Port Ewen Water District Annual Drinking Water Quality Report for 2015 PWS ID# 5503382

Dear Customer:

We are pleased to present a summary of the quality of the water provided to you during the past year. To comply with State and Federal regulations, the Port Ewen Water District, will be annually issuing a report describing the quality of your drinking water. The purpose of this report is to raise your understanding of the drinking water and awareness of the need to protect our drinking water sources. This report details where our water comes from, what it contains, and the risks our water testing and treatment are designed to prevent. The Port Ewen Water 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.

Port Ewen Water District's drinking water <u>meets or surpasses</u> all federal and state drinking water standards in 2015.

We encourage public interest and participation in our community's decisions affecting drinking water. Regular Water Board Meetings are held on the second Tuesday of every month at the Town of Esopus Town Hall. The public is welcome. If you have any questions about this report or your drinking water, please contact Donald F. Kiernan, Superintendent, at 845-331-5900 or write to Port Ewen Water District, 131 River Rd., Ulster Park, NY 12487. This report will also be available on the web at <u>www.esopus.com</u> or friend us on facebook at Port Ewen Water/Sewer Dept..

Where does our water come from?

In general, 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 can pick up substances resulting from the presence of animals or from human activities. Contaminants that may be present in source water include: microbial contaminants; inorganic contaminants; pesticides and herbicides; organic chemical contaminants; and radioactive contaminants. In order to ensure that tap water is safe to drink, the State and the EPA prescribe regulations which limit the amount of certain contaminants in water provided by public water systems

The Port Ewen Water District is supplied by surface water from the Hudson River. The Hudson River is our only source and during drought conditions, the consumers of the District have always had an ample supply of water to meet their needs. The Roger Mabie Water Treatment Plant is located at 131 River Road, Ulster Park, NY 12487. The Treatment Plant has the capability of producing 1 million gallons of drinking water per day. Prior to being pumped to District consumers, the Hudson River water undergoes several stages of water treatment. The water is first chlorinated by means of a Chlorine Dioxide injection system to ensure effective eradication of bacteria. The water is then subjected to the addition of Aluminum Sulfate (Alum), in order to start the process of removal of silt and fine particulates. Clarified water is then injected with lime for control of Ph and conventional filtration takes place. After filtering, post chlorination is done to provide residual chlorine levels in the distribution system. The water is pumped into the distribution system and a 2 million gallon water storage facility, located at the southern end of the District.

Facts and Figures

The Port Ewen Water District serves a population of around 4500 and has 1450 service connections. The total water produced in 2015 was 113,000,000. The daily average of water treated and pumped into the distribution system was 309,000 gallons per day. The

amount of water delivered to customers was 85,000,000 gallons. Treated water used for backwashing filters and plant usage, and meter error accounted for 12,000,000 gallons. This leaves an unaccounted for total of 16,000,000 gallons. This water was used to flush mains, fight fires, leakage from water main breaks and unmetered leaks, meter inaccuracy and usage and accounts for the remaining 16,000,000 gallons (14 % of the total amount produced). In 2015, water customers were charged \$ 3.84 per 1,000 gallons of water.

Are there contaminants in our drinking water?

As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include: total coliform, turbidity, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes (THM's), and synthetic organic compounds. In addition to the testing we are required to perform, our system conducts routine bacteriological testing of our finished water to make certain our water is safe and of a high quality. However, during the months of February and March 2015, the Port Ewen Water District, violated the turbidity standard. This was a violation of Part 5 of the New York State Sanitary Code. This violation was caused by the overall quality of the Hudson River during February and March 2015. The table below depicts which compounds were detected in your drinking water. The State allows us to test for some contaminants less than once per year, because the concentration of these contaminants do not change frequently.

Table of Detected Contaminants

Contaminant	Violation Yes/No	Date of sample	Level Detected	Unit Measure	MCLG	MCL Limit	Likely source of contamination	
Nitrate	no	2/17/15	0.701	mg/l	10	10	runoff from fertilizer use, leaching from septic	
Sulfate	no	2/17/15	43.3	mg/l		250	tanks, sewage.	
Chloride	no	2/17/15	42.8	mg/l		250		
Sodium	no	2/17/15	24	mg/l				
Total Dissolv solids	ved no	2/17/15	151	mg/l				
THM's	no	2015 2015	43.2 66.475	ppb (177 ppb (182	Broadway) Hasbrouck)	80	By-product of drinking water chlorination	
Haloacetic Acids	no	2015 2015	31.2 29.725	ppb (177 ppb (182	Broadway) Hasbrouck)	60	By-product of drinking water chlorination	
Turbidity	yes	Feb, Ma	Feb, March 2015					
Lead	no	6/10/15	5 0.00	4 ppb		0.015	corrosion of household plumbing	
Copper	no	6/10/1	5 0.03	ppb		1.3	corrosion of household plumbing	

It should be noted that all drinking water, including bottled drinking water, may be reasonably 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 (800-426-4791) or the Ulster County Health Department at 845-340-3010.

Definitions

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLGs as feasible

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.

<u>Milligrams per liter (mg/l)</u>: Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm). <u>Micrograms per liter (ug/l)</u>: Corresponds to one part of liquid in one billion parts of liquid (part per billion - ppb). <u>Treatment Technique (TT)</u>: A required process intended to reduce the level of a contaminant in drinking water. <u>Nephelometric Turbidity Unit (NTU)</u>: A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

We test turbidity because it is a good indicator of the effectiveness of our filtration system. State regulations require that 95% of the turbidity samples collected have measurements below 0.3 NTU.

<u>Maximum Residual Disinfectant Level (MRDL)</u> - The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

<u>Maximum Residual Disinfectant Level Goal (MRDLG)</u> - The level of a drinking water disinfectant below which there is no known expected risk. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

What does this information mean?

As you can see by the table, our system met all requirements in 2015. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below the level allowed by the State. Total Trihalomethanes (THM's) were detected below the current MCL, in 2015. But we are required to present the following information on THM's in drinking water.

"Some people who drink water containing 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."

Do I need to take special precautions?

Although our drinking water met or exceeded state and federal regulations, some people may be vulnerable to disease causing microorganisms or pathogens 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 from their health care provider about drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium, Giardia and other microbial pathogens are available from the Safe Drinking Water Hotline at (800-426-4791).

Why save water and how to avoid wasting it?

Although our system has an adequate amount of water to meet present and future demands, there are a number of reasons why it is important to conserve water:

- Saving water saves energy and some costs associated with both of these necessities of life;
- Saving water reduces the cost of operating and maintaining the water system;
- Saving water lessens the strain on the water system during a dry spell or drought, helping to avoid severe water use restrictions so that essential fire fighting needs are met;

You can play a role in conserving water by becoming conscious of the amount of water your household is using, and by looking for ways to use less whenever you can. It is not hard to conserve water. Conservation tips include:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load to capacity.
- Turn off the tap water when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons per day. Fix it and you save almost 6,000 gallons per year.
- Check toilets for leaks by putting a few drops of food coloring in the tank, watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from one of these otherwise invisible toilet leaks. Fix it and you can save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.

Thank you for allowing us to continue to provide your family with quality drinking water this year. We ask that all our customers help us to protect our water sources, which are the heart of our community and our way of life. Please call our office if you have any questions.

The Port Ewen Water District is pleased to be affiliated with the following organizations:

American Water Works Association New York Rural Water Hudson Valley Water Works Ulster County Water Superintendents Association

Port Ewen Water District Hudson River AWQR Summary

The NYS DOH has completed a source water assessment fir this system, based on available information. Possible and actual threats to this drinking water source were evaluated. The state source water assessment includes a susceptibility rating based on the risk posed by each potential source of contamination and how easily contaminants could affect the source. The susceptibility rating is an estimate of the potential for contamination of the source water., it does not mean that the water delivered to consumers is, or will become contaminated. While nitrates were detected in our water, it should be noted that all drinking water, including bottled water, may be reasonably expected to contain at least small amounts of some contaminants from natural sources. The presence of contaminants does not necessarily indicate that the water poses a health risk. See Section " Are there contaminants in our drinking water?" for a list of contaminants that have been detected. The source water assessments provide resource managers with additional information for protecting source water into the future.

The Hudson River watershed is exceptionally large and too big for detailed evaluation in the Source Water Assessment Program. General drinking water concerns for public water suppliers which use these sources include: storm generated turbidity, eutrophication (excessive nutrients and algae), wastewater and toxic sediments. In addition, salt water can enter the lower Hudson and impact drinking water quality during periods of low flow. The summary below is based on the analysis of the contaminant inventory compiled for the drainage area deemed most likely to impact drinking water quality at this PWS intake.

This assessment found an elevated susceptibility to contamination for this source of drinking water. The amount of agriculture land cover/pasture in the assessment area results in a high protozoa contamination. There is also a high density of sanitary wastewater discharges which results in elevated susceptibility for numerous contamination categories. Non-sanitary wastewater discharges may also contribute to contamination. There is also noteworthy contamination susceptibility associated with other discrete contaminant sources, and these facility types include: Inactive hazardous waste sites, mines and landfills. It should be noted that these types of facilities may typically be found within watersheds encompassing a large geographical area, such as the Hudson River Watershed.

Please note that our water is filtered and is disinfected to ensure that the finished water delivered into your home meets the New York State's drinking water standards for microbial contamination.

County and State Health Departments may use this information to direct future source water protection activities. This may include quality monitoring, resource management, planning and education programs.

A copy of this assessment, including a map of the assessment area, can be obtained by contacting us at 845-331-5900.