

*Presented By*  
**Maple Shade Utilities**



ANNUAL  
**WATER**  
**QUALITY**  
**REPORT** WATER TESTING  
PERFORMED IN 2014

## Our Mission Continues

We are proud to present once again our annual water quality report covering all testing performed between January 1 and December 31, 2014. Most notably, last year marked the 40th anniversary of the Safe Drinking Water Act (SDWA). This rule was created to protect public health by regulating the nation's drinking water supply. We celebrate this milestone as we continue to manage our water system with a mission to deliver the best-quality drinking water. By striving to meet the requirements of the SDWA, we are ensuring a future of healthy, clean drinking water for years to come.

Please let us know if you ever have any questions or concerns about your water.

## Source Water Assessment

The New Jersey Department of Environmental Protection (NJDEP) has completed and issued a Source Water Assessment Report of our drinking water sources. The report is available at [www.state.nj.us/dep/swap](http://www.state.nj.us/dep/swap) or by contacting NJDEP Bureau of Safe Drinking Water at (609) 292-5550.

The purpose of the assessment is to determine the susceptibility of our source water to eight potential contaminants: Pathogens; Nutrients; Pesticides; Volatile Organic Compounds; Inorganics; Radionuclides; Radon; Disinfection By-products; and Precursors. The susceptibility ratings of our wells were determined to be between low and high. This susceptibility rating does not imply poor water quality; rather, it signifies the system's potential to become contaminated in the assessment area.

If you have any questions about these findings, please contact us during regular business hours.

## 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.

## Community Participation

You are invited to participate in our public meetings and voice your concerns. The township council meetings are held at 7:00 p.m. on the second and last Thursdays of the month at the Township Municipal Complex, 200 Stiles Avenue, Maple Shade, New Jersey. For more information concerning township meetings, call (856) 779-9610.

## Where Does My Water Come From?

Our source is five wells that draw their water from the Potomac, Raritan, and Magothy aquifers, which collectively are referred to as the PRM Aquifer. The wells range in depth from 126 to 500 feet. The ultimate source of the PRM is rainwater that seeps down into the ground. In the region around Camden, New Jersey, the state has determined that overuse of the PRM Aquifer has caused it to be a critical zone. To protect the aquifer, in 1996 the state reduced the maximum water allocation that each system within the critical zone could withdraw. Maple Shade allocation was reduced by 28% from 930 to 667.5 million gallons per year. If Maple Shade needs more water than its allocation, it must purchase it from a state-approved regional alternative supplier. Currently, only one supplier is approved, New Jersey

American Water, whose water comes from the Delaware River and from groundwater wells. The cost of purchasing this water is much greater than the cost to produce water from Maple Shade wells. For this reason, we ask your cooperation in conserving water, not only during times of drought, but also all year long, even when it is raining.

We ask residents and businesses alike to partner with us regarding water usage. Please water your lawns during evening hours. In daylight, the bright sunshine evaporates water rapidly and your lawn receives little benefit.

If at all possible, do not use water to clean your driveway. Sweeping or using a blower is suggested.

The Township of Maple Shade restricts all use of water for outside purposes to evening hours between 7 p.m. and 11 p.m. daily. Washing automobiles is permitted; however, the use of water for washing pavement (e.g., driveways or sidewalks, etc.) is prohibited.

We ask all of the residents of the Township to conserve water as much as possible by using water-saving toilets, faucets, and other devices that are easily purchased at the local home centers and hardware stores.

## QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call Raphael M. Hughes, Project Manager, Woodard & Curran/Maple Shade Utilities, at (856) 488-7450. If you have any personal health concerns relating to the information in this report, please contact your health care provider.

## Sampling Results

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.

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 <sup>1</sup>

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Arsenic (ppb)	2014	5	0	0.360	NA	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2014	2	2	0.0533	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chromium (ppb)	2014	100	100	0.28	NA	No	Discharge from steel and pulp mills; Erosion of natural deposits
Mercury [inorganic] (ppb)	2014	2	2	0.046	NA	No	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland
Nickel (ppb)	2014	100	NA	2	NA	No	Pollution from mining and refining operations; Natural occurrence in soil
Selenium (ppb)	2014	50	50	1.4	NA	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Five Haloacetic Acids [HAA5] (ppb)	2014	60	NA	4.6	ND–11.76	No	By-product of drinking water disinfection
Total Trihalomethanes [TTHM] (ppb)	2014	80	NA	11.6	1.10–20.7	No	By-product of drinking water disinfection

### 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)	2012	1.3	1.3	0.131	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2012	15	0	0.86	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits

### SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	RUL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Aluminum (ppb)	2014	200	NA	0.66	NA	No	Erosion of natural deposits; Residual from some surface water treatment processes
Chloride (ppm)	2014	250	NA	20.6	6.19–40.6	No	Runoff/leaching from natural deposits
Hardness [as CaCO <sub>3</sub> ] (ppm)	2014	250	NA	88.6	NA	No	Naturally occurring
Iron (ppb)	2014	300	NA	17.4	NA	No	Leaching from natural deposits; Industrial wastes
Manganese (ppb)	2014	50	NA	16	NA	No	Leaching from natural deposits
pH (Units)	2014	6.5–8.5	NA	7.85	NA	No	Naturally occurring
Sodium (ppm)	2014	50	NA	4.98	NA	No	Naturally occurring
Silver (ppb)	2012	100	NA	0.636	NA	No	Industrial discharges
Sulfate (ppm)	2014	250	NA	24.7	NA	No	Runoff/leaching from natural deposits; Industrial wastes
Total Dissolved Solids (ppm)	2014	500	NA	166	NA	No	Runoff/leaching from natural deposits
Zinc (ppm)	2014	5	NA	0.00130	NA	No	Runoff/leaching from natural deposits; Industrial wastes

## UNREGULATED AND OTHER SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH
1,1-Dichloroethane	2014	0.15	NA
1,2,3-Trichloropropane	2014	0.038	NA
1,4-Dioxane	2014	0.41	NA
Chlorate	2014	47	NA
Hexavalent Chromium	2014	0.25	NA
Strontium (ppb)	2014	625	NA
Bromoform	2014	1.0	NA

<sup>1</sup> 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.

## REGULATED SUBSTANCES - DELAWARE SYSTEM - PWSID NJ 0327001

PARAMETER	UNITS	COMPLIANCE ACHIEVED	MCLG	MCL	HIGHEST LEVEL DETECTED	RANGE DETECTED	TYPICAL SOURCE
Barium	ppm	Yes	2	2	0.1	ND to 0.1	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium*	ppb	Yes	100	100	1.3	ND to 1.8	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
Nickel	ppb	Yes	NA <sup>1</sup>	NA <sup>1</sup>	8	ND to 8	Erosion of natural deposits
Nitrate	ppm	Yes	10	10	2.23	ND to 2.23	Runoff from fertilizer use; industrial or domestic wastewater discharges; erosion of natural deposits
Turbidity <sup>2</sup>	NTU	Yes	NA	TT = 1 NTU	0.13	ND to 0.13	Soil runoff
	%	Yes	NA	TT = % of samples <0.3 NTU	100%	NA	Soil runoff
Total Organic Carbon (TOC)	%	Yes	NA	"TT >35% Removal	44% <sup>3</sup>	44% to 66%	Naturally present in the environment.
Ratio of Actual / Required TOC Removal	Ratio	Yes	NA	TT: Running Annual Average > 1.0	1.6	1.25 to 2.01	Naturally present in the environment.
Chlorine	ppm	Yes	MRDLG = 4	MRDL = 4	0.50 <sup>4</sup>	ND to 1.8	Water additive used to control microbes
Five Haloacetic Acids [HAA5]- (Stage 2)	ppb	Yes	NA	60	17 <sup>5</sup>	ND to 23	By-product of drinking water disinfection
Total Trihalomethanes [TTHM]- (Stage 2)	ppb	Yes	NA	80	35 <sup>5</sup>	3.9 to 40	By-product of drinking water disinfection
Bromate	ppb	Yes	0	10	7	ND to 7	By-product of drinking water disinfection
Alpha Emitters	pCi/L	Yes	0	15	6.7	ND to 6.7	Erosion of natural deposits
Combined Radium (226/228)	pCi/L	Yes	0	5	2.19 <sup>5</sup>	ND to 2.91	Erosion of natural deposits

**Lead and Copper Monitoring Program - Tap water samples were collected from 50 homes in our service area**

CONTAMINANT	UNITS	COMPLIANCE ACHIEVED	MCLG	ACTION LEVEL	90TH PERCENTILE	HOMES ABOVE ACTION LEVEL	TYPICAL SOURCE
Copper (2013) <sup>6</sup>	ppm	Yes	1.3	1.3	0.3	0	Corrosion of household plumbing systems
Lead (2013) <sup>6</sup>	ppb	Yes	0	15	2	2	Corrosion of household plumbing systems

SECONDARIES	UNITS	TYPICAL SOURCE	RUL	HIGHEST LEVEL DETECTED	RANGE DETECTED	TYPICAL SOURCE
Iron	ppm	Naturally Occurring	0.3 / 0.6	0.7	ND to 0.7	The recommended upper limit for iron is based on unpleasant taste of the water and staining of laundry. Iron is an essential nutrient, but some people who drink water with iron levels well above the recommended upper limit could develop deposits of iron in a number of organs of the body

#### Footnotes for Delaware System

<sup>1</sup> Nickel monitoring is required. Currently there is no established MCL or MCLG.

<sup>2</sup> 100% of the turbidity readings were below the treatment technique requirement of 0.3 NTU. Turbidity is a measure of the cloudiness of the water and an indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.

<sup>3</sup> Data represents the lowest removal of Total Organic Carbon (TOC)

<sup>4</sup> Data represents the highest quarterly running annual average

<sup>5</sup> Data represents the highest locational quarterly running annual average

<sup>6</sup> The State of New Jersey allows us to monitor for certain contaminants less than once a year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative, are more than one year old.

### Table Definitions

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

**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

**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.