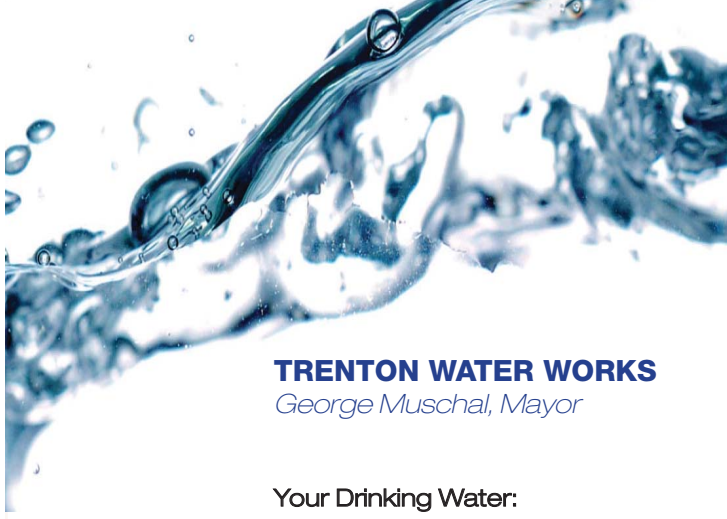
2014 WATER quality report



TRENTON WATER WORKS

George Muschal, Mayor

Your Drinking Water:

It's high quality.

It's reliable.

And we are continuing to make the necessary investments to keep it that way.

The City of Trenton is pleased to present the

Trenton Water Works
2014 Water Quality Report

Quality drinking water is an essential resource. The good news is that your tap water is top quality! Our water meets all state and federal standards.

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Permit #1117

Trenton Water Works
P.O Box 528
Trenton, NJ 08604-0528

NOTICE TO LANDLORDS:
You are required by law to make this report available to all water consumers. Please post in a visible location or distribute to all tenants. Additional copies are available by calling 609.989.3208.

HOW A WATER METER WORKS

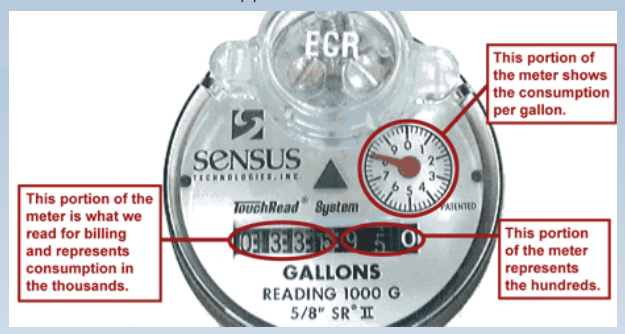
Water meters are used to measure the volume of water that passes a point in a pipe using mechanical, magnetic or electronic devices. The simplest mechanical meters measure the displacement of rotary pistons or loosely suspended disks as water flows past.

Other types of meters use speed of flow (velocity meters) to calculate volume. Impellers (multijet meters) and turbine meters use similar principles. The large turbine meters are used in high-volume pipes.

Newer meters use electromagnetic energy or ultrasonic transducers to measure flow in large-volume situations.

Different types of meters are most accurate for low, medium and high-flow applications. The low volume of residential usage is most accurately measured by the positive displacement or multijet meters.

Meters are most often made of bronze or brass and plastic and are spliced into a pipe on an inside surface near where the water enters the residence from the supplier.



For more information:

The City of Trenton values the water utility's customers and works hard to ensure their satisfaction. If you have questions or comments about this report, please call our Water Quality Office at 609-989-3216 between 8:00 A.M. and 3:00 P.M., or contact the following sources of information:

New Jersey Department of Environmental Protection
Bureau of Safe Drinking Water
609-292-5550
www.state.nj.us/dep/watersupply

U.S. Environmental Protection Agency
Safe Drinking Water Hotline
1-800-426-4791
www.epa.gov/safewater

Este inform contiene informacion muy importante sobre su aqua beber.

A HISTORY OF WATER METERS

Water meters are essential and their history dates back to the early 1900s when engineers began to design and build them to be used throughout water systems across the world. The benefits of water meter devices range from their ability to help in the detection of leaks to their ability to give the consumer and utility information in reference to the water usage within a given network.

The origin of water meters goes back over 100 years with two separate beginnings. The National Meter Company was formed in Brooklyn, New York in 1870. This company was responsible for the production of the L.H. Nash disc meters and Empire piston meters.

Then in 1886 the Pittsburg Meter Company was founded, by George Westinghouse; later this company joined another to form Pittsburgh Equitable Meter Company in 1927, relocating to Brooklyn, New York. Pittsburgh Equitable produced several types of meters such as: Keystone compound meters, Eureka "A" turbine meters, Arctic and Tropic meters.

In 1945, the manufacturer was purchased by Willard F. Rockwell and renamed Rockwell Manufacturing Company who had a special interest in the water meters and the people who built them. In fact, Rockwell had the facility moved to Uniontown in 1953 where the brand new meter was revolutionized and called the SR (sealed register) meter. This meter was put into production and to date over 40 million SR meters are in service through several countries around the world including the United States.

The facility expanded and designed many types of meters including the SRII in 1985 which is an upgraded piston type water meter, including electronic encoding capabilities and state of the art reading and billing capabilities.

In 1989 the company became Sensus and this is the main meter used by Trenton Water Works.

Trenton Water Works has entered into an Administrative Consent Order (ACO) with the New Jersey Department of Environmental Protection to cover the finished water reservoir. Under the ACO the construction of the cover is scheduled to be completed by July 30, 2019.

SUSCEPTIBILITY RATINGS FOR TRENTON WATER DEPARTMENT SOURCES

The table below illustrates the susceptibility ratings for the seven contaminant categories (and radon) for each source in the system. The table provides the number of wells and intakes that rated high (H), medium (M), or low (L) for each contaminant category. For susceptibility ratings of purchased water, refer to the specific water system's source water assessment report.

The seven contaminant categories are defined at the bottom of the page. DEP considered all surface water highly susceptible to pathogens, therefore all intakes received a high rating for the pathogen category. For the purpose of 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 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, DEP may customize (change existing) monitoring schedules based on the susceptibility ratings.

	Pathogens			Nutrients			Pesticides			Volatile Organic Compounds			Inorganics			Radio-nuclides			Radon			Disinfection Byproduct Precursors		
Sources	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L
Wells – 0																								
GUDI – 0																								
Surface water intakes – 1	1				1			1			1			1			1			1			1		

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.

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

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

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

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.

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

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

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

the susceptibility ratings.

SOURCE WATER ASSESSMENT

Trenton Water Works also has access to purchased groundwater as an emergency water source. This water source was not evaluated during the source water assessment because it is only an emergency water source.

If you have questions regarding the source water assessment reports or summaries please contact the Bureau of Safe Drinking Water at 609.292.5550 or visit www.nj.gov/dep/watersupply/swap/assessments.htm.

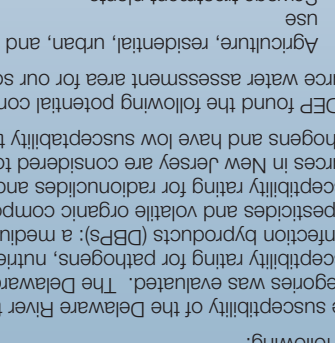
Trenton Water Works draws its source water from the Delaware River through one intake. An assessment of this source water determined the following:

The susceptibility of the Delaware River to eight contaminant categories was evaluated. The Delaware River received a high susceptibility rating for pathogens, nutrients, inorganics, and disinfection byproducts (DBPs); a medium susceptibility rating for pesticides and volatile organic compounds (VOCs); and a low susceptibility rating for radionuclides and radon. All surface water sources in New Jersey are considered to be highly susceptible to pathogens and have low susceptibility to radionuclides and radon.

NJDEP found the following potential contaminant sources within the source water assessment area for our source:

- Agriculture, residential, urban, and commercial/industrial land use
- Sewage treatment plants
- Known contaminated sites
- Solid waste landfills, solid waste resource recovery facilities, solid waste transfer facilities, compost facilities, Class B recycling facilities
- NJPDES permitted facilities
- Underground storage tanks

Trenton Water Works Water Meter Readers



Faces of Trenton Water Works

Trenton Water Works employs approximately 100 people in the areas of water treatment, laboratory analysis, customer service, and facility maintenance. We are proud of our excellent staff who are your neighbors and fellow consumers.