

LEBANON WATER QUALITY REPORT CARD

In 2004, Lebanon had no violation of federal or state water quality standards.

LEBANON'S GENERAL WATER QUALITY CHARACTERISTICS (year)			Highest Detected Level or Range		Highest Level Allowed (EPA's MCL)	Ideal Goals (EPA's MCLG)	Sources of Contaminants
Secondary Contaminants			CS	SC			
Total Alkalinity	(98)	ppm	348	324	n/a	n/a	Erosion of Natural Deposits
Total Hardness	(98)	ppm	340	260	n/a	n/a	Erosion of Natural Deposits
Dissolved Solids	(98)	ppm	461	378	n/a	n/a	Erosion of Natural Deposits
Sulfate	(03)	ppm	<5.0	<5.0	n/a	n/a	
Sodium	(03)	ppm	47.90	43.00	n/a	n/a	Erosion of Natural Deposits
Chloride	(99)	ppm	38	7.3	250	n/a	Erosion of Natural Deposits
Primary Contaminants							
Fluoride (Natural)	(03)	ppm	1.01	0.681	4.0	4.0	Erosion of Natural Deposits
Nitrate	(03)	ppm	0.178	0.0111	10.0	10.0	Erosion of Natural Deposits
Barium	(03)	ppm	0.292	0.234	2.0	2.0	Erosion of Natural Deposits
Copper	(02)	ppm		0.917	1.3	1.3	Corrosion from Household Plumbing and Service
Distribution results					(action level)		
Lead	(02)	ppb		5	15	0	Corrosion from Household Plumbing and Service
Distribution results					(action level)		
Arsenic	(03)	ppb	<10	<10	50	n/a	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronic production waste
			Less than 10	Less than 10			
Total Trihalomethanes	(04)	ppb	21.37	22.33	80	n/a	By-product of drinking water chlorination
Haloacetic Acids	(04)	ppb	3.8	2.53	60	n/a	By-product of drinking water chlorination
Gross Alpha	(01)	pCi/L	1.7+1.5	2+1.5	15	0	Erosion of Natural Deposits
Gross Beta	(01)	pCi/L	1.9+/-3.6	4+/-3.8	50	0	Erosion of Natural Deposits
Radium 228	(03)		0	0	5	0	Erosion of Natural Deposits
Total Coliform	(04)			0	Presence of coliform bacteria in >5% of monthly samples	0	Human & Animal Waste
**							Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present

Listed above are detected contaminants in Lebanon's drinking water for 2004. All are below allowed levels. Not listed are the hundreds of other contaminants for which we tested that were not detected.

Definitions:

CS = Chicago Street Water Plant

ppm – One part per million.

Primary Contaminants have a MCL

ppb- One part per billion

Secondary Contaminants have non-enforceable guidelines

SC = Sugar Creek Water Plant

pCi/L – pico Curies per liter

Maximum Contaminant Level (MCL) – The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's 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. MCLG's allow a margin of safety."

Action Level – The concentration of a contaminant that triggers treatment or other requirements that a water system must follow. Lead & Copper are reported at the 90th percentile. Sample levels ranged from 0.010 to 1.680 ppm for copper testing and the lead testing ranged from less than 1 to one sample of 7 ppb.

Total Trihalomethanes (TTHM's) are based on an average of samples collected during the 1st quarter thru the 4th quarter of 2004.

Haloacetic Acids (HA's) are based on an average of quarterly samples

The arsenic MCL will change from 50 ppb to 10 ppb in the year 2006

Beginning with July 1, 2002 a system that detects arsenic between 5 ug/L and 10 ug/L must include an educational statement in the CCRs. For reports covering calendar years 2001 to 2005, systems that detect arsenic 10Ug/L and 50ug/L must include information concerning the health effects of arsenic in the CCRs. Lebanon water is below this threshold.

The presence of contaminants in drinking water does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791). For questions about the quality of our drinking water, call Lebanon Utilities at 482-8843.

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 providers. EPA/ CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline (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 land or through the ground, it dissolves naturally occurring minerals and 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 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, stormwater runoff and residential uses.
- ❖ Organic chemicals, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban run-off, and septic systems.
- ❖ Radioactive materials, which can be naturally occurring or be the result of oil and gas production and mining activities.

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 (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

