chlorine gas does. We sample daily to check the levels of these constituents and report the results quarterly to the Department of Health (DOH). New raw water treatment techniques have shown to improve our water quality and keep our DBPs well below DOH's standards. However, DBPs are monitored as an average of the four quarterly results, and our average was over the limit and we did not meet our 2009 goals, but we anticipate they will be met in 2010.

Our water sources are spring and run-off fed (Dohman and Main Impoundment). Mattix Creek is another water source that pumps into the Main Impoundment as a back up when it is low. This water is pumped to the treatment facility, chemically treated, allowed to settle, filtered to a clearwell, pumped to storage, injected with chlorine, and fed to town.

Total Coliform are 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.

Trihalomethanes (THM) & Haloacetic Acids (HAA5) Byproducts of chlorination affects some people who drink water containing these in excess of the MCL over many years and they may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

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. For additional information about contaminants and potential health effects call the 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 at 800-426-4791.

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 360-642-8078 or 642-2203 and ask for either Rick Gray or Jake Binion, or email us at lbwtp2o@yahoo.com

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	0.61 November 29th	N/A	1.0 ntu	Soil Runoff
THM Trihalomethanes	Y	129.5 ug/l	0	80 ug/l	Byproduct of drinking water chlorination
HAA5 Haloacetic Acids	Y	82 ug/l	0	60 ug/l	Byproduct of drinking water chlorination
IOC Inorganic Chemicals	Metals, salts, and other chemical compounds that don't contain carbon. Such as aluminum, molybdenum, nitrite, and cyanide to name a few. Yearly tests include Nitrite and Nitrate testing. <b>No Violations</b>				
SOC Synthetic Organic Chemicals	Man made compounds which are used throughout the world in pesticides, paints, dyes, solvents, plastics, & food additives. <b>No Violations</b>				
VOC Volatile Organic Chemicals	Subcategories of organic chemicals termed volatile because they evaporate easily. Most commonly found in drinking water as a byproduct of chlorination. Test done quarterly. <b>No Violations</b>				
Radionuclide's	Gross Alpha & Radium 228. No testing required in 2009. <b>No Violation</b>				
Asbestos	Testing for asbestos fibers which can occur when using asbestos pipe. <b>No Violation</b>				

Rick Gray  
City of Long Beach Waterplant Operator:  
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