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2021 Annual Drinking Water Quality Report

for

MENEMSHA WATER COMPANY

Chilmark, Massachusetts

MassDEP PWSID # 4062000

This report is a snapshot of drinking water quality that we provided last year. Included are details about where your water comes from, what it contains, and how it compares to state and federal standards. We are committed to providing you with information because informed customers are our best allies.

1. COMPLIANCE WITH DRINKING WATER REGULATIONS

Does My Drinking Water Meet Current Health Standards?

We are committed to providing you with the best water quality available. However, some contaminants that were tested last year did not meet all applicable health standards regulated by the state and federal government. Due to contaminant violations of copper during May and November 2021, and violations of lead during November 2021, our system is taking the following corrective actions.

- We collected additional samples.
- We provided educational information to water consumers in December 2021.
- A corrosion control treatment system is under construction and is anticipated to be online by the fourth quarter of 2022.

In October 2021 we failed to complete required Total Coliform Bacteria sampling in a timely manner, which is a monitoring and reporting violation. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially harmful bacteria may be present. Because we did not take the required number of samples, we did not know whether the contaminants were present in your drinking water, and we are unable to tell you whether your health was at risk during that time - details are provided in the table below.

| Contaminant | Monitoring Period | Number of Samples Required | Number of Samples Taken | Date Sampling Conducted | Health Effects |
|-------------------------|-------------------|----------------------------|-------------------------|-------------------------|----------------|
| Total Coliform Bacteria | 10/1 - 10/31/2021 | 2 | 0 | 11/2021 | Unknown |

In addition to sampling for these contaminants in November 2021, our system provided notification to water consumers of this violation in early December 2021, and the notice was posted publicly for seven days.

2. PUBLIC WATER SYSTEM INFORMATION

Address: 40 Blueberry Ridge Lane, PO Box 584, Chilmark, Massachusetts 02535

Contact Person (Weston & Sampson Services, Inc.): Paul Provost, Primary Operator: (978) 479-8170

Water System Improvements

Our water system is routinely inspected by Mass DEP. MassDEP inspects our system for its technical, financial, and managerial capacity to provide safe drinking water to you.

To ensure that we provide the highest quality of water available, your water system is operated by Massachusetts certified operators from Weston & Sampson Services, Inc. who oversee the routine operations of our system.

Over the past year, we have installed remote monitoring controls and alarms on the well and the storage tank. These controls allow for real-time online monitoring tank levels and power outages by authorized personnel. We also completed the water system's first cross connection survey.

3. YOUR DRINKING WATER SOURCE

Where Does My Drinking Water Come From?

Your water is provided by the following source(s) listed below:

The drinking water for Menemsha Water Company comes from one well (Well Three). This well was installed in 2002, is 84 feet deep, and provides up to 72,000 gallons of water per day. Two other wells are in the same area but are not active.

| Source Name | MassDEP Source ID | Source Type | Location of Source |
|---------------------|-------------------|-------------|---|
| Well One (Offline) | 4062000-01G | Groundwater | Near electrical building at the well field |
| Well Two (Offline) | 4062000-02G | Groundwater | Along left side of driveway coming into well field area |
| Well Three (Active) | 4062000-03G | Groundwater | Along left side of driveway coming into well field area |

Is My Water Treated?

Our water system makes every effort to provide you with safe and pure drinking water. The water quality of our system is constantly monitored by us and MassDEP to determine if any treatment may be required.

Prior water quality test results show that the water needs to be treated to continue to meet these goals. To improve the quality of the water, our system is in the process of constructing a corrosion control treatment system, expected to be online by the fourth quarter of 2022.

How Are These Sources Protected?

MassDEP prepared source water assessment and protection (SWAP) reports in 2004 for all public water systems existing at that time as required by the Safe Drinking Water Act amendments. The purpose of these SWAP reports is to assess the susceptibility of public water supplies. As our water system was registered after these assessments were conducted, a SWAP report is not available for the public water system.

Residents can continue to protect the source of their drinking water by:

- Take hazardous household chemicals to hazardous materials collection days
- Limiting use of pesticides, fertilizers, etc. in lawns, gardens or other plantings
- Practice water conservation
- Protect against cross connections

With careful use, and by reducing sources of pollution, our groundwater will continue to be an important natural resource for years to come!

4. SUBSTANCES FOUND IN TAP WATER

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, and in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

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, and 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 stormwater runoff, and septic systems.

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, the Department of Environmental Protection (MassDEP) and U.S. Environmental Protection Agency (EPA) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) and Massachusetts Department of Public Health (DPH) regulations establish limits for contaminants in bottled water that must provide the same protection for public health. 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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (800) 426-4791.

5. IMPORTANT DEFINITIONS

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.

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.

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

90th Percentile – Out of every 10 homes sampled, 9 were at or below this level.

ppm = parts per million, or milligrams per liter (mg/l)
ppb = parts per billion, or micrograms per liter (ug/l)
ppt = parts per trilling, or nanograms per liter (ng/l)
pCi/L = picocuries per liter (a measure of radioactivity)
ND = Not Detected
N/A = Not Applicable

Secondary Maximum Contaminant Level (SMCL) – These standards are developed to protect the aesthetic qualities of drinking water and are not health based.

Massachusetts Office of Research and Standards Guideline (ORSG) – This is the concentration of a chemical in drinking water, at or below which, adverse health effects are unlikely to occur after chronic (lifetime) exposure. If exceeded, it serves as an indicator of the potential need for further action.

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 contamination.

PFAS - Per- and polyfluoroalkyl substances

6. WATER QUALITY TESTING RESULTS

What Does This Data Represent?

The water quality information presented in the table(s) is from the most recent round of testing done in accordance with the regulations. All data shown was collected during the last calendar year unless otherwise noted in the tables.

| Regulated Contaminant | Date(s) Collected | Highest Result Detected | Range Detected | MCL or MRDL | MCLG or MRDLG | Violation (Y/N) | Possible Source(s) of Contamination |
|-------------------------------|------------------------|-------------------------|----------------|-------------|---------------|-----------------|---|
| Inorganic Contaminants | | | | | | | |
| Barium (ppm) | 5/7/2019 | 0.01 | N/A | 2 | 2 | NO | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits |
| Nitrate (ppm) | 9/29/2021 11/5/2021 | 0.26 | 0.22 – 0.26 | 10 | 10 | NO | Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits |
| Perchlorate (ppb) | 5/7/2019 9/18/2019 | 0.94 | 0.66-0.94 | 2 | N/A | NO | Rocket propellants, fireworks, munitions, flares, blasting agents |

| Regulated Contaminant | Date(s) Collected | 90 TH percentile | Action Level | MCLG | # of sites sampled | # of sites above Action Level | Possible Source of Contamination |
|------------------------|-------------------|-----------------------------|--------------|------|--------------------|-------------------------------|--|
| Lead and Copper | | | | | | | |
| Lead (ppb) | 5/17-18/2021 | 0.012 | 15 | 0 | 20 | 2 | Corrosion of household plumbing systems; Erosion of natural deposits |
| Copper (ppm) | 5/17-18/2021 | 6.1 | 1.3 | 1.3 | 20 | 11 | Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives |
| Lead (ppb) | 11/2-3/2021 | 0.021 | 15 | 0 | 20 | 4 | Corrosion of household plumbing systems; Erosion of natural deposits |
| Copper (ppm) | 11/2-3/2021 | 4.0 | 1.3 | 1.3 | 20 | 9 | Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives |

For more details about lead and copper in water, please refer to the Educational Information provided on page five.

| Regulated Contaminant | Date(s) Collected | Detect Result or Range | Highest Quarterly Average | MCL | Violation (Y/N) | Possible Source(s) of Contamination |
|-----------------------|--------------------------------|------------------------|---------------------------|-----|-----------------|--|
| PFAS6 (ppt) | 11/5/2021 and 12/28/2021 | 0 - 2.01 | 2.01 | 20 | NO | Discharges and emissions from industrial and manufacturing sources associated with the production or use of these PFAS, including production of moisture and oil resistant coatings on fabrics and other materials. Additional sources include the use and disposal of products containing these PFAS, such as firefighting foams. |

Some people who drink water containing these PFAS in excess of the MCL may experience certain adverse effects. These could include effects on the liver, blood, immune system, thyroid, and fetal development. These PFAS may also elevate the risk of certain cancers.

Unregulated contaminants are those for which there are no established drinking water standards. The purpose of unregulated contaminant monitoring is to assist regulatory agencies in determining their occurrence in drinking water and whether future regulation is warranted.

| Unregulated and Secondary Contaminants | Date(s) Collected | Highest Result Detected | Average Detected | SMCL | ORSG | Possible Source |
|--|-------------------|-------------------------|------------------|------|------|---|
| Inorganic Contaminants | | | | | | |
| Sodium (ppm) | 5/7/2019 | 14 | N/A | ---- | 20 | Natural sources; runoff from use as salt on roadways; by-product of treatment process |
| For more details about sodium in water, please refer to the Educational Information provided on page five. | | | | | | |

| Unregulated Contaminant | Date(s) Collected | Detect Result or Range | Average Detected | ORSG | Possible Source |
|---|-------------------|------------------------|------------------|------|-----------------|
| N-ethylperfluoro-1-octanesulfonamidoacetic acid (N-EtFOSAA) (ppt) | 12/28/2021 | 14 | N/A | + | ---- |
| + There is no ORS Guideline for this compound. | | | | | |

7. EDUCATIONAL INFORMATION

Sensitive Populations – 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 some infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control and Prevention (CDC) guidelines on lowering the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

Lead – 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 Menemsha Water Company public water system 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>.

Copper – Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson’s Disease should consult their personal doctor.

Sodium – Sensitive individuals, such as those experiencing hypertension, kidney failure, or congestive heart failure, should be aware of the sodium levels where exposures are being carefully controlled.

8. ADDITIONAL INFORMATION

Please Help Us Conserve Water

Household water conservation not only saves water, but it saves energy too; energy needed to heat water and to run appliances.

- Check all faucets for leaks; even a slow drip can waste up to 20 gallons of water in a day!
- Check for toilet leaks by putting a few drops of food coloring in the toilet's tank. An "invisible" leak in the toilet wastes up to 100 gallons in a day.
- Only run full loads through your washing machine and dishwasher.
- Do your outdoor watering early or late, not in the midday heat, and make sure you aren't watering sidewalks or driveways.

Cross Connection Control and Backflow Prevention

The Menemsha Water Company public water system makes every effort to ensure that the water delivered to your residence is clean, safe and free of contamination. We work very hard to protect the quality of the water delivered to you from the time the water is extracted from underground throughout the entire treatment and distribution system. But what happens when the water reaches your home? There is still a need to protect the water from contamination caused by a cross connection.

What is a cross connection?

A cross connection occurs whenever the drinking water supply is or could be in contact with potential sources of pollution or contamination. Cross connections exist in piping arrangements or equipment that allows the drinking water to come in contact with non-potable liquids, solids or gases (hazardous to humans) in the event of a backflow.

What is backflow?

Backflow is the undesired reverse of the water flow in the drinking water distribution lines. The backward flow of water can occur when pressure created by equipment or a system, such as a boiler or air conditioning system, is higher than the water pressure inside the water distribution lines (backpressure), or when the pressure in the distribution lines drops due to occurrences such as water main breaks or heavy water demand, causing the water to flow backward inside the water distribution system (backsiphonage). Backflow is a problem that many water consumers are unaware of, and every water customer has a responsibility to help prevent them.

What can you do to help prevent a cross connection?

Without the proper protection, something as simple as a garden hose has the potential to contaminate or pollute the drinking water lines in your home. In fact, over half of the country's cross connection incidents involve unprotected garden hoses. There are very simple steps that you, as a drinking water user, can take to prevent such hazards:

- Never submerge a hose in soapy water buckets, pet watering containers, pools, tubs, sinks, drains or containers of chemicals.
- Never attach a hose to a garden sprayer without the proper backflow preventer.
- Buy and install a hose bib vacuum breaker for all inside and outside hose connections. The installation can be as easy as attaching a garden hose to a spigot. This inexpensive device is available at most hardware stores and home improvement centers.
- Buy water-connected appliances and equipment equipped with a backflow preventer.

For additional information on cross connections and on the status of your water system's cross connection program, please contact Menemsha Water Company, at (978) 694-9004, or Paul Provost, of Weston & Sampson Services, Inc., at (978) 479-8170.