

EAST NEWARK WATER SYSTEM CONSUMER CONFIDENCE REPORT 2016

NJDEP PWSID# 0902001

***** IMPORTANT INFORMATION! Your water meets or surpasses all New Jersey State and Federal standards for safe drinking water.**

***(Este informe contiene informacion muy importante sobre su agua de beber. Traduzcalo o hable con alguien que lo entienda bien.)**

**** (Este relatorio contem informacao importante sobre a agua potavel. Aconselhamos que obtenha este documento traduzido.)**

The Borough of East Newark is pleased to present you with our Annual Water Quality Report based on the year 2016 analytical results. 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. We want you to be confident that we make every effort to continually monitor and protect our water resources.

Both the United States Environmental Protection Agency (EPA) and the New Jersey Department of Environmental Protection (NJDEP) require water suppliers to mail a Consumer Confidence Report (CCR) to their customers on an annual basis. This CCR provides information about the water you drink. It shows how your water measured up to the government standards during the year 2015. We are proud to report that our drinking water meets all federal and state safety requirements

If you want to learn more about the East Newark Water distribution system, please attend any of our regularly scheduled Borough Council Meetings at the Borough Hall, 34 Sherman Avenue, East Newark, NJ 07029. The meetings are held on every second Wednesday of each month at 5:30 p.m.

***If you have any questions or concerns about your drinking water, please contact the Borough of East Newark at 973-481-2902. Or, you can call the EPA Safe Drinking Water Hotline at 1-800-426-4791.

For information on various water related topics, free instructional materials, and directions to related water links, visit www.njawwa.org. The USEPA drinking water web site is www.epa.gov/safewater, or you can contact the NJDEP, Bureau of Safe Drinking Water at 609-292-5550 or at their website at www.nj.gov/dep/watersupply

Where does your water come from?

The Borough of East Newark receives its bulk water supply through the Town of Kearny PWSID# 0907001, primarily from PWSID# 1613001, the North Jersey District Water Supply Commission (NJDWSC). NJDWSC gets its water from two of the most pristine water supply reservoirs in the country, namely the 29.6 billion gallon Wanaque and the 7 billion gallon Monksville reservoirs. The commission also operates two (2) pump stations designed to pump 250 million gallons per day of water from the Pompton River and 150 million gallons per day from the Ramapo River in the Wanaque Reservoir as needed. The water is then pumped through underground pipes to the Borough of East Newark.

In 1996, Congress amended the Safe Drinking Water Act to create the "Source Water Assessment & Protection Program". Each state is required to identify and evaluate all sources of water that are used for drinking water within the state. The goal of this program is to identify and assess potential sources of contamination and to promote and facilitate the protection of the water sources.

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 or by contacting NJDEP's Bureau of Safe Drinking Water at (609) 292-5550. You may also contact the Borough of East Newark at 973-481-2902.

The sources were rated on their susceptibility to seven contamination categories (and Radon), as defined below:

Pathogens: Disease causing organisms such as bacteria and viruses. Common sources are animal and human fecal wastes.

Nutrients: Compounds, minerals and elements that aid growth, that are both naturally occurring and man-made. Examples include nitrogen and phosphorus.

Volatile Organic Compounds: Man-made chemicals used as solvents, degreasers, and gasoline components. Examples include benzene, methyl tertiary butyl ether (MTBE), and vinyl chloride.

Pesticides: Man-made chemicals used to control pests, weeds and fungus. Common sources include land application and manufacturing centers of pesticides. Examples include herbicides such as atrazine, and insecticides such as chlordane.

Inorganics: Mineral-based compounds that are both naturally occurring and man-made. Examples include arsenic, asbestos, copper, lead, and nitrate.

Radionuclides: Radioactive substances that are both naturally occurring and man-made. Examples include radium and uranium.

Radon: Colorless, odorless, cancer-causing gas that occurs naturally in the environment. For more information call (800) 648-0394 or go to <http://www.nj.gov/dep/rpp/radon/index.htm>

Disinfection Byproduct Precursors: A common source is naturally occurring organic matter in surface water. Disinfection byproducts are formed when the disinfectants (usually chlorine) used to kill pathogens react with dissolved organic material (for example leaves) present in surface water.

The source water assessment performed on the five (5) sources determined the following:

- All five (5) sources were rated high for pathogens, nutrients, inorganics and disinfection byproduct precursors.
- All five (5) sources were rated medium for volatile organic compounds.
- All five (5) sources were rated low for radon and radionuclides.
- Pesticides were rated at medium for (2) sources and low for three (3) sources.

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

If a system is rated highly susceptible for a contamination 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.

If you have any questions regarding the source water assessment report or summary please contact the Bureau of Safe Drinking Water at swap@dep.state.nj.us or (609) 292-5550.

HEALTH AWARENESS AND WATER QUALITY ISSUES

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.

The Safe Drinking Water Act regulations allow monitoring waivers to reduce or eliminate the monitoring requirements for asbestos, volatile organic chemicals (VOC) and synthetic organic chemicals (SOC). NJDWSC received monitoring waivers for synthetic organic chemicals and asbestos.

TABLE OF DETECTED REGULATED CONTAMINANTS

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 NJDWSC, Kearny Water Department and the Borough of East Newark routinely monitor 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 1st to December 31st, 2016.

**Table 1
East Newark Water Department - Water Quality Report**

Microbiological Contaminants

Regulated Contaminant	Units	COMPLIANCE ACCHIEVED	MCLG	MCL	Highest Level	Source of Contamination
Total Coliform Bacteria	# per 100 ml	Yes	0	1 positive sample per month	0	Coliform are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful bacteria may be present.

+The East Newark Water Department collects 2 routine total coliform samples per month.

REGULATED DISINFECTANTS and DISINFECTION BYPRODUCTS

Stage 2 Disinfection Byproducts, Note: Stage 2 DBP compliance is based on the locational running annual average (LRAA) calculated at each monitoring location. The LRAA for Stage 2

Regulated Contaminant	UNIT	COMPLIANCE ACCHIEVED	LRAA Maximum of all Sites	LRAA Range of all Averages	Source of Contamination/ and Comments
Total Trihalomethanes (TTHM) Stage 2	PPB	Yes	62.65	37.05 – 62.65	Byproduct of water disinfection. / TTHM compliance is based on Locational Running Annual Average with a limit of 80 PPB.
Haloacetic Acids (HAA5) Stage 2	PPB	Yes	38.28	23.88 – 38.28	Byproduct of water disinfection. / HAA5 compliance is based on Locational Running Annual Average With a limit of 60 PPB

Disinfectants: Limit is based upon the Running Annual Avg. (RAA) reported quarterly.

Regulated Contaminant	Units	COMPLIANCE ACCHIEVED	MRDL G	MRDL	Highest RAA Detected	Range Detected	Source of Contamination
Chlorine as CL2 (Running avg.)	PPM	Yes	4	4	0.7	0.3 – 0.7	Chlorine is used as a drinking water disinfectant.

Lead and Copper Rule

Regulated Contaminant	Units	COMPLIANCE ACCHIEVED	RUL	Highest Detected	90 th Percentile Result	Source of Contamination
Lead	PPM	Yes	.15	0.001	0.00087	Erosion of natural deposits, discharge of drilling waste and discharge from metal refineries.
Copper	PPM	Yes	1.3	0.1789	0.0452	Erosion of natural deposits.

LEAD AND COPPER. COMPLIANCE WITH THE LEAD AND COPPER RULE IS BASED ON THE 90TH PERCENTILE RESULT FROM POINTS OF USE IN THE DISTRIBUTION SYSTEM COLLECTED IN 2015. EAST NEWARK WATER IS ON REDUCED MONITORING, 3 YEAR INTERVALS, AND WILL MONITOR NEXT IN 2018.

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, a person would have to drink two liters of water everyday at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Table 2
North Jersey District Water Supply Water Quality Report
Provided by Kearny Water

PRIMARY CONTAMINANTS

Regulated Contaminant	Units	COMPLIANCE ACCHEIVED	MCLG	MCL	Highest Level	Range Detected	Source of Contamination
Turbidity	NTU	Yes	NA	TT (% of samples <0.3 NTU) Minimum 95% Required	0.38	99.7% < 0.3 NTU	Soil Runoff
Total Organic Carbon	PPM	Yes	NA	TT = Percent Or meeting alternative criteria of 1.0	Running Annual Avg. 1.0	0.76 – 1.0	Naturally present in the environment.

INORGANIC CONTAMINANTS

Regulated Contaminant	UNIT	COMPLIANCE ACCHEIVED	MCLG	MCL	Highest Result	Range Detected	Source of Contamination/ and Comments
Barium	PPM	Yes	2	2	0.014	N/A	Erosion of Natural Deposits
Nitrate as nitrogen	PPM	Yes	10	10	0.284	N/A	Agricultural runoff; road salting

ADDITIONAL INFORMATION

The Safe Drinking Water Act regulations allow monitoring waivers to reduce or eliminate monitoring requirements for asbestos, volatile organic chemicals and synthetic organic chemicals. Our system received monitoring waivers for asbestos and we are not required to monitor for synthetic organic chemicals.

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 East Newark is responsible for providing high quality drinking water, 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 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 1-800-426-4791 or at www.epa.gov/safewater/lead.

DEFINITIONS

In the 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:

AL	Action Level – The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, which a water system must follow.
LRAA	Locational Running Annual Average
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 “Goal” 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.
MRDL	Maximum Residuals 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 Residuals 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 contamination.
NTU	Nephelometric Turbidity Unit – Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person. It is monitored because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.
NA	Not applicable
NS	No standard
PPB	Parts per billion or Micrograms per liter (ug/l)
PPM	Parts per million or Milligrams per liter (mg/l)
RAA	Running Annual Average
RUL	Recommended Upper Limit
TT	Treatment Technique – A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.