EAST NEWARK WATER SYSTEM
CONSUMER CONFIDENCE REPORT 2018
FOR THE YEAR 2017
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 entiend" a 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 2017 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 2017. 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.

INFORMATION ABOUT DRINKING WATER CONTAMINANTS

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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline 800-426-4791.

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.

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.

East Newark Water is pleased to provide you this information along with the results compiled by the Suez – Kearny Water.

This booklet contains important information about the water in your community. Translate or speak to someone who understands it well.

Health Effects of Detected Contaminants:

(1) *Turbidity*. Turbidity has no health risk effects. However, turbidity can interfere with disinfecting and provide a medium for biological growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as cramps, nausea, diarrhea, and associated headaches.

Radioactive Contaminants/Inorganic Contaminants

(2) *Copper*. Copper is an essential nutrient, but some people who drink water-containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water-containing 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.

(3) *Lead.* Infants and children who drink water-containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits an attention span and learning abilities. Adults who drink this water over many years could develop kidney problems and high blood pressure.

Volatile Organic Contaminants

(4) *TTHMs (Total Trihalomethanes)*. Some people who drink water-containing trihalomethanes in excess of the MCL over many years could experience problems with their liver, kidneys, or central nervous systems, and may have an increased chance of getting cancer.

VULNERABLE POPULATION LANGUAGE

40 CFR: 141.154(a)

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

SPECIAL CONSIDERATIONS REGARDING CHILDREN, PREGNANT WOMEN, NURSING MOTHERS, AND OTHERS

Children may receive a slightly higher amount of 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 case of lead and nitrate, effects on infants and children are the health endpoints upon which the standards are based.

ADDITIONAL SPECIAL NOTICE ON LEAD

Lead: **Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that the lead levels at your home may be higher than at other homes in your community as a result of materials used in your home plumbing. If you are concerned about elevated lead levels in your home water, you may wish to have your tap water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the SAFE DRINKING WATER HOT LINE (1-800-426-4791) Adults who drink this water over many years could develop kidney problems and high blood pressure.**

WATER SUPPLIED BY THE EAST NEWARK WATER IS IN COMPLIANCE WITH LEAD AND COPPER BASED ON THE 90TH PERCENTILE RESULT. ALL INDIVIDUAL LEAD AND COPPER SAMPLES WERE ALSO BELOW THE ACTION LEVEL.

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, 2017.

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	1	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. We recorded a single positive sample for total coliform in the months of October and December. The samples were negative for e-coli. In conformance with the rules a repeat sample was collected from the same location and 2 additional check samples were taken upstream and downstream of the location of the positive samples within 24 hours and retested. All repeat and check samples were negative therefore the system remained in compliance.

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	63	59 – 63	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	31	27 – 31	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	0.90	0.20 – 0.90	Chlorine is used as a drinking water disinfectant.

Lead and Copper Rule

Regulated Contaminant	Units	COMPLIANCE ACCHIEVED	RUL	Highest Detected	90th 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 Suez Kearny Operations

primary standards – Directly related to the safety of drinking water

Inorganic Chemicals	MCLG	MCL	Highest Result	Range of Results	Violation	Likely Source
Barium ppm	2	2	0.02	ND – 0.02	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of Natural Deposits
Nitrate as a nitrogen ppm	10	10	0.52	ND – 0.52	No	Erosion of Natural Deposits; Runoff from orchards; Runoff from glass and electronics production wastes

Turbidity	MCLG	MCL	Level Found	Average	Violation	Likely Source
Turbidity NTU (Combined filtered water)	NA	TT=1NTU TT=95% <0.3NTU	1 99.5%	NA	No	Soil run-off

TOC Removal Ratio	MCLG	MCL	Average Ratio RAA	Range of Ratio (monthly)	Violation	Likely Source
Total Organic Carbon (TOC) ppm	NA	TT=Removal Ratio RAA>1	1.10	1.00 – 1.50	No	Naturally present in the environment

secondary standards – Related to the aesthetic quality of drinking water

Secondary standards are non-mandatory guidelines to assist public water systems for aesthetic considerations, such as taste, color and odor. These contaminants are not considered to present a risk to human health.

Substance	Units	NJ RUL	Highest Result	Range of Results	Likely Source
Alkalinity	ppm	NA	49	NA	Natural Mineral
Aluminum	ppm	0.2	0.050	NA	Treatment Process (if aluminum based treatment products are used), or Erosion of Natural Deposits and Industrial Discharge
Chloride	ppm	250	104	NA	Natural Mineral, Road Salt
Color	CU	10	2	NA	Natural Mineral and Organic Matter
Copper	ppm	<1	0.021	NA	Corrosion of household plumbing
Foaming Agents	ppm	500	<0.04	NA	Detergents
Hardness	ppm	NA	89	NA	Natural Mineral
Odor	TON	3	< 1	NA	Naturally Occuring, Chlorine
pH	units	6.5-8.5	8.1	NA	Natural Mineral, Treatment Process
Sodium	ppm	NA	45	NA	Natural Mineral, Road Salt
Sulfate	ppm	250	12.4	NA	Natural Mineral
Total Dissolved Solids	ppm	500	129	NA	Natural Mineral
Zinc	ppm	5	0.011	NA	Erosion of Natural Deposits, and Industrial Discharge

susceptibility ratings for East Newark 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 the NJDEP, Bureau of Safe Drinking Water at 609.292.5550.

The table below illustrates the susceptibility rating for the seven contaminant categories and radon for the NJDWSC resources (5 surface water intakes). The table provides ratings of high (H), medium (M), or low (L) for each contaminant category. The numbers in each column refer to the number of sources with that rating. **If a system is rated highly susceptible for a contaminant 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. As a result of the assessments, NJDEP may customize (change existing) monitoring schedules based on the susceptibility ratings.

If you have 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.

Source	Pathogens Rating			Nutrients Rating			Pesticides Rating			VOCs Rating			Inorganics Rating			Radionuclides Rating			Radon Rating			DBPs Rating		
	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L
NJDWSC 5 Surface Water	5			5				2	3		5		5					5			5	5		

SOURCE WATER MONITORING – *CRYPTOSPORIDIUM*

Cryptosporidium is a microbial pathogen found in surface water throughout the United States. Although filtration removes *Cryptosporidium*, the most commonly-used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates the presence of these organisms in our source water. Current test methods do not allow us to determine if the organisms are viable or capable of causing disease. Ingestion of *Cryptosporidium* may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people, infants and small children, and the elderly are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. *Cryptosporidium* must be ingested to cause disease, and it may spread through means other than drinking water.

NJDWSC started the second round of source water monitoring in accordance with the requirements of EPA's Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR). This monitoring will continue through the spring of 2017. The data collected in 2017 is presented in the table below.

LS2ESWTR Round 2	Microbials	Range of Results
	Cryptosporidium, # Cysts/L	0 – 0.1
	Giardia, # Cysts/L	0 – 0.4

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.

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:

Term	Description
AL	Action Level: The concentration of contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
CU	Color Unit
CDC	Center for Disease Control
Disinfection By-product Precursors	A common source naturally occurring organic matter in surface water. Disinfection by-products are formed when the disinfectants (usually chlorine) used to kill pathogens react with dissolved organic material (DPB precursors) present in surface water
Inorganic Contaminants	Contaminants such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming. These contaminants may be present in source water.
LRAA	Locational Annual Running Average Annual Running average of results for a specific sampling site.
MCL	Maximum Contaminant Level is the highest level of contaminant that is allowed in the drinking water. MCLs are set as close to the MCLGs as is feasible using the best available treatment technology.
MCLG	Maximum Contaminant Level Goal is the level of a contaminant in drinking water below which there is no known expected risk to health MCLGs allow a margin of safety.
MF/L	Million fibers per liter
MRDL	Maximum Residual Disinfectant Level is the highest level of 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 disinfectant allowed in drinking water below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.
NA	Not Applicable
ND	Not Detected is a term used when a laboratory analysis demonstrates that the constituent is not present.
NTU	Nephelometric Turbidity Unit is the measure of the clarity of water. Turbidity is excess of 5 NTU is just noticeable to the average person.
Nutrients	Compounds, minerals and elements that aid growth that are both naturally occurring and manmade. Examples include nitrogen and phosphorus.
Organic Contaminants/ Volatile Organic Compounds	Compounds, including synthetic and volatile organic chemicals which are by-products of industrial processes and petroleum production, and can also come from gas stations, stormwater runoff and septic systems. Manmade chemicals used as solvents, degreasers, and gasoline components. Examples include benzene, methyl tertiary butyl ether (MTBE) and vinyl chloride. These compounds may be present in surface water.
Pesticides, Herbicides, Insecticides, Fungicides and Rodenticides	Manmade chemicals used to control pests, weeds and fungus which may come from a variety of sources such as agriculture, stormwater runoff and residential uses and may be present in source water. Common sources include land application and manufacturing centers of pesticides. Examples include herbicides such as atrazine and insecticides such as chlordane.
pC/L	Picocuries per liter is a measure of radioactivity in water.
PPB	Parts per billion or micrograms per liter equals one part per billion and corresponds to one minute in 2,000 years, or a single penny in $10,000,000.
POE	Point of Entry to the water distribution system
PPM	Parts per Million or milligrams per liter (mg/l) equals one part per million and corresponds to one minute in two years or a single penny in $10,000.
RAA	Running Annual Average
RUL	Recommended Upper Limit: the highest level of a constituent of drinking water that is recommended in order to protect aesthetic quality.
TON	Threshold Odor Number
TT	Treatment Technique is a required process intended to reduce the level of contaminant in drinking water.