

### *About Newport Water...*

The original water works in Newport was started in 1876. The Newport Water Works Company was incorporated in 1881, and was succeeded by the Newport Water Corporation in 1929. Since 1936, the City of Newport has owned and operated the system. The City's legal authority to own and operate the system is stated in the City Charter and was established through RIGL 46-13-12.1. The Newport Water Division (NWD) is a division within the City of Newport's Utilities Department and is responsible for the operation and maintenance of the system. The NWD operates as an enterprise fund and is independent of the overall City budget. The NWD is regulated by the Rhode Island Public Utilities Commission.

### *Newport's Water Supply*

**Newport Water** draws its raw water supply from a system of nine surface reservoirs: North Pond, South Pond, Paradise Pond, Gardiner Pond, St. Mary's Pond, Sisson Pond, Lawton Valley Reservoir, Nonquit Pond and Watson Reservoir. These reservoir systems are located in a basin area totaling 18.625 square miles or 11,920 acres of rural, forested and some developed lands. The reservoirs are interconnected through a complex network of pipelines and pumping stations. Newport Water has purchased 350 acres of conservation easements to protect raw water quality of the reservoirs.

The water is treated at either Station 1 Plant in Newport or the Lawton Valley Plant in Portsmouth. The combined capacity of the plants is 13 million gallons of treated water per day.

### *Newport's Distribution System*

**Newport Water's** distribution system consists of water mains of various size, material and age which carry water throughout the City of Newport, Town of Middletown and a portion of the Town of Portsmouth to each individual customer. In addition, Newport Water provides water wholesale to the Portsmouth Water and Fire District and the U.S. Navy for distribution within their systems. Newport Water maintains within our system approximately 14,700 services, 160 miles of water main, 3,300 valves and 1,000 hydrants.

PRSR STD  
U.S. POSTAGE  
PAID  
NEWPORT, RI  
PERMIT #286

CITY OF NEWPORT  
WATER DIVISION  
70 Halsey Street  
Newport, RI 02840

# *City of Newport*

## *Department of Utilities*

### *Water Division*



## *2007*

# *CONSUMER CONFIDENCE*

## *REPORT*

**Este relatório contém informação importante sobre a qualidade da água na sua comunidade. Pergunta a quem saiba traduzir ou fala com alguém que compreenda o que está escrito.**

**Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, o hable con alguien que lo entienda.**

April 2008

This notice is being sent to you by the Newport Water Division  
State Water System ID # 1592010

## IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

### **Newport Water Division Did Not Meet a Monitoring Requirement in 2007**

The City of Newport water system violated a drinking water monitoring standard over the past year. Although this was not *an emergency*, as our customers, you have the right to know what happened and what we did to correct the situation.

We are required to monitor your drinking water for specific contaminants on a regular basis. Included in this monitoring is daily sampling for chlorine dioxide. We did not collect one (1) sample for chlorine dioxide on August 25, 2007.

Results of regular monitoring are an indication of whether or not our drinking water meets health standards. On August 25, 2007, we did not properly monitor for chlorine dioxide and therefore cannot be sure of the quality of our drinking water during that time.

#### **What should I do?**

There is nothing you need to do at this time.

#### **What happened?**

At each Water Treatment Plant, the Newport Water Division introduces chlorine dioxide into its raw water stream for pre-oxidant, disinfection, taste and odor, and trihalomethane control. Chlorine dioxide is produced by combining chlorine gas and sodium chlorite via a chlorine dioxide generator.

The operation of the chlorine dioxide generator at the Lawton Valley Water Treatment Plant (LVWTP) failed in the morning on August 25, 2007. The plant operators switched to the use of all chlorine gas at this time, until the generator was repaired approximately 12 hours later. One of the Rhode Island Department of Health sampling and monitoring requirements is to sample for chlorine dioxide once per day for every day the plant is producing water. The plant operators did not take the required sample for chlorine dioxide on August 25, 2007. The failure to take the daily sample is a violation of the monitoring requirements. This monitoring violation is a Tier 3 violation, requiring public notice be issued no later than one year after the violation is identified.

During the timeframe the LVWTP's chlorine dioxide generator was off-line on August 25, 2007 there was no interruption of the application to chlorine to the system and the free chlorine residuals in the finished water remained within the set standards. It is the position of the Newport Water Division that treatment effectiveness was not compromised during this timeframe.

Operations at Newport Water Division's Station 1 Treatment Plant in Newport were not affected during this timeframe. Station 1 was operating in full compliance with all rules and regulations.

#### **What is being done?**

The treatment plant operators have been retrained on the proper sampling of all required laboratory analysis which must be performed on a daily basis. This training will minimize any reoccurrence of this sampling error.

For more information, please contact Kenneth Mason, Deputy Director Utilities - Engineering at (401) 845-5614 or 70 Halsey Street, Newport, RI 02840.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

## Detected Contaminants Table

This table shows the results of our combined water-quality analyses for both Station 1 - Newport and Lawton Valley - Portsmouth systems from Jan. 1, through Dec. 31, 2007. Every regulated contaminant that we detected in the water, even in the most minute traces, is listed here along with the highest levels allowed by regulation (MCL), the ideal goals for public health, the amounts detected, the usual sources of such contamination, footnotes explaining our findings and a key to units of measurement.

<u>Microbiological Contaminants</u>	<u>Period</u>	<u>Unit</u>	<u>MCL</u>	<u>MCLG</u>	<u>Detected Level</u>	<u>Range</u>	<u>Major Sources</u>	<u>SDWA Violation</u>
Turbidity ①	2007	NTU	TT	n/a	0.42	96.39%	Soil runoff	No
Total Organic Carbon	2007	removal ratio	TT	n/a	1.08	0.22 - 1.54	Naturally present in environment	No
<u>Inorganic Contaminants</u>	<u>Period</u>	<u>Unit</u>	<u>MCL</u>	<u>MCLG</u>	<u>Detected Level</u>	<u>Range</u>	<u>Major Sources</u>	<u>SDWA Violation</u>
Arsenic *	2007	ppb	10	0	3	ND - 3	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.	No
Barium *	2007	ppm	2	2	0.012	0.006 - 0.012	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits	No
Cadmium *	2007	ppb	5	5	2	ND - 2	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints.	No
Copper ②	2007	ppm	AL=1.3	1.3	0.034	0	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.	No
Fluoride ③	2007	ppm	4	4	1.41	0.13 - 1.41	Water additive which promotes strong teeth	No
Lead ②	2007	ppb	AL=15	0	5	2	Corrosion of household plumbing systems; erosion of natural deposits.	No
Nitrate *	2007	ppm	10	10	0.96	0.18 - 0.96	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits.	No
<u>Synthetic Organic Contaminants Including Pesticides and Herbicides</u>	<u>Period</u>	<u>Unit</u>	<u>MCL</u>	<u>MCLG</u>	<u>Detected Level</u>	<u>Range</u>	<u>Major Sources</u>	<u>SDWA Violation</u>
Benzo(a)pyrene(PAH) *	2007	ppt	200	0	140	ND - 140	Leaching from linings of water storage tanks and distribution lines.	No
Di(2-Ethylhexyl)Phthalate *	2007	ppb	6	0	1.00	ND - 1.00	Discharge from rubber and chemicle factories	No
Simazine *	2007	ppb	4	4	0.15	ND - 0.15	Herbicide runoff	No
<u>Volatile Organic Contaminants</u>	<u>Period</u>	<u>Unit</u>	<u>MCL</u>	<u>MCLG</u>	<u>Detected Level</u>	<u>Range</u>	<u>Major Sources</u>	<u>SDWA Violation</u>
Total Trihalomethanes (TTHM) ④	2007	ppb	80	n/a	78.86	37.30 - 108.80	By-product of drinking water chlorination	No
Haloacetic Acid 5	2007	ppb	60	n/a	21.39	0.00 - 33.90	By-product of drinking water chlorination	No
<u>Disinfection By-products</u>	<u>Period</u>	<u>Unit</u>	<u>MCL</u>	<u>MCLG</u>	<u>Detected Level</u>	<u>Range</u>	<u>Major Sources</u>	<u>SDWA Violation</u>
Chlorite	2007	ppm	1	0.8	0.393	<0.05 - 0.409	By-product of drinking water disinfection	No
<u>Disinfectants</u>	<u>Period</u>	<u>Unit</u>	<u>MRDL</u>	<u>MRDLG</u>	<u>Detected Level</u>	<u>Range</u>	<u>Major Sources</u>	<u>SDWA Violation</u>
Chlorine	2007	ppm	4	4	0.82	0.05 - 2.20	Water additive used to control microbes	No
Chlorine Dioxide	2007	ppb	800	800	770	20 - 770	Water additive used to control microbes	No
<u>Unregulated Contaminant Monitoring</u>	<u>Period</u>	<u>Unit</u>	<u>MCL</u>	<u>MCLG</u>	<u>Detected Level</u>	<u>Range</u>	<u>Major Sources</u>	<u>SDWA Violation</u>
Sodium	2007	ppm	n/a	n/a	24.5	13.30 - 24.50	Naturally occurring; road runoff; contained in water treatment chemicals; EPA regulations require us to monitor this contaminant while EPA considers setting a limit on it.	No

### **Water Quality Table Footnotes:**

① 0.42 NTU was the highest single turbidity measurement recorded. The lowest monthly percentage of samples meeting the turbidity limit was 96.39%. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration.

② Detected level indicates the 90<sup>th</sup> percentile value of the 30 samples taken. The Range indicates the number of samples above the action level.

③ Newport Water adds fluoride to its treated water as an aid in dental cavity prevention in young children.

④ Some people who drink water containing TTHM's in excess of the MCL over many years may experience problems with their liver, kidneys or central nervous system and may have an increased risk of contracting cancer. Detected level is based on the highest four-quarter average.

\* Sampled and monitored at raw water supply reservoirs prior to treatment.

### Key to Table

AL	= Action Level
MCL	= Maximum Contaminant Level
MCLG	= Maximum Contaminant Level Goal
MRDL	= Maximum Residual Disinfectant Level
MRDLG	= Maximum Residual Disinfectant Level Goal
NTU	= Nephelometric Turbidity Units
pCi/L	= pico Curies per liter (a measure of radio-activity)
ppm	= parts per million, or milligrams per liter (mg/l)
ppb	= parts per billion, or micrograms per liter (ug/l)
ppt	= parts per trillion, or nanograms per liter
TT	= Treatment Technique
n/a	= Not applicable

### Definitions

Maximum Contaminant Level or MCL: The highest level of a contaminant that is allowed in drinking water.

Maximum Contaminant Level Goal or MCLG: The level of a contaminant in drinking water below which there is no known or expected risk to health.

Maximum Residual Disinfectant Level or MRDL: The highest level of a disinfectant allowed in drinking water.

Maximum Residual Disinfectant Level Goal or MRDLG: The level of a drinking water disinfectant below which there is no known or expected risk to health.

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirement that a water system must follow.

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

The data presented in this report is from the most recent testing done in accordance with regulations. The RI Department of Health (RIDOH) allows NWD 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.

### Source Water Assessments

The University of Rhode Island, in cooperation with RIDOH and other state and federal agencies, has assessed the threats to Newport Water's water supply sources. The assessment considered the intensity of development, the presence of businesses and facilities that use, store or generate potential contaminants, how easily contaminants may move through the watersheds, and the sampling history of the water. The assessment results will be used to plan source protection efforts in the future.

Our monitoring program continues to assure that the water delivered to your home is safe and wholesome. However, the assessment found that our water sources on Aquidneck Island and in Little Compton and Tiverton are moderately susceptible to contamination. This average ranking for the entire system is based on land use and existing water quality. Because most land in source water areas is privately owned, the focus of the assessments has been on identifying threats from land use so local governments, residents and water suppliers can take action to protect valuable drinking water supplies. This means monitoring and protection efforts are especially important to assure continued water quality. The complete Source Water Assessment Report is available at our office or by calling the RIDOH, Office of Drinking Water Quality at (401) 222-6867. The assessments are also made available at the RIDOH and URI web site at [www.healthri.gov](http://www.healthri.gov) or [www.uri.edu/ce/wq/program/html/swap/reports.html](http://www.uri.edu/ce/wq/program/html/swap/reports.html).

### Cryptosporidium in Drinking Water:

*Cryptosporidium* is a microbial pathogen found in surface water throughout the U.S. Although filtration removes *Cryptosporidium*, the most commonly used filtration methods cannot guarantee 100% removal. Consuming water with *Cryptosporidium*, may cause *cryptosporidiosis*, an abdominal infection with symptoms including nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease in a few weeks. However, immunocompromised people are at greater risk of developing life threatening illness. We encourage immunocompromised individuals to consult their doctor regarding appropriate precautions to avoid infection. *Cryptosporidium* must be ingested to cause disease, and it may be spread through means other than drinking water. EPA adopted the Long Term 2 Enhanced Surface Water Treatment Rule (LT2 rule) on January 5, 2006 to control microbial contaminants. The LT2 rule requires the NWD to monitor our source water for 24 months, calculate an average *Cryptosporidium* concentration, and use the results to determine if our source water is vulnerable to contamination and may require additional treatment. NWD will be submitting our 24 month monitoring results to RIDOH and EPA by June 1, 2008. Based on the results of the monitoring, if necessary, any additional treatment improvements must be completed by September 30, 2013. The results through 2007 indicate additional treatment upgrades at either plant probably will not be required. From April 2006 through December 2007, NWD began the monitoring of the source water monthly entering each plant for the presence of these organisms. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. The months where the organisms were detected are:

<u>STATION 1</u>		<u>LAWTON VALLEY</u>	
Nov 2006	0.09 oocysts/liter	Jan 2007	0.27 oocysts/liter
Feb 2007	0.19 oocysts/liter		
Nov 2007	0.14 oocysts/liter		

## ***Newport Water Annual Water Quality Report***

**Newport Water** is pleased to present this water quality report for 2007 to our customers. In accordance with the Safe Drinking Water Act all water utilities are required to issue an annual Consumer Confidence Report to promote customer awareness of the quality of their drinking water. This brochure is a snapshot of the water quality from January through December 2007. Included are details about where your water comes from, what it contains, and how it compares to EPA standards. In 2007, Newport Water conducted 8800 analyses to monitor approximately 80 drinking water contaminants. The following table indicates only the contaminants that were detected, even if the detected level was below the maximum level set by the EPA. For the year 2007, our system had one violation of a monitoring requirement. A Public Notice regarding this monitoring violation is included with this document. Please be advised that the employees of Newport Water are committed to providing you the safest and most reliable drinking water possible.

### ***If you have any questions please contact:***

Julia Fogue, Dir. Of Utilities (401) 845-5600

US EPA Hotline (800) 426-4791

RI Department of Health, Drinking  
Water Quality (401) 222-6867

### ***Also, information is available on the Internet:***

EPA — [www.epa.gov/safewater](http://www.epa.gov/safewater)  
Newport Dept. of Utilities — [www.cityofnewport.com](http://www.cityofnewport.com)

### ***How can you be involved?***

Meetings of the Newport City Council begin at 6:30 PM on the second and fourth Wednesday of each month in the Council Chambers, City Hall, 43 Broadway, Newport, RI.

## ***Additional Health Information***

To ensure that tap water is safe to drink, EPA prescribes limits on the amount of certain contaminants in water provided by public water systems. FDA 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 risk and effects can be obtained by calling the EPA's Safe Drinking Water Hotline (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 radioactive material and can pick up substances resulting from the presence of animals or human activity. Contaminants that may be present in source water include:

- (A) Microbial contaminants, such as viruses and bacteria, which may come from septic systems, agricultural livestock operations and wildlife.
- (B) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm runoff; oil and gas production, mining or farming.
- (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, storm runoff; and residential uses.
- (D) Organic chemical contaminants, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff and septic systems.

- (E) Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

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, persons who have HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk of 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.

## **Concerning Lead in Our Water**

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 NWD 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 at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

### ***About Manganese...***

Customers of the Newport Water Division may at times receive water with a yellow to brown color. This is occasionally due to the level of the naturally occurring mineral “manganese” in the water. This occurs mainly in the summer and fall. At times the water in the reservoirs of our system has elevated levels of manganese which do not respond to treatment at the water treatment facilities. The EPA has not established requirements for Manganese as a primary drinking water regulation. The EPA has established secondary drinking water regulations for contaminants such as manganese which are recommended goals. The secondary drinking water regulations are related to contaminants that primarily affect the aesthetic qualities (taste, color, and odor) of drinking water.

The Water Division must balance the treatment processes to meet both the enforceable levels of the primary drinking water regulations with the goals of the secondary drinking water regulations. When we experience elevated levels of manganese leaving the treatment facilities, the operating staff adjusts treatment processes as much as possible and changes the reservoir water source. In order to remove the treated water with the elevated levels the staff flushes the distribution system.

The Water Division regrets the inconvenience of the colored water and works diligently to avoid these situations by maintaining all drinking water standards and goals. The following EPA website is provided for additional information.

[www.epa.gov/safewater/mcl.html](http://www.epa.gov/safewater/mcl.html)

### ***Remember to Use Water Wisely...***

Water is vital to each of us every day. The average person uses 60 gallons of water per day. Because of increasing demands for water combined with drought conditions, we have seen conditions where our available water supply has been reduced to extremely low levels. When we use water wisely we not only maintain a safe water supply, but we also keep our individual water, sewer and heating costs down. The problem is not what we use water for, but the fact that we use more than we need. Here are some tips to help everyone use water wisely:

Check for leaks by checking the reading on your water meter and then turn off all water fixtures for one hour. Go back and check the reading on your meter - if it has changed, you have a leak.

Fix leaky faucets. A leaky faucet can waste up to 20 gallons of water per day. If the water is hot, you are heating the water before you waste it, which can be very expensive. Replace worn out washers or “O” rings which are usually the cause for leaking faucets.

Check for leaks in your toilet. This is where most household water is wasted. A leak in a toilet can sometimes be detected by a trickling sound - but it can also leak silently. Place a dye tablet or a few drops of food coloring in the tank. Wait 15 minutes, if colored water appears in the bowl, your flapper or flush valve may need to be replaced.

If you do not already have water efficient or low flow fixtures, then install water saving devices that are available on the market today such as retro-fit aerators, flow regulators and water displacement devices.

The best time to water your yard is early morning, when winds are calm and temperatures are cool. Make sure sprinkler is set properly in order to avoid watering sidewalks and driveways.

Grass doesn't need to be watered every day; make sure your lawn really needs it before irrigating. If you can stick a screwdriver into your lawn easily- don't water!

Use a rain barrel under a roof gutter downspout to collect water for outdoor use.