

ANNUAL WATER
QUALITY REPORT

Water testing performed in 2003

Proudly Presented By:

**BIDDEFORD & SACO
WATER COMPANY**

PWS ID#: ME0090170

Working Hard for You

We proudly present our annual water quality report. This edition covers all testing completed from January through December 2003. We are pleased to tell you that our compliance with all state and federal drinking water laws remains exemplary. We are committed to delivering drinking water of the highest quality. To that end, we remain vigilant in meeting the challenges of source water protection, water conservation, and community education while continuing to serve the needs of all of our water users.



For more information about this report, or for any questions relating to your drinking water, please call either Norm Lavigne, Treatment Manager, at (207) 282-9141 or Jerry Mansfield, Biddeford and Saco Water Company President, at (207) 282-1543. Public speakers for community meetings may be arranged by calling (207) 282-9141.

Accolades

Our Saco River treatment facility has been awarded the Director's Certificate by the Partnership for Safe Water in recognition of our exceptional water quality and facility operations. We submit our facility to annual peer review under this program. Our treatment facility is among an elite group of only 20 nationwide to have been awarded the Director's Certificate for six consecutive years!



Conservation can lower your water and sewer bills

We have a supply of conservation kits that can help reduce water use in your home. The kits include a low-flow showerhead, two faucet aerators, and a weir that can be placed to reduce the amount of water used each time a toilet is flushed. The cost for each kit picked up in our office is eight dollars (\$8.00). If you can't come to our office, we would be glad to mail one or more kits out to you; postage and handling costs are four dollars (\$4.00) for the first kit and one dollar (\$1.00) for each additional kit in the same request. Simply send us a check for the number of kits you want and we will be pleased to mail them along to you.



Our maps are going digital

A geographical information system (GIS) is a computer system capable of assembling, storing, manipulating, and displaying data that is referenced to its specific geographic location, that is, where it is on the map. The data can include streets, lots, and utilities. GIS allows individuals, businesses, government and industry to accomplish more efficiently the daily tasks that depend on location. Tasks that might be made more efficient include managing environmental information, tracking transportation, utility, and emergency response systems, as well as planning for and locating new businesses and development.

GIS has been used extensively in state government in Maine for some time, and is being actively developed by the cities and towns right here in our service area to support daily decision making activities. We are in the process of converting our distribution system maps into an electronic format and referencing the newly digitized maps into the state's GIS system. We expect to complete the initial work on this project during 2004.

Your Source of Water

The Saco River is our sole source of water. It begins as a small stream high in the White Mountains of New Hampshire and flows through about 124 miles of New Hampshire and Maine forest and farmland before reaching our treatment plant. The Saco River Watershed actually covers an area of roughly 1,700 square miles in central New Hampshire and southwestern Maine. We are fortunate that the Saco River is one of the cleanest major rivers in Maine and New England, due in part to the lack of any substantial industrial development along the Saco River shoreline. In fact, the majority of the Saco River in Maine has been given the cleanest rating possible for water. Demand is great for high quality drinking water. We provide an average of more than 5 million gallons of water every day to a population of between 45,000 and 200,000 people (depending on the time of year). To learn more about our watershed on the Internet, go to the U.S. EPA's Locate Your Watershed (http://cfpub.epa.gov/surf/huc.cfm?huc_code=01060002). Additional information on the Saco River watershed and land use regulations in place for the watershed can also be obtained through the Saco River Corridor Commission's Internet site (www.sccc-maine.org), or by visiting our office.

Is It Safe To Drink From A Garden Hose?

No. Substances used in vinyl garden hoses to keep them flexible can get into the water. That's what can cause the water from a hose to have a rubbery or plastic taste. These chemicals are not good for you nor are they good for your pets. Allowing the water to run for a short time in order to flush the hose before drinking or filling your pets' drinking containers might help, but it is always better to get drinking water directly from the tap.

Source Water Assessment Program

A national Source Water Assessment program was mandated by the 1996 amendments to the Safe Drinking Water Act. Once complete, the assessment program will provide an overview of all public water supply sources nationwide. In the State of Maine, the Drinking Water Program (DWP) coordinated the assessment program, which was completed in May 2003. The program identified future growth in source protection areas as the dominant risk factor threatening public water supplies. For more information on the assessment program in the State of Maine, please visit the DWP's Web site (<http://www.state.me.us/dhs/eng/water/>).

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised people such as individuals with cancer undergoing chemotherapy, those who have undergone an organ transplant, those with HIV/AIDS or other immune system disorders, and some of the elderly and very young may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

Trenchless Technology

It's expensive to replace and upgrade existing water pipes, and a large part of such expenses is the cost associated with excavation, backfill, and restoring roadway surfaces once work is done. In addition, the inconvenience and mess of having neighborhood streets dug up is disruptive and unpleasant for all. Utilities have been seeking ways to both reduce costs and minimize the inconvenience for years, and have recently begun to see some success. One of the new procedures is called "pipe bursting"; the pipe bursting technology was developed in Europe and is just now beginning to be used in the United States. This trenchless technology facilitates the replacement of water pipes by using a hydraulically powered device to split the old pipe and simultaneously install the replacement pipe. The only excavation required is at the points where the new pipe has to be connected to a service, hydrant, or another water pipe. When things go well, a pipe can be replaced with a minimum amount of disruption to the area; plus there's the potential to both lower costs and save time. We decided to check out this new technology, and last year installed 1,300 feet of 8-inch replacement pipe on Randall Avenue in Ocean Park using pipe bursting. Though there were some problems, and it does not appear to be the best choice for all of our pipe replacement projects, we were quite encouraged with the results and will be using this new technology again in the future.

Substances That Might Be in Drinking Water

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 the land or through the ground, it dissolves naturally occurring minerals, possibly including radioactive material, and can pick up substances resulting from human or animal activity.

Under the Safe Drinking Water Act (SDWA), the U.S. Environmental Protection Agency (EPA) protects the public health by setting national limits for hundreds of these substances in public drinking water supplies. Similarly, U.S. Food and Drug Administration (FDA) regulations establish limits for these same substances in bottled water in order to provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some of these substances. The presence of these substances does not necessarily indicate that the water poses a health risk. Substances 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, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may 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 may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

What Makes Water "Hard"?

If substantial amounts of either calcium or magnesium, both nontoxic minerals, are present in drinking water, the water is said to be "hard." Hard water does not dissolve soap readily, so making a lather for washing and cleaning is difficult (hard). Conversely, water containing little calcium or magnesium is called "soft" water. Our water tends to be soft.

What's In My Water?

We are pleased to report that during the past year, the water delivered to your home or business complied with, or did better than, all state and federal drinking water requirements. Each year we analyze more than 70,000 water samples for bacteria, turbidity, inorganic contaminants, lead and copper, nitrate, volatile organic contaminants, total trihalomethanes, and synthetic organic contaminants. For your information, we have compiled a list in the table below showing which substances were detected in our drinking water during 2003. Although all of the substances listed below are under the Maximum Contaminant Level (MCL) set by the U.S. EPA, we feel it is important that you know exactly what was detected and how much of the substance was present in the water. None of the 120 other substances regulated by the EPA was detected in our water. (The state requires us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.)

REGULATED SUBSTANCES

SUBSTANCE (UNITS)	YEAR SAMPLED	MCL	MCLG	AMOUNT DETECTED	RANGE (LOW-HIGH)	VIOLATION	TYPICAL SOURCE
Alpha emitters (pCi/L)	2002	15	0	0.09	NA	No	Erosion of natural deposits
Barium (ppm)	2003	2	2	0.0048	NA	No	Erosion of natural deposits
Chloramines (ppm)	2003	MRDL=4	MRDLG=4	1.14	0.1-1.72	No	Water additive used to control microbes
Fluoride (ppm)	2003	4	4	1.05	0.93-1.15	No	Erosion of natural deposits; Water additive which promotes strong teeth
Haloacetic Acids [HAAs] (ppb)	2003	60	NA	48.6	25-88	No	By-product of drinking water disinfection
Nitrate (ppm)	2003	10	10	0.2	NA	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
TTHMs [Total Trihalomethanes] (ppb)	2003	80	NA	41.8	21-71	No	By-product of drinking water disinfection
Total Organic Carbon (Removal ratio)	2003	TT>1.0 ratio	NA	1.45	1.18-1.74	No	Naturally present in the environment
Turbidity (NTU) ¹	2003	TT	NA	0.08	0.04-0.12	No	Soil runoff

Tap water samples were collected for lead and copper analyses from 30 homes throughout the service area

SUBSTANCE (UNITS)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH% TILE)	NO. OF HOMES ABOVE AL	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2002	1.3	1.3	0.05	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2002	15	0	9	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

UNREGULATED SUBSTANCES

SUBSTANCE (UNITS)	YEAR SAMPLED	AMOUNT DETECTED	RANGE (LOW-HIGH)	TYPICAL SOURCE
Hardness (ppm)	2003	29.1	NA	Erosion of natural deposits
Sodium (ppm)	2003	8.0	NA	Erosion of natural deposits
Sulfate (ppm)	2003	10	NA	Erosion of natural deposits

¹Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. During the reporting year, 100% of all samples taken to measure turbidity met water quality standards.

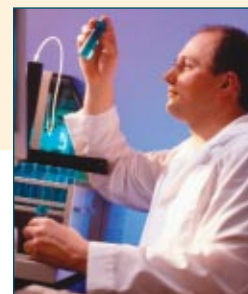


Table Definitions

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

MCL (Maximum Contaminant Level): 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.

MCLG (Maximum Contaminant Level Goal): 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.

MRDL (Maximum Residual Disinfectant Level): 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.

MRDLG (Maximum Residual Disinfectant Level Goal): 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 contamination.

NA: Not applicable

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water.

pCi/L (picocuries per liter): A measure of radioactivity.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

Removal Ratio: A ratio between the percentage of TOC actually removed to the percentage of TOC required to be removed.

TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.