

Annual Drinking Water Quality Report for 2017

Village of Phoenix/Town of Schroepfel

C/O 455 Main Street, Phoenix, NY 13135/69 County Route 57A, Phoenix, NY 13135

(Public Water Supply ID#s: 3704363 & 3730110)

INTRODUCTION

To comply with State regulations, the Village of Phoenix, will be annually issuing a report 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. Last year, your tap water met all State drinking water health standards. We are proud to report that our system did not violate a maximum contaminant level or any other water quality standard. 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.

If you have any questions about this report or concerning your drinking water, please contact James Lynch, Village Administrator or Mayor Ryan Wood at (315) 695-2484. Residents of the Town of Schroepfel can contact the Town Supervisor, Lynett Greco, at (315) 695-4473. 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, at which time you can discuss any drinking water issues with them in person. They are generally held on the first Tuesday of each month at 7:00 PM in the Municipal Building located at 455 Main Street, Phoenix.

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, in some cases, radioactive material, 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 Department's and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Our water system serves approximately 2,138 people through 913 service connections and has approximately 270 outside users through 84 service connections in the Town of Schroepfel. Our system consisted of two drilled wells until August 2017. Foster Well #1 was 20 inches in diameter and was screened from 40 to 64 feet below grade. Foster Well #3 was 18 inches in diameter and is screened from 51.5 to 68 feet below grade. The source wells were located approximately three miles to the east-northeast of the Village in the Town of Schroepfel. Microscopic Particulate Analysis (MPA) sampling performed by the Oswego County Health Department (OCHD) and by our independent laboratory indicated that Foster Wells #1 & #3 were classified as groundwater under the influence of surface water (GWUDI.) The village water system was in violation of the Surface Water Treatment Rule (SWTR) based on this analysis. Foster Wells #1 & #3 were abandoned to comply with the SWTR, the Village undertook a capital project constructing a pump station and related infrastructure to completion and as a result now supplying its system through the purchase of potable water from the Onondaga County Water Authority (OCWA).

Liquid sodium hypochlorite (chlorine) and orthophosphate is added to the potable water supplied by OCWA and is pumped to one 750,000-gallon water tower in the village and one 300,000 gallon tank in the Town of Schroepfel.

SOURCE WATER ASSESSMENT

The New York State Department of Health has evaluated the Great Lakes' watershed to susceptibility to contamination under the Source Water Assessment Program (SWAP), and their findings are summarized in the following paragraphs. It is important to stress that these assessments were created using available information and only estimate the potential for source water contamination. Elevated susceptibility ratings do not mean that source water contamination has or will occur for OCWA.

The Great Lakes' watershed is exceptionally large & too big for a detailed evaluation in the SWAP. General drinking water concerns for public water supplies which use these sources include: storm generated turbidity, wastewater, toxic sediments, shipping related spills, and problems associated with exotic species (e.g. zebra mussels- intake clogging and taste and odor problems). This summary is based on the analysis of the contaminant inventory compiled for the drainage area deemed most likely to impact water quality at the OCWA intake.

This assessment found a moderate susceptibility to contamination for this source of drinking water. The amount of agricultural lands in the assessment area results in elevated potential for pesticide contamination. Non-sanitary wastes & other discrete sources may also increase contamination potential. OCWA provides treatment and regular monitoring to ensure the water delivered to consumers meets all applicable standards.

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, nitrate, inorganic compounds, disinfection byproducts, and synthetic organic compounds. Our system sampled for total coliform, inorganic compounds, nitrate and disinfection byproducts in 2016. 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, 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 Oswego County Health Department at (315) 349-3557.

TABLE OF DETECTED COMPOUNDS

Contaminant	Violation Y/N	Date of Sample	Level Detected (Maximum) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, AL)	Likely Source of Contamination
Inorganic Contaminants							
Barium	No	12/21/16	60.0 ug/L	ppb	2,000 ug/l	2,000 ug/l	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Copper 90 th percentile* Village of Phoenix	No	2017	180 ug/L Range 20 - 540 ug/l	ppb	1,300 ug/l	AL= 1,300 ug/l	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Copper 90 th percentile* Town of Schroepfel	No	9/19/16	132 ug/L Range 20 - 570 ug/l	ppb	1,300 ug/l	AL= 1,300 ug/l	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Nitrate (as Nitrogen)	No	11/07/17	300 ug/l	ppb	10,000 ug/l	10,000 ug/l	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Chloride	No	12/21/16	26.0 mg/l	ppm	250 mg/l	N/A	Naturally occurring or indicative of road salt contamination
Sodium **	No	12/21/16	15.1 mg/l	ppm	N/A	N/A	Naturally occurring
Sulfate	No	12/30/13	17.2 mg/l	ppm	250 mg/l	N/A	Naturally occurring
Nickel	No	12/21/16	2 ug/l	ppb	N/A	N/A	Naturally occurring
Fluoride	No	12/21/16	110 ug/l	ppb	N/A	2,200 ug/l	Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Manganese	No***	12/21/16	140 ug/l	ppb	300 ug/l	N/A	Naturally occurring; Indicative of landfill contamination
Iron	No***	12/21/16	340 ug/l	ppb	N/A	300 ug/l	Naturally occurring.
Radioactive Contaminants							
Radium-226 & 228	No	10/28/13	1.19 pCi/L	pCi/L	0 pCi/L	5 pCi/L	Erosion of natural deposits.

Gross alpha activity (including radium-226 but excluding radon and uranium)	No	10/28/13	2.35 pCi/L	pCi/L	0 pCi/L	15 pCi/L	Erosion of natural deposits.
Beta particle and photon activity from man-made radio nuclides	No	10/28/13	2.35 pCi/L	pCi/L	0 pCi/L	50*** pCi/L	Decay of natural deposits and man-made emissions.
Volatile Organic Compounds							
TTHMs (Total Trihalomethanes) Village of Phoenix Three sampling locations	No	2017	41.7 ug/L Range (22.0 – 73.8 ug/L)	ppb	N/A	80 ug/l	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.
TTHMs (Total Trihalomethanes) Town of Schroepfel	No*****	2017	42.7 ug/l Range (20.9 – 50.6) ug/l	ppb	N/A	80 ug/l	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.
HAAs (Haloacetic Acids) Village of Phoenix Three sampling locations	No	2017	20.5 ug/l (Average) Range (10.8 – 65.7 ug/l)	ppb	N/A	60 ug/l	By-product of drinking water chlorination needed to kill harmful organisms.
HAAs (Haloacetic Acids) Town of Schroepfel	No	2017	7.2 ug/l Range (5.1 – 13.5 ug/l)	ppb	N/A	60 ug/l	By-product of drinking water chlorination needed to kill harmful organisms.
m, o & p Xylene Town of Schroepfel	No	5/15/17	1.3 ug/l	ppb	N/A	5 ug/l	Leaching of solvent from lining of potable water tanks*****

Notes:

* – 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. The action level for copper was not exceeded at any of the sites tested.

** – The level presented represents the 90th percentile of the ten samples collected. The action level for lead was not exceeded any of the sites tested.

***- Total concentration for Iron and Manganese < 500 ppb. Village also adds orthophosphate as sequestering agent to

**** - The state considers 50 pCi/L to be the level of concern for beta particles.

***** - Locational Running Annual Average (LRAA) including sample collected on 2/17/17 was 68.9 ppb.

***** - Lining of elevated water storage tank in the Town of Schroepfel (Oswego County Industrial Park) was re-

coated in 2016. Minor detections of Xylene compounds have been detected in samples in the Oswego County Industrial Park since placing the tank back into service.

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.

Milligrams per liter (mg/L): Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).

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

Picocuries per liter (pCi/L): A measure of the radioactivity in water.

WHAT DOES THIS INFORMATION MEAN?

As you can see by the table, our system had no violations. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below the level allowed by the State.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2017, your system was in compliance with applicable State drinking water operating, monitoring and reporting requirements. The Town of Schroepel did, however, fail to sample for volatile organic compounds (VOCs) within the Oswego County Industrial Park in the first quarter of 2017 and were issued a violation under Subpart 5-1 of the New York State Sanitary Code. The levels of VOCs have remained below the individual MCL of 5 ug/L for all samples collected.

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. 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 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). Please note that testing of the water at this system has shown that this water is suitable for drinking purposes and contains very low amounts of contaminants and should not pose any health risks.

INFORMATION FOR NON-ENGLISH SPEAKING RESIDENTS

Spanish

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.

French

Ce rapport contient des informations importantes sur votre eau potable. Traduisez-le ou parlez en avec quelqu'un qui le comprend bien.

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; and
- ♦ 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 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.

CLOSING

Thank you for allowing us to continue to provide your family with quality drinking water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements. We ask that all our customers help us protect our water sources, which are the heart of our community. Please call our office if you have questions.