



# BOROUGH OF PARK RIDGE BOARD OF PUBLIC WORKS ANNUAL WATER QUALITY REPORT JUNE 2010

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The Park Ridge Water Department is pleased to present this year's Annual Water Quality Report. This report details the results of our water quality testing performed in 2009. It is designed to inform you about the quality water and services we provide to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water.

In 2009, we analyzed over 2,500 samples to ensure that the 700 million gallons of water we pump, treat, and deliver meets all water quality safety standards. Once again, we are pleased to report that our water meets or exceeds all federal, state and OUR OWN drinking water standards.

The Board of Public Works is committed to delivering a safe and reliable supply of drinking water to the 5,000 customers in Park Ridge and Woodcliff Lake. This has been the consistent goal since the water utility began its operation in the 1920's.



The Federal Safe Drinking Water Act requires that all water utilities issue an annual Consumer Confidence Report. This water quality report details where our water comes from, what it contains, and gives important information about water and health.

This publication is very important because informed customers are the best allies in maintaining safe drinking water. Regular meetings of the Park Ridge Board of Public Works occur on the first and third

Wednesday of each month, at 8:00 PM at the Park Ridge Utility Department, 15 Sulak Lane, Park Ridge. The public is welcome.

If you have any questions about your water please call us at (201) 391-2113. Additional information is also available on the Borough's website at [www.parkridgeboro.com](http://www.parkridgeboro.com). You may also call the Environmental Protection Agency safe drinking water hotline at (800) 426-4791 or find it on EPA's web site at [www.epa.gov](http://www.epa.gov).

## Where does our water come from?

Our water is supplied by groundwater from 19 wells located throughout Park Ridge and Woodcliff Lake. This water is drawn from the Brunswick Aquifer. In addition, we have three water storage tanks and five booster stations which can transfer water between different parts of the distribution system.

### IMPORTANT PHONE NUMBERS

Park Ridge Water Department William Hahn - Licensed Operator	<b>201-391-2113</b>	NJDEP Bureau of Safe Drinking Water	<b>1-609-292-5550</b>
To report water emergencies during non-business hours	<b>201-391-5400</b>	New Jersey Board of Public Utilities	<b>1-800-624-0241</b>
New Jersey State Department of Environmental Protection (NJDEP)	<b>1-609-292-3950</b>	Environmental Protection Agency's Safe Drinking Water Hotline	<b>1-800-426-4791</b>

## Drinking Water Quality Table

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 microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Substance	Units	EPA Goal MCLG	EPA Stan- dard MCL	NJDEP Standard MCL	*Park Ridge Detected Level	Park Ridge Range	Major Sources
<b><i>Inorganic Chemicals</i></b>							
Barium	ppm	2	2	2	0.44	0.07 - 0.44	Discharge of drilling waste; discharge from metal refineries; erosion of natural deposits
Nickel	ppb	NA	NA	NA	9.40	2.10-9.40	Erosion of natural deposits
Selenium	ppb	50	50	50	3.00	ND - 3.00	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines.
Nitrate	ppm	10	10	10	3.88	1.1 - 3.88	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Arsenic	ppb	NA	10	5	5.00	ND - 5	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Chromium	ppb	100	100	100	4.50	ND - 4.5	Discharge from steel and pulp mills; Erosion of natural deposits

*(This category contains 11 additional constituents which were not detected)*

### ***Microbiological***

Total Coliform		0	2	2	1	0 - 1	Naturally present in the environment
Fecal Coliform/ <i>E. Coli</i>		0	0	0	0	0	Human and animal fecal waste

*Over 180 samples were collected throughout the year from our distribution system.*

### ***Radionuclides (Well #17 and Well #20 tested in 2008. All other wells tested in 2006)***

Alpha Emitters	pCi/L	0	15	15	4.1	ND - 4.77	Erosion of natural deposits
Combined Radium 226/228	pCi/L	0	5	5	2.5	ND - 4.31	Erosion of natural deposits
Radon (tested 6/28/99)	pCi/L	n/a	n/a	n/a	790	n/a	Erosion of natural deposits

### ***Organic Chemicals***

Methyl Tertiary-Butyl Ether	ppb	70**	n/a	70	2	ND - 2.9	Leaking underground gasoline and fuel oil tanks, gasoline and fuel oil spills
Tetrachloroethylene	ppb	0	5	1	0.04	ND - 0.04	Discharge from factories and dry cleaners
Trichloroethylene	ppb	0	5	1	0.09	ND - 0.09	Discharge from metal degreasing sites and other factories
1,1,1-Trichloroethane	ppb	200	200	30	0.07	ND - 0.07	Discharge from metal degreasing sites and other factories
Total Trihalomethanes (TTHM)	ppb	n/a	80	80	7.55	ND - 15.9	By-product of drinking water disinfection
Five Haloacetic Acids (HAA5)	ppb	n/a	60	60	1.36	ND - 6.08	By-product of drinking water disinfection

\* Park Ridge detected level shows the highest test results used to determine compliance for the year in 2009. For some contaminants, this level is the running annual average of data from the highest entry point. Park Ridge did not exceed any MCL during 2009.

\*\* NJDEP regulated chemical. MCLG is health-based number developed by the NJDEP.

*(This category contains 22 additional constituents which were not detected)*

### **Definitions:**

**MCLG (Maximum Contaminant Level Goal)** - 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

**MCL (Maximum Contaminant Level)** - The highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**NJRUL** - New Jersey Recommended Upper Limit

**ND (non-detects)** - laboratory analysis indicates that the constituent is not present.

**ppm (parts per million)** - one drop in 10 gallons, one minute in two years, or a single penny in \$10,000.

**ppb (parts per billion)** - one drop in 10,000 gallons, one minute in 2,000 years

**pCi/L (picocuries per liter)** - measure of the radioactivity in water

**Action Level** - The concentration of a contaminant which, if exceeded, triggers a treatment or other requirements, which a water system must follow

## Drinking Water Quality Table (continued)

### *Lead and Copper (tested in 2007)*

Substance	Units	Action Level	Number of Samples	90th Percentile	# Samples above the action level	Major Sources
Lead	ppb	15	31	2.2	0	Corrosion of household plumbing systems; erosion of natural deposits
Copper	ppb	1,300	31	471	0	Corrosion of household plumbing systems; erosion of natural deposits

### *Secondary Standards - related to aesthetic quality of drinking water*

Substance	Units	NJ RUL	Highest Park Ridge Result	Average Park Ridge Result	Park Ridge Range	Major Sources
Chloride	ppm	250	154	90	45 - 154	Natural Mineral - Road Salt
Hardness	ppm	250	350	256	170 - 350	Natural Mineral
Sodium	ppm	50	116	39	13 - 116	Natural Mineral - Road Salt
Sulfate	ppm	250	99	31	17 - 99	Natural Mineral
Zinc	ppm	5	0.09	0.01	ND - 0.09	Natural Mineral
Total Dissolved Solids	ppm	500	751	466	291-751	Erosion of Natural Mineral Deposits
pH		6.5 - 8.5	8.1	7.53	7.0 - 8.1	Natural Characteristic

**Note:** The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

### What Does This Table Mean?

Our water is tested to ensure that it is safe and healthy. Major Sources shows where this substance usually originates. Range shows the highest and lowest results for the year. Definitions explain the abbreviations used in the table. We ran many tests on our water. Only the listed substances were found.

The Safe Drinking Water Act regulations allow monitoring waivers to reduce or eliminate the monitoring requirements for certain contaminants. We received waivers for asbestos and synthetic organic chemicals because vulnerability assessments were performed and unambiguously showed that our system is not at risk of contamination from these contaminants.

### **PROJECTS WE ARE DOING TO IMPROVE OUR WATER SYSTEM**

- 💧 Replace carbon at the Well #17 (Hertz) treatment facility.
- 💧 Drill and install new replacement well at the Well #3 (Spring Valley Road) pumping facility.
- 💧 Design, permit and bid for new arsenic treatment facility at Well #13 (Wield Court).
- 💧 Bid for and purchase new front line backhoe/loader
- 💧 Update Long Range Engineering Plan
- 💧 Contract for semi-annual leak detection survey.

## NJDEP & EPA HEALTH NOTES

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 stormwater 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 stormwater 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 stormwater runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.
- Lead: 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 Park Ridge 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 or <http://www.epa.gov/safewater/lead>.

- Arsenic: While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.
- Radon: Radon is a radioactive gas that you can't see, taste or smell. At high levels of exposure, it is a known carcinogen. Radon is found throughout the U.S. in soil and can move up through the ground and into a home through cracks and holes in the foundation. It can also get into indoor air when released from tap water used for showering and other household activities. Radon entering the home through tap water will in most cases be a small source of radon in indoor air. If you are concerned about radon in your home, have the air tested. It is inexpensive and easy. There are simple ways to fix a radon problem that are not too costly. Call the EPA Radon Hotline for more information at 1-800-SOS-RADON.
- Sodium: 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.

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 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.

## Source Water Assessment Program

The New Jersey Department of Environmental 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](http://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 19 wells determined the following susceptibility ratings for each of the groundwater supply wells. This table illustrates the susceptibility rating for each individual well and contamination category.

Susceptibility Rating for Drinking Water Sources											
EPTDS ID	Source ID	Source Name	Location	Contaminant Category							
				Pathogens Rating	Nutrients Rating	Pesticides Rating	VOCs Rating	Inorganics Rating	Radionuclides Rating	Radon Rating	DBPs Rating
006	007	Well 1	Park Avenue	M	M	L	H	H	H	H	M
006	009	Well 2	Mill Road	M	M	L	H	H	M	H	M
007	013	Well 3	Spring Valley Road	M	H	L	H	M	M	H	M
008	015	Well 4	Oak Avenue	M	M	L	H	H	H	H	M
009	019	Well 5	Sulak Lane	M	M	L	H	M	H	H	M
009	020	Well 6	Sulak Lane	M	H	M	H	H	M	H	M
009	021	Well 7	Sulak Lane	M	H	M	H	H	M	H	M
009	022	Well 8	Sulak Lane	M	H	L	H	H	M	H	M
016	025	Well 9	Werimus Road	M	H	L	H	M	M	H	M
011	027	Well 10	Glen Road	M	H	M	H	M	H	H	M
012	029	Well 11	Russett Place	M	M	L	H	M	M	H	M
013	031	Well 12	Glendale Road	M	H	L	H	M	M	H	M
014	033	Well 13	Wield Court	M	M	L	H	H	M	H	M
015	035	Well 14	Turrett Street	M	H	M	H	H	M	H	H
016	037	Well 15	Old Mill Road	M	H	L	H	M	M	H	M
017	039	Well 16	Prospect Avenue	M	M	L	H	M	H	H	M
018	041	Well 17	Glenbrook Drive	M	H	L	H	M	M	H	H
020	045	Well 18	New Street	M	M	L	H	H	H	H	H
021	048	Well 19	Ridge Avenue	M	M	L	H	M	M	H	M

\* The NJDEP has not yet performed the source water assessment for Well #20. The susceptibility ratings will be similar to Well #15

**L,M,H:** Low, Medium and High susceptibility

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

**Nutrients:** Common types of nutrients include nitrogen and phosphorous. Common sources include discharge from septic fields, areas where animal waste is stored, and runoff from agricultural and residential land where fertilizers were used.

**Pesticides:** Pesticides are manmade chemicals used to control bacteria, fungi, weeds, rodents, and insects. Common sources of pesticides include land applications (nonpoint source) and manufacturing/distribution centers of pesticides (point source).

**Synthetic Organic Compounds (SOCs):** Sources of SOC's can be point and nonpoint. Common sources include chemical manufacturing plants, pharmaceutical plants, sewage treatment plants, and discharges from contaminated sites. Synthetic organic compounds are manmade.

**Volatile Organic Compounds (VOCs):** Man-made chemicals that are used as solvents, degreasers, and gasoline components. VOCs are the most common organic contaminants in ground water in New Jersey.

**Inorganics:** Mineral-based compounds that are both naturally occurring and manmade. Common sources include discharges from manufacturing plants, releases from contaminated sites, past land uses, and naturally occurring sources. Inorganics include arsenic, cadmium, copper, lead, mercury, and asbestos.

**Radionuclides:** Radioactive substances that are both naturally occurring and manmade, such as radium and radon. Common sources include the decay of naturally occurring minerals, leaching of subsurface material (for example rocks and sedimentary materials) into ground water, and improper disposal of radioactive waste.

**Disinfection Byproduct (DBP) Precursors:** Disinfection byproducts are formed when the disinfectants used to kill pathogens during treatment react with dissolved organic material present in the water.

If a source was 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](mailto:swap@dep.state.nj.us) or 609-292-5550.

- ◆ Wash only full loads in your washing machine, or adjust the water level to reflect the size of the load.
- ◆ Let your pots and pans soak instead of letting the water run while you clean them.
- ◆ Try planting drought-tolerant and regionally adapted plants in areas that are hard to water or that receive little use. This may include narrow strips near sidewalks or driveways and steep hills.
- ◆ Install ultra-low-flush toilets or place a plastic bottle filled with water or sand in your toilet tank to reduce the amount of water used in each flush.
- ◆ Put dye tablets or food coloring in your toilet tank and wait to see if the color appears in the bowl (without flushing). If it does, you have a leak!
- ◆ Turn the faucet off while you shave, brush your teeth and lather up your hands.
- ◆ Take a short shower instead of a bath. While a five minute shower uses a 12 to 25 gallons, a full tub requires about 70 gallons.

**Water Conservation Tips**



Board of Public Works  
 Department of Public Utilities  
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