



PWSID# NJ1322001

**Annual Drinking Water Quality Report**  
**Borough of Keyport Water Department**  
**For the Year 2014, Results from the Year 2013**

**Meeting the Challenge**

We are once again proud to present to you our annual water quality report. This edition covers all testing completed from January 1, 2013 through December 31, 2013. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal drinking water standards. We continually strive to adopt new and better methods for delivering the best-quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the challenges of source water protection, water conservation, and community education while continuing to serve the needs of all our water users. Please share with us your thoughts about the information in this report. After all, well-informed customers are our best allies.

**Community Participation**

The Borough of Keyport encourages public comment. If you have any concerns or comments regarding your water utility, please call (732) 739-3900 or attend the regularly scheduled borough council meetings at Borough Hall, 70 West Front Street, on the first and third Tuesday of each month. All are welcome.

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 projection, 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.

**Source Water Assessment Program**

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/creport.htm](http://www.state.nj.us/dep/swap/creport.htm) or by contacting the NJDEP Bureau of Safe Drinking Water at (609) 292-5550.

The table below illustrates the susceptibility rating for each individual source for each of the contaminant categories in the Borough of Keyport's system (PWSID NJ1322001). For susceptibility ratings of purchased water, refer to the specific water system's source water assessment report. We purchased water from Shorelands Water Company (PWSID NJ133900) and from the New Jersey American Monmouth System (PWSID NJ1345001) from January to May of 2013 and October to December 2013. If a system is rated highly susceptible for a contaminant category, this 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 initiate treatment if any contaminants are detected at frequencies and concentrations above allowable levels. As a result of these assessments, NJDEP may customize (change existing) monitoring schedules based on the susceptibility ratings. If you have questions regarding source water assessment reports or summaries, please contact the Bureau of Safe Drinking Water at [swap@ddep.state.nj.us](mailto:swap@ddep.state.nj.us) or at (609) 292-5550.

Potential Contaminant Category	Well Susceptibility Ratings (total number of wells for each category)		
	LOW	MEDIUM	HIGH
Pathogens		2	
Nutrients	1	1	
Pesticides	2		
VOC's			2
Inorganics	2		
Radionuclides		2	
Radon		2	
DBPs		1	1

EPA requires monitoring for over 80 drinking water contaminants. Those contaminants listed in the table are only contaminants detected in your water.

TEST RESULTS									
Contaminant	Violation Y/N	Detection Levels			Range	Units of Measurement	MCLG	MCL	Likely Source of Contamination
		Keypoint	Shorelands	NJ American					
<b>Treatment / Treatment Byproducts</b>									
Turbidity	N	N/A	N/A	0.26	0.05-0.26	NTU	NA	TT	Soil runoff
TOC	N	N/A	N/A	2.18	1.02-2.08	ppm	NA	TT	Naturally Present in the Environment
Total Trihalomethanes (TTHMS) Stage 2 LRAA	N	.018 <sup>1</sup>	52.5 <sup>1</sup>	66.0 <sup>1</sup>	32.0-102.0	ppb	NA	80	By-product of drinking water disinfection
Haloacetic Acids – (HAA5) Stage 2 LRAA	N	.014 <sup>1</sup>	40.9 <sup>1</sup>	29.0 <sup>1</sup>	5.3-40.9	ppb	NA	60	By-product of drinking water disinfection
<b>Radioactive Contaminants</b>									
Gross Alpha *	N	ND	ND	1.00	0.95-1.00	pCi/L	0	15	Erosion of natural deposits
Combined Radium-228 & 226 *	N	1.5	ND	0.40	ND-1.5	pCi/L	0	5	Erosion of natural deposits
<b>Inorganic Contaminants:</b>									
Barium *	N	.028	ND	ND	0-0.028	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride	N	ND	0.78	0.80	ND – 0.80	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer
Nitrate (as Nitrogen)	N	ND	0.93	0.55	ND – 0.93	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
<b>Lead &amp; Copper Distribution System (2012)</b>									
Contaminant	Violation Y/N	Amount Detected (90 <sup>th</sup> Percentile)		Sites Above AL/Total Sites	Unit of Measure	MCLG	AL		
Lead *	N	1.5		0/23	ppb	0	AL=15	Corrosion of household plumbing systems; erosion of natural deposits	
Copper *	N	0.093		0/23	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits	

Page 4

The Borough of Keypoint Water Department routinely monitors for contaminants in your drinking water according to Federal and State laws. The table on the following page shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2013.

**Water Quality Results**

We are pleased to report that our drinking water meets all federal and state safety requirements.

**Special considerations regarding children, pregnant women, nursing mothers, and others:**

Children may receive a slightly higher amount of a contaminant present in the water than do adults, on a body weight basis, because they may drink a greater amount of water per pound of body weight than do adults. For this reason, reproductive or developmental effects are used for calculating a drinking water standard if these effects occur at lower levels than other health effects of concern. If there is insufficient toxicity information for a chemical (for example, lack of data on reproductive or developmental effects), an extra uncertainty factor may be incorporated into the calculation of the drinking water standard, thus making the standard more stringent, to account for additional uncertainties regarding these effects. In the cases of lead and nitrate, effects on infants and children are the health endpoints upon which the standards are based.

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. The Borough of Keypoint is responsible for providing high quality drinking water, but can not 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 second to 2 minutes before using water for drinking and 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 <http://www.epa.gov/safewater/lead>.

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).

Page 3

**What does this mean?**

- ✓ We have learned through our monitoring and testing that some contaminants have been detected. As you can see by the table, our system had no violations. We are proud that your drinking water meets or exceeds all Federal and State safety requirements.
- ✓ 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.

**Waiver Information**

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 waiver for synthetic organic chemicals.

**DEFINITIONS**

In the following table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.

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.

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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

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

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.

Secondary Contaminant- Substances that do not have an impact on health. Secondary Contaminants affect aesthetic qualities such as odor, taste or appearance. Secondary standards are recommendations, not mandates.

Recommended Upper Limit (RUL) – Recommended maximum concentration of secondary contaminants. These reflect aesthetic qualities such as odor, taste or appearance. RUL's are recommendations, not mandates.

Locational Running Annual Average (LRAA) is the yearly average of all the results at each specific sampling site in the distribution system.

Page 6

Regulated Disinfectants	Level Detected (Average & Highest Detect)		MRDL	MRDLG
Chlorine	0.32	0.71	4.0 ppm	4.0 ppm

Contaminant	Detection Levels			Range	Units of Measurement	RUL
	Keypoint	Shorelands	NJ American			
<b>Secondary Contaminants:</b>						
Sodium	9.78	ND-53.4	29-58.7	ND-58.7	ppm	50
Iron	0.053	ND-0.580	ND	ND-0.580	ppm	0.30
Manganese	0.005	.041	ND	ND-0.041	ppm	0.050

**Iron**-The secondary Recommended Upper Limit (RUL) 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 RUL could develop deposits of iron in a number of organs in the body. **Sodium**-For healthy individuals the sodium intake from water is not important, because a much greater of sodium takes place from salt in the diet. However sodium levels above the Recommended Upper Limit (RUL) may be of concern to individuals on a sodium restricted diet.

Unregulated Contaminant Monitoring 3	Units	NJDEP Guidance Level	Range Detected	Highest Level Detected	Use or Environmental Source
Chlorate	ppb	NA	ND to 760	760	Agricultural defoliant or desiccant; disinfection byproduct; and used in production of chlorine dioxide.
Hexavalent Chromium	ppb	NA	ND to 0.22	0.22	Major sources of hexavalent chromium (chromium-6) in drinking water are discharges from steel and pulp mills, and erosion of natural deposits of chromium-3. Hexavalent Chromium is not currently regulated as an individual substance. NJ American Water voluntarily performed this monitoring based on recommendations from USEPA. For more information on Hexavalent Chromium (Chromium 6), please visit our web site.
Strontium	ppb	NA	37.6 to 411.7	411.7	Naturally occurring element. commercial use of strontium has been in the faceplate of glass cathode-ray tube televisions to block x-ray emissions.
1,4- Dioxane	ppb	NA	ND to 0.50	0.50	Used as a solvent in manufacturing and processing of paper, cotton, textile products, automotive coolant, cosmetics and shampoos.

1- Stage one monitoring is no longer required and is superseded by Stage 2 This level represents the highest annual quarterly Locational Running Average calculated from the data collected.  
2\*- Sample results from previous years  
3- NJAWC participated in the Unregulated Contaminant Monitoring Rule. 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 and NJDEP in determining the occurrence of unregulated contaminants in the drinking water and whether regulation is warranted. Our results are available upon request.

Page 5