

# **Annual Drinking Water Quality Report for 2009**

**Town of Goshen, 41 Webster Avenue, PO Box 217, Goshen, New York 10924**

## ***ARCADIA HILLS WATER DISTRICT - PUBLIC WATER SUPPLY ID # 3503605***

To comply with State regulations, the Town of Goshen, 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. 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 the Town of Goshen Water & Sewer Department at (845) 294-6193. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled town board meetings. The meetings are held at 7:30 PM every 2<sup>nd</sup> and 4<sup>th</sup> Thursday each month at the Town Hall, 41 Webster Avenue, Goshen, NY.

## ***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 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 822 people through 258 service connections. Our water source is groundwater drawn from 11 drilled wells. The water is pumped from the wells to the treatment plants where chlorine (Sodium Hypochlorite, 12.5%) is added to provide disinfection. The disinfected water is then pumped into the distribution system to satisfy user demand. Water produced in excess of the demand is stored in the water storage tower.

In an effort to supply you with the safest possible product, the level of chlorine is monitored and documented daily to ensure the proper dosage is being added. A coliform bacteria test and chlorine residual are performed monthly on the distribution system by the regulating authority, the Orange County Health Department.

In response to longstanding complaints about discolored water from residents served by this water district, we began a program of treatment of the water using a blended polyphosphate, Technical Products TPC 532H. The addition of this product, along with a regular program of hydrant flushing has help reduce the incidence of discolored water.

The NYS DOH has completed a source water assessment for this system, based on available information. Possible and actual threats to this drinking water source were evaluated. The state source water assesment includes a susceptibility rating based on the risk posed by each potential source of contamination and how easily contaminants can move through the subsurface to the wells. 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. See "Table of Detected Contaminants" for a list of the contaminants that have been detected. The source water assessments provide resorce managers with additional information for protecting source waters in the future.

As mentioned before, our water is derived from eleven drilled wells. The source water assessment has rated these wells as having a medium to medium-high susceptibility to microbials and nitrates. These ratings are due primarily to the close proximity of a SPDES permitted discharge facility (industrial/commercial facilities that discharge wastewater into the environment and are regulated by the state and/ or federal government) and the low-level residential activity that are located in the assessment area. In addition, the wells draw from a confined aquifer with the estimated recharge area within the selected time of travel and the overlying soils may not provide adequate protection from potential contamination. While the source water assessment rates our well as being susceptible to microbials, please note that our water is disinfected to ensure that the finished water delivered into your home meets New York State's drinking water standards for microbial contamination.

A copy of the assessment, including a map of the assessment area, can be obtained by contacting us.

## ***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, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, and synthetic organic compounds. The table presented on page 2 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 Orange County Department of Health at (845) 291-2331.

### 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
Nitrate	No	04/08/09	0.58 (ND-0.58)	mg/l	10	MCL=10	Runoff from fertilizer use; Erosion of natural deposits
Fluoride	No	05/07-06/07	0.26 (ND-0.26)	mg/l	N/A	MCL=2.2	Erosion of natural deposits
Arsenic	No	05/07-06/07	4.0 (ND-4.0)	ug/l	N/A	MCL=10	Erosion of natural deposits
Barium	No	05/07-06/07	.10 (0.018-0.10)	mg/l	2	MCL=2	Erosion of natural deposits
Sodium	No	04/08/09	43.1 (14.6-43.1)	mg/l	N/A	See Note 1	Naturally occurring;
Sulfate	No	05/07-06/07	78.0 (29.0-78.0)	mg/l	N/A	MCL=250	Naturally occurring
Lead	No	08/08	3.5 <sup>2</sup> (ND-7.2)	ug/l	0	AL=15.0	Corrosion of household plumbing systems; Erosion of natural deposits.
Copper	No	08/08	0.22 <sup>3</sup> (0.04-0.34)	mg/l	1.3	AL=1.3	Corrosion of household plumbing systems; Erosion of natural deposits;
Manganese	No	02/20/06	22.0	ug/l	N/A	MCL=300	Naturally occurring
Combined Radium 226 & 228	No	2008 Quarterly	1.28 (0.75-2.03)	pCi/l	0	MCL=5	Erosion of natural deposits
Total Trihalomethanes (TTHMs-chloroform, bromodichloromethane, dibromochloromethane and bromoform)	No	08/14/07	6.9 (1.4-6.9)	ug/l	N/A	MCL=80	By-product of drinking water chlorination needed to kill harmful organisms.

#### NOTES

- 1- Water containing more than 20mg/l of sodium should not be used for drinking by people on severely restricted sodium diets. Water containing more than 270 mg/l of sodium should not be used for drinking by people on moderately restricted sodium diets.
- 2 – The level presented represents the 90<sup>th</sup> percentile of the 12 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 90<sup>th</sup> percentile is equal to or greater than 90% of the lead values detected at your water system. In this case twelve samples were collected at your water system and the 90<sup>th</sup> percentile value was the second highest value (3.5 ug/l). The action level for lead was not exceeded at any of the sites tested.
- 3- The level presented represents the 90<sup>th</sup> percentile of the 12 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 90<sup>th</sup> percentile is equal to or greater than 90% of the copper values detected at your water system. In this case twelve samples were collected at your water system and the 90<sup>th</sup> percentile value was the second highest value (.22). The action level for copper was not exceeded at any of the sites tested

#### 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
- N/A:** Not applicable

**WHAT DOES THIS INFORMATION MEAN?**

As you can see by the table, our system had no MCL violations. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below New York State requirements. During 2008, our system was required to test for lead and copper. The testing was performed during the month of August. As noted in the “Table of Contaminants”, lead was detected in nine of the twelve samples and copper was detected in all of the samples, but all the detections were below the New York State requirement. Please note that infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead and/or copper 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. If you are concerned about elevated lead levels in your home’s water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791).

**IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?**

During 2009, our system was in compliance with applicable State drinking water operation, monitoring and reporting requirements.

**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).

**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 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.*

**We at the Town of Goshen work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water source, which is the heart of our community, our way of life and our children’s future. If you have any questions or comments regarding this Annual Water Quality Report, please do not hesitate to contact our Water & Sewer Department at (845) 294-6193.**