Town of Mendon
Water Commission
20 Main Street
Mendon, Massachusetts 01756
Telephone: (508) 473-2547 Fax: (508) 478-8241
watercom@mendonma.gov

Mendon Water Commission
2015 Annual Consumer Confidence Report (CCR)
Public Water Supply (PWS) ID Number: 2179000
Hopedale PWS ID Number: 2138000

Consecutive System Interconnected on Cape Road at Town Line between Hopedale and Mendon

The Mendon Water Commission has prepared this report to provide important information about the town's public water system, including all drinking water testing between January 1 and December 31, 2015. There were no violations of any drinking water regulations in 2015.

If you have any questions regarding this report, please contact Leah Cameron, Administrative Clerk for the Water Commission, at the phone number or email address above. The Town of Mendon has been purchasing water from the Town of Hopedale since June 1, 2005. Consumer Confidence Reports for both Mendon and Hopedale are available in both Town Halls or can be found at: http://www.mendonma.gov/water-commission

Water Commission Meetings:
The Mendon Water Commission encourages you to attend its meetings. The Commission typically meets monthly in the Mendon Town Hall. Please check the Town of Mendon website or contact the Water Commission office to confirm meeting dates. Also, if a situation warrants, public hearings will be held and you will be notified through the news media or by U.S. Postal Service mail.

Water Commissioners during 2015:
Allan Kent, Chairman
Dean D'Alessandro
Dwight Watson

Timothy Watson, Certified Water Operator

Water Sources:
The water within Mendon's public water system comes from the Town of Hopedale. This water comes from several wells in a few locations. The main location is the well field on Mill Street within the Hopedale golf course. At this location, more than 30 wells are being pumped by a vacuum system which supplies the majority of water to be treated. Additionally, water comes from 5 separate wells located around the treatment plant itself. More information about the watershed is available on the U.S. Environmental Protection Agency (EPA) Surf Your Watershed website at: www.epa.gov/surf

Source Name	MassDEP Source ID#	Location of Source
Mill St. Well Field	2138000-01G	Within Hopedale Golf Course
Greene St. Gravel Packed Well	2138000-02G	Within Water Treatment Plant
Greene St. Gravel Packed Well 1	2138000-03G	Within Water Treatment Plant
Greene St. Gravel Packed Well 2	2138000-04G	Within Water Treatment Plant
Greene St. Bedrock Well	2138000-05G	Within Water Treatment Plant
Greene St. Bedrock Well	2138000-06G	Within Water Treatment Plant

Treatment:
The water is sent to the treatment plant located off of Greene Street in Hopedale. There, the raw water is immediately treated with chlorine gas and the pH is adjusted to be a neutral 7 by adding sodium hydroxide. These corrosion control chemicals help to reduce the amount of lead and copper in the water. The water is then sent through Greensand Plus filters, which contain silica sand and manganese dioxide. These filters remove any remaining contaminants, such as iron and manganese, to the point of being undetectable by our water tests. The filtered water is then sent through an ultraviolet system, removing any viruses the water may contain. After this process is completed, the water is then chlorinated a final time before being sent into the distribution system.

Water Quality Monitoring:

Water quality is constantly monitored by the Hopedale Water Department and Mass Department of Environmental Protection (MassDEP), based on a sampling schedule set forth by MassDEP. This helps to determine the effectiveness of existing water treatment and whether any additional treatment is required. Beyond that, the water within the Mendon system itself is monitored monthly for coliform bacteria and yearly for by-products of chlorine: trihalomethanes and haloacetic acids. Lead and copper testing is done every other year and asbestos is tested for every seven years.

Here are some examples of potential contaminants that are monitored and treated:

- Gross Alpha Particle Activity
- Asbestos
- Haloacetic Acids
- Chlorine
- Inorganics
- Iron
- Lead and Copper
- Manganese
- Nitrate
- Nitrite
- Perchlorate
- Radium 226 and 228
- Secondary Contaminants
- Synthetic Organic Compounds (SOCs)
- Trihalomethanes
- Turbidity
- Volatile Organic Compounds (VOCs)

Source Water Assessment:
As part of the Source Water Assessment Program (SWAP), MassDEP conducted assessments of our drinking water sources for the purposes of determining their susceptibility to potential contamination. A susceptibility ranking of "high" was assigned to this system, due to potential threats to water quality in the area, such as pesticides, fertilizers and chemical or fuel spills. The complete SWAP report is available online at: http://www.mass.gov/eea/docs/dep/water/drinking/swap/cero/2138000.pdf More information is listed in the "Ways to Protect Your Water Supply" section on measures that can be taken to reduce these threats.

Substances Found in Tap Water:
To ensure that tap water is safe to drink, MassDEP and the EPA prescribe regulations limiting the amount of certain contaminants in water provided by public water systems. The U.S. 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. 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

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 and – in some cases, radioactive material – 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 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 storm water runoff, and residential use.

- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and which may 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.

Water Quality Testing Results:
The presence of the following contaminants does not necessarily indicate that the water poses a health threat. The water quality information presented in the tables is from the most recent round of testing done in accordance with the regulations. All data shown were collected during the last calendar year, unless otherwise noted in the tables.

	Date Collected	90th Percentile	AL	MCLG	# of sample sites	# of sites above AL	Exceeds AL? (Y/N)	Possible Sources of Contamination
Lead (ppb)	8/19/14	3	15	0	5	0	N	Corrosion of household plumbing systems, erosion of natural deposits
Copper (ppm)	8/19/14	0.495	1.3	1.3	5	0	N	Corrosion of household plumbing systems, erosion of natural deposits, leaching from wood preservatives

	Highest # Positive in a Month	MCL	MCGL	Violation? (Y/N)	Possible Source of Contamination
Total Coliform	0	0	0	N	Naturally present in the environment
Fecal Coliform or E. Coli	0	*	0	N	Human and animal fecal waste

Turbidity*	TT	Lowest Monthly % of Samples	Highest Detected Daily Value	Violation? (Y/N)	Possible Source of Contamination	*Turbidity is a measure of the cloudiness of the water. It is a good indicator of water quality.
Daily Compliance (NTU)	1	----------	0.32	N	Soil runoff	**Monthly turbidity compliance is related to a specific treatment technique (TT).
Monthly Compliance**	At least 95% <0.3	100%	----------	N		Our system filters the water so at least 95% of our samples each month must be below the turbidity limits specified in the regulations.

Regulated Contaminant	Date(s) Collected	Amount Detected	MCL or MRDL	MCLG or MRDLG	Violation? (Y/N)	Possible Source(s) of Contamination
Inorganic Contaminants						
Barium (ppm)	5/20/15	0.056	2	2	N	Discharge of drilling wastes or metal refineries, erosion of natural deposits
Nitrate (ppm)	5/20/15	0.58	10	10	N	Runoff from fertilizer, leaching from septic tanks, erosion of natural deposits
Perchlorate (ppb)	8/18/15	0.09	2	NA	N	Rocket propellants, fireworks, munitions, flares, blasting agents
Radioactive Contaminants						
Gross Alpha (pCi/l) (minus uranium)	4/26/2012	0.71	15	0	N	Erosion of natural deposits
Radium 226 & 228 (pCi/l) (combined values)	1/25/2012	0.84	5	0	N	Erosion of natural deposits

Regulated Contaminant	Date(s) Collected	RAA	Range Detected	MCL or MRDL	MCLG or MRDLG	Violation? (Y/N)	Possible Source(s) of Contamination
Disinfectants & Disinfection By-Products							
Total Trihalomethanes (TTHMs) (ppb)	8/18/15	30.6	NA	80	NS	N	By-product of drinking water chlorination
Haloacetic Acids (HAA5s) (ppb)	8/18/15	13.9	NA	60	NS	N	By-product of drinking water chlorination
Chlorine (ppm) (free)	Monthly 2015	0.39	0.20-0.58	4	4	N	Water additive used to control microbes

Unregulated & Secondary Contaminants	Date(s) Collected	Result or Range Detected	SMCL	ORSG	Possible Source(s) of Contamination
Inorganic Contaminants					
Sodium (ppm)	5/20/15	55	NS	20	Natural sources, runoff from use as road salt, by-product of treatment process
Sulfate (ppm)	5/20/15	16	250	NS	Natural sources
Other Organic Contaminants					
Bromodichloromethane (ppb)	8/18/15	11	NS	NS	By-product of drinking water chlorination
Chloroform (ppb)	8/18/15	14	NS	70	By-product of drinking water chlorination
Dibromo-chloro-methane (ppb)	8/18/15	5.6	NS	NS	By-product of drinking water chlorination

Terminology Used in Water Quality Testing Results:

- **90th Percentile**: Out of every 10 homes sampled, 9 were at or below this level.
- **Action Level (AL)**: The highest level of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **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. MCLGs allow for a margin of safety. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- **Maximum Residual Disinfectant Level (MRDL)**: The highest level of a disinfectant (chlorine, chloramines, chlorine dioxide) 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 (chlorine, chloramines, chlorine dioxide) below which there is no known of expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- **NA**: not applicable
- **ND**: not detected
- **NS**: none set
- **NTU** (nephelometric turbidity units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- **Running Annual Average (RAA):** Average of four quarters
- **Treatment Technique (TT)**: A required process intended to reduce the level of a contaminant in drinking water
- **Variances and Exemptions**: State or EPA permission not to meet an MCL or a treatment technique under certain conditions
- **pCi/l** (picocuries per liter): a measure of radioactivity)
- **ppb** (parts per billion): One part substance per billion parts water (or micrograms per liter [ug/l])
- **ppm** (parts per million): One part substance per million parts of water (or milligrams per liter [mg/l])
- **ppt** (parts per trillion): One part substance per trillion parts of water(or nanograms per liter [ng/l])
- **Secondary Maximum Contaminant Level (SMCL)**: These standards are developed to protect the aesthetic qualities of drinking water, such as taste and odor, and are not health-based.
- **Massachusetts Office of Research and Standards Guideline (ORSG)**: 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.
- **Unregulated Contaminants:** Substances without MCLs for which EPA requires monitoring. For some of these substances, the Massachusetts Office of Research and Standards (ORS) has developed state guidelines or secondary MCLs. Unregulated contaminants are only reported when they were detected.

Violations:

There were no violations in 2015.

Please share this information with everyone who drinks this water, especially those who do not receive this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

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. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer who are 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 (Centers for Disease Control) 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) or http://water.epa.gov/drink/hotline

Lead in Home 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. The Mendon Water Commission 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

Sodium Sensitivity
Individuals who are sensitive to sodium, such as those experiencing hypertension, kidney failure, or congestive heart failure, should be aware of sodium levels and carefully control their exposure.

Cross Connections:
A cross connection is formed at any point where a drinking water line connects with equipment, systems containing chemicals or water sources of questionable quality. Outside water taps and garden hoses tend to be the most common sources of cross-contamination at home. For example, fluctuation in water pressure can cause water to be siphoned or sucked backwards through pipes and hoses. This could occur if the water pressure dropped when a hose was turned on to apply spray fertilizer. In such a situation, the fertilizer could be sucked back into the drinking water pipes.

The Mendon Water Commission recommends the installation of backflow prevention devices, such as Hose Bibb vacuum breakers, on all hose connections in order to prevent cross connections. These are inexpensive and are available from your local plumbing contractor or supplier. For more information on backflow prevention, contact the Safe Water Drinking Hotline at 1-800-426-4791.

As required by Massachusetts Drinking Water Regulations 310 CMR 22.22 (3) (b), the Mendon Water Commission has an approved Cross Connection Program Plan. All cross connections in Mendon businesses that are supplied by public water are surveyed by a certified backflow tester on an annual basis. These records are available for your inspection at the Water Commission office in the Town Hall.

Ways to Protect the Water Supply:
- Dispose of all unused household hazardous wastes at the Board of Health's Household Hazardous Waste Day. Call 508-634-2656 for more information.
- Minimize the use of fertilizers, pesticides, or herbicides. Sweep up any spills instead of washing them into the street or storm drain. Do not apply them before a heavy rain is anticipated. Use natural alternatives to these substances.
- Maintain your septic system. The septic tank should be emptied once every three years. Call 508-634-2656 for more information.
- Conserve water to help support a growing population and avoid watering bans. Avoid excessive lawn irrigation. Check for leaks within your system. Purchase water saving devices, such as low flow toilets and showerheads.

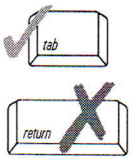
Massachusetts Department of Environmental Protection
Bureau of Resource Protection – Drinking Water Program

Consumer Confidence Report Certification

For calendar year 2015

A. PWS Information

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



Mendon Water Commission
PWS Name

Mendon
City /Town

The community water system named above hereby certifies that its Consumer Confidence Report (CCR) was distributed to customers, appropriate agencies, and notices of availability have been given in compliance with 310 CMR 22.16A. Furthermore, the system certifies that the information contained in the report is correct and consistent with the compliance monitoring data previously submitted to MassDEP.
I certify under penalty of law that I am the person authorized to fill out this form and the information contained herein is true, accurate, and complete to the best of my knowledge and belief.

2179000
PWS ID#

Leah Cameron
Name

Administrative Clerk
Title

508-473-2547
Phone #

6/15/16
Date

Signature of Owner/Responsible Party or Certified Operator

B. Public Notice Certification

CCR delivery by newspaper or postings does not meet PN requirements. PN must be directly delivered (by hand, land, electronic).

Is this system using this CCR to provide **Tier 3** Public Notice? ☐ Yes ☒ No

What PN is included? Violation ☐ UCMR3 ☐ Other ☐ — List other

Did you have a consultation with MassDEP ? ☐ Yes ☐ No — Consultation date

The PN can be found on page _____ of the CCR. — Date of PN Occurrence

☐ I am reporting multiple Tier 3 PNs. I have listed the additional PN information at the end of this form.

The public water system indicated above hereby affirms that a Tier 3 public notice has been provided within this CCR to consumers in accordance with 310 CMR 22.16(4) including: delivery, content, format requirements, notification deadlines, and that the public water system will meet future requirements for notifying new billing units and new customers of the violation.

C. For Systems Selling Water to Other Community Water Systems

If you did not sell water to another community PWS skip Section C.

☐ My system delivered the applicable information required at 310 CMR 22.16A(3), to the buying system(s) no later than April 1st of this year, or by the mutually agreed upon date specifically included in a written contract between the parties.

D. Annual Cross Connection Education

Is this CCR being used for your system's annual cross-connection education? ☒ Yes ☐ No
If no, what methods did you use to meet your annual CCCP requirements (citation)?

Continued on next page

ALL distribution (posting, land or e-delivery, publication, and good faith efforts) must be completed on or before July 1st.

E. Consumer Delivery Methods – Based on Population Served

For systems serving fewer than 500 persons:
(Choose #1 or #2)

6/16/16
Date of delivery/publication

☐ 1. My system used one or more of the following methods to notify customers that the CCR would **not** be mailed directly to them but is available to them upon request. (A copy of the notice is attached).

☐ Land mail ☐ Door-to-door ☐ Newspaper ☐ eMail ☐ Post notices

Locations of posted notices

☒ 2. My system provided a copy of the CCR to each customer by the following methods(s):

When email is used for delivery, any returned emails must be redelivered by land delivery ideally within 3 days but before July 1.

☐ Published the full CCR in a local newspaper (the published report is attached).

☒ Land mailed or hand-delivered the CCR to consumers.

☐ eMailed with PDF of CCR or ☐ eMailed with embedded CCR (email is attached)

☐ Posted the CCR on the web and sent the direct URL to customers by way of mail or email (notice is attached).

List URL

Instructions for customers to request a hard copy must also be included in e-delivery.

For systems serving between 500 and 9,999 persons:
(Choose #1 or #2)

Date of delivery/publication

☐ 1. My system provided a copy of the CCR to each customer by
☐ Land mail ☐ eMail with PDF ☐ eMail with embedded CCR

☐ Land mailed or ☐ eMailed a notice of availability of the CCR with a direct URL

When a URL is used it must be a direct link to the document.

List the URL if used.

☐ 2.My system provided the CCR to each customer by publishing the full report in a newspaper (a copy of the published CCR is attached) and provided notice to consumers of this action by either:
☐ Published a notice of this in a local newspaper
☐ Land mailed a notice of this to consumers.
☐ e-Mailed a notice of this to consumers.

For systems serving 10,000 or more persons:

Date of delivery/publication

☐ My system provided a copy of the CCR to each customer by:

☐ Land mail ☐ eMail with PDF ☐ eMail with embedded CCR
☐ Land mailed or ☐ eMailed a notice of availability of the CCR with a direct URL

List the URL if used.

☐ In addition to one of the delivery methods checked above, my system serves greater than 100,000 persons and, as required, has posted the CCR on a publicly accessible Internet site:
www.

List the URL used

F. Good Faith Delivery Methods **(minimum of 3 is required)**

To reach people who drink our water but are not billed customers the following were conducted in addition to the required delivery:

☒ Posted the CCR on a publicly accessible Internet site at the following address. (Only for systems under 100,000 population who did not use this method as their primary method)
www.mendonma.gov/water-commission

List the URL used.

☐ Mailed the CCR to all postal patrons within the service area (list of zip codes used is attached).

☐ Mailed a postcard listing the URL where the CCR can be found, to all postal patrons within the service area (list of zip codes used is attached).

www.
List the URL used.

☒ Advertised availability of the CCR in the following news media (the announcement is attached):
☐ Radio ☐ Newspaper ☒ Television / cable ☐ Social media
☐ Digital signboard

☐ Published the CCR in local newspaper (the published CCR is attached).

☒ Posted the CCR in public places i.e., post office, town hall, library (a list of locations is attached).

☐ Delivered multiple CCR copies to single-bill addresses serving several persons i.e., apartments, businesses, large private employers (a list of locations is attached).

☐ Delivered multiple CCR copies to community organizations (A list of organizations is attached.)

☐ Posted the CCR or a notice of availability at locations within the apartment/condo complex (list of the locations is attached).

☐ _____
Other

G. Mandatory Agency Delivery Requirements

Agencies and consumers must **receive** CCR on or before July 1.

☑ 1. Delivered 1 copy of CCR and the Certification Form to local board of health. (Contact your board of health as to whether they would prefer land or e-delivery of CCR.)

6/15/16
Date completed

When emailing, scan documents into 1 PDF file. Make sure Cert form is the first page.

☑ 2. Delivered 1-copy of CCR and the Certification Form to MA Dept. of Public Health.
☐ Hardcopy to: 250 Washington St.; Boston, MA 02108 or
☐ PDF emailed to: dph.ccr@massmail.state.ma.us

6/15/16
Date completed

☑ 3. Delivered 1-copy of CCR, the Certification Form, and **all** the attachments check-marked in this form to the MassDEP Boston Office at:
☐ Hardcopy to: CCR Program, 1 Winter St. -5th Fl.; Boston, MA 02108 or
☐ PDF emailed to: Program.Director-DWP@state.ma.us.

6/15/16
Date completed

☐ 4. If **not** emailed to the MassDEP Boston Office, delivered 1-copy of CCR, the Certification Form, and **all** the attachments check-marked in this form to your MassDEP regional office at:

_____
Date completed

Only one email is necessary. If the CCR is e-delivered to the Boston office it will also be accessible to the regional office as well. No need to e-deliver to regional office.

☐ Hardcopy to: MassDEP-WERO; Statehouse West 4th Floor; 436 Dwight Street.; Springfield, MA 01103
☐ Hardcopy to: MassDEP-CERO; 8 New Bond St; Worcester, MA 01606
☐ Hardcopy to: MassDEP-NERO; 205-B Lowell St.; Wilmington, MA 01887
☐ Hardcopy to: MassDEP-SERO; 20 Riverside Dr.; Lakeville, MA 02347

The 2015 Consumer Confidence Report (CCR) is now available from the Mendon Water Commission. It has been mailed to all customers. Additional copies are available at the Town Hall. It can also be accessed online at: http://www.mendonma.gov/water-commission

Public Places Where CCR Is Posted:

- Mendon Town Hall
- Mendon Post Office
- Taft Public Library