

# Annual Drinking Water Quality Report

## Helmetta Water Department

For the Year 2015, Results from the Year 2014

We are pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. The Borough of Helmetta bulk purchases all of its water from the East Brunswick Water Department, who in turn receives its water from the Middlesex Water Company. The New Jersey Department of Environmental Protection (NJDEP) has completed and issued the Source Water Assessment Report and Summary for these public water systems, 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 these Source Water Assessments.

The Helmetta Borough Water Department, the East Brunswick Water & Sewer Utility and the Middlesex Water Company routinely monitor for contaminants in your drinking water according to Federal and State laws. The tables show the results of that monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup> 2014. The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

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).

Helmetta Water Department Test Results – PWS ID# NJ1206001						
Contaminant	Violation Y/N	Level Detected	Units of Measurement	MC LG	MCL	Likely Source of Contamination
<b>Inorganic Contaminants:</b>						
Copper Test results Yr. 2012 Result at 90 <sup>th</sup> Percentile	N	0.2 No samples exceeded the action level	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
<b>Disinfection Byproducts:</b>						
TTHM [Total trihalomethanes] Test results Yr. 2014	N	Range = 25 - 73 Highest LRAA = 47	ppb	N/A	80	By-product of drinking water disinfection
HAA5's [Total Halocetic Acids] Test results Yr. 2014	N	Range = 11 - 50 Highest LRAA = 35	ppb	N/A	60	By-product of drinking water disinfection
<b>Regulated Disinfectants</b>		<b>Level Detected</b>		<b>MRDL</b>		<b>MRDLG</b>
Chlorine		Average = 0.3 ppm		4.0 ppm		4.0 ppm

HAA5 and TTHM compliance is based on a Locational Running Annual Average (LRAA), calculated at each monitoring location. The LRAA calculation is based on four completed quarters of monitoring results.

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.

If you have any questions about this report or concerning your water utility, please contact Darren Doran at 732-521-0386. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled Borough Council meetings at Borough Hall, 60 Main Street. Meetings are held on the second and fourth Wednesday of each month at 7:30 p.m.

Middlesex Water Company – PWS ID# NJ1225001						
Contaminant	Violation Y/N	Level Detected	Units of Measurement	MC LG	MCL	Likely Source of Contamination
<b>Inorganic Contaminants:</b>						
Barium Test results Yr. 2014	N	0.03	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Copper Test results Yr. 2013 Result at 90 <sup>th</sup> Percentile	N	0.4 No samples exceeded the action level	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits
Fluoride Test results Yr. 2014	N	0.06	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead Test results Yr. 2013 Result at 90 <sup>th</sup> Percentile	N	2.8 1 sample out of 51 exceeded the action level	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate (as Nitrogen) Test results yr. 2014	N	1.2	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nickel Test results yr. 2014	N	1.2	ppb	N/A	N/A	Erosion of natural deposits
<b>Disinfection Byproducts:</b>						
TTHM [Total trihalomethanes] Test results Yr. 2014	N	Range = 10 - 63 Highest LRAA = 54	ppb	N/A	80	By-product of drinking water disinfection
HAA5's [Total Halocetic Acids] Test results Yr. 2014	N	Range = 6 - 42 Highest LRAA = 34	ppb	N/A	60	By-product of drinking water disinfection
<b>Microbiological Contaminants:</b>						
Total coliform Bacteria Test results Yr. 2014	N	0.6 % Highest Monthly Level		0	5% of monthly samples	Naturally present in the environment
Turbidity Test results Yr. 2014	N	100 % Maximum Level Detected = 0.13		N/A	TT = 95 % of samples < 0.3 NTUs	Soil runoff
<b>Radioactive Contaminants:</b>						
Beta/photon Emitters Test results Yr. 2011	N	3.6	pCi/l	0	50	Decay of natural and man-made deposits
Gross Alpha Test result Yr. 2011	N	3.8	pCi/l	0	15	Erosion of natural deposits
<b>Regulated Disinfectants</b>		<b>Level Detected</b>		<b>MRDL</b>		<b>MRDLG</b>
Chlorine		Average = 0.6 ppm		4.0 ppm		4.0 ppm

HAA5 and TTHM compliance is based on a Locational Running Annual Average (LRAA), calculated at each monitoring location. The LRAA calculation is based on four completed quarters of monitoring results.

### Middlesex Water Company Additional Monitoring

#### Unregulated Contaminant Monitoring Rule (UCMR)

The Middlesex Water Company participated in the UCMR in 2013 & 2014. Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether regulation is warranted. Our results are available upon request.

Contaminant	Level Detected	Units of Measurement	Likely source
Perfluorohexanoate (PFHA)	0.003	ppb	A man-made chemical used in the manufacture of fluoropolymers
Perfluoro octanic Acid (PFOA)	Range = 3.3 – 6.8	ppb	A man-made chemical used in the manufacture of fluoropolymers
Strontium	Range = 68 - 125	ppb	Erosion of natural deposits
Chromium VI	Range = 0.03 – 0.1	ppb	Erosion of natural deposits
Chlorate	Range = 85 - 140	ppb	Erosion of natural deposits
Chromium (total)	0.27	ppb	Erosion of natural deposits
Molybdenum	1.1	ppb	Erosion of natural deposits
Chlorodifluoromethane (HCFC-22)	Range = ND – 0.1	ppb	A man-made chemical