

Brownville Junction Water Department

PWSID ME0090240

2013 Consumer Confidence Report

I. Owner/Operator of Public Water System

Water Operator's Name: Steven Jay

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Upcoming Regularly Scheduled Meeting(s): Published at Brownville Town Office

Report Covering Calendar Year: January 1, 2013 – December 31, 2013

II. Water Source

Description of Water Source: The water source comes from two drilled wells approximately 50 and 60 feet deep and sits approximately 150 feet from the west side of Front Street. The water that supplies these wells is pumped from an underground aquifer. This water is then aerated and pumped to the system via a high lift pump. This aeration removes carbon dioxide from the water, which adjusts the pH and alkalinity of the raw water. This is necessary due to the corrosive nature of water. We also disinfect the water with hypochlorite (15% chlorine).

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 town offices, public water suppliers, and the DWP. For more information about the SWAP, please contact the DWP at telephone 287-2070.

III. Waiver (Full Waiver 1/1/2011-12/31/2013)

In 2011, our system was granted a "Synthetic Organics Waiver". This is a three year exemption from the monitoring/reporting requirements for the following industrial chemical(s): TOXAPHENE/CHLORADANE/PCB, HERBICIDES, CARBAMATE PESTICIDES, 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.

IV. Compliance Violations

None

V. Water Test Results

Contaminant	Date	Results	MCL	MCLG	Source
Microbiological					
COLIFORM (TCR)(1)	2013	0 pos	1 pos/mo or 5%	0 pos	Naturally present in the environment
Inorganics					
ARSENIC	2/28/2011	1.9 ppb	10 ppb	0 ppb	Erosion of natural deposits. Runoff from orchards, glass and electronics production wastes.
BARIUM	2/28/2011	0.00081 ppm	2 ppm	2 ppm	Discharge of drilling wastes. Discharge from metal refineries. Erosion of natural deposits.
CHROMIUM	2/28/2011	2 ppb	100 ppb	100 ppb	Discharge from steel and pulp mills. Erosion of natural deposits.
NITRATE (4)	3/18/2013	0.09 ppm	10 ppm	10ppm	Runoff from fertilizer use. Leaching from septic tanks, sewage. Erosion of natural deposits.
CopperLead					
COPPER 90 th % VALUE (3)	1/1/11-12/31/13	0.18 ppm	AL=1.3 ppm	1.3 ppm	Corrosion of household plumbing systems.
LEAD 90 th % VALUE (3)	1/1/11-12/31/13	3.2 ppb	AL=15 ppm	0 ppb	Corrosion of household plumbing systems.
Chlorine Residual					
CHLORINE RESIDUAL	RAA	0.20 ppm Range (0.10-0.30 ppm)	MRDL=4.0ppm	MRDLG=4 ppm	By-product of drinking water chlorination.

Secondary Contaminants

Tested 2/28/2011: SULFATE 3 ppm, MAGNESIUM 2.2 ppm, NICKEL 0.0015 ppm, SODIUM 2.8 ppm, CHLORIDE 3 ppm, ZINC 0.0043 ppm

Definitions:

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health.

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

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

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.

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

Units:

ppm = parts per million or milligrams per liter (mg/L).

pCi/L = picocuries per liter (a measure of radioactivity).

ppb = parts per billion or micrograms per liter (µg/L).

pos = positive samples.

Notes:

- 1) Total Coliform Bacteria: Reported as the highest monthly number of positive samples, for water systems that take < 40 samples per month.
- 2) Arsenic: The U.S. EPA adopted the new MCL standard in October 2001. Water systems must meet this new standard by January 2006.
- 3) Fluoride: Fluoride levels must be maintained between 1-2 ppm, for those water systems that fluoridate the water.
- 4) Lead/Copper: Action levels (AL) are measured at consumer's tap. 90% of the tests must be equal to or below the action level.
- 5) 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 provider.
- 6) Gross Alpha: Action level over 5 pCi/L requires testing for Radium. Action level over 15 pCi/L requires testing for Radon and Uranium.
- 7) Uranium: The U.S. EPA adopted the new MCL standard of 30 ug/l(ppb), in December 2000. Water systems must meet this new standard after December 2003.
- 8) Radon: The State of Maine adopted a Maximum Exposure Guideline (MEG) for Radon levels in drinking water above 4,000 pCi/L, effective 1/1/07. If Radon exceeds the MEG in water, treatment is recommended. It is also advisable to test indoor air for Radon. The U.S. EPA is proposing setting federal standards for Radon in drinking water.
- 9) TTHM/HAA5: Total Trihalomethanes and Haloacetic Acids (TTHM and HAA5) are formed as a by-product of drinking water chlorination. This chemical reaction occurs when chlorine combines with naturally occurring organic matter in water.

All other regulated drinking water contaminants were below detection levels.

VII. Health Information

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

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 (1-800-426-4791).

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. Town of Brownville 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>.

VIII. Certification

I, Kevin N. Black, hereby certify and attest that I have distributed copies of this Consumer Confidence Report to all users of my public water system on April 2, 2014, electronically, in accordance with 40 CFR§141-142. Copies are also available at the Town Office. I further certify that the information contained in this annual Consumer Confidence Report is correct and consistent with compliance monitoring data. Any intentional deception or misinformation represented in this report may be cited as a violation of State and U.S. EPA National Primary Drinking Water Rules.

Signed: Kevin N. Black Dated: 3/31/14