

# PORTSMOUTH WATER AND FIRE DISTRICT

## 2001

# CONSUMER CONFIDENCE REPORT

### Dear Customer:

We are pleased to present a summary of the quality of the water provided to District customers during the past year. The Safe Drinking Water Act (SDWA) requires that water utilities issue an annual "Consumer Confidence" report to customers in addition to other notices that may be required by law. This report details where our water comes from, what it contains, and the risks our water testing and treatment are designed to prevent. The Portsmouth Water and Fire District is committed to providing you with the safest and most reliable water supply. Informed consumers are our best allies in maintaining safe drinking water. *Some water customers of the Newport Water Department and the Naval Station Newport water system, particularly in the Redwood Farms, Bay View and Melville areas, in addition to properties with private wells, may receive this consumer notice, even though they are not customers of the District. This over-coverage is unavoidable in our effort to ensure that all potential water users within the District receive this legal notice through a Postal Customer mailing.*

**The Portsmouth Water and Fire District's drinking water met or surpassed all federal and state drinking water standards in 2001.**

We encourage public interest and participation in our community's decisions affecting drinking water. Regular meetings of the Administrative Board of the Portsmouth Water and Fire District are held on the first and third Tuesday of every month at 7:15 PM, at the District's office at 1944 East Main Road. The public is welcome and encouraged to attend these meetings. Minutes of meetings are available upon request. The information in this report is available on the World Wide Web at <http://www.asrwwa.org> and will soon be available at <http://www.portsmouthwater.org>.

### Overview

The Portsmouth Water and Fire District is a quasi-municipal agency created by the RI General Assembly and is responsible for providing drinking water and fire hydrants for ninety percent of mainland Portsmouth. The District is governed by a seven-member elected Administrative Board and holds an annual election of officers on the second Wednesday in June. Although the District is not affiliated legally or administratively with the Town of Portsmouth government, the District and Town work cooperatively to best serve their common constituents.

In 2001, the District had an operating budget of \$1.98 million, which was funded by water sales, property taxes and service charges. The District's average daily demand for 2001 was 1.29 million gallons. The District does not own any water supplies, but purchases its regular water supply on a wholesale basis from the Newport Water Department and relies on the Stone Bridge Fire District in Tiverton for emergency water supply. As part of its efforts to provide a long-term, adequate water supply for Portsmouth, the District has undertaken a fractured bedrock groundwater evaluation and test well program. This study should be complete in 2004.

The Administrative Board's goal is to provide the customers of the District with an adequate supply of the best quality water available, now and into the future.

To that end, the District is a member of the Aquidneck Island Partnership's Drinking Water Subcommittee, which is charged with evaluating and recommending methods to protect the island's drinking water supply reservoirs. As part of its commitment to improve water quality, the District continues to require that new water main extensions be looped-in to existing water mains whenever possible. In addition, the Board annually allocates funding for in-house loop-in projects for existing dead-end mains.

In 2002, the District will construct three major capital improvements. An existing 10-inch subaqueous pipeline, which crosses The Cove in the Hummocks, will be relocated onto The Cove Bridge. In addition, 6-inch and 8-inch water mains on Park Avenue and Point Road from Morgan Street to The Cove Bridge will be replaced with new 10-inch water mains. This capital work is presently under design and is scheduled for construction in early 2003 to coincide with the Town of Portsmouth's improvements to Park Avenue. In addition, the Board will be upgrading and replacing parts of its Supervisory Control and Data Acquisition (SCADA) system in 2002. The SCADA system is used to remotely monitor and operate the District's pumps, tanks, valves and chemical feed systems. Chlorine residual monitors will also be installed as part of this project to allow the District to continuously monitor water quality.

## **Water Source**

In 2001, the Portsmouth Water and Fire District purchased all of its water from the Newport Water Department, with the exception of an emergency supply from the Stone Bridge Fire District during part of one day in July. The Newport supply is treated at Newport's Lawton Valley Water Treatment Plant in Portsmouth, which draws surface water from the Lawton Valley Reservoir, St. Mary Pond, and Sisson Pond in Portsmouth, Nonquit Pond in Tiverton and Watson Reservoir in Little Compton. The Stone Bridge supply is treated at the Stone Bridge Treatment Plant in Tiverton, which draws water from Stafford Pond in Tiverton.

## **Concerning Lead in Our Water**

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791).

## **Health Effects Information**

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 Environmental Protection Agency'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, 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:

- (a) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife;
- (b) 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;
- (c) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;
- (d) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems;
- (e) 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 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.

Some people may be more vulnerable to contaminants in drinking water than is 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).

Some people who drink water containing TTHMs (Total Trihalomethanes) in excess of the MCL over many years could experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

**The Portsmouth Water and Fire District prepared this report. We'll be happy to answer any questions about the District and our drinking water quality. Contact William J. McGlenn, General Manager and Chief Engineer (401-683-2090).**

**The Portsmouth Water and Fire District is a proud member and supporter of the American Water Works Association, the New England Water Works Association and the Rhode Island Water Works Association.**

# **PORTSMOUTH WATER AND FIRE DISTRICT 2001 CONSUMER CONFIDENCE REPORT**

## **ADMINISTRATIVE BOARD MEMBERS**

Joseph A. Magliocco, Tax Assessor  
Chairman

G. David Crockett, Tax Assessor  
William L. Douglas, Jr., Treasurer  
Philip T. Driscoll, Clerk  
Peter S. Kent, Water Commissioner  
Michael W. Nott, Moderator  
Gaetano Polselli, Jr., Tax Collector

Phone: (401) 683-2090                      Fax: (401) 682-1550  
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**PLEASE REFER TO WATER QUALITY TABLE BELOW**

## How Do I Read This Water Quality Table?

It's easy! Our water is tested to assure that it is safe and healthy. The column marked Detected Level shows the highest test results during the year. Major Sources shows where this substance usually originates.

Footnotes explain important details. Definitions of key terms are:

**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 (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.

## Key to Abbreviations in the Water Quality Table

AL = Action Level

MCL = Maximum Contaminant Level

MCLG = Maximum Contaminant Level Goal

mrem = millirems (a measure of radiation absorbed by the body)

N/A = Not Applicable

ND = Not detectable at testing limit

NTU = Nephelometric Turbidity Units

pCi/l = picocuries per liter (a measure of radioactivity)

ppb = parts per billion, or micrograms per liter ( $\mu\text{g/l}$ )

ppm = parts per million, or milligrams per liter ( $\text{mg/l}$ )

TT = Treatment Technique

## WATER QUALITY TABLE \*

CONTAMINANT (FOOTNOTE)	YEAR TESTED	UNIT	MCL	MCLG	DETECTED LEVEL	RANGE	MAJOR SOURCES IN DRINKING WATER	VIOLATION
<b>Microbiological Contaminants</b>								
Turbidity (1) (2)	2001	NTU	TT = 5	N/A	2.2	N/A	Soil runoff.	NO
			TT = 95% of monthly samples < 0.5		94% < 0.5			
<b>Radioactive Contaminants</b>								
Beta/photon emitters (3)	2001	pCi/l	50**	0	3.69	1.85 – 3.69	Decay of natural and man-made deposits.	NO
Combined radium (3)	2001	pCi/l	5	0	2.18	ND – 2.18	Erosion of natural deposits.	NO
<b>Inorganic Contaminants</b>								
Copper (4) (9)	1997	ppm	AL = 1.3	1.3	0.06	N/A	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.	NO
Fluoride (5) (6)	2001	ppm	4	4	1.50	0.69 – 1.50	Water additive, which promotes strong teeth.	NO
Lead (7) (9)	1997	ppb	AL = 15	0	5.2	N/A	Corrosion of household plumbing systems; Erosion of natural deposits.	NO
Nitrate (3)	2001	ppm	10	10	1.9	0.17 – 1.90	Runoff from fertilizer use; Leaching from septic tanks, sewerage; Erosion of natural deposits.	NO
Nitrite (3)	2001	ppm	1	1	0.02	ND – 0.02	Runoff from fertilizer use; Leaching from septic tanks, sewerage; Erosion of natural deposits.	NO
<b>Volatile Organic Contaminants</b>								
TTHMs (Total Trihalomethanes) (8)	2001	ppb	100	N/A	86.7	2.03 – 86.7	By-product of drinking water chlorination.	NO
<b>Unregulated Contaminants ***</b>								
Sodium (3)	2001	ppm	100	N/A	20.7	17.9 – 20.7	Erosion of natural deposits; Road-salt runoff.	N/A

\* The data presented in this table is from the most recent testing done in accordance with regulations. Test results are from the Portsmouth Water and Fire District's distribution system unless otherwise noted in the footnotes.

\*\* The MCL for beta particles is 4 mrem/year. EPA considers 50 pCi/l to be the level of concern for beta particles.

\*\*\* Although not regulated by the EPA, we are required by the Rhode Island Department of Health to test for sodium. There is no MCL for sodium, however the Health Advisory Level is 100 ppm.

### Water Quality Table Footnotes

- (1) Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the filtration systems.
- (2) Measured after treatment at the Newport Water Department Lawton Valley Treatment Plant. Although the level did not meet the TT standard in January of 2001, it was not considered a violation by the RI Department of Health due to other treatment considerations.
- (3) Measured in the raw (untreated) water of the Newport Water Department reservoirs.
- (4) Copper results are for the 90<sup>th</sup> percentile value from the sampling of 30 high-risk homes, which are tested at the customer's tap once during every three-year period. None of the 30 homes tested exceeded the Action Level.
- (5) Measured after treatment at the Newport Water Department Lawton Valley Treatment Plant.
- (6) Fluoride is added to the water at a rate of 1.0 ppm to help prevent tooth decay in children.
- (7) Lead results are for the 90<sup>th</sup> percentile value from the sampling of 30 high-risk homes, which are tested at the customer's tap once during every three-year period. Two of the 30 homes tested exceeded the Action Level. If more than 3 tested homes exceeded the Lead Action Level of 15 ppb, we would be required to take appropriate action to reduce the amounts being detected. A violation would occur if we did not take action.
- (8) Some people who drink water containing TTHM's (Total Trihalomethanes) in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.
- (9) 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.