



# ROCKAWAY TOWNSHIP MUNICIPAL UTILITY 2012 WATER QUALITY REPORT

For the Year 2011

CONSERVING WATER TODAY FOR TOMORROW

Rockaway Township Municipal Utility is proud to present our year 2012 Water Quality Report for drinking water analysis conducted during the 2011 calendar year. Annually we provide this report to you with valuable information about your drinking water. This report demonstrates that Rockaway Township continues to produce safe high quality drinking water for our consumers.

## Where does your water come from?

The Utility currently operates three groundwater treatment plants that draw water from the Stratified Drift Aquifer. Four of the wells are located along Green Pond Road.

We also have four wells located within the Fox Hills Senior Development on Mt. Hope Avenue.

Over the past five years the Utility has averaged pumping 1.40 million gallons of water per day through our treatment plants into our distribution system and water storage tanks. As well, we bulk purchase water daily from the Town of Dover.

Just as bottled water can contain contaminants so can our wells. As it is well known, two of the three township wells were contaminated with volatile organics by private industry back in the early 1980's. Be assured the Township has continued to provide excellent drinking water by utilizing treatment techniques that include air stripping, carbon filtration and chlorine disinfection.

These treatment techniques allow the Utility to provide high quality drinking water, which more than satisfies all State and Federal Standards.

## Security

It is important for the Utility to protect the water supply for our customers. The Utility has made every effort to secure its' facilities from local vandalism as well as terrorist incidents. If you have any security concerns, see people utilizing any fire hydrants, calls upon your house and does not provide proper ID, or if you see any suspicious people around our facilities, please contact the Utility at 1-973-983-2825 or the Police Department at 1-973-625-4000.

## Periodic Fire Hydrant Flushing

At least twice a year and periodically, the Municipal Utility conducts a comprehensive fire hydrant flushing program throughout the water distribution system. Fire hydrant flushing helps remove any sediment from the water mains which assures consistent water quality. The flushing program also ensures that fire hydrants are checked for proper operation in case of a fire.

## Educational Information

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** may come from a variety of sources such as agriculture, urban storm-water runoff, and residential uses.

**Organic Chemical Contaminants** include 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 that 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 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 (1-800-426-4791)

Special Considerations Regarding Children, Pregnant Women, Nursing Mothers, and other Children may receive a slightly higher amount of a contaminant present in the drinking water than do adults, based on body weight, because they may drink a greater amount of water per pound of body weight than 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 cases of lead and nitrate, effects on infants and children are the health endpoints upon which the standards are based.

### Susceptibility Ratings for Rockaway Township 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 this 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.

Further information on the Source Water Assessment Program can be obtained by logging onto NJDEP's source water assessment web site at [www.state.nj.us/dep/swap](http://www.state.nj.us/dep/swap) or by contacting NJDEP's Bureau of Safe Drinking Water at 1-609-292-5550.

### SUMMARY OF SUSCEPTIBLE RATINGS FOR ROCKAWAY TOWNSHIP

	Pathogens			Nutrients			Pesticides			Volatile Organic Compounds			Inorganics			Radio-nuclides			Radon			Disinfection Byproduct Precursors					
	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L			
<b>Wells – 8</b>		4	2	6					6	3		3			2	4			3	3		3	3		2	4	
<b>GUDI-0</b>																											
<b>Surface Water Intakes -0</b>																											

- 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 ranium.
  - 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.
- 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.

## Waivers

The Safe Drinking Water Act regulations allow monitoring waivers to reduce or eliminate the monitoring requirements for asbestos, volatile organics, and synthetic organic chemicals. Rockaway Township has received monitoring waivers for Asbestos and we are awaiting determination of our waiver for synthetic organic chemicals.

## Water Quality

With in this report, we have provided you with a copy of our 2011 water quality testing data. As you can see, Rockaway Township is making every effort to ensure it continues to provide high quality potable drinking water to our customers.

## Council Meetings & Information Sites

Rockaway Township Council Meetings are held on the First Tuesday and the Last Tuesday of every month except for Holidays and special Election Days. For more information on Council Meetings:  
Please call our Township Clerk at 1-973-983-2838

## Water System Improvements

Rockaway Township Municipal Utility continually strides to improve the water quality and service to our customers. In 2011 we installed several new pieces of electrical equipment and upgraded our telemetry systems.  
The Utility also conducts an enhanced preventive maintenance program on all our pumps, motors, and electrical control panels and communications system annually to ensure for a better operation.

## Terminology

### 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 a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

### Action Level

The concentration of a contaminant which if exceeded, triggers treatment or other requirements which a water system must follow;

### Treatment Technique

A required process intended to reduce the level of a contaminant in drinking water. (air stripping)

### NJDEP

New Jersey Department of Environmental Protection

### EPA

Environmental Protection Agency

### Parts Per Billion

(ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.00 dollars.

### Part Per Million

(ppm) or Milligrams per liter (mg/l)- one part per million corresponds to one minute in two years, or a single penny in \$10,000.00 dollars.

### Maximum Residual Disinfectant Level

(MRDL): 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.”



### Maximum Residual Disinfectant Level Goal

(MRDLG): “Maximum Residual Disinfectant Level Goal (MRDLG): The level of 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 contaminants.”

## **Rockaway Township Municipal Utility 2011 Water Quality Data**

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).

<i>Contaminant</i>	<i>Violation</i>	<i>Level Detected</i>	<i>Units of Measurement</i>	<i>MCLG</i>	<i>MCL</i>	<i>Likely Source of Contamination and Health Effects Language</i>
<b>TTHM's Total Trihalomethanes</b>	No	0.5 – 10.5 Annual Average 9ppb	ppb	n/a	80	By-product of drinking water chlorination
<b>HAA's Total Haloacetic Acid</b>	No	0.5 – 3.50 Annual Average 4.0 ppb	ppb	n/a	60	By-product of drinking water chlorination
<b>Nitrate (as nitrogen)</b>	No	1.30- 1.65 Highest Level Detected 1.65ppm	ppm	10	10	Run off from fertilizer use, leaching from septic tanks, sewage; erosion of natural deposits
<b>Barium</b>	No	.005 - .023 Highest Level Detected .023ppm	ppm	2.0	2.0	Discharge of drilling waste; Discharge from metal refineries; erosion of Natural Deposits
<b>Lead</b>	No	Result at 90 <sup>th</sup> Percentile .002ppm	ppm		Action Level – .015 ppm	<b>No sites exceeded the Action Level for Lead</b>  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. Rockaway Township is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been setting for several hours, you can minimize your potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using the 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 is available from the Safe Drinking Water Hotline or at <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a> .
<b>Copper</b>	No	Result at 90 <sup>th</sup> Percentile .104ppm	ppm		Action Level – 1.3ppm	<b>No sites exceeded the Action Level for Copper</b>  Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
<b>Fluoride</b>	No	Range .09 - .22 Highest Level Detected 0.22ppm	ppm	4.0	4.0	Erosion of Natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
<b>Chromium</b>	No	Range Non Detected – 1.0 ppb Highest Level Detected 1.0ppb	ppb			Discharge from Steel and pulp mills, erosion of natural deposits
<b>Cyanide</b>	No	Range Non Detected – 2.0ppb Highest Level Detected 2.0ppb	ppb			
<b>Sodium</b>	No	Range 11.3 – 52.1 ppm Highest Level Detected 52.1ppm	ppm	N/A	50.0	FOR 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 of concern to individuals on a sodium restricted diet.”
<b>Chlorine Residuals</b>	No	Average Range .162	ppm	4.0 ppm	4.0ppm	Calcium Chloride, Tablet Chlorine utilized for Disinfection

<b>Total Coliform Bacteria</b>	<b>Yes</b>	7 Positive Detected	Positive Sample	0	1 Positive Monthly Sample	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.
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**The Rockaway Township Municipal Utility News Page**

In the News, Rockaway Township has developed and published a new web site that allows for more detailed information to be obtained as well as a program that allows residents to send in Service Requests.

Along with the new web site the **Municipal Utility** has several pages on water the Utility and WATER CONSERVATION MEASURES.

[www.rockawaytownship.org](http://www.rockawaytownship.org)

**Public Notice for Lead & Copper Failure to Sample**

The United States Environmental Protection Agency (EPA) and Rockaway Township Municipal Utility are concerned about lead in your drinking water. During the June 2011 through September 2011 sampling round the Township did collect the required amount of samples. However, one sample was collected three days after the sampling cycle ended. Specifically, the sampling cycle ended on Friday September 31, 2011 and one sample that was collected was collected on Monday October 3, 2011 by a homeowner. This placed the Utility out of compliance for timing only and at no time did we exceed the Action Level for Lead & Copper.

The Utility has made modifications to its sampling procedures to ensure this does not happen again.

Additionally, the Lead & Copper Sampling that was conducted showed that the Township did not exceed the Action Levels for Lead & Copper.

If you have any questions about how we are carrying out the requirements of the lead regulation please give me Robert Sheard – Superintendent a call at 1-973-983-2876.

EPA's Drinking Water Web Site ( <a href="http://www.epa.gov/safewater">www.epa.gov/safewater</a> )	Safe Drinking Water Hotline (1-800-426-4791)
Rockaway Township Municipal Utility Superintendent, Robert Sheard at: 1-973-983-2825. Water@rockawaytownship.org Rockaway Township Public Water Supply ID = 1435002	New Jersey Bureau of Safe Drinking Water (1-609-292-5550)

Sweep your driveway, do not wash it

Use automatic nozzles on hoses

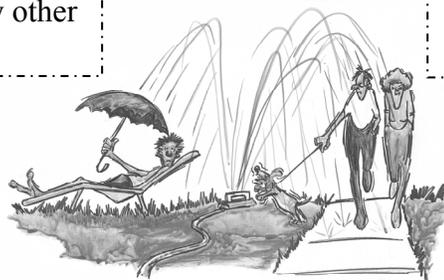
Water plants with  
Rain water

Remember, you do not have to water  
your lawn every day.

Only water when your lawn shows  
signs of needing water or every other  
day

Check your toilets for leaks by  
putting food coloring into the closet  
(back of toilet).

If the water in the bowl changes  
color, you have a leak.





SINCE 1844

ROCKAWAY  
TOWNSHIP

MUNICIPAL UTILITY

SIXTY FIVE MOUNT HOPE ROAD  
ROCKAWAY, NEW JERSEY 07866-1699

Bulk Rate  
U.S. Postage  
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Permit No. 616  
Rockaway, NJ 07866