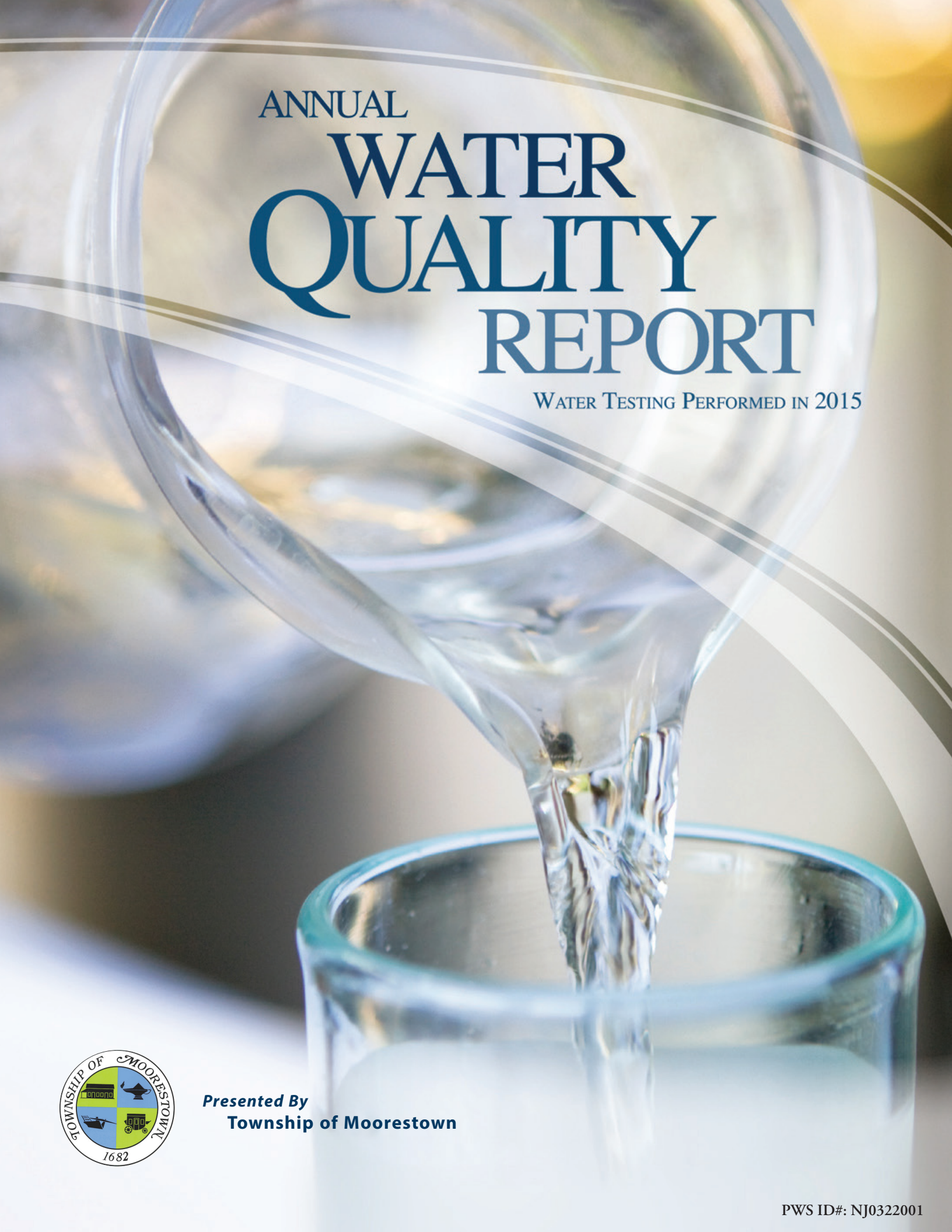


ANNUAL WATER QUALITY REPORT

WATER TESTING PERFORMED IN 2015

Presented By
Township of Moorestown

PWS ID#: NJ0322001

Meeting the Challenge

Once again we are proud to present our annual drinking water report, covering all drinking water testing performed between January 1 and December 31, 2015. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best-quality drinking water to your homes and businesses. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all of our water users.

Please remember that we are always available to assist you should you ever have any questions or concerns about your water.

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. We are responsible for providing high-quality drinking water, but we 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 www.epa.gov/lead.

Update

The North Church Street water treatment plant (wells #7 & #9) was turned off at the NJDEP's recommendation on October 6, 2014. The treatment plant was started using #7 well June 17, 2015 through February 18, 2016. The plant is currently off, awaiting temporary treatment followed by permanent treatment in the near future.

Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration 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 these contaminants does not necessarily indicate that the 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, in some cases, radioactive material, and substances resulting from the presence of animals or from human activity. Substances 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, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may 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 may also come from gas stations, urban stormwater runoff, and septic systems;

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

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Where Does My Water Come From?

Your drinking water comes from a blend of sources that may include groundwater from the Potomac-Raritan-Magothy Aquifer and surface water from the Delaware River. Moorestown Township purchases surface water from New Jersey American Water.

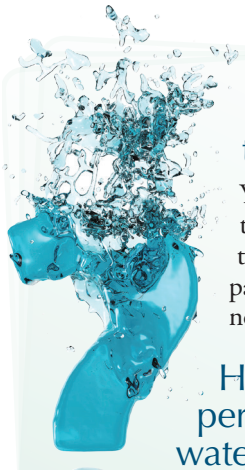
Source Water Assessment

SWAP (Source Water Assessment Program) is a program of the New Jersey Department of Environmental Protection (NJDEP) to study existing and potential threats to the quality of public drinking water sources throughout the state. Sources are rated depending upon their contaminant susceptibility.

NJDEP considered all surface water highly susceptible to pathogens, so all intakes received a high rating for the pathogen category. For the purpose of the Source Water Assessment Program, radionuclides are more of a concern for groundwater than surface water. As a result, surface water intakes' susceptibility to radionuclides was not determined and a low rating was assigned.

For susceptibility ratings of purchased water, refer to the specific water system's source water assessment report. Source Water Assessment Reports, Definitions, and Summaries are available for public water systems at www.state.nj.us/dep/swap/ or by contacting the NJDEP's Bureau of Safe Drinking Water at (609) 292-5550.

If a system is rated highly susceptible for a contaminant category, it does not mean a customer is or will be consuming contaminated drinking water. The rating reflects the potential for contamination of source water, not the existence of contamination. Public water systems are required to monitor for regulated contaminants and to install treatment if any contaminants are detected at frequencies and concentrations above allowable levels. As a result of the assessments, NJDEP may customize (change existing) monitoring schedules based on the susceptibility ratings.



Is tap water cheaper than soda?

Yes! You can refill an 8 oz. glass of tap water approximately 15,000 times for the same cost as a six-pack of soda pop. And, water has no sugar or caffeine.

How long can a person go without water?

Although a person can live without food for more than a month, a person can only live without water for approximately one week.

When was drinking water first regulated?

The Safe Drinking Water Act (SDWA) of 1974 represents the first time that public drinking water supplies were protected on a federal (national) level in the U.S. Amendments were made to the SDWA in 1986 and 1996.

About Our Violations

We routinely monitor for drinking water contaminants. We took 8 samples to test for the presence of coliform bacteria during the week of February 11, 2015. One of our samples showed the presence of coliform bacteria. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems. Repeat samples were collected within 24 hours (February 13, 2015), and once again the same location showed the presence of coliform bacteria. The standard is that no more than one location per month may do so. As per Federal regulations, the Township has to notify the public of this violation. Samples collected on February 17, 2015, were all negative for total coliform. During this time, the Township was purchasing 100 percent of its water from New Jersey American Water Company.

We have evaluated our sampling procedures and techniques to ensure proper sample collection.

Violation Type: Monitoring, Routine Major for Gross Alpha, Excluding Radon and Uranium for the period 4/1/2015 TO 6/30/205 for the following sample point ID: TP003013 North Church Stree Plant. The Bureau is aware of the circumstances that surrounded this missed sampling and subsequent attempts to collect a replacement sample. The violation has returned to compliance with the sample that was collected 8/12/2015.

Questions?

We want you to be informed about your drinking water. For more information about this report, or for any questions relating to your drinking water, please call Bill Butler at the Moorestown Township Department of Public Works at (856) 235-3520.

Sampling Results

During the past year, we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The tables below show only those contaminants that were detected in the water. The state requires us to monitor for certain substances less often than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

We participated in the 3rd stage of the EPA's Unregulated Contaminant Monitoring Rule (UCMR3) program by performing additional tests on our drinking water. UCMR3 benefits the environment and public health by providing the EPA with data on the occurrence of contaminants suspected to be in drinking water, in order to determine if the EPA needs to introduce new regulatory standards to improve drinking water quality. Contact us for more information on this program.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as those with cancer undergoing chemotherapy, those who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

REGULATED SUBSTANCES [1]

				Moorestown Township		Delaware River Regional WTP			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Alpha Emitters (pCi/L)	2015	15	0	16.93[2]	9.3–16.93	NA	NA	No	Erosion of natural deposits
Barium (ppm)	2014	2	2	0.0830	0.0310–0.0830	NA	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chlorine (ppm)	2015	[4]	[4]	0.51	0.20–0.51	0.96	0.36–0.96	No	Water additive used to control microbes
Combined Radium (pCi/L)	2015	5	0	4.43[3]	1.65–4.43	NA	NA	No	Erosion of natural deposits
Haloacetic Acids [HAAs] (ppb)	2015	60	NA	13.92	ND–13.92	NA	NA	No	By-product of drinking water disinfection
Nitrate (ppm)	2015	10	10	4.15	ND–4.15	1.09	1.09–1.09	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
TTHMs [Total Trihalomethanes] (ppb)	2015	80	NA	34.3	3.53–34.3	NA	NA	No	By-product of drinking water disinfection
Total Coliform Bacteria[4] (# positive samples)	2015	1 positive monthly sample	0	2	NA	NA	NA	Yes	Naturally present in the environment
Total Organic Carbon (% removal)	2015	TT	NA	NA	NA	88	36–88	No	Naturally present in the environment
Trichloroethylene[5] (ppb)	2015	1	0	1.12	0.820–1.12	NA	NA	No	Discharge from metal degreasing sites and other factories
Turbidity[6] (NTU)	2015	TT	NA	NA	NA	0.13	ND–0.13	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2015	TT = 95% of samples < 0.3 NTU	NA	NA	NA	100%	NA	No	Soil runoff
Uranium (ppb)	2015	30	0	0.014	0.00019–0.014	NA	NA	No	Erosion of natural deposits

Tap water samples were collected for lead and copper analyses from sample sites throughout the community.

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/ TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2014	1.3	1.3	0.0731	0/33	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2014	15	0	5.4	2/33	No	Corrosion of household plumbing systems; Erosion of natural deposits

SECONDARY SUBSTANCES - MOORESTOWN TOWNSHIP

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	RUL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Iron (ppb)	2015	300	NA	3.1	3.1–3.1	No	Leaching from natural deposits; Industrial wastes
Manganese (ppb)	2015	50	NA	1.7	1.7–1.7	No	Leaching from natural deposits

UNREGULATED CONTAMINANT MONITORING RULE PART 3 (UCMR3) - DELAWARE RIVER REGIONAL WTP

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Hexavalent Chromium (ppb)	2013/2014	1.0	0.65–1.22	Naturally occurring element; used in making steel and other alloys; chromium-3 or 6 forms are used for chrome plating, dyes and pigments, leather tanning, and wood preservation
Molybdenum (ppb)	2013/2014	1.4	1.2–1.7	Naturally occurring element found in ores and present in plants, animals, and bacteria; commonly used form molybdenum trioxide used as a chemical reagent
Strontium (ppb)	2013/2014	79	74.3–90.2	Naturally occurring element; historically commercially used in the faceplate glass of cathode-ray tube televisions to block X-ray emissions
Total Chromium (ppb)	2013/2014	1.8	ND–1.8	Naturally occurring element; used in making steel and other alloys; chromium-3 or -6 forms used for chrome plating, dyes and pigments, leather tanning, and wood preservation

UNREGULATED CONTAMINANT MONITORING RULE PART 3 (UCMR3) - MOORESTOWN TOWNSHIP

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH
1,1-dichloroethane (ppb)	2013/2014	0.049	ND – 0.049
1,4-Dioxane (ppb)	2013/2014	0.31	ND – 0.31
Hexavalent Chromium (ppb)	2013/2014	1.5	ND – 1.5
Chromium 6 (ppb)	2013/2014	1.6	0.46 – 1.6
Cobalt (ppb)	2013/2014	6.3	ND – 6.3
Molybdenum (ppb)	2013/2014	2.1	ND – 2.1
Strontium (ppb)	2013/2014	430	79 - 430
Vanadium (ppb)	2013/2014	0.31	ND – 0.31
Chlorate (ppb)	2013/2014	90	ND - 90

UNREGULATED SUBSTANCES - MOORESTOWN TOWNSHIP

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
1,2,3-Trichloropropane	2015	0.0700	0.058–0.0700	Halogenated alkane, used as an ingredient in paint, varnish remover, solvents, and degreasing agents

[1] Under a waiver granted on December 30, 1998, by the State of New Jersey Department of Environmental Protection, our system does not have to monitor for synthetic organic chemicals/pesticides because several years of testing have indicated that these substances do not occur in our source water. The SDWA regulations allow monitoring waivers to reduce or eliminate the monitoring requirements for asbestos, volatile organic chemicals, and synthetic organic chemicals. Our system received monitoring waivers for synthetic organic chemicals and asbestos.

[2] The 16.93 result exceeded the holding time required, and thus the result value could have been higher.

[3] The sample result 4.43 exceeded the holding time required, but was still below MCL.

[4] A list-one assessment was completed. It was concluded that only the sample collection point (sink) was contaminated.

[5] Results rounded to the whole number.

[6] Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. The turbidity rule requires that 95% or more of the monthly samples must be less than or equal to 0.3 NTU (and no sample may exceed 1 NTU).

Definitions

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

LRAA (Locational Running Annual Average): The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters. Amount Detected values for TTHMs and HAAs are reported as LRAAs.

MCL (Maximum Contaminant Level): 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.

MCLG (Maximum Contaminant Level Goal): 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.

MRDL (Maximum Residual Disinfectant Level): 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.

MRDLG (Maximum Residual Disinfectant Level Goal): 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.

NA: Not applicable

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

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.

pCi/L (picocuries per liter): A measure of radioactivity.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

RUL (Recommended Upper Limit): RULs are established to regulate the aesthetics of drinking water like taste and odor.

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