

2010

Water Quality Report



The Safe Drinking Water Act requires that all water utilities issue an annual report on water quality.

This report explains from where your water comes, how it is treated to make it safe for drinking, and how it compares to the Environmental Protection Agency (EPA) and New Jersey Department of Environmental Protection (NJDEP) standards.

Township of Wayne, Division of Water
201 Dey Road
Wayne , NJ 07470
973-694-5090

May 2010
PWSID#1614001

IS MY WATER SAFE?

Last year, as in past years, your tap water met all U.S. Environmental Protection Agency (EPA) and State drinking water health standards. The Township of Wayne vigilantly safeguards its water supplies and once again we are proud to report that our system has not violated a maximum contaminant level or any other water quality standard.

WHY ARE THERE CONTAMINANTS IN MY DRINKING WATER?

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 at 1-800-426-4791.

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.

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, the 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.

Lead

The action level for lead in drinking water is 15 ppb or 0.015 milligrams per liter (mg/l). The EPA requires Water Suppliers to take action to reduce lead levels if the 90th percentile sample taken is above the 15ppb action level. The original samples taken in Wayne

showed that the 90th percentile sample at the consumers tap had lead levels of 18ppb at that time.

The concentration of lead in the water leaving the NJDWSC treatment facility is far below the action level of 15ppb. Lead in drinking water is most likely caused by lead pipes or lead solder and fixtures in a home's plumbing and not from the water supply itself. As the pipes corrode over time, lead is released from the pipes into a home's drinking water.

The NJDWSC studied this problem and determined that introduction of a corrosion inhibitor into the water distribution system would reduce lead levels in drinking water at consumer taps. This process began in the fall of 2001.

Since the addition of the corrosion control inhibitor to the water, the water sampling data has shown that the lead levels have been decreased to below the action level. Sampling will continue in the future to ensure that the lead level in the drinking water stays below the action level.

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 Township of Wayne 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 drinking 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 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

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/Center for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

STORMWATER POLLUTION

Pollution on streets, parking lots and lawns is washed by rain into storm drains, which flow into streams and rivers and eventually into our drinking water supplies. Through storm water, fertilizer, oil, pesticides, detergents, pet waste, grass clippings and other debris can end up in our drinking water supplies.

As part of New Jersey's initiative to keep our water clean and plentiful and to meet federal requirements, Wayne and other public agencies must adopt ordinances prohibiting various activities that contribute to stormwater pollution. Breaking these rules can result in fines and penalties.

As a resident or business, it is important to know what you can do to protect our water:

[Limit your use of fertilizer and pesticides.](#)

- Do a soil test to see if you need fertilizer
- Do not apply fertilizers if heavy rain is predicted
- Look to alternatives to pesticides
- If you use fertilizers and pesticides, follow the instructions on the label about how to correctly apply and make sure you properly store or discard any unused portions

[Properly use and dispose of hazardous products](#)

- Hazardous products include some household and commercial cleaning products, lawn and garden care products, motor oil, antifreeze and paints.
- Do not pour any hazardous products down a storm drain. Recycle these items at the County Household Hazardous Waste Collection.

If you need further information or have any questions, you may contact any one of the following:

NJDEP Bureau of Safe Drinking Water

609-292-5550

Passaic County Health Department

973-881-4396

Wayne Township Health Department

973-694-1800, Extension 3243

Wayne Township Water Division

973-694-5090

WHERE DOES YOUR WATER COME FROM?

The Township of Wayne gets its drinking water from the North Jersey District Water Supply Commission (NJDWSC). The NJDWSC takes water from the Wanaque and Monksville Reservoirs and also has the capability to pump water from the Pompton and Ramapo Rivers up into the Wanaque Reservoir as needed. Wayne also has an emergency connection to Newark Water.

The New Jersey Department of Environment Protection (NJDEP) has completed and issued the Source Water Assessment Report and Summary for our 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 source water assessment performed on our two sources, North Jersey District Water Supply and Newark Water, determined the following:

- The five NJDWSC surface water intakes were rated highly susceptible to pathogens, nutrients, inorganics and disinfectant byproduct precursors. The five intakes had a

medium susceptibility to volatile organic compounds and a low susceptibility to both radionuclides and radon. Two of the five intakes have medium susceptibility to pesticides, while the other three were considered to have low susceptibility.

- The single Newark Water intake was highly susceptible to pathogens, inorganics and disinfection byproduct precursors. The intake had low susceptibility to nutrients, pesticides, volatile organic compounds, radionuclides and radon.

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.

A listing of potential contaminant sources within the source water assessment areas for our sources is available within the Source Water Assessment Report. If you have any further 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.

2010 Water Quality Report

The table below lists all the drinking water analytes that were detected during calendar year 2009. The presence of these analytes in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from January 1, 2009 to December 31, 2009. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year.

Primary Standards - Federal drinking water standards based on human health criteria

Inorganic Compounds	NJDWSC Result	Maximum Result	Minimum Result	Federal/ State MCL	Violation	MCLG	Typical Source of Contaminant
Arsenic (ppb)	0.20	0.20	---	10/5	No	---	Erosion of natural deposits, runoff from glass & electronics production
Barium (ppm)	0.010	0.010	---	2/2	No	2	Erosion of natural deposits
Fluoride (ppm)	0.029	0.029	---	4/1.2	No	---	Erosion of natural deposits
Mercury (ppb)	0.038	0.038	---	2	No	---	Erosion of natural deposits, Discharge for refineries.
Nitrate (ppm as nitrogen)	0.21	0.21	---	10/10	No	10	Runoff from factories or cropland Runoff from fertilizer use

Lead and Copper (2008)	90th Percentile	Samples >AL	Number of Samples	AL	Violation	MCLG	Typical Source of Contaminant
Lead (ppb)	2	3	32	15	No	0	Corrosion of household plumbing
Copper (ppm)	0.050	0	32	1.3	No	1.3	Corrosion of household plumbing

Turbidity	NJDWSC Result	Maximum Result	Minimum Result	Federal/ State MCL	Violation	MCLG	Typical Source of Contaminant
Turbidity (NTU)	0.15 (highest single measurement)	0.15	100% (lowest monthly % meeting turbidity limits)	<5% of samples exceed 0.3 NTU	No	NS	Soil run-off Turbidity is the measure of the particulate matter or "cloudiness" of the water. High turbidity can hinder the effectiveness of disinfectants.

Total Organic Carbon (TOC)	NJDWSC Result	Maximum Result	Minimum Result	Federal/ State MCL	Violation	MCLG	Typical Source of Contaminant
Amount Removed	35.38%	45.55%	24.85%	35%	No	NA	Naturally present in the environment

Microbiologicals	NJDWSC Result	Maximum Result	Minimum Result	Federal/ State MCL	Violation	MCLG	Typical Source of Contaminant
Total Coliforms - NJDWSC out of 2145 samples	0.55%	0.55%	0.00%	<5%	No	0	Naturally present in the environment
Total Coliforms - Wayne out of 781 samples	0.00%	0.00%	0.00%	<5%	No	0	Naturally present in the environment
Fecal Coliforms and E. coli	0	0	0	0	No	0	Human and animal fecal waste

Organic Compounds (Running Annual Average)	NJDWSC Result Average	Maximum Result	Minimum Result	Federal/ State MCL	Violation	MCLG	Typical Source of Contaminant
Total Trihalomethanes (ppb)	61	80	53	80	No	NS	By-product of disinfection
Haloacetic Acids (ppb)	33	36	31	60	No	NS	By-product of disinfection

Regulated Disinfectant	NJDWSC Result Annual Average	MRDL	MRDLG
Chlorine (ppm)	1.09	4.0 as Cl ₂ ppm	4 ppm

Secondary Standards - Related to the aesthetic quality of drinking water, not health related

Secondary Compounds	NJDWSC Result	Federal/ State MCL	Violation
Alkalinity (ppm)	30.2	NS	No
Aluminum (ppm)	0.025	≤0.2	No
Chloride (ppm)	46.1	≤250	No
Free Chlorine Residual (ppm)	1.09 (annual average)	≥0.2	No
Color (CU)	2	≤10	No
Hardness (ppm)	56	50-250	No
Iron (ppm)	0.011	≤0.3	No
Manganese (ppm)	0.0009	≤0.05	No
pH (units)	8.01	6.5-8.5	No
Sodium (ppm)	24.7	≤50	No
Sulfate (ppm)	10.5	≤250	No
Total Dissolved Solids (ppm)	131	≤500	No
Zinc (ppm)	0.009	≤5	No

Frequently Asked Questions

Is Wayne's drinking water hard or soft?

The hardness in Wayne's drinking water is 56 ppm or 3.3 grains of hardness. This is considered soft water.

Is fluoride added to Wayne's drinking water?

No. Fluoride is not added to Wayne's drinking water.

Does Wayne test drinking water at private homes or buildings?

No. Wayne Township does not perform water testing at private homes or businesses. To have your drinking water tested, contact a private water sampling laboratory.

Public Comments on Drinking Water

Wayne Township Council Meetings are held at 8:00pm on the 1st and 3rd Wednesday of each month. Comments and questions from the public are allowed during the public portion of the council meeting.

Definitions:

[Action Level \(AL\)](#) - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

[Maximum Contaminant Level \(MCL\)](#) - 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 \(MCLG\)](#) - The level of contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

[Maximum Residual Disinfectant Level \(MRDL\)](#) - The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for the control of microbial contaminants.

[Maximum Residual Disinfectant Level Goal \(MRDLG\)](#) - 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.

[Inorganic Compounds](#) - Chemicals associated with minerals and metals.

[Microbiologicals](#) - Microorganisms such as bacteria, viruses and protozoa, which may be potentially harmful. These organisms may occur naturally or can be introduced into the environment from sewage treatment plants, septic systems and runoff.

[Organic Compounds](#) - Chemicals containing carbon which are associated with living matter.

[TT - Treatment Technique](#) - A required process intended to reduce the level of a contaminant in drinking water.

[CU](#) - Color Unit

[ml](#) - milliliters

[NA](#) - Not Applicable

[NS](#) - No Standard

[NTU](#) - National Turbidity Unit

[ppb](#) - parts per billion

[ppm](#) - parts per million

[pCi/l](#) - Picocuries per liter

[Avg](#) - average