

2021 CONSUMER CONFIDENCE REPORT

Tewksbury Hospital Public Water Supply
365 East Street
Tewksbury, Massachusetts
MassDEP PWS ID #3295001

In accordance with the 1996 Federal Safe Drinking Water Act amendments (40 CFR Parts 141 & 142), the Tewksbury Hospital Public Water Supply (PWS ID #3295001) has prepared the following Consumer Confidence Report for 2021. The purpose of this report is to advance your understanding of the quality of your drinking water and heighten your awareness of the need to protect precious water resources. It is a snapshot of the quality of the water that the Tewksbury Hospital Public Water Supply provided to its consumers during the calendar year 2021. Included within this Annual Consumer Confidence Report are details about where Tewksbury Hospital's water comes from, what it contains, and how it compares to state and federal drinking water standards.

PUBLIC WATER SYSTEM INFORMATION

Public Water System Address

Address: 365 East Street, Tewksbury, Massachusetts
Contact Person: Mr. William P. Pellerin, Water Storage System Foreman III
Telephone Number: (978) 851-7321

Public Water System Improvements

Our water system is routinely inspected by the Massachusetts Department of Environmental Protection (MassDEP). The MassDEP inspects our system for its technical, financial, and managerial capacity to provide safe drinking water to our consumers. To ensure that we provide the highest quality of water available, your water system is operated by a Massachusetts certified drinking water supply facility operator who oversees the routine operation of the system. During 2021, there were no major changes or modifications to the treatment or distribution activities associated with the Tewksbury Hospital Public Water Supply.

Opportunities for Public Participation

If you would like to participate in discussions regarding your water quality, please contact Mr. William P. Pellerin, Water Storage System Foreman III.

DRINKING WATER SOURCE INFORMATION

Where Does My Drinking Water Come From?

Tewksbury Hospital's water source is located within the Shawsheen River basin. Tewksbury Hospital's water supply includes two groundwater supply wells and pumping stations, and two one-million gallon storage tanks, all of which are located on the Tewksbury Hospital grounds. The Old Tubular Well (Well #1) and the East & Maple Street Well (Well #3) wellhead protection area is located within portions of the towns of Tewksbury, MA and Andover, MA. The Old Tubular Well (Well #1), which is located on the northern side of East Street, has been off-line since December of 2000 with the exception of periodic, temporary activation to allow for sample collection. The Old Tubular Well (Well #1) remained off-line, including all of 2021, as a precautionary measure while off-site contamination is being investigated and remediated under the Massachusetts Contingency Plan (MCP), 310 CMR 40.0000.

The following table lists the drinking water sources utilized by the Tewksbury Hospital Public Water Supply during 2021 as well as the volume of water distributed from each source:

Source Name	MassDEP Source ID#	Source Type	Volume of Water Distributed from Source (gallons)	Location of Source
Old Tubular Well (Well #1)	3295001-01G	Groundwater	0	North Side of East Street
East & Maple Street Well (Well #3)	3295001-03G	Groundwater	33,199,972	South Side of East Street, intersection of East and Maple

Is My Water Treated?

The Tewksbury Hospital Public Water Supply makes every effort to provide its consumers with safe and pure drinking water. To improve the quality of the water delivered to Tewksbury Hospital, the water is treated to control microorganisms, pH levels, and corrosivity.

All reservoirs and some groundwater sources contain numerous microorganisms, some of which can cause people to become sick. To eliminate disease-carrying organisms, it is necessary to disinfect the water. Prior to distribution, the water supply at Tewksbury Hospital is disinfected via the addition of sodium hypochlorite, a typical water treatment practice used to control microbes.

Many drinking water sources in New England are naturally corrosive (meaning the pH of the water is less than 7.0) including the Tewksbury Hospital Public Water Supply source water. Therefore, the water has a tendency to corrode and dissolve metal piping, which can result in damaged piping as well as the introduction of metals such as lead and copper into the water supply. The Tewksbury Hospital Public Water Supply uses corrosion control measures that include both pH adjustment and the addition of a corrosion inhibitor to the water supply prior to distribution. The water system uses potassium hydroxide (KOH) in order to adjust the pH of the water to a non-corrosive pH level (approximately 7.0). Additionally, the water system also uses a blended phosphate solution (K-5) that can form a protective coating on the insides of the pipes. Both of these measures aid in the reduction of pipe corrosion and damage and, through analytical testing, these measures have been shown to reduce lead and copper concentrations in the Tewksbury Hospital Public Water Supply.

Disinfection, pH adjustment, and corrosion control via chemical addition occurred continuously throughout 2021 for the Tewksbury Hospital Public Water Supply. The water quality of the Tewksbury Hospital Public Water Supply is constantly monitored by us and MassDEP to determine the effectiveness of the existing water treatment activities and to determine if any additional treatment actions are warranted.

How Are The Water Sources Protected?

The Tewksbury Hospital Public Water Supply, as well as the Tewksbury Water Division Public Water Supply, participated in additional source water assessment with the MassDEP through the Source Water Assessment Program (SWAP). The SWAP inventoried land uses within the primary recharge areas of public water supply sources (Zone II areas, IWPA's), assessed the susceptibility of the drinking water sources from contamination from those land uses, and publicized the results in order to support local and state efforts to improve water supply protection. The SWAP report for the Tewksbury Hospital Public Water Supply contains information about the land uses near the public water supply wells and potential sources of contamination to the water that is being supplied to the wells. It also contains information about the groundwater protection by-laws in the Towns of Tewksbury, MA and Andover, MA that assist the public water supply in protecting the quality of the water that is provided to its consumers.

The Zone II for Tewksbury Hospital's water supply wells consists primarily of a mix of forest and residential land use. Portions of the Zone II are also used for agricultural, commercial, and industrial activities. There is land owned by Tewksbury Hospital within the Zone II, much of which is used for agriculture use through agreements with the individual farmers who utilize the land. Staff from the Massachusetts Department of Public Health's (Mass DPH) Bureau of Environmental Health and from Tewksbury Hospital work with the farmers to limit the use of pesticides

and fertilizers and to protect the groundwater from potential sources of contamination. Additional source protection measures taken by Tewksbury Hospital have included the following: 1) working with the Town of Tewksbury to adopt a zoning by-law restricting land use in the Zone II, 2) removing agricultural activities from the Zone I areas of both water supply wells, 3) monitoring and controlling these agricultural activities in the Zone II, and 4) pursuing ownership or control of the land within the Zone I areas of both water supply wells.

What is My System's Ranking?

A susceptibility ranking of "high" was assigned to the Tewksbury Hospital water supply wells by the MassDEP based on the presence of at least one high threat land use within the water supply protection area. These land uses typically use, produce, or store contaminants of concern that, if managed improperly, are potential sources of contamination. They include various agricultural, commercial, industrial, and residential uses. Some of the types of operations and/or hazards associated with them include fertilizer storage and usage, gasoline and service station operations, rail yard operations, fuel distribution activities, and septic systems. Other threats may include state-listed oil or hazardous material sites, landfills, and transportation corridors. Releases of contaminants may never occur from the potential sources of contamination located in the water supply protection area, provided best management practices are in use at these facilities/locations. The MassDEP SWAP report provides a table detailing the land uses in the water supply protection areas associated with Tewksbury Hospital's wells and the potential threats posed by those uses.

Where Can I Obtain a Copy of the Full SWAP Report?

A copy of the complete Tewksbury Hospital SWAP Report is available at the Tewksbury and Andover Boards of Health and online by accessing the MassDEP's website at <https://www.mass.gov/doc/northeast-region-source-water-assessment-protection-swap-program-reports/download> and searching for the PWS ID number 3295001. For more information, please contact Mr. William P. Pellerin, Water Storage System Foreman III, Tewksbury Hospital, at (978) 851-7321.

SUBSTANCES FOUND IN TAP 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, 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 MassDEP and the U.S. EPA prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) and Mass DPH regulations also 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 (1-800-426-4791) or visiting their website at <https://www.epa.gov/ground-water-and-drinking-water>.

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. U.S. Environmental Protection Agency (EPA)/Centers for Disease Control (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 plumbing fixtures. Tewksbury Hospital is responsible for providing high quality drinking water, but cannot control the variety of materials used in existing plumbing components. You can minimize the potential for lead exposure by flushing the tap for 30 seconds to 2 minutes before using water for drinking or cooking, when the tap has not been used recently. If you are concerned about lead in your water, water may be 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>.

IMPORTANT DEFINITIONS

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. This number is compared to the action level to determine lead and copper compliance.

Level 1 Assessment – A study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in a water system.

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

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 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 and are non-enforceable public health goals.

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 or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

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

Unregulated Contaminants – Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated monitoring is to assist EPA in determining their occurrence in drinking water and whether future regulation is warranted.

Variations and Exemptions – State or EPA permissions not to meet an MCL or a treatment technique under certain conditions.

- ppm** = parts per million, or milligrams per liter (mg/L)
- ppb** = parts per billion, or micrograms per liter (ug/L)
- ppt** = parts per trillion, or nanograms per liter (ng/L)
- pCi/l** = picocuries per liter (a measure of radioactivity)
- NTU** = Nephelometric Turbidity Units
- ND** = Not Detected
- N/A** = Not Applicable
- mrem/year** = millirems per year (a measure of radiation absorbed by the body)
- TT** = treatment technique

WATER QUALITY TESTING RESULTS

What Does This Data Represent?

The Tewksbury Hospital water quality information presented in the tables below is from the most recent round of analytical testing completed in accordance with applicable regulations. All of the laboratory analytical data presented herein was collected during calendar year 2021, unless otherwise noted¹. A discussion of the data and compliance with established guidelines is provided in the next section.

Contaminant	Date Collected	90 TH percentile	Action Level (ug/L)	MCLG	# of sites sampled	# of sites above Action Level	Possible Source of Contamination
Lead (ppb)	8/19/21	1.4	15	0	11	0	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppb)	8/19/21	950	1,300	1,300	11	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

¹Monitoring for some contaminants is completed less frequently than once per year, because the concentrations for those contaminants are not expected to vary significantly from year to year. As a result, some of our data, though representative, are more than a year old. For those contaminants, the date of the last sampling event is shown in the table.

Coliforms, as presented in the next table, are bacteria that are naturally present in the environment and used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system.

Contaminant	Highest # Samples Positive in a month	Date	MCL	MCLG	Violation (Y/N)	Possible Source of Contamination
Total Coliform Bacteria	1	5/18/2021, 7/23/2021	1	0	No*	Human and animal fecal waste
E. Coli	None	N/A	1	0	No	Human and animal fecal waste

*During the past year, we were required to conduct two Level 1 Assessments related to the detection of coliforms. Two Level 1 Assessments were completed, which are further discussed in the next section.

Regulated contaminants are those contaminants for which there are established drinking water standards. Additional regulated contaminants not listed above are provided in the table below.

Regulated Contaminants	Date(s) Collected	Highest Result or Highest Running Quarterly Average Detected	Range Detected	MCL or MRDL	MCLG or MRDLG	Violation (Y/N)	Possible Source(s) of Contamination
Inorganic Contaminants							
Turbidity (NTU)	7/13/2021	0.99	--	TT	N/A	No	Soil runoff
Alpha Emitters (pCi/L)	8/12/2014	2.62	--	15	0	No	Erosion of natural deposits
Combined Radium (pCi/L)	8/04/2020	0.98	--	5	0	No	Erosion of natural deposits
Arsenic (ppb)	5/7/2019	6.3	--	10	0	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	5/7/2019	0.04	--	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Cadmium (ppb)	5/7/2019	0.25	--	5	5	No	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
Perchlorate (ppb)	7/27/2021	0.413	--	2	N/A	No	Rocket propellants, fireworks, munitions, flares, blasting agents
Nitrite (ppm) ^b	Monthly	<0.10	Not Detected	1	1	No	
Nitrate (ppm)	Quarterly	1.8	1.3 – 1.8	10	10	No	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits

Regulated Contaminants	Date(s) Collected	Highest Result or Highest Running Quarterly Average Detected	Range Detected	MCL or MRDL	MCLG or MRDLG	Violation (Y/N)	Possible Source(s) of Contamination
Disinfectants and Disinfection By-Products							
Total Trihalomethanes (TTHMs) (ppb)	8/24/2021	57	49 – 57	80 ^a	--	No	Byproduct of drinking water chlorination
Haloacetic Acids (HAA5) (ppb)	8/24/2021	3.6	0 – 3.6	60	--	No	Byproduct of drinking water disinfection
Volatile Organic Compounds							
Chloroform (ppb)	Quarterly	1.0	0.55 – 1.0	80 ^a	70	No	Byproduct of drinking water chlorination
Bromodichloromethane (ppb)	Quarterly	2.2	0.81 – 2.2	80 ^a	--	No	Byproduct of drinking water chlorination
Dibromochloromethane (ppb)	Quarterly	1.9	0 – 1.9	80 ^a	--	No	Byproduct of drinking water chlorination
Bromoform	Quarterly	0.67	0 – 0.67	80 ^a	--	No	Byproduct of drinking water chlorination

Notes:

^a This value represents the MCL for Total Trihalomethanes, which include bromoform, chloroform, bromodichloromethane and dibromochloromethane.

^b Infants below the age of six months who drink water containing nitrite in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.

Unregulated contaminants are those contaminants for which there are no established drinking water standards. Often these compounds have limited or no health effects but may affect water appearance, odor, or taste. 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	Result or Range ^b Detected	Average Detected	SMCL	ORSG	Possible Source
Unregulated Contaminants						
Sodium (ppm)	5/7/2019	79	--	---	20	Natural sources; runoff from use as salt on roadways; by-product of treatment process
Nickel (ppb)	5/7/2019	6.1	--	--	0.1	Natural sources; discharge from industrial processes
Perfluorooctane sulfonic acid (PFOS) ^c (ppt)	8/13/2020, 8/27/2020, 9/8/2020	2.4 – 3.3	2.9	--	20	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 fire-fighting foams.
Perfluorooctanoic acid (PFOA) ^c (ppt)		4.5 – 6.2	5.5	--		
Perfluorobutanesulfonic acid (PFBS) (ppt)		2.7 – 3.5	3.1	--	--	
Perfluorohexanoic acid (PFHxA) (ppt)		5.5 – 8.7	7.1	--	--	

Unregulated and Secondary Contaminants	Date(s) Collected	Result or Range ^b Detected	Average Detected	SMCL	ORSG	Possible Source
Secondary Contaminants						
Alkalinity (ppm)	7/13/2021	86	--	--	--	
Aluminum (ppm)	7/13/2021	Not Detected	--	0.050 to 0.2		Residue from water treatment process: erosion of natural deposits
Calcium (ppm)	7/13/2021	30	--	--	--	
Chloride (ppm)	7/13/2021	170	--	250	--	Runoff from road de-icing, use of inorganic fertilizers, landfill leachates, septic tank effluents, animal feeds, industrial effluents, irrigation drainage, and seawater intrusion in coastal areas
Color (C.U.)	7/13/2021	25	--	15	--	Naturally occurring organic material
Copper (ppm)	7/13/2021	0.0012	--	1.0	--	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Hardness (ppm)	7/13/2021	110	--	--	--	
Iron (ppm)	7/13/2021	4	--	0.3	--	Naturally occurring, corrosion of cast iron pipes
Magnesium (ppm)	7/13/2021	7.6	--	--	--	
Manganese ^a (ppb)	Quarterly	990 – 1,100	1,023	50	Health Advisory ^a of 300 / 1,000 ppb	Erosion of natural deposits.
pH	7/13/2021	7.4	--	6.5 to 8.5	--	Low pH may produce: bitter metallic taste; corrosion and high pH may produce a slippery feel; soda taste; deposits
Potassium (ppm)	7/13/2021	51	--	--	--	
Silver (ppm)	7/13/2021	Not Detected	--	0.1	--	Erosion of natural deposits
Sulfate (ppm)	6/4/2019	26.8	--	250	--	Naturally occurring
Total Dissolved Solids (TDS) (ppm)	7/13/2021	440	--	500	--	Erosion of natural deposits
Zinc (ppm)	7/13/2021	Not Detected	--	5	--	Erosion of natural deposits, leaching from plumbing materials

Notes:

^a The EPA has established a lifetime health advisory (HA) value of 300 ppb for manganese to protect against concerns of potential neurological effects, and a one-day and 10-day HA of 1,000 ppb for acute exposure. MassDEP has similar ORSG HA values, and also recommends that infants up to 1 year of age should not be given water or formula made with water containing manganese over 300 ppb for more than 10 days in a year.

^b Contaminants without ranges were only analyzed once, therefore no range is available.

^c PFOS and PFOA were unregulated chemicals from January 1 – October 1, 2020 and had a combined ORSG of 20 ppt. On October 2, 2020, they became regulated with an MCL of 20 ppt (combined for PFOS, PFOA, and 4 other compounds). Any detects found after that time would be reported in the regulated contaminants table above.

COMPLIANCE WITH DRINKING WATER REGULATIONS AND STANDARDS

Does My Drinking Water Meet Current Health Standards?

Tewksbury Hospital is committed to providing the best water quality available. However, Coliforms were found in two samples collected in 2021 and this was a warning of potential problems. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially harmful bacteria may be present. On May 18, 2021, in accordance with the MassDEP's approved sampling schedule, a water sample was collected from the East & Maple Street Well (Well #3) location for laboratory analysis for total coliform. On July 23, 2021, also in accordance with the MassDEP's approved sampling schedule, a water sample was collected from the Right Storage Tank location for laboratory analysis for total coliform. The laboratory analytical results for both of these samples indicated the presence of Total Coliform. Therefore, as previously noted, a Level 1 Assessment was conducted after the result for each of these samples was received, which consisted of the analysis of a water sample for E. Coli bacteria and collection of a confirmatory sample for analysis of coliform (on May 21, 2021 and July 27, 2021, respectively). The Level 1 Assessments confirmed the absence of E. Coli bacteria and indicated the absence of total coliform in the samples collected on May 21, 2021 and July 27, 2021. All other Total Coliform and E. Coli samples collected during 2021 were negative. Tewksbury Hospital will continue to monitor the water supply for these contaminants in accordance with the schedule set forth by the MassDEP.

Health Effects Statements

Manganese is a naturally occurring mineral found in rocks, soil, groundwater, and surface water. Manganese is necessary for proper nutrition and is part of a healthy diet, but can have undesirable effects on certain sensitive populations at elevated concentrations. The United States Environmental Protection Agency (EPA) and MassDEP have set an aesthetics-based Secondary Maximum Contaminant Level (SMCL) for manganese of 50 ug/L (microgram per liter), or 50 parts per billion. In addition, MassDEP's Office of Research and Standards (ORS) has set a drinking water guideline for manganese (ORSG), which closely follows the EPA public health advisory for manganese. **Drinking water may naturally have manganese and, when concentrations are greater than 50 ug/L, the water maybe discolored and taste bad. Over a lifetime, the EPA recommends that people limit their consumption of water with levels over 1000 ug/L, primarily due to concerns about the possible neurological effects. Children up to one year of age should not be given water with manganese concentrations over 300 ug/L, nor should formula for infants be made with that water for longer than 10 days.**

The ORSG differs from the EPA's health advisory because it expands the age group to which a lower manganese concentration applies from children less than six months of age to children up to one year of age to address concerns about children's susceptibility to manganese toxicity. For more information see: EPA Drinking Water Health Advisory for manganese at:

https://www.epa.gov/sites/production/files/2014-09/documents/support_cc1_magnese_dwreport_0.pdf and the MassDEP health advisory for manganese at:

<https://www.mass.gov/lists/drinking-water-contaminants-information-for-the-public#manganese->.

Tewksbury Hospital is in the process of the designing and installing a treatment and filtration system in the Saunders Building, which will treat and filter for manganese as well as PFOS and arsenic. Tewksbury Hospital is further undergoing a review by the Massachusetts Division of Capital Asset Management and Maintenance, which will include an evaluation of the treatment and distribution system and recommend any needed improvements to further enhance water quality.

In addition to the MCLs, the EPA has also established National Secondary Drinking Water Regulations that set non-mandatory water quality standards for 15 contaminants. These secondary contaminant levels (SMCLs) are not enforced by the EPA. Rather, they have been established as guidelines to assist public water systems in managing their drinking water for aesthetic considerations, such as taste, color, and odor. Although these contaminants are

not health threatening at their respective SMCLs, and public water systems only need test for them on a voluntary basis, their presence may cause the water to appear cloudy or colored, or to taste or smell bad. This may cause people to stop using water from their public water system even though the water is actually safe to drink. Secondary standards are set to give public water systems some guidance on removing these chemicals to levels that are below what most people will find to be noticeable.

Drinking Water Violations

No drinking water violations occurred during 2021.

EDUCATIONAL INFORMATION

Do I Need To Be Concerned about Certain Contaminants Detected in My Water?

While your drinking water meets the standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

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.

ADDITIONAL INFORMATION

Want to Know More?

If you would like to know more about Tewksbury Hospital's drinking water please call Mr. William P. Pellerin, Water Storage System Foreman III at Tewksbury Hospital at (978) 851-7321 or the Massachusetts Department of Public Health, Bureau of Environmental Health, Environmental Toxicology Program at (617) 624-5757 with any questions, comments, or concerns you may have. Additional information may also be obtained from the Tewksbury Board of Health at (978) 640-4470 (<https://www.tewksbury-ma.gov/290/Board-of-Health>) or the MassDEP's Drinking Water Program at (617) 292-5770 (<https://www.mass.gov/water-supplier-operations>). Fact sheets on drinking water, contaminants, health effects, and public education materials are available on the MassDEP and EPA web sites. Citizens may also call the EPA Safe Drinking Water Hotline at (800) 426-4791 (<https://www.epa.gov/sdwa>).