Water System water quality challenges and capital improvements

In 2019 the Hyannis Water System dealt with water quality challenges, related capital improvements and planned projects.

The design of a needed Mahler Filtration Facility was completed, went out to bid and construction commenced in the fall. The re-activation of Straightway Well 1 was completed in the spring of 2019. The Mary Quinn 4 Well replacement design was completed and the first phase went out to bid and construction on the well started. The Hyannis Water System new source alternatives evaluation report was approved and implemented. All well drilling preparations and public outreach commenced.

The second phase of a cleaning and lining water main rehabilitation job was started on Main Street between School Street and the Yarmouth Town line to clean and upgrade pipes, valves, fire hydrants and water services.

How Many Times a Day Do You Turn on the Faucet?
The average American home uses about 100 to 150 gallons of water a day. Did you know that 14% of all the water we use is wasted by leeking taps and toilets? Conserving water is as simple as repairing leaky faucets and toilets, taking shorter showers, not leaving water running while brushing teeth, washing hands, washing fruits and vegetables. Learn more about using water wisely at www.USDA/WaterSense.

Using water wisely benefits you and the environment.

Test well drilling with a sonic drill rig at site F. County Farm, Barnstable Village.

Hyannis Water System
PWS ID: 04020004

The late town council president Jim Crocker speaking at the groundbreaking ceremony for the Mahler Water Filtration Plant in Hyannis.

Hyannis Water Board
Stephen O’Neil, Chair
Mark Sexton, Vice Chair
Tom Holmes, Member
Jonathan Asselin, Member
Harold E. Tobey, Member

Annual Water Quality Report
Water testing performed in calendar year 2019

Hyannis Water System
Operated by Suez
47 Old Yarmouth Road
Hyannis, MA 02601-0326
(508) 775-0063

Information for Persons with Compromised Immune Systems
Some people are 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 (Center for Disease Control) guidelines do not appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800) 426-6791 or www.epa.gov/safewater/botline.

Source Water Assessment and Protection
The Massachusetts DEP has prepared a Source Water Assessment Program (SWAP) Report for the Hyannis Water System. The report assesses the susceptibility of public water supplies to contamination and makes recommendations. This report is available from the Hyannis Water System located at 47 Old Yarmouth Road in Hyannis, the local Board of Health and also at the DEP website: http://www.massdep.dept/water/drinking/soucrewa.html/reports.
DISTRIBUTION SYSTEM WATER QUALITY
This report contains only those data collected during sampling. Not all contaminants are mentioned.

<table>
<thead>
<tr>
<th>Chemical Class</th>
<th>Range</th>
<th>MCL</th>
<th>MCLG</th>
<th>Violation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenic (arsenic-III)</td>
<td>0.00</td>
<td>50</td>
<td>50</td>
<td>No</td>
</tr>
<tr>
<td>Chlorine</td>
<td>0.00</td>
<td>1.0</td>
<td>1.0</td>
<td>Violation</td>
</tr>
<tr>
<td>Mercury (mercury)</td>
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<td>0.1</td>
<td>0.1</td>
<td>No</td>
</tr>
<tr>
<td>Lead</td>
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<td>0.01</td>
<td>0.01</td>
<td>No</td>
</tr>
<tr>
<td>Selenium</td>
<td>0.00</td>
<td>10.0</td>
<td>10.0</td>
<td>No</td>
</tr>
<tr>
<td>TDS</td>
<td>0.00</td>
<td>500</td>
<td>500</td>
<td>No</td>
</tr>
</tbody>
</table>

In general, the water is safe to drink. However, some contaminants were present in quantities exceeding the MCL or MCLG. The presence of these contaminants may be due to various factors, such as the natural environment, industrial activities, or other human activities. The presence of these contaminants does not necessarily indicate that the 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 (888) 426-4791.

SAFETY DRINKING WATER ACT – WATER QUALITY STANDARDS DEFINITIONS

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

Massachusetts Maximum Contaminant Levels (MCLs): The Massachusetts maximum contaminant levels (MCLs) in the drinking water regulations consist of promulgated US EPA MCLs which have become effective, plus a few MCLs set specifically by the Massachusetts Department of Environmental Protection.

Minimum Contaminant Level (MCL): The highest level of a contaminant in drinking water below which it is known or assumed to be without risk of harm to health. MCLs are set at or below the MCLGs as feasible using the best available treatment technology.

Minimum Relative Contaminant Level Goal (MRL): The level of a contaminant in drinking water below which there is no known or expected risk to health. MRLs can vary as new science becomes available.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfected allowed in drinking water. Disinfection by-products that are present or formed during the treatment of water for the destruction of Giardia or Cryptosporidium may be harmful to health. These standards are designed to protect the aesthetic qualities of drinking water and are not health-based.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a disinfected allowed in drinking water. Disinfection regulations exist to protect the aesthetic qualities of drinking water and are not health-based.

Primary Standards: Federal drinking water regulations for substances that are health-related. Water suppliers must meet all primary drinking water standards.

Secondary Standards: Federal drinking water regulations for substances that do not have an immediate health effect. These regulations exist to protect the aesthetic qualities such as taste, odor, and appearance. Secondary standards are recommendations, not mandates.

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

Ohio Department of Health Standards and Guidelines (OH-DSG): These are concentration levels of chemical substances in water that the State Health Department considers safe for human consumption. Violation of these standards results in health problems, such as birth defects or cancer.

Unregulated Contaminants: Contaminants, which are not currently regulated by the EPA, may be harmful to health.

Water Source Characteristics: The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, springs, reservoirs, 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 materials, and can pick up substances resulting from the presence of animals or human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sew ler 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 storm water 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 storm water runoff, and industrial use.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production. These contaminants can also come from gas storage, urban storm water runoff, and septic systems.
- Radionuclides, which can be naturally occurring or be the result of oil or gas production and mining activities.

For Your Information:

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of certain contaminants. The presence of these contaminants does not necessarily indicate that the 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 (888) 426-4791.

To learn more about these contaminants and potential health effects, you can obtain the following materials at no charge:

- State of Massachusetts Department of Public Health: www.mass.gov/dph or the Massachusetts Drinking Water Education Partnership: www.massdwp.org.

Where to go for more information: The Massachusetts DEP at (617) 292-5585 or www.massdep.state.ma.us/dpd or the Massachusetts Drinking Water Education Partnership at www.massdwp.org.