

***Annual Drinking Water Quality Report for 2006***  
South Albany Water District  
445 Delaware Avenue, Delmar, NY 12054  
Public Water Supply Identification Number NY0100193

**INTRODUCTION**

All community water systems are required by the U.S. Environmental Protection Agency (EPA) to publish an annual statement to review their water system, sources of supply and present information on compliance with drinking water standards. Last year our water system met all standards. Our constant goal is to provide a safe and dependable supply of drinking water. The Town continues to investigate new technologies to modernize the water purification process to keep up with new Federal and State mandates. Measures have also been taken to enhance the security of our water resources. If you have any questions concerning this report or concerning your drinking water please contact: Richard A. Sayward, Chief Water Treatment Plant Operator; Bethlehem Water Treatment Plant, 143 New Salem So. Rd., Voorheesville, NY 12186; Telephone (518) 765-4433, Fax (518) 439-0166 or you can reach us by e-mail [RSayward@townofbethlehem.org](mailto:RSayward@townofbethlehem.org)

**WHERE DOES OUR WATER COME FROM?**

The South Albany WD draws its water from a ground water source. The District is served by one drilled well. The well is 311 feet deep. Groundwater or well water is stored below the surface of the earth in deep, porous rocks called "aquifers." Groundwater is purified naturally as it filters through layers of soil, clay, rock and sand. This process, known as "percolation" takes years to complete. As a result, groundwater requires less treatment than surface water. We pump this groundwater out through our well. The pumping capacity for the well is approximately 25 gallons per minute. Chlorine in the form of sodium hypochlorite is added to the water, which is used for disinfection to protect against contamination from harmful bacteria and other organisms. The water is pumped to a 10,000 gallon storage tank and a 1000 gallon pressure tank to meet consumer demand.

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 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.

**FACTS AND FIGURES**

The Water District provides water through 23 service connections to a population of 80 people. Our average daily demand is 3,096 gallons. Our single highest day was 10,570 gallons. The total water produced in 2006 was 1,130,210 gallons.

**ARE THERE CONTAMINANTS IN OUR DRINKING WATER?**

In accordance with State regulations, the South Albany WD routinely monitors your drinking water for numerous contaminants. We test your drinking water for inorganic contaminants, radiological contaminants, lead and copper, nitrate, volatile organic contaminants, and synthetic organic contaminants. In addition, we test 1 sample for coliform bacteria each month. The table presented below depicts which contaminants were detected in your drinking water. The State allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old and is noted.

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 pose 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 Albany County Health Department at (518) 447-4620.

SOUTH ALBANY WD TEST RESULTS						
Public Water Supply Identification Number NY0100193						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
<b>Inorganic Contaminants</b> (data from 6/12//01 unless otherwise noted)						
Barium	N	270	ppb	2000	2000	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chloride	N	40	ppm	N/A	250	Geology; Naturally occurring
Copper (data from 9/06) (range of values)	N	0.395 <sup>1</sup> 0.14-0.52	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride	N	780	ppb	N/A	2200	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Iron	N	60	ppb	N/A	300	Geology; Naturally occurring
Lead (data from 9/06) (range of values)	N	2.5 <sup>2</sup> ND - 3	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Manganese	N	20	ppb	N/A	300	Geology
Nickel	N	15	ppb	N/A	N/A	Discharge from steel/metal factories;
Odor	N	1	units	N/A	3	Organic or inorganic pollutants originating from municipal and industrial waste discharges: natural sources
pH	N	8.2	units		6.5-8.5	
Sodium <sup>3</sup>	N	104	ppm	N/A	N/A	Geology; Road Salt
<b>Disinfection Byproducts</b> (sample from 7/28/04)						
Total Trihalomethanes [TTHM]	N	6.2	ppb	0	80	By-product of drinking water chlorination
Chlorine (average) based on daily testing Range of values	N	1.01 0.02-4.8	ppm	MRDLG N/A	MRDL 0	Used in the treatment and disinfection of drinking water
<b>Notes:</b>						
1. The level presented represents the 90 <sup>th</sup> percentile of 5 test sites. The action level for copper was not exceeded at any of the 5 sites tested						
2. The level presented represents the 90 <sup>th</sup> percentile of 5 test sites. The action level for lead was not exceeded at any of the 5 sites tested						
3. Water containing more than 20 mg/l should not be consumed by persons on severely restricted sodium diets; Water containing more than 270 mg/l should not be consumed by persons on moderately restricted sodium diets						
<i>Non-Detects (ND)</i> - laboratory analysis indicates that the contaminant is not present.						
<i>Parts per million (ppm) or Milligrams per liter (mg/l)</i> - one part per million corresponds to one minute in two years or a single penny in \$10,000.						
<i>Parts per billion (ppb) or Micrograms per liter</i> - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.						
<i>Parts per trillion (ppt) or Nanograms per liter (nanograms/l)</i> - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.						
<i>Picocuries per liter (pCi/L)</i> - picocuries per liter is a measure of the radioactivity in water.						
<i>90<sup>th</sup> Percentile Value</i> - The values reported for lead and copper represent the 90 <sup>th</sup> percentile. 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 and copper values detected at your water system						
<i>Action Level</i> - the concentration of a contaminant, which, if exceeded, triggers treatment, or other requirements, which a water system must follow.						
<i>Treatment Technique (TT)</i> - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.						
<i>Maximum Contaminant Level</i> - The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.						
<i>Maximum Contaminant Level Goal</i> The "Goal" (MCLG) is 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.						
<i>Maximum Residual Disinfectant Level (MRDL)</i> : 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.						
<i>Maximum Residual Disinfectant Level Goal (MRDLG)</i> : 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						
<i>N/A-Not applicable</i>						

**WHAT DOES THIS INFORMATION MEAN?**

As you can see by the table, our system had no violations. We have learned through our monitoring and testing that some contaminants have been detected; however, these compounds were detected below New York State requirements. MCL's are set at very stringent levels. To understand the possible health effects

described for many regulated contaminants, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

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

During 2006, our system was in compliance with applicable State drinking water operating, 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 microbiological pathogens are available from the Safe Drinking Water Hotline (800-426-4791).

**WHAT IS THE SOURCE WATER ASSESSMENT PROGRAM (SWAP)?**

To emphasize the protection of surface and ground water sources used for public drinking water, Congress amended the Safe Drinking Water Act (SDWA) in 1996. The amendments require that New York State Department of Health's Bureau of Public Water Supply Protection is responsible for ensuring that source water assessments are completed for all of New York's public water systems.

A source water assessment provides information on the potential contaminant threats to public drinking water sources:

- ◆ each source water assessment will: determine where water used for public drinking water comes from (delineate the source areas)
- ◆ Inventory potential sources of contamination that may impact public drinking water sources
- ◆ Assess the likelihood of a source water area becoming potential contaminated

A SWAP summary for our water supply is attached to this report.

**WATER CONSERVATION TIPS**

The South Albany WD encourages water conservation. There are a lot of things you can do to conserve water in your own home. Conservation tips include:

- ◆ Only run the dishwasher and clothes washer when there is a full load
- ◆ Use water saving showerheads
- ◆ Install faucet aerators in the kitchen and the bathroom to reduce the flow from 4 to 2.5 gallons per minute
- ◆ Water gardens and lawn for only a couple of hours after sunset
- ◆ Check faucets, pipes and toilets for leaks and repair all leaks promptly
- ◆ Take shorter showers

**CLOSING**

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit our customers. 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.

**South Albany Water District**  
NY0100193  
**Source Water Assessment Summary**

The NYS DOH has completed a Source Water Assessment for the South Albany water district, based on available information. Possible and actual contaminant threats to your well were evaluated. The assessment 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 well. The susceptibility rating is an estimate of the potential for contamination. It does not mean that the water delivered to your home is or will become unsafe to drink. See section “Are there contaminants in our drinking water?” of this report, for information concerning low levels of contaminants in your water.

The sensitivity of an aquifer is based on the geology, which influences how rapidly groundwater moves and how quickly a contaminant could reach a well. South Albany’s aquifer has been given a sensitivity of Unknown (rating between medium and high). The potential impact of a chemical or microbe on a well (susceptibility) is based on the aquifer’s sensitivity, proximity of a potential contaminant source and chemical or biological characteristics of the contaminant.

The assessment has determined that South Albany’s well is susceptible to nitrates, enteric bacteria and enteric viruses. The potential sources of these contaminants are the septic systems in the area. Nitrates are routinely tested for and have not been found in the well’s water. Any microbes, such as bacteria and viruses that may reach the well would be eliminated by the disinfection of the water supply.

The assessment has determined that chemicals, including petroleum products, stored in the area have a very low possibility of reaching this well. This is due to the geology, and distance of the stored chemicals from the well.

A copy of the full Source Water Assessment, including a map of the assessment area, is available for review by contacting us at the number provided in this report.