

Annual Drinking Water Quality Report for 2006

Lisbon Water Department

Lisbon, Maine
PWSID ME0090870

We're pleased to present to you our Annual Drinking Water Quality Report. This report, a requirement of the 1996 amendments to the Safe Drinking Water Act, is designed to inform you about the quality water and services we deliver to you every day. 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.

WATER SOURCE

We have four wells, gravel packed, from which we draw the Town's water. The 56' deep Bauer Well is located on the southwest side of route 196 on the easterly edge of the Lisbon village. A second and third wells, 66' and 88', are located on the west side of Moody Rd, on the westerly side of the Lisbon village. The fourth well, 78' in depth, is located on the east side of Ann Street, in the middle of the Lisbon Falls village. The Moody Rd raw water is injected with sodium hypochlorite for filtration processing of arsenic. All wells are equipped with the means to chlorinate if needed, to protect against potential bacteriological contaminants.

SOURCE WATER ASSESSMENT

The sources of drinking water include rivers, lakes, ponds, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and radioactive material and can pick up substances resulting from human or animal activity. The Maine Drinking Water Program (DWP) has evaluated all public water supplies as part of the Source Water Assessment Program (SWAP). The assessments included geology, hydrology, land uses, water testing information, and the extent of land ownership or protection by local

ordinance to see how likely our drinking water source is to being contaminated by human activities in the future. Assessment results are available at public water suppliers, town offices, and the DWP. For more information about the SWAP, please contact the DWP at telephone 287-2070.

If you have any questions about this report or concerning your water utility, please contact Paul Adams, at telephone number 207-353-3020, or fax 207-353-3004, or mailing address 639 Lisbon St., Lisbon Falls, ME 04252. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the second and fourth Tuesday of every month, 7 p.m., at the department office in Lisbon Falls.

WATER QUALITY

Lisbon Water Department routinely monitors for constituents in your drinking water according to Federal and State laws. The following table shows any detection resulting from our monitoring for the period of January 1st to December 31st, 2006. *

In 2005, due to efforts to protect the water supply, we applied for and were granted a three-year waiver for synthetic organics (Phase II/V) testing. This is an exemption from the testing/monitoring requirements for pesticides, herbicides, fungicides and other industrial chemicals; the state of Maine Drinking Water Program grants a waiver only upon a finding that "it will not result in an unreasonable risk to health."

We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water IS SAFE at these levels.

*If no tests were required for a given contaminant in 2006, the law requires that the most recent test results be included here. No test results over 5 years old are allowed, however.

Some or all of the following contaminants were tested for as regulated by law. Other elements are also tested for which do not require reporting, as they do not pose a potential health risk.

Microbiological Contaminants

1. Total Coliform Bacteria
2. Fecal coliform and *E.coli*
3. Turbidity

Radioactive Contaminants

4. Beta/photon emitters
5. Gross Alpha
6. Combined radium
- 6.a. Uranium
- 6.b. Radon

Inorganic Contaminants

7. Antimony
8. Arsenic
9. Asbestos
10. Barium
11. Beryllium
12. Cadmium
13. Chromium
14. Copper
15. Cyanide
16. Fluoride
17. Lead
18. Mercury (inorganic)
19. Nitrate (as Nitrogen)
20. Nitrite (as Nitrogen)
21. Selenium
22. Thallium

Synthetic Organic Contaminants including Pesticides and Herbicides

23. 2,4-D
24. 2,4,5-TP (Silvex)
25. Acrylamide
26. Alachlor
27. Atrazine
28. Benzo(a)pyrene (PAH)
29. Carbofuran
30. Chlordane
31. Dalapon
32. Di(2-ethylhexyl) adipate
33. Di(2-ethylhexyl) phthalate
34. Dibromochloropropane
35. Dinoseb
36. Diquat
37. Dioxin [2,3,7,8-TCDD]
38. Endothall
39. Endrin
40. Epichlorohydrin
41. Ethylene dibromide
42. Glyphosate
43. Heptachlor
44. Heptachlor epoxide
45. Hexachlorobenzene
46. Hexachlorocyclo-pentadiene
47. Lindane
48. Methoxychlor
49. Oxamyl [Vydate]
50. PCBs [Polychlorinated biphenyls]
51. Pentachlorophenol
52. Picloram
53. Simazine
54. Toxaphene

Volatile Organic Contaminants

55. Benzene
56. Carbon tetrachloride
57. Chlorobenzene
58. o-Dichlorobenzene
59. p-Dichlorobenzene
60. 1,2 - Dichloroethane
61. 1,1 - Dichloroethylene
62. cis-1,2-ichloroethylene
63. trans - 1,2 -Dichloroethylene
64. Dichloromethane
65. 1,2-Dichloropropane
66. Ethylbenzene
- 66a. Methyl-Tertiary-Butyl-Ether (MTBE) (Maine MCL)
67. Styrene
68. Tetrachloroethylene
69. 1,2,4 -Trichlorobenzene
70. 1,1,1 - Trichloroethane
71. 1,1,2 -Trichloroethane
72. Trichloroethylene
73. TTHM [Total trihalomethanes]
73. a. HAA5 [Total Haloacetic Acids]
74. Toluene
75. Vinyl Chloride
76. Xylenes

TEST RESULTS						
Unless otherwise noted, testing was done in 2006.						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants						
Total Coliform Bacteria	N	0 positive	N/A	0 positive	1 positive	Naturally present in the environment
Radioactive Contaminants						
Gross Alpha (3/8/06)	N	5	pCi/L	0	15	Naturally occurring radioactivity in bedrock.
Combined radium (9/25/02)	N	0.51	pCi/L	0	5	Naturally occurring radioactivity in bedrock.
Radon (8/18/05)	N	224	pCi/L	n/a	4,000	Naturally occurring radioactive gas in bedrock.
Inorganic Contaminants						
Arsenic (3/8/06)	Y	12	ppb	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (6/20/05)	N	0.005	ppm	2	2	Erosion of natural deposits
Chromium (6/20/05)	N	1.20	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Copper (9/1/05)	N	0.57	ppm	1.3	AL=1.3	Corrosion of household plumbing systems
Lead (9/1/05)	N	3	ppb	0	AL=15	Corrosion of household plumbing systems

Nitrate (as Nitrogen) (3/8/06)	N	1.35	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
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Definitions:

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

Maximum Contaminant Level - (MCL) is 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) is 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.

Variations, Exemptions, and Waivers - State or EPA permission not to meet an MCL, a treatment technique or test for a given contaminant under certain conditions.

Treatment Technique (TT) - A required process intended to reduce the level of a contaminant in drinking water (e.g. treatment technique for turbidity).

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Running Annual Average (RAA): The Average of all monthly or quarterly samples for the last year at all sample locations.

N/A - not applicable

Units:

Parts per million (ppm) or Milligrams per liter (mg/L) - One part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter (µg/L) - One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Picocuries per liter (pCi/L) - A measure of the radioactivity in water.

Notes:

Total Coliform Bacteria: Reported as the highest monthly number of positive samples, for water systems that take < 40 samples per month. For water systems that take > 40 samples per month, no more than 5% of the samples may be positive.

Gross Alpha: Due to our high gross alpha result, we were required to test for radium. Because our radium levels are low, we are not in violation. Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

Radon: Radon is found in the soil and bedrock formations and is a water soluble, gaseous by-product of Uranium. Most Radon is released to the air, moments after turning on the tap. Only about 1-2 percent of Radon in the air comes from drinking water. The USEPA is proposing setting federal standards for public drinking water. The State of Maine currently recommends treatment for Radon levels in drinking water above 4,000 pCi/L. Breathing Radon released to air from tap water increases the risk of lung cancer over the course of your lifetime. If you seek more information about Radon, please contact this office or the State Drinking Water Program and request a Radon Fact Sheet.

Arsenic: The U.S. EPA adopted the new MCL standard of 10 ppb, in October 2001. Water systems must meet this new standard by January 2006. While your drinking water meets the previous EPA standard of 50 ppb for arsenic, it does contain low levels of arsenic. EPA’s newly adopted standard of 10 ppb balances the current understanding of arsenic’s possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Lead/Copper: Action levels are measured at consumer’s tap. 90% of the tests must be equal to or below the action level.

Nitrate: Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

IMPORTANT INFORMATION

Arsenic MCL Exceedance: In March 2006, our water system exceeded the arsenic standard of 10 ppb. Our water system installed an Arsenic removal system in 2006. Results of subsequent Arsenic testing results have been satisfactory. Some people who drink water containing Arsenic well in excess of the

MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or are man made. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials. All 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 the water poses a health risk. 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 stormwater 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 stormwater 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 runoff, and septic systems. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-ten thousand chance of having the described health effect.

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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

We, at Lisbon Water Department, work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life, and our children's future. Please contact us with any questions.