2003 Lehi
PWS ID # 25015

The United States enjoys one of the best supplies of drinking water in the world. Nevertheless, many of us who once gave little or no thought to the water that comes from our taps are now asking questions: How safe is my drinking water? Where does my drinking water come from, and how is it treated? What can I do to help protect my drinking water?

In 1974 Congress passed the Safe Drinking Water Act (SDWA) to protect public health by regulating the nation's public drinking water supply and protecting sources of drinking water. SDWA is administered by the U.S. Environmental Protection Agency and its state partners. Since 1999, water suppliers have been required to provide annual Consumer Confidence Reports to their customers. This report provides the answers to these and other frequently asked questions.

Lehi City Water Department has been providing clean water to the community since 1934, helping to keep you and your family healthy. We take this mission very seriously. As shown in this annual report covering the year 2003, the water we delivered surpassed the strict regulations of the State of Utah and the U.S. Environmental Protection Agency.

In 2003 our water department distributed 751,000,000 gallons of drinking water to our customers. Our water source is groundwater pumped from three wells as well as ground water from Alpine Springs. All three 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.

Lehi treats Alpine Springs water only, using Chlorine disinfection to remove or reduce harmful contaminants that may come from the source water.

Lehi City Water Department has (6) certified operators with the state of Utah in water distribution. Two Grade IV; one Grade III; and three Grade II operators.

The cost of drinking water is rising as we meet the needs of aging infrastructure, comply with public health standards, and expand service areas. These increasing costs may cause us to raise your rates. However, despite rate increases, water is still a bargain.

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: 153 North 100 East, Lehi, Utah 84043. 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.

Kenneth Greenwood, Mayor

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

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.

2003 Monitoring Results for Contaminants in Drinking Water

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**	Level Detected	Range Detected	Violation (Yes / No)	Year [1] Sampled	Potential Source of Contamination
Microbiological Contaminants								
Total Coliform Bacteria[4]	Positive /Negative	0	Presence of coliform bacteria in greater than or equal to 5% of monthly samples	3 positive in July 2002	NA	YES	2003	Naturally present in the environment.
Fecal Coliform[5]	Positive /Negative	0	A routine sample and a repeat sample are total coliform positive, and one is also fecal coliform	1 positive in July 2003	NA	YES	2003	Human and animal fecal waste.
Turbidity[2]	NTU	NA	TT	0.236 highest sample	0.133 - 0.236	NO	2001	Soil Runoff.
Radioactive Contaminants								
Beta/photon emitters[3]	mrem/yea	0	4	7	ND - 7	NO	1998	Decay of natural and man-made deposits.
Gross Alpha	pCi/L	0	15	2.85 +/- 1.5 High	ND - 2.85 +/-1.5	NO	2002	Erosion of natural deposits.
Radium 226	pCi/L	0	5	0.173 single sample	NA	NO	2001	Erosion of natural deposits.
Inorganic Contaminants								
Arsenic	ppb	NA	10	2.4	2.3 - 2.5	NO	2001	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium	ppm	2	2	0.13	0.1 - 0.2	NO	2001	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Copper[6]	ppm	1.3	1.3 = AL	0.57 (90th percentile)	0.0096 - 1.6	NO	2002	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
				1 of 30 sites above AL				
Fluoride	ppm	4	4	0.23	0.214 - 0.269	NO	2001	Erosion of natural deposits; Water additive to promote strong teeth; Discharge from fertilizer and aluminum factories.
Lead	ppb	0	15 = AL	5.5 (90th percentile)	5 - 8.1	NO	2002	Corrosion of household plumbing systems; Erosion of natural deposits.
				All sites below AL				
Nitrate	ppm	10	10	0.70	0.16 - 1.36	NO	2003	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	ppb	50	50	3.17	1.7 - 3.9	NO	2001	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
Synthetic Organic Contaminants								
Bis (2-ethylhexyl) phthalate	ppb	0	6	1.38	ND - 4.3	NO	2003	Discharge from rubber and chemical factories.
Volatile Organic Contaminants								
Total Trihalomethanes (TTHMs)	ppb	0	80	5.1 single sample	NA	NO	2003	By product 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	Level Detected	Range	Year Sampled[1]
Bromodichloromethane	ppb	0.55	ND - 1.1	2003
Chloroform	ppb	2	ND - 4.0	2003
Sodium	ppm	21.03	18.2 - 26.7	2001
Sulfate	ppm	25.47	ND - 38.2	2001
Total Dissolved Solids	ppm	286.7	282 - 296	2001

Notes:

[1]The 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, is more than one year old.

[2]Turbidity 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.

[3]Beta/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.

[4]Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

[5]Fecal coliforms are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely-compromised immune systems.

[6]Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

Total Coliform Violation:
The United States EPA sets drinking water standards and has determined that the presence of total coliforms is a possible health concern. Total coliforms are common in the environment and are generally not harmful themselves. The presence of these bacteria in drinking water, however, generally is a result of a problem with water treatment or the pipes which distribute the water, and indicates that the water may be contaminated with organisms that can cause disease. Disease symptoms may include diarrhea, cramps, nausea, and possibly

jaundice, and any associated headaches and fatigue. These symptoms, however, are not just associated with disease-causing organisms in drinking water, but also may be caused by a number of factors other than your drinking water. EPA has set an enforceable drinking water standard for total coliforms to reduce the risk of these adverse health effects. Under this standard, no more than 5.0 percent of the samples collected during a month can contain these bacteria, except that systems collecting fewer than 40 samples/month that have one total coliform-positive sample per month are nit violating the standard. Drinking water which meets this standard is usually not associated with a health risk from disease-causing bacteria and should be considered safe.

Fecal Coliform Violation:
The United States EPA sets drinking water standards and has determined that the presence of fecal coliforms is a serious health concern. Fecal coliforms are generally not harmful themselves, but their presence in drinking water is serious because they usually are associated with sewage or animal wastes. The presence of these bacteria in drinking water is generally is a result of a problem with water treatment or the pipes which distribute the water, and indicates that the water may be contaminated with organisms that can cause disease. Disease symptoms may include diarrhea, cramps, nausea, and possibly jaundice, and any associated headaches and fatigue. These symptoms, however, are not just associated with disease-causing organisms in drinking water, but also may be caused by a number of factors other than your drinking water. EPA has set an enforceable drinking water standard for fecal coliforms to reduce the risk of these adverse health effects. Under this standard, all drinking water samples must be free of these bacteria. Drinking water which meets this standard is associated with little or none of this risk and should be considered safe. A boil order was issued during this time period.

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.
Action Level (or AL): The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, which a water system must follow.
Treatment Technique (or 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 (or millirems): a measure of radiation absorbed by the body.
NTU (or Nephelometric Turbidity Units): A measure of clarity.
NA: Not applicable.
ND: Not detectable at testing limits.
PPB (or parts per billion): micrograms per liter (ug/l).
PPM (or parts per million): milligrams per liter (mg/l).
pCi/L (or picocuries per liter): a measure of radioactivity.
EPA: Environmental Protection Agency.