

# *Annual Drinking Water Quality Report for 2005*

## **Dexter Utility District**

Dexter, Maine  
PWSID ME0090440

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 of 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**

Our water source is Lake Wassookeag. As it is surface water, we filter the raw water through a method known as slow sand filtration. We then add chlorine to protect against potential bacteriological contaminants, fluoride to promote dental health and soda ash for pH adjustment to prevent corrosion of household plumbing systems. Dexter Utility District maintains 880 service connections that serve approximately 2,200 people.

### **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 Randy Webber, Superintendent, at telephone number 207-924-7367, or mailing address 25 Main St., Dexter, ME 04930. 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 Tuesday of every month, at 7 p.m., at the treatment plant located on Route 23 Grove St.

### **WATER QUALITY**

Dexter Utility District 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 1<sup>st</sup> to December 31<sup>st</sup>, 2005. \*

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."

As you can see by the table, our system had no violations. We're proud that your drinking water meets all Federal and State requirements. 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 2005, 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. GrossAlpha
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 2005.

Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
<b>Microbiological Contaminants</b>						
Total Coliform Bacteria (2005)	N	<b>0 positive</b>	N/A	0 positive	1 positive	Naturally present in the environment
Turbidity (4/13/05)	N	<b>0.1</b>		N/A	TT	Soil runoff
<b>Radioactive Contaminants</b>						
Gross Alpha (3/4/03)	N	<b>0.4</b>	pCi/L	0	15	Naturally occurring radioactivity in bedrock.
Radium 228 (3/18/03)	N	<b>0.29</b>	pCi/L	0	5	Naturally occurring radioactivity in bedrock.
<b>Inorganic Contaminants</b>						
Barium (4/13/05)	N	<b>0.002</b>	ppm	2	2	Erosion of natural deposits
Copper (8/11/05)	N	<b>0.54</b>	ppm	1.3	AL=1.3	Corrosion of household plumbing systems
Fluoride (3/15/05)	N	<b>1.92</b>	ppm	4	4	Water additive which promotes strong teeth.
Lead (8/11/05)	N	<b>14</b>	ppb	0	AL=15	Corrosion of household plumbing systems
<b>Volatile Organic Contaminants</b>						
TTHM [Total Trihalomethanes] (2005)	N	<b>32</b>	ppb	0	80	By-product of drinking water chlorination
HAA5 [Total Haloacetic Acids] (2005)	N	<b>21.25</b>	ppb	0	60	By-product of drinking water chlorination

**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.

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.

**Gross Alpha:** Action level over 5 pCi/L requires testing for Radium. Action level over 15 pCi/L requires testing for Radon and Uranium.

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

**Fluoride:** Fluoride levels must be maintained between 1-2 ppm, for those water systems that fluoridate the water.

**Turbidity:** Turbidity is a measure of cloudiness or suspended colloidal matter (silt). Excessive turbidity levels can cause problems with water disinfection. 0.1 ntu was the single highest measure of turbidity for the calendar year. 100% of the samples taken were below 1.49 ntu for slow sand filtration media. Therefore, your finished drinking water is clear and safe to drink.

**IMPORTANT INFORMATION**

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 Dexter Utility 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. Please contact us with any questions.