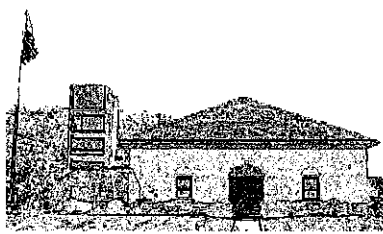


# Annual Drinking Water Quality Report Hawthorne Water Department



For the Year 2016, Results from the Year 2015

We are pleased to present to you this year's Annual Drinking Water Quality Report. The New Jersey Department of Environmental Protection requires all water suppliers to provide reports like this every year to each customer.

**Water Sources:**

The Hawthorne Water Department drew groundwater from 21 wells throughout the Borough.

The following is a list of our sources:

Wagaraw Road Wellfield (6 wells), and wells at Cedar and Maitland Avenue.

Goffle Road Wellfield (5 wells), and wells at First Avenue, Rea Avenue and Bamford Avenue.

South Wagaraw Road Wellfield (3 wells), Goffle Hill Road Well, and Utter Avenue Well.

As a precautionary measure, water from all wells are disinfected with chlorine. Water from the South Wagaraw well field is treated with a greensand filter for removal of iron and manganese. Water from the South Wagaraw Road, Wagaraw Road, and the North Goffle Road Station wells are treated by an air stripper system to remove organic compounds.

Borough of Hawthorne  
Water Department  
445 Lafayette Avenue  
Hawthorne, NJ 07506

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### Results of Monitoring For Contaminants in Drinking Water

<b>Contaminant</b>	<b>Units</b>	<b>MCL</b>	<b>MCLG</b>	<b>LEVEL DETECTED</b>	<b>Violation Yes/No</b>	<b>Range</b>	<b>Potential Source</b>
<b>Coliform</b>	Present /Absent /100 ml	<1	<1	<1	N	0 of 276 samples were positive	Leaking septic system, runoff from streams
<b>Nitrate</b> North Station South Station Goffle Hill Utter Ave	ppb	10,000	10,000	2,947 2,984 3,490 3,006	N N N N	1 Sample 1 Sample 1 Sample 1 Sample	Runoff from fertilizer use; leaching from septic tanks; erosion of natural deposits.
<b>Stage 2 THM Trihalomethanes</b>	ppb	80	NA	LRAA: 15	N	7 - 23	Disinfectant Byproduct
<b>Stage 2 HAA Haloacetic Acids</b>	ppb	60	NA	LRAA: 3	N	3 - 4	Disinfectant Byproduct
<b>Copper (2015)</b>	ppm	1.3 AL	1.3	0.1	N	ND – 0.13	Corrosion of household plumbing.
<b>Lead (2015)</b>	ppb	15 AL	0	3	N	ND - 6	Corrosion of household plumbing.
<b>Barium (2014)</b>	ppm	2	2	0.5	N	0.2 – 0.8	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
<b>Chromium (2014)</b>	ppb	100	100	0.3	N	ND – 0.8	Discharge from steel and pulp mills; erosion of natural deposits
<b>Cyanide (2014)</b>	ppb	200	200	1	N	ND - 5	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
<b>Mercury (2014)</b>	ppb	2	2	0.03	N	0.03 – 0.04	Erosion of natural deposits; discharge from refineries and factories; run-off from landfills; run-off from cropland
<b>Thallium (2014)</b>	ppb	2	0.5	0.3	N	ND – 0.6	Leaching from ore-processing sites; discharge from electronics
<b>Chlorine Residual</b>	ppm	4 MRDL	4 MRDLG	Average: 0.6	N	0.02 – 1.3	Water additive used to control microbes.

MRDL(G)= Max. Residual Disinfectant Level (Goal)

LRAA = Locational Running Annual Average

NA = Not Applicable

ND = Not Detected

RMCL(G)=Recommended Max. Containment Level (Goal)

ppm= parts per million

ppb= parts per billion

MCL(G)= Maximum Containment Level (Goal)

The Hawthorne Water Department routinely monitors for contaminants in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2015 unless otherwise indicated. Radionuclides were tested in 2011 and all results were within USEPA standards.

**Other Substances:** These are considered secondary standards and are not considered health risks.

<b>Secondary Standards</b>	<b>Units</b>	<b>RMCL</b>	<b>RMCLG</b>	<b>Average Level Detected</b>	<b>Exceeds RMCL Y/N</b>	<b>Range</b>	<b>Potential Source</b>
Chloride (2014)	ppm	250	250	130	N	87 – 155	Naturally Occurring
Hardness (2014)	ppm	250	250	282	Y	253 - 310	Naturally Occurring
Sodium (2014)	ppm	50	50	46	N	19 – 71	Naturally Occurring
Sulfate (2014)	ppm	250	250	21	N	16 – 26	Naturally Occurring
Total Dissolved Solids (2014)	ppm	500	500	450	N	384 - 502	Naturally Occurring
Surfactants/Detergents (2014)	ppm	0.5	0.5	0.3	N	0.07 – 0.5	Treatment Process

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. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

The New Jersey Department of Environmental Protection (NJDEP) has completed and issued the Source Water Assessment Report and Summary for this public water system, which is available at [WWW.state.nj.us/dep/swap](http://WWW.state.nj.us/dep/swap) or by contacting NJDEP's Bureau of Safe Drinking Water at (609) 292-5550. You may also contact your public water system to obtain information regarding your water system's Source Water Assessment. This water system's source water susceptibility ratings and a list of potential contaminant sources is attached.

**Source Water Assessment for Hawthorne Borough (NJ1604001)**

Wells	Pathogens			Nutrients			Pesticides			VOC's			Inorganics			Radionuclides			Radon			DBP's		
	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L
1-21	0	17	4	15	6	0	0	15	6	21	0	0	21	0	0	17	4	0	21	0	0	0	21	0

*If a drinking water source's susceptibility is high, it does not necessarily mean the drinking water is contaminated. The rating reflects the potential for contamination of source water, not the existence of contamination.*

Under the State's Safe Drinking Water Regulations, all public water systems must routinely monitor for contamination. If MCLs (drinking water standards) are exceeded, the water system must perform additional monitoring and treat the water before it is served to the consumer. The water system is also required to notify its customers when MCL violations occur. The process for notification depends on the severity of the violation, which can include public service announcements and publication in a local newspaper. Information about violations must also be included in the Consumer Confidence Reports that community water systems must mail to all their customers annually.

***For additional information:***

We want our valued customers to be informed about their water utility. If you have any questions about this report or concerning your water utility, please contact Robert Scully, Director, at 973-427-2501. If you want to learn more, please attend any of our regularly scheduled Borough Council meetings at Borough Hall, 445 Lafayette Avenue. Meetings are held on the first and third Wednesdays of each month at 8:00 p.m.

**Health Effects:**

**Barium:** Barium is a naturally occurring ore used in a variety of manufactured goods. The EPA has found that in some people, short exposure to Barium in exceedance of the MCL can cause gastrointestinal disturbances and muscle weakness. Long term exposure to barium at levels above the MCL may cause high blood pressure.

**Chloride:** Chloride occurs naturally in water and is monitored as a secondary contaminant. Secondary contaminants are aesthetic (taste and odor) rather than health risks; however, in high concentrations chloride can cause Diarrhea in some people.

**Chlorine:** Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.

**Chromium:** Some people who use water containing chromium well in excess of the MCL over many years could experience allergic dermatitis.

**Coliform Bacteria/E-Coli:** Coliform Bacteria are common in the environment and are generally not harmful. The presence of these bacteria in drinking water is usually the result of a problem with the treatment system or the pipes which distribute the water, and indicates that the water may be contaminated with germs that may cause disease.

**Copper:** Copper is an essential nutrient, but some people who drink water that contains copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water that contains copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

**Cyanide:** Some people who drink water containing cyanide well in excess of the MCL over many years could experience nerve damage or problems with their thyroid.

**Haloacetic Acids:** Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

**Hardness:** Water hardness is the traditional measure of the capacity of water to react with soap and producing lather. Hard water often produces a noticeable deposit of precipitate (e.g. insoluble metals, soaps or salts) in containers, including "bathtub ring".

**Lead:** 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. Hawthorne Water is responsible for providing high water quality, 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 drinking water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

**Mercury:** Some people who drink water containing inorganic mercury well in excess of the MCL over many years could experience kidney damage.

**Nitrate:** Nitrate in drinking water a levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.

**Secondary Contaminant:** These parameters do not have an impact on health. Secondary Contaminants affect aesthetic qualities such as odor, taste or appearance. Secondary standards are recommendations, not mandates.

**Sodium:** Naturally occurring mineral. Sodium is essential for good health. Certain medical conditions however, require sodium intake monitoring. Excessive sodium can adversely affect high blood pressure, heart disease or diabetes. Contact your physician for further information.

**Sulfate:** Sulfate occurs naturally in water and is monitored as a secondary contaminant. Secondary contaminants are aesthetic (taste and odor) rather than health risks; however, in high concentrations sulfate can cause Diarrhea in some people.

**Surfactants/Detergents:** In general, prolonged exposure of skin to surfactants in excess of the RUL can cause chafing.

**Thallium:** Some people who drink water containing thallium in excess of the MCL over many years could experience hair loss, changes in their blood, or problems with their kidneys, intestines, or liver.

**Total Dissolved Solids:** (TDS) in drinking water is not a health hazard. The recommended upper limit has been established based on the aesthetic properties of water. Water high in TDS may taste salty or brackish. High TDS may also indicate that other ions naturally present in water may be above established regulatory levels.

**Trihalomethanes:** Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

### **Definitions:**

**Non-Detected (ND)** - laboratory analysis indicates that the constituent is not present at or above the detection limit.

**Parts per million (ppm) or Milligrams per liter (mg/l)** - one part per million corresponds to one minute in two years or a single penny in \$10,000.

**Parts per billion (ppb) or Micrograms per liter** - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000

**Picocuries per liter (pCi/L)** - picocuries per liter is a measure of the radioactivity in water.

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

**Maximum Contaminant Level** - The "Maximum Allowed" (MCL) is 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** -The "Goal"(MCLG) is 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.

**Maximum Residual Disinfectant Level (MRDL)**: 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.

**Maximum Residual Disinfectant Goal (MRDLG)**: 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 contamination

***Potential Contamination:***

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 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 residential uses.
- \* Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can, also come from gas stations, urban storm water 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, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water, which 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

*Please share this information with all the other people who drink this water, especially those who may not have received 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. People with severely compromised immune systems, infants, and some elderly may be at increased risk if exposed to Total Coliform bacteria. These people should seek advice about drinking water from their health care providers. General guidelines on ways to lessen the risk of infection by microbes are available from EPA's Safe Drinking Water Hotline at 1 (800) 426-4791.*

***Regarding Waivers:***

The Safe Drinking Water Act 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 Contaminants and asbestos.

**We at the Hawthorne Water Department work hard to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life, and our children's future. Please call our office if you have questions @ 973 427-2501.**

**Report prepared by the Hawthorne Water Department's Licensed Operator, Max Huber:  
Agra Environmental & Laboratory Services, 90 1/2 West Blackwell Street, Dover, NJ 07801  
Ph. 973-989-0010 or [www.agra.us](http://www.agra.us)**

The 2016 Consumer Confidence Report on Water Quality for the Hawthorne Water Utility is  
now available at:

<http://www.hawthornenj.org/PDF/Forms/CCR.pdf>

For a hard copy of this report, call 973-427-5555 Extension 300