

2017 Water Quality Report
South Freeport Water District
PWSID# ME0091480

About Your Drinking Water

South Freeport Water District (SFWD) is pleased to provide you with its 2017 Consumer Confidence Report for the South Freeport water system (public water supply ID# ME0091480), which contains important information about your drinking water. The report summarizes the quality of water SFWD provided in 2017 including details about water sources, what the water at your tap contains, and how it compares to standards set by regulatory agencies. For the year 2017, we are pleased to report that your drinking water met all national primary drinking water standards.

The District must alert you, however, that an equipment failure caused an elevated fluoride concentration for approximately 10 days in March, 2017. This is an alert about your drinking water and a cosmetic dental problem that might affect children under nine years of age. At low levels, fluoride can help prevent cavities, but children drinking water containing more than 2 milligrams per liter (mg/l) of fluoride may develop cosmetic discoloration of their permanent teeth (dental fluorosis). The drinking water provided by the South Freeport Water District had a maximum fluoride concentration of 3.65 mg/l during this event.

Dental fluorosis, in its moderate or severe forms, may result in a brown staining and/or pitting of the permanent teeth. This problem occurs only in developing teeth, before they erupt from the gums. Children under nine should be provided with alternative sources of drinking water that has been treated to remove the fluoride to avoid the possibility of staining and pitting of their permanent teeth. You may also want to contact your dentist about proper use by young children of fluoride-containing products. Older children and adults may safely drink the water.

Drinking water containing more than 4 mg/l of fluoride (the U.S. Environmental Protection Agency's drinking water standard) can increase your risk of developing bone disease. Your drinking water does not contain more than 4 mg/l of fluoride, but we're required to notify you when we discover that the fluoride levels in your drinking water exceed 2 mg/l because of the cosmetic dental problem.

For more information, please call Maine Water Company, operators of the South Freeport Water District water system at 800-287-1643. Some home water treatment units are also available to remove fluoride from drinking water. To learn more about available home water treatment units, you may call NSF International at 1-877-8-NSF-HELP.

The District operators responded immediately to this problem when it was discovered. The faulty equipment was replaced and proper fluoride levels have been maintained since the event.

Although this report lists only those regulated substances that were detected in your water, we test for more than what is reported. This report is only a summary of our activities during 2017. If you have any questions about the information in this report, please call 207.865.1474.

Sources of Supply

SFWD uses a groundwater supply. Sodium silicate, a corrosion inhibitor, is used to combat corrosion in the distribution system. Fluoride is also added to promote dental health. Two interconnections with Maine Water Company exist to provide emergency assistance in the event of major problems. Certified operators ensure the quality of the water and that all primary and secondary drinking water regulations are met.

Sources of drinking water include rivers, lakes, ponds, and wells. As water flows either on the surface or through the ground, it dissolves naturally occurring minerals and radioactive material and can also accumulate substances resulting from human and animal activity. The Maine Drinking Water Program (DWP) has evaluated all public water supplies as part of the Source Water Protection Program. 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. The source overall has a low to moderate risk of significant contamination. Assessment results are available at town offices, public water suppliers, and from the DWP (207.287.2070).

In 2017, SFWD was granted a three year "Synthetic Organics Waiver" from monitoring/reporting requirements for the following industrial chemicals: Toxaphene/Chlordane/PCB, herbicides, Carbamate pesticides, and Semivolatile organics. This waiver was granted due to the absence of these potential sources of contamination within a half mile radius of the water source.

Contaminants that may be present in source water include:

- (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- (B) 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.
- (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, stormwater runoff, and residential uses.
- (D) Organic chemical contaminants, including synthetic and volatile organics, are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- (E) Radioactive contaminants, 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. FDA regulations establish limits for contaminants in bottled water, which 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 Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800.426.4791).

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 (800.426.4791).

South Freeport Water District

Water Source: One well serving the village of South Freeport.

The following table lists the level of contaminants that were detected for the year 2017 in your water system. The Safe Drinking Water Act 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 representative, are more than one year old.

Microbiological Contaminants: During 2017, none of the 8 distribution system samples tested positive for coliform bacteria.

Violations:

Lead Customer Notification – We are required to notify any customer who participated in our lead/copper testing of their individual testing results. In 2017, we failed to provide this information to our customers.

Fluoride Exceedance – On March 6, 2017 and November 20, 2017, the District exceeded the Secondary MCL of 2.0 ppm for Fluoride. Fluoride in drinking water at these elevated levels may cause mottling of children's teeth, usually in children less than nine years old. Mottling, also known as dental fluorosis, may include brown staining and/or pitting of the teeth, and occurs only in developing teeth before they erupt from the gums.

Violation Period: 1/1/2017-1/31/2017; **Violation Type:** Reporting, Routine Fluoride distribution system. We are required to monitor our drinking water for specific contaminants on a regular basis. Results of regular monitoring indicate whether or not drinking water meets health standards. In January 2017, we failed to report our Fluoride sampling result to the DWP on time (indicated as a Reporting violation above). The sample was collected on time and standards were met. The results were reported after the deadline.

Compounds	Test Date	Violation Y / N	Detection Value	Range of Detection	Federal/State Standard		Major Sources in Drinking Water
					MCL/MRDL	MCLG/MRDLG	
Inorganics							
Arsenic, ppb	2017	N	ND	NA	10	0	Erosion of natural deposits
Chromium, ppb	2017	N	ND	NA	100	100	Erosion of natural deposits
Fluoride, ppm	2017	N	4.84	0.26-4.84	4	4	Water additive which promotes strong teeth
Nitrate, ppm	2017	N	0.75	NA	10	10	Runoff from fertilizer use
Barium, ppm	2017	N	0.0056	NA	2	2	Erosion of natural deposits
Radionuclides							
Radium (228), pCi/L	2012	N	1.58	NA	5	0	Erosion of natural deposits

Lead and Copper	Test Date	90th Percentile	Total Number of Samples	Samples Exceeding Action Level	Federal/State Standard		Major Sources in Drinking Water
					Action Level	MCLG	
Copper, ppm	2017	2.07	10	3	1.3	1.3	Corrosion of household plumbing
Lead, ppb	2017	6	10	0	15	0	Corrosion of household plumbing

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. SFWD is responsible for providing high quality drinking water, but cannot control the variety of materials used in 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>.

Notes:

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements.

Fluoride: Fluoride may help prevent tooth decay if administered properly to children, but can be harmful in excess. US Dept of Health and Human Services recommends a level of 0.7 ppm.

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. Some levels are based on a running annual average.

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.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NA: Not applicable.

NTU: Nephelometric turbidity unit (cloudiness of water)

Turbidity: Monitored as a measure of treatment efficiency for removal of particles

pCi/L, picocuries/Liter: A unit of concentration for radioactive contaminants.

ppb: A unit of concentration equal to one part per billion.

ppm: A unit of concentration equal to one part per million.

PWSID: Public water supply identification number.

Running Annual Average (RAA): The average of all monthly or quarterly samples for the last year at all sample locations. The average detection value is the highest running quarterly average value obtained for all four quarters.

Our water systems are designed and operated to deliver water to our customers' plumbing systems that complies with state and federal drinking water standards. Customers' plumbing, including treatment devices, might remove, introduce or increase contaminants in tap water. All customers, and in particular operators of facilities like hotels and institutions serving susceptible populations (like hospitals and nursing homes), should properly operate and maintain the plumbing systems in these facilities. You can obtain additional information from the EPA's Safe Drinking Water Hotline at 800.426.4791.

South Freeport Water District

P.O. Box 72

South Freeport, Me 04078