

LEHI CITY
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Lehi City Residence
Lehi, Utah 84043

2006 Annual Water Quality Report



Lehi City Water Dept.

PWS ID #25015

Lehi City Water Department

PWS ID #25015

801-768-7102, Ext.3

What's the Quality of My Water?

The Lehi City Water Department has been providing clean water to your community since 1934, helping to keep you and your family healthy. We take this mission very seriously. Our constant goal is to provide you with a safe and dependable supply of drinking water. This report covers January 1 through December 31, 2006. The Lehi City's drinking water supply surpassed the strict regulations of both the State of Utah and the U.S. Environmental Protection Agency (EPA), which requires all water suppliers to prepare reports like this every year.

In 2006 our water department distributed 734,855,471 gallons of water to our customers. Our water source is groundwater pumped from five wells as well as groundwater from Alpine Springs. All five wells are in a protected aquifer with a natural clay seal. Alpine Springs is made up of several springs in the foothills of the Traverse Mountains northeast of Alpine, Utah. The springs are in a protected zone.

A source protection plan has been prepared and adopted for each Culinary Water Source, outlining land uses and emergency responses within each source capture zone, to prevent pollution infiltration. This Protection Plan may be available for review upon approval of the Lehi City Water Superintendent and the Public Works Director.

Our city treats all of the culinary sources, using Chlorine disinfection to remove or reduce harmful contaminants that may come from the source water.

Lehi City Water Department has eight certified operators with the state of Utah in water distribution: four Grade IV, three Grade III, and one Grade II operators.

If you have any questions about this report or concerning your water utility, please contact Lee Barnes by calling 801-768-7102, Ext. 3 or by writing to this address: 2538 North 300 West, Lehi, Utah 84043. You may also view this CCR and other information about our city on the Lehi City website at www.lehicity.com. We want our valued customers to be informed about their water utility. You can attend regular public meetings on the second and fourth Tuesday of each month at 153 North 100 East, in City Council Chambers, at 7:00 p.m.

Howard Johnson, Mayor
Johnny Barnes, Council Member
Johnny Revill, Council Member
Mark Johnson, Council Member
Stephen Holbrook, Council Member
James Dixon, Council Member

The U.S. Environmental Protection Agency (EPA) wants you to know:

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

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, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife. Inorganic contaminants, such as salts 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. Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses. Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems. Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

2006 Monitoring Results for Lehi City

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 providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791)

Contaminant	Unit	MCLG Health Goal	MCL EPA's Limits	Highest Level Detected	Range Detected	Violation (Yes / No)	Year ¹ Sampled	Potential Source of Contamination
Microbiological Contaminants								
Turbidity ²	NTU	NA	TT	1.2	0.83 - 1.2	NO	2004	Soil Runoff.
Radioactive Contaminants								
Beta/photon emitters ³	pCi/L	0	50	3.3 +/- 1.4	2.5 - 3.3 +/- 1.4	NO	2006	Decay of natural and man-made deposits.
Gross Alpha	pCi/L	0	15	4.7 +/- 1.6	1.6 - 4.7 +/- 1.6	NO	2006	Erosion of natural deposits.
Radium 226	pCi/L	0	5	0.173 single sample		NO	2001	Erosion of natural deposits.
Inorganic Contaminants								
Antimony	ppb	6	6	0.7	ND - 0.7	NO	2004	Discharge from petroleum refineries fire retardants ceramics electronics solder.
Arsenic	ppb	NA	10	2.9	2.6 - 2.9	NO	2004	Erosion of natural deposits Runoff from orchards Runoff from glass and electronics production wastes.
Barium	ppm	2	2	0.26	0.007 - 0.26	NO	2004	Discharge of drilling wastes Discharge from metal refineries Erosion of natural deposits.
Copper	ppm	1.3	1.3 = AL	0.23 (90th percentile) 0.016 - 0.56 All sites below AL		NO	2005	Corrosion of household plumbing systems Erosion of natural deposits Leaching from wood preservatives.
Fluoride	ppm	4	4	0.2 0.2 All samples		NO	2004	Erosion of natural deposits Water additive to promote strong teeth Discharge from fertilizer and aluminum factories.
Lead	ppb	0	15 = AL	8.0 (90th percentile) 1.0 - 14.0 All sites below AL		NO	2005	Corrosion of household plumbing systems Erosion of natural deposits.
Nitrate	ppm	10	10	1.6	0.2 - 1.6	NO	2006	Runoff from fertilizer use Leaching from septic tanks, sewage Erosion of natural deposits.
Selenium	ppb	50	50	9.6	2.8 - 9.6	NO	2004	Discharge from petroleum and metal refineries Erosion of natural deposits Discharge from mines.
Thallium	ppb	0.5	2	1.7	ND - 1.7	NO	2004	Leaching from ore-processing sites Discharge from electronics, glass and drug factories.
Volatile Organic Contaminants and Disinfectant By-Products								
Chlorine	ppm	MRDLG=4	MRDL=4	0.2 0.2 All samples		NO	2006	Water additive used to control microbes.
Total Haloacetic Acids (HAA5)	ppb	NA	60	1.1	ND - 1.1	NO	2006	Byproduct of drinking water chlorination.
Total Trihalomethanes (TTHMs)	ppb	0	80	2.4	ND - 2.4	NO	2006	Byproduct of drinking water chlorination.

Non-Regulated Substances: Unregulated contaminant monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants.

Substance	Unit	Average Level Detected	Range	Year Sampled ¹
Bromoform	ppb	0.38	ND - 1.5	2005
Dibromochloromethane	ppb	0.18	ND - 0.7	2005
Sodium	ppm	30	27 - 32	2004
Sulfate	ppm	20	12 - 27	2004
Total Dissolved Solids	ppm	298	288 - 308	2004

Notes:

- ¹The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, are more than one year old.
 - ²Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.
 - ³Beta/Photon Emitters: The MCL for beta particles is 4 mrem/year. USEPA considers 50 pCi/L to be a level of concern for beta particles.
- ***Lehi City Water Department takes 40 Bacteria samples (Total Coliform) per month. We are proud to report that we had no violations during 2006.

Definitions

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

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 allow for a margin of safety.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Action Level (AL): The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, which a water system must follow.

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

90th Percentile: 90% of samples are equal to or less than the number in the chart.

MREM (millirems): a measure of radiation absorbed by the body. **NTU (Nephelometric Turbidity Units):** A measure of clarity.

NA: Not applicable. **ND:** Not detectable at testing limits. **PPB (parts per billion):** micrograms per liter (ug/l).

PPM (parts per million): milligrams per liter (mg/l). **pCi/L (picocuries per liter):** a measure of radioactivity.

CDC: Centers for Disease Control. **EPA:** Environmental Protection Agency.

