The E.P Forrestel Water Treatment Facility

-and-

The Akron Water System

Present the:

Annual Water Quality Report

For the Year of 2013

Annual Drinking Water Quality Report for 2013
Village of Akron Water System
21 Main St, Akron 14001
Public Water Supply ID# NY1400397

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INTRODUCTION

To comply with State regulations, the Village of Akron will be issuing a report annually describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water and awareness of the need to protect our drinking water sources. This report provides an overview of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to State standards. Last year, your tap water met all State drinking water health standards.

If you have any questions about this report or concerning your drinking water, please contact **The E.P. Forrestel Treatment Plant at 585-547-9410.** We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled village board meetings. The meeting schedule is available from the Village Clerk's Office, located at 21 Main St, Akron, NY 14001, or by calling 716-542-9636.

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 State Health Departments and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Our water source is the Murder Creek Reservoir, which is located in the Town of Bennington, NY. The E.P Forrestel Water Treatment Plant is located adjacent to the reservoir, in the Town of Darien Center. Water conveyed from treatment plant is chlorinated and filtered using the coagulation, flocculation, sedimentation, and filtration processes.

FACTS AND FIGURES

Our water system serves roughly 3085 people in the village through 1238 service connections. In 2013 we served 13 industrial accounts, and 35 easement customers living along the transmission line between the Water Plant and the village. The total water produced in 2013 was 146.5 million gallons, of which 113.7 million gallons were consumed by the village. The average amount of water treated each day was 401,412 gallons. Our highest daily production was 649,100 gallons on July 13, 2013.

Water customers paid a base charge of $38.75 for the first 5000 gallons, and $7.75 per 1000 gallons consumed after that. Bills are mailed quarterly. The average residential cost per year was $333.00. The national yearly average is approximately $435.

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, haloacedic acids, radiological and synthetic organic compounds. The table presented 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 concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

It should be noted that all drinking water, including bottled drinking water, might 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 Erie County Health Department at 716-961-6800.

Table of Detected Contaminants

Contaminant	MCL Violation Yes/No	Date of Sample	Level Detected (Avg./Max) (Range)	Unit Measure-ment	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Turbidity (1)	No	Daily	Avg: 0.097 High: 0.189 Low: 0.010	NTU	N/A	TT = 0.3 NTU	Soil Runoff
Copper	No	9/26 2011	<0.0638 (2) Range: High: 0.066 Low: 0.021	mg/l	1.3	AL = 1.3 mg/l	Corrosion of household plumbing; erosion of natural deposits.
Lead	No	9/26 2011	ND (3) Range: ND to 0.8	ug/l	0	AL = 15 ug/l	Corrosion of household plumbing; erosion of natural deposits
Total Trihalomethanes	No	Quarterly	63 avg.(4) Range: 21–108	ug/l	N/A	MCL = 80 ug/l	By–product of drinking water chlorination.
Total Haloacetic Acids	No	Quarterly	43 avg (4) Range: 22– 65	ug/l	N/A	MCL = 60 ug/l	By-product of drinking water disinfection
Chlorine	No	Constant	1.50 avg Range: 0.78-2.61	mg/l	MRDL = N/A	MRDL = 4	Added for disinfection
Nitrate	No	12/16 2013	0.05	mg/l	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Gross alpha	No	12/16 2013	0.35	pCi/l	0	15	Erosion of natural deposits.
Combined radium-226 and radium-228	No	12/16 2013	0.84	pCi/l	0	5	Erosion of natural deposits.
Barium	No	12/16 2013	0.0192	mg/l	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.

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Arsenic	No	12/16 2013	0.7	ug/l	N/A	10	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics Production wastes.

1 – Turbidity is a measure of the cloudiness of the water. We test it because it is a good indicator of the effectiveness of our filtration system, readings must be < 0.3 NTU for at least 95% of monthly readings.
2 – The level presented represents the 90th percentile of the 10 sites tested. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90th percentile is equal to or greater than 90% of the copper values detected at your water system. In this case, ten samples were collected at your water system and the 90th percentile value was the second highest value (0.0638 mg/l). The action level for copper was not exceeded at any of the sites tested.
3 – The level presented represents the 90th percentile of the ten samples collected (ND). The action level for lead was not exceeded at any of the sites tested
4 – This level represents the quarterly running annual average calculated from data collected.
5- N/A-Not Applicable
6 – ND -Not Detected

Definitions:

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.

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.

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): 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 contamination.

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

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

Non-Detects (ND): Laboratory analysis indicates that the constituent is not present.

Nephelometric Turbidity Unit (NTU): A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Milligrams per liter (mg/l): Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm). Compare to 1 minute in two years.

Micrograms per liter (ug/l): Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb). Compares 1 second in 32 years.

WHAT DOES THIS INFORMATION MEAN?

As you can see by the table, our system had no Maximum Contaminant Level violations in 2013. We did have a minor scheduling violation because 4th quarter sampling was done in December rather than November. We at the Akron water system test many more parameters than listed here to ensure a safe drinking water.

Although we did not exceed the Action Level, we are required to present the following information on lead in drinking water:

If present, elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children. 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. The Akron Water System 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 (1-800-426-4791) or at http://www.epa.gov/safewater/lead.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2013, our system was in compliance with applicable State drinking water monitoring, operating, and reporting requirements. Water department employees strive to provide safe and pleasing drinking water, and work to ensure the reliability of the treatment process. Our water filtration plant was built in 1927, with many updates though the years. The plant is staffed every day and continuously monitored via an automated alarm system.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Although our drinking water met or exceeded state and federal regulations, some people may be more vulnerable to disease causing microorganisms or pathogens in drinking water than the general population. Immune-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 their 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 (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 of the costs associated with both of these necessities of life;
- Saving water reduces the cost of energy required to pump water and the need to construct costly new wells, pumping systems and water towers;
- 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 firefighting 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 9-15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it up and you can save almost 6,000 gallons per year.
- Check your 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 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.

SYSTEM IMPROVEMENTS

At the treatment plant: Our logging operation in the watershed was finished in the winter of 2013. This brings to an end an operation that started in 2004 to harvest aging trees from our property and promote the growth of new hardwood trees. New instrumentation was purchased for monitoring chlorine residuals leaving the plant and distributions system. A new overhead door was installed on our loading dock for increased security. Our water transmission line valves and services were marked with new high visibility signs. A comprehensive mowing and trimming operation took place. Both water filters were drained and cleaned, and media was topped off with fresh media.

In the distribution system: We continued our water meter replacement program with new Neptune brand meters. Maintenance was performed on our pressure reducing valves, as well as hydrant service and repairs. We flushed dead end lines on a quarterly basis, and performed a comprehensive system wide flush.

Thank you for allowing us at the Village of Akron Water System to continue to provide you and your family with quality drinking water in 2013. We ask that all our customers help us protect our water sources, which are the heart of our community. Please call the Water Plant if you have any questions at 585-547-9410.