

Annual Drinking Water Quality Report for 2010
Village of Poland
9 Case St, Poland NY, 13431
(Public Water Supply ID#2102313)

INTRODUCTION

To comply with State regulations, the Village of Poland, 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, we conducted tests for over 80 contaminants. Contaminants were as noted in the table but were all below the allowable level. However we failed to collect and submit lead and copper water sample results as required between June 1 and September 30 of 2010. We will be sampling during the same time frame in this upcoming year. 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 Scot Burritt, Water Treatment Plant Operator, 315-826-3141. 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 on the second Tuesday at 7 pm of each month.

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 463 residents through 182 connections from two 64-foot deep drilled wells located at the north end of the Village, East of State Route 28 and 8. The groundwater is pumped from the wells through the water treatment plant where it is chlorinated prior to entering the distribution system. As the distribution system is being supplied with water, a 256,000 gallon storage tank on Buck Hill Road is being topped off (filled). When the tank is full the water pumps will turn off. The Village then receives water from the storage tank. When the water pressure at the water plant drops down to a set pressure, the pumps will start again to refill the tank and supply the distribution system. During 2010 27,155,200 gallons were treated and pumped throughout the system.

Source Water Assessment

On March 1993, Ground Water Associates, INC. made an inventory of potential contamination sources in and around the Village of Poland that could have an effect on our water sources. This list includes sites of working gravel pits, service stations, warehouse for heavy equipment, salt storage, trailer park and other businesses. These may produce and/or have possibly spilling of Petroleum Hydrocarbon Solvents, Various other by products, salt and septic systems. A list of these potential contamination sources may be seen at the Village Office at 9 Case St. by appointment call (315) 826-3141.

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, halo acetic 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, 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 (Herkimer District Office) State Health Department at (866-6879).

Table of Detected Contaminants							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
<u>Inorganic Contaminants</u>							
Ph	No	5/09	7.65	units	6.5-8.5	MCL 10	
Nitrogen, Nitrate	No	03/10	1.39	mg/l	10	MCL 10	Runoff from fertilizer use; leachate from septic systems; Erosion from natural products
Total Fluoride	No	11/10	.12	mg/l	n/a	MCL 2.2	Erosion of natural deposits; Water additive that promotes strong teeth Discharge from fertilizer and aluminum factories
Copper	No	12/09	.16 .082- .16	mg/l range	1.3mg/l	AL 1.3 #1	Corrosion of galvanized and copper pipes; erosion of natural deposits.
Lead	No	12/09	4.4 ND-4.6	µg/l range	15µg/l	Al 15 #2	Corrosion of household plumbing systems; Erosion of natural deposits.

<u>Disinfection Byproducts</u>							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Total Trihalomethanes	No	8/07	2.9	µg/l	N/A	80µg/l	Byproducts, of drinking water chlorination needed to kill harmful organisms TTHM's are formed when source water contains large amounts of organic matter.
<u>Trihalomethanes breakdown of individual analytes detected</u>							
Chloroform	No	09/10	1.1	µg/l			see total trihalomethanes
Bromodichloromethane	No	09/10	.96	µg/l			see total trihalomethanes
Dibromochloromethane	No	09/10	.85	µg/l			see total trihalomethanes
<u>Radiological</u>							
Radium 228	No	3/10	0.65	pCi/L	0	5 pCi/L #3	Erosion of Natural Deposits
Radon	No	3/10	510.6	pCi/L			Naturally occurring radioactive gas found in soil
Radium 226	No	3/10	0.02	pCi/L	0	5 pCi/L #3	Erosion of Natural Deposits
Gross Alpha	No	3/10	2.5	pCi/L	0	15pCi/L	Erosion of Natural Deposits
Gross Beta	No	3/10	2.0	pCi/l	0	50pCi/L #4	Decay of natural deposits and man made materials
Uranium	No	3/10	1.5	µg/l	0	30 µg/l	Erosion of Natural Deposits

Notes:

1 – 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 in 2009) were collected at your water system and the 90th percentile value was (the highest value of 0.16 mg/l, i.e., second highest value of .16 mg/L). **The action level of copper was not exceeded** at any of the sites tested.

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 lead values detected at your water system. In this case, (ten samples in 2009) were collected at your water system and the 90th percentile value was (the highest value of 4.6µg/l, i.e., second highest value of 4.4µg/L). **The action level of lead was not exceeded** at one of the sites tested.

3- Combined MCL for Radium 226 and Radium 228

4- The state considers 50 pCi/L to be the level of concern for Beta particles

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).

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

Nanograms per liter (ng/l): Corresponds to one part of liquid to one trillion parts of liquid (parts per trillion - ppt).

Picograms per liter (pg/l): Corresponds to one part per of liquid to one quadrillion parts of liquid (parts per quadrillion – ppq).

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

Millirems per year (mrem/yr): A measure of radiation absorbed by the body.

Million Fibers per Liter (MFL): A measure of the presence of asbestos fibers that are longer than 10 micrometers.

WHAT DOES THIS INFORMATION MEAN?

As you can see by the table, our system had no violations of sampled contaminants. 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?

POLAND VILLAGE has been found to be in violation of the New York State Sanitary Code Drinking Water Regulations and the National Primary Drinking Water Regulations.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During the 1/1/2010 to 12/31/2010 compliance period, we failed to collect and/or submit lead and copper water sample results as required and therefore cannot be sure of the quality of your drinking water during that time.

Public water systems that violate drinking water standards, such as the above violation, are required to make public notification of the violation.

We are attempting to prevent further violations by ensuring that all required sampling is done in accordance with federal and state drinking water regulations.

If you have any questions, please contact Scot Burritt at 315-826-3141 or the New York State Department of Health, Herkimer District office at 315- 866-6879.

INFORMATION ON RADON

Radon is a naturally occurring radioactive gas found in soil and outdoor air that may also be found in drinking water and indoor air. Some people exposed to elevated radon levels over many years in drinking water may have an increased risk of getting cancer. The main risk is lung cancer from radon entering indoor air from soil under homes.

In 2010, we collected one representative water sample that was analyzed for radon. This sample was collected at the water treatment plant. The result was 510.6 picocuries/liter (pCi/l). The contribution to air was 0.05 picocuries/liter (pCi/l). For additional information call your state radon program (1-800-458-1158) or call EPA's Radon Hotline (1-800-SOS-Radon).

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

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).

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 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 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 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 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. Please call our office if you have any questions or would like clarification on any of the above.