

Old Town Water District's Annual Drinking Water Quality Report for 2016

Background: We are pleased to provide you with this year's Annual Water Quality Report. We want our customers to know about the quality water services we have delivered to you over the past year. Our goal is to provide to you a safe and dependable supply of drinking water.

Water Source: The Old Town Water District was formed in 1925. We serve the towns of Old Town, Milford, Bradley, portions of Orono, portions of the University of Maine, and the Penobscot Nation on Indian Island. Our water comes from five gravel packed wells: three on Spring Street and two on Bennoch Road. All of our water is treated at the Spring Street filter plant. We add chlorine for protection against harmful pathogens, adjust pH for corrosion control, and add fluoride to reduce tooth decay, as approved by referendum vote of the citizens of the Old Town Water District.

Contact Info: Our office is located at 109 Center Street. Office hours are Monday through Friday, 8:00 AM to 4:00 PM. If you have any questions about this report or your water utility, please contact Steven M. Lane, Superintendent, Old Town Water District, 109 Center Street, Old Town, Maine 04468. Phone 207-827-2145. We want our valued customers to be informed about their water utility. Any member of the public is invited to attend any of our regular meetings. They are generally held on the second Tuesday of each month at 7:30 AM at the District office.

Source Water Assessment: The usual 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). This assessment included geology, hydrology, land use, water testing information, and the extent of land ownership or protection by local ordinance. This information is used to determine how likely our drinking water source is to become contaminated by human activities in the future. Assessment results are available at town offices, public water suppliers, and the DWP. For more information about the SWAP, please contact the DWP at telephone 207-287-2070.

Water District Overview: We provide high quality water for domestic, commercial and industrial use. We maintain fire hydrants throughout Old Town, Milford and Bradley. We install and maintain water services, repair water mains, flush our system once per year, sample and analyze the water both at our wells and filter plant as well as in the distribution system. We read meters and bill residential accounts quarterly for water usage. Most commercial and industrial accounts are billed monthly. We have an approved cross connection control (backflow) program to protect the public water supply from contamination. We have three trustees; two from Old Town, one from Milford. We have a staff of eight dedicated employees consisting of a superintendent, foreman, two office staff, two meter /service people, a filter plant operator and a maintenance and repair person.

Water Quality: The Old Town Water District routinely tests for contaminants in your drinking water according to Federal and State laws. The following table shows the results of our monitoring for the period of January 1st to December 31, 2016. We are pleased to report no violations of any State or Federal Drinking water rules during 2016.

All drinking water, including bottled water, may be expected to contain at least small amounts of some contamination. It's important to remember that the presence of these contaminants does not necessarily pose a health risk. In the following table you will find many terms and abbreviations you may not be familiar with. To help you understand these terms we've provided the following definitions:

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years.

Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years.

Picocuries per liter (pCi/L) – picocuries per liter is a measure of radioactivity in water.

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

Variances & Exemptions (V&E) - State or EPA permission not to meet a set standard or treatment technique under certain conditions.

Action Level - 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.

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

Maximum Contaminant Level Goal - (mandatory language) The (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.

Some or all of the following contaminants were tested for as regulated by law:

Microbiological Contaminants

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

Radioactive Contaminants

4. Beta/photon emitters
5. Alpha emitters
6. Combined radium
 - Uranium
 - 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]
74. Toluene
75. Vinyl Chloride
76. Xylenes

In 2014, our system was granted a ‘Synthetic Organics Waiver.’ This is a three year exemption from the monitoring/reporting requirements for the following industrial chemicals: CARBAMATES, PESTICIDES, and SEMI-VOLATILE ORGANIC COMPOUNDS. This waiver was granted due to the absence of these potential sources of contamination within a half mile radius of our water source.

TEST RESULTS

Contaminant	Violation Y/N	Date Of Test	Level Detected	Units	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants							
Total Coliform Bacteria 10 samples per month	N	Monthly	0	Present Absent	0	1	Naturally present in the environment
Turbidity	N	6/27/2016	<0.6	NTU	na	TT ₃	Soil runoff

The following were detected in our water supply:

Inorganic Contaminants							
Arsenic	N	06/27/2016	<.1	ppb	0ppb	10ppb	Naturally present in the environment
Barium	N	06/30/2014	0.0021	ppm	2 ppm	2 ppm	Naturally present in the environment.
Chromium	N	06/30/2014	2.7	ppb	100 ppb	100 ppb	Discharge from steel and pulp mills. Erosion of natural deposits.
Copper 90% system sample	N	08/19/2015	1.2	ppm	1.3 ppm	AL=1.3 ppm	Corrosion of household plumbing systems-
Fluoride Alternate concentration .7 ppm	N	06/09/2016	0.8	ppm	4 ppm	4 ppm	Water additive which promotes strong teeth.
Lead 90% system sample	N	08/19/2015	5.5	ppb	0 ppb	AL=15 ppb	Corrosion of household plumbing systems.
Nitrate (as Nitrogen)	N	06/27/2016	0.45	ppm	10 ppm	10 ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Radionuclides							
Radium	N	11/28/11	0.361	pCi/L	5pCi/L	0pCi/L	Erosion of natural deposits
Radon	N	3/21/13	217 pCi/L	pCi/L	4000 pCi/L	4000 pCi/L	Erosion of natural deposits

Disinfectants and Disinfectant Byproducts							
Total Halocetic acids (HAA5) 09/12/2016	N	RAA	1.1	ppb	0 ppb	60 ppb	Byproduct of drinking water chlorination
Total Trihalomethanes (TTHM) 09/12/2016	N	RAA	60.7	ppb	0 ppb	80 ppb	Byproduct of drinking water chlorination
Daily Average Chlorine Residual	N	AA	1.38	ppm	4 ppm	4 ppm	Added as a disinfectant

Unregulated Contaminant Monitoring Rule 3 (UCMR3) (required monitoring for 30 contaminants)							
Manganese	N	06/27/16	.0012	ppb	na	na	Naturally present in the environment
Strontium	N	12/3/13	130	ppb	na	na	Naturally present in the environment
Chromium-6	N	12/3/13	0.16	ppb	na	na	Discharge from steel and pulp mills. Erosion of natural deposits
Chlorate	N	12/3/13	61	ppb	na	na	Naturally present in the environment

Old Town Water District is pleased to report no drinking water violations during 2016. All other regulated contaminants were below detection levels.

IMPORTANT NOTE:

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Old Town Water District is responsible for providing high quality drinking water, but cannot control the variety of materials used in household plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>

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. More information about contaminants and potential health effects can be obtained by calling the EPA Safe Drinking Water Hotline at 1-800-426-4791. Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as people with 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 from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to reduce the risk of infection by Cryptosporidium and other microbiological contaminants are also available from the EPA Safe Drinking Water Hotline (800-426-4791).

MCLs 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.

In our continuing effort to maintain a safe and dependable water supply it is necessary to make continuous investment in the treatment and distribution system. The costs of these investments are reflected in the approved water rates. Rate adjustments are necessary periodically in order to address these improvements. The process of changing rates is regulated by the Maine Public Utilities Commission, and customer notification is required. Thank you for allowing us to continue providing your family or business with safe, clean, quality water during 2016.

We at the Old Town Water District 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.

Old Town Water District Board of Trustees;

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