2012 CONSUMER CONFIDENCE REPORT

Pascoag Utility District-Water Division

Pascoag, RI
PWS ID#1592020

We are very pleased to provide you with this year's Consumer Confidence Report. This report provides you with information on the water and services that we delivered to you in 2012. Included are details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies.

We want our valued customers to be informed about their water utility. If after reviewing this report you have any questions, or would like to know more about the Pascoag Utility District's water system, please call Michael Lima at (401) 568-6222. You are also invited to attend our monthly meetings which are held at 6:00 pm, on the fourth Monday of each month, at the District office. The office is located at 253 Pascoag Main Street, Pascoag, RI 02859.

The Quality of Your Drinking Water

Our goal is to provide you with a safe and dependable supply of drinking water. Please see the Violation section at the end of this report for details. We were issued a violation in 2012 for the detection of Total Coliform bacteria and E. Coli Bacteria. In response, we issued a Public Notification and eliminated the bacteria with increased chlorination, hydrant flushing and cleaning of the water storage tank.

Additionally, we were issued a violation for not treating or monitoring as required in December 2012. Specifically, on December 25, 2012, the chlorine analyzer for treatment of Well #5 was not functioning. Between December 21 and December 29, 2012 we failed to collect chlorine data at a required distribution monitoring station. See the violation details below. We are committed to ensuring the quality of your water.

The Source of Your Drinking Water

We have one drilled well, Well #5, which provides a portion of our water. It is 700 feet deep and is located in the area of Reservoir Road and George Eddy Drive. Well #5's pump station is equipped with a sodium hypochlorite injector which allows for improved chlorine levels in the Reservoir Road service area. We maintain the prescribed wellhead protection area and consider the well to be at low risk of contamination.

We purchase the remainder of our water from the Harrisville Fire District. The Harrisville Fire District's water source is six wells, three near their office and three in Eccleston Field. The RI Department of Health, in cooperation with other state and federal agencies, has assessed the threats to the Harrisville'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 soils in the Source Water Protection Area (SWPA), and the sampling history of the water.

Our monitoring program continues to assure that the water delivered to your home is safe to drink. However, the assessment found that Harrisville's water source is at moderate risk of contamination. Monitoring and protection efforts are necessary and ongoing to assure continued water quality. The complete Source Water Assessment Report is available from the Harrisville Fire District or the Department of Health at (401) 222-6867.

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 Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791).

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 (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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:

- **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 by-products 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 the result of oil and gas production and mining activities.

Water Quality Test Results

The table below lists all of the drinking water contaminants that were detected through our water quality monitoring and testing. The presence of contaminants 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 the January – December 2012 monitoring period. For those contaminants that are monitored less frequently the most recent test results are listed.

Maximum Contaminant Levels (MCL's) are set at very stringent levels. The Maximum Contaminant Level Goal (MCLG) is set at a level where no health effects would be expected, and the MCL is set as close to that as possible, considering available technology and cost of treatment. A person would have to drink 2 liters of water every day, as recommended by health professionals, at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

2012 TEST RESULTS FROM HARRISVILLE FIRE DISTRICT

Radioactive Contaminants	Violation Y/N	Level Detected						Unit Measurement	MCLG	MCL	Likely Source of Contamination
		Well #1	Well #2	Well #3	Well #4	Well #5	Well #6				
Combined Radium (2008)	N	ND	1.07	ND	1.51	1.46	ND	pCi/L	0	5	Erosion of natural deposits
Inorganic Contaminants	**Violation Y/N**	**Level Detected**						**Unit Measurement**	**MCLG**	**MCL**	**Likely Source of Contamination**
		Well #1	**Well #2**	**Well #3**	**Well #4**	**Well #5**	**Well #6**				
Barium (2008)	N	0.01	0.04	0.01	0.01	0.03	0.03	ppm	2	2	Erosion of natural deposits
Chromium (2008)	N	**	**	**	**	1	1	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Nitrate (as Nitrogen)	N	0.59	0.74	0.09	0.09	0.48	1.4	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

** - Not detected in laboratory analysis

DISTRIBUTION SYSTEM TEST RESULTS

Inorganic Contaminants	Violation Y/N	Level Detected 90th Percentile	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Copper (2011)	N	0.24	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (2011)	N	2	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Volatile Organic Contaminants	**Violation Y/N**	**Level Detected**	**Unit Measurement**	**MCLG**	**MCL**	**Likely Source of Contamination**
Chlorine	N	Average*0.3 Range:0.24 – 0.39	ppm	**MRDLG** 4	**MRDL** 4	Water additive used to control microbes.
Haloacetic Acids (HAA5) (2010)	N	Average*2 Range: 2 – 2.30	ppb	N/A	60	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM) (2010)	N	Average*19 Range: 13 - 24	ppb	0	80	By-product of drinking water chlorination

*Running annual average (RAA).

2012 TEST RESULTS FROM THE PASCOAG UTILITY DISTRICT

Radioactive Contaminants	Violation Y/N	Level Detected Well #5	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Combined Radium (2008)	N	ND - 1.15	pCi/L	0	5	Erosion of natural deposits
DISTRIBUTION SYSTEM TEST RESULTS						
Inorganic Contaminants	**Violation Y/N**	**Level Detected**	**Unit Measurement**	**MCLG**	**MCL**	**Likely Source of Contamination**
Arsenic	**N**	**6**	**ppm**	**0**	**10**	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Fluoride (2012)	N	0.05	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories

Inorganic Contaminants	Violation Y/N	Level Detected 90th Percentile	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Copper (2011)	N	0.2	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Of the twenty sites tested for lead and copper, none of them exceeded their respective Action Levels.						

Volatile Organic Contaminants	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Chlorine	N	Average 0.4 Range 0.23 – 1.28	ppm	MRGLG 4	MRDL 4	Water additive used to control microbes
Haloacetic Acids (HAA) (2012)	N	9.1	ppb	N/A	60	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM) (2012)	N	33.7	ppb	1	80	By product of drinking water chlorination
Toluene	N	0.001	ppb	1	1	Discharge from petroleum factories and gas station

Non Detect (ND) - Laboratory analysis indicated that the contaminant was not present.
Parts 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.
Parts per billion (ppb) or Micrograms per liter (ug/L) - One part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.
Picocuries per liter (pCi/L) - Picocuries per liter is a measure of the radioactivity in water.
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 MCL is 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 MCLG is 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.
Maximum Residual Disinfection 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 contaminants
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.

The State of Rhode Island requires testing for other contaminants not regulated by the US EPA. The following contaminant was detected in Pascoag Utility District's water:

- **Nickel:** Nickel was detected at a concentration of 0.007 ppm
- **Zinc:** Zinc was detected at a concentration of 0.05 ppm
- **Methyl Tertiary Butyl Ether (MTBE):** MTBE was detected at a concentration of 0.57 ppb

For most people, the health benefits of drinking plenty of water outweigh any possible health risk from these contaminants. However, 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/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

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 Pascoag Utility District 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 http://www.epa.gov/safewater/lead.

Violation

Total Coliform & E. Coli Bacteria

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.

Violation Type	Violation Period	Violation Explanation
MCL (TCR), Monthly	9-1-12 to 9-30-12	Total coliform bacteria were found in our drinking water during the period indicated in enough samples to violate a standard. Additionally, E. Coli bacteria was detected in one sample.

The sampling period for the bacteria violation was September, 2012. The violation period is automatically listed as the entire sampling period by the RI Department of Health. However, the bacteria issue was successfully addressed by September 19, 2012.

Total Coliform: Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. Coliforms were found in more samples than allowed and this was a warning of potential problems. Additional testing was performed and no E. Coli bacteria were detected in any of the water samples.

E. Coli Bacteria:
Fecal coliforms and E. Coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants and young children.

Treatment and Monitoring Violations:
We were issued a violation for not treating or monitoring as required in December 2012. Specifically, on December 25, 2012, the chlorine analyzer for treatment of Well #5 was not functioning. And, between December 21 and December 29, 2012 we failed to collect chlorine data as a required distribution monitoring station.

The lack of monitoring was due to the chlorine analyzer not being turned on after the well was restarted subsequent to fixing a water main leak on December 24th. As soon as it was noticed that the analyzer was off, it was returned to service. Chlorine was being injected during the whole period, but the measurement system was the equipment not turned on."

We at the Pascoag Utility District work to provide top quality water to every tap. We encourage all of our customers to conserve and use water efficiently and remind you to help us protect our water sources, which are the heart of our community, our way of life and our children’s future. Please do not hesitate to call our office with any questions.