

HARRISON WATER DEPARTMENT

2016 Consumer Confidence Report

NJDEP PWS ID# 0904001

***** 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.)**

Harrison Water is pleased to present you with our Annual Water Quality Report based on the year 2015 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 deliver a Consumer Confidence Report (CCR) to their customers on an annual basis. This CCR provides information about the quality of 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 Harrison Water Department, please attend any of our regularly scheduled Town Council Meetings at the Town Hall, 318 Harrison Avenue, Harrison, NJ 07029. The meetings are held on the first Tuesday of each month at 7:30 p.m.

*** If you have any questions or concerns about your drinking water, please contact the Harrison Water Department at 973-268-2431. 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 www.nj.gov/dep/watersupply.

The Town of Harrison receives its water supply primarily from PWS ID# 1605002 PASSAIC VALLEY WATER COMMISSION (PVWC). The PVWC's main treatment facility is the Little Falls Water Treatment Plant located in Totowa, NJ. Water diverted from the Passaic and Pompton Rivers is treated, filtered and disinfected at the plant. In drought conditions or other emergency, water from the Point View Reservoir in Wayne, NJ can be used to supplement river sources. Treated water is then mixed at the main pumping station with treated water from PWS ID# 1613001 North Jersey District Water Supply Commission's (NJDWSC) Wanaque Reservoir treatment plant, PWS ID# 0906001 the Jersey City Municipal Utility Authority (JCMUA) treatment plant, and PWS ID# 0714001 Newark Water Pequannock water treatment plant. The water is then pumped through underground pipes to the Town of Harrison.

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 Reports and Summaries for all public water systems. The Source Water Assessment, and related questions, for the PVWC system (PWS ID 1605002), the NJDWSC system (PWS ID 1613001), the Jersey City system (PWS ID 0906001) and the Newark system (PWS ID 0714001) can be obtained by logging onto the NJDEP's source water assessment Web site at www.state.nj.us/dep/swap or by contacting NJDEP's Bureau of Safe Drinking Water at (609) 292-5550.

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 intakes for each system lists the following susceptibility ratings for a variety of contaminants that may be present in source waters:

- Eleven (11) intakes were rated high for pathogens and disinfection byproduct precursors.
- Ten (10) intakes were rated medium for volatile organic compounds and one (1) was rated low.
- Eleven (11) intakes were rated low for radon and radionuclides.
- Three (3) intakes were rated medium for pesticides and eight (8) were rated low.
- Ten (10) intakes were rated high for inorganic contaminants and one (1) was rated medium.
- Nine (9) intakes were rated high for nutrients, one (1) was rated medium and one (1) was rated low.

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.

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.

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 PVWC, NJDWSC, Jersey City, Newark systems and the Harrison Water Department 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, 2015.

Test Results for the Year 2015

Contaminant	Compliance Achieved	Level Detected (range)	Units of Measurement	MCLG	MCL	Likely Source of Contamination
Barium	Yes	0.027 (0.016 0.027)	ppm	2	2	Erosion of natural deposits discharge of drilling wastes, discharge from metal refineries
Chromium	Yes	0.57 (ND – 0.57)	ppb	100	100	Erosion of natural deposits Discharge from steel & pulp mills
Copper	Yes	0.0589	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Contaminant	Compliance Achieved	Level Detected (range)	Units of Measurement	MCLG	MCL	Likely Source of Contamination
Fluoride	Yes	0.09 (ND – 0.09)	ppm	4	4	Erosion of natural deposits
Lead	Yes	2.05	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Haloacetic Acids (HAA5) Stage 2 DBPR	Yes	26 LRAA (16.5-29.18)	ppb	NA	60	By product of drinking water disinfection
(TTHM) Total Trihalomethanes Stage 2 DBPR	Yes	54 LRAA (25 – 82.9)	ppb	NA	80	Discharge from industrial chemical factories
Nickel	Yes	1.98 (1.63 – 1.98)	ppb	NA	NA	Runoff from fertilizer use, leaching from septic tanks, sewage, erosion of natural deposits
Nitrate	Yes	3.7 (0.89 – 3.7))	ppm	10	10	Runoff from fertilizer use, leaching from septic tanks, sewage, erosion of natural deposits
Selenium	Yes	0.69 (ND – 0.69)	ppb	50	50	Erosion of natural deposits, discharge from petroleum & metal refineries, discharge from mines
Turbidity (NTU)	Yes	0.53 (0.02 – 0.53)	TT	NA	TT=1	Soil Runoff
Turbidity (NTU)	Yes	99.97%	TT	NA	TT = percentage of samples <0.3 NTU (min. 95% required)	Soil Runoff

Total Organic Carbon (%)

System	Compliance Achieved	MCL	Plant Effluent Sample Results	Typical Source
PVWC	Yes	TT= % removal	(46-72 range) (25-45 required)	Naturally present in the environment
NJDWSC	Yes	TT= removal ratio	1.0 (RAA) (0.94 – 1.0)	Naturally present in the environment
JCMUA	Yes	TT= removal ratio	1.25 (Lowest RAA) (1.00 - 1.63)	Naturally present in the environment

Disinfectants:

Disinfectant	Compliance Achieved	MRDLG	MRDL	Result	Typical Source
Chlorine (ppm)	Yes	4	4	0.7 RAA	Water additive used to control microbes.

Primary Contaminants:

Microbiological	Compliance Achieved	Result	MCLG	MCL	Typical Source
Total Coliform Bacteria (%)	Yes	0%	NA	>5% of monthly samples positive	Discharge from industrial chemical factories
Fecal Coliform or E.coli bacteria (#)	Yes	0%	NA	>5% of monthly samples positive	By-product of drinking water disinfection

Detected Secondary Analytes:

Analyte	Range in ppm	MCLG	RUL	Likely Source of Contamination
Manganese	3.49	NA	0.50 ppm	Naturally present in the environment
*Sodium	75 - 281	NA	50 ppm	Natural mineral, road salt

*PVWC and Jersey City's finished water was above the NJ Recommended Upper Limit (RUL) for 50 ppm for sodium in 2015. Possible sources of sodium include natural soil runoff, roadway salt runoff, upstream wastewater treatment plants, and a contribution coming from chemicals used in the water treatment process. For healthy individuals the sodium intake from water is not important, because a much greater intake of sodium takes place from salt in the diet. However, sodium levels above the recommended upper limit may be a concern to individuals on a sodium-restricted diet. If you have any concerns please contact your health care provider.

Unregulated Contaminants for which EPA Requires Monitoring

Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

PVWC Little Falls Water Treatment Plant Effluent

Contaminant	Average and Range of Results
Chlorate, ppb	117 (93-140)
Hexavalent Chromium, ppb	0.0765 (0.06–0.093)
Strontium, ppb	86 (76-96)

Harrison Water Distribution System

Contaminant	Average and Range of Results
Strontium, ppb	99.125 (64-160)
Chromium-6, ppb	0.044 (0.036-0.055)
Chlorate, ppb	133.250(76-220)

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). The PVWC and Harrison Water received monitoring waivers for asbestos and VOC by the rule. PVWC also received a monitoring waiver for SOC. Monitoring was conducted for VOC during 2002, but none were detected.

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 Harrison Water Department 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 at 800-426-4791 or 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 “Maximum Allowed” is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to 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
ND	Not detected
NS	No standard
ppb	Parts per billion or Micrograms per liter (ug/l)
ppm	Parts per million or Milligrams per liter (mg/l)
PWS ID	Public Water System Identification
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.