Annual Drinking Water Quality Report for 2002
Staatsburg Water Service Area
Staatsburg, New York 12580
(Public Water Supply ID#1302777)
Operator: DCWWA Hyde Park Staff 845-229-2524

#### Introduction

To comply with State and Federal regulations, the Staatsburg Water System 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 New York State standards.

If you have any questions or concerns about this report, or concerning your drinking water, or want to learn more, please contact **the Dutchess County Water & Wastewater Authority at (845) 486-3601**. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled meetings. The meetings are held on the third Wednesday of every month at 27 High Street, Poughkeepsie, NY in the second floor conference room beginning at 3:30 PM. Please call our office at 486-3601 for agenda details and any last minute meeting time or date changes.

### 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 and the FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

The water source for the Staatsburg Water System is the Hyde Park Water Treatment Plant, 48 South Drive, Hyde Park, NY 12538. The Hyde Park plant takes its water from the Hudson River. Surface water is filtered to remove particulate material and disinfected with chlorine to destroy microorganisms. In 2002 the water quality of this source was in full compliance with the New York State Department of Health. Copies of specific test results are available by contacting the Dutchess County Water and Wastewater Authority at (845) 486-3601. The Staatsburg system is fed by gravity from the Hyde Park System, which is kept pressurized by two elevated storage tanks within the Hyde Park System.

#### FACTS AND FIGURES

Our water system serves 1078 residents through 270 service connections. The total water purchased in 2002 was 44,400,000 gallons. The daily average of treated water provided for the Staatsburg distribution system was 121,600 gallons. In July our highest single day was 175,000 gallons. The amount of water billed to customers was 32,635,000 gallons. This leaves an unbilled total of 11,765,000 gallons. This unbilled for water can be attributed to water used thru leakage, out of order water meters, and system flushing. It should be noted that in Late January two major leaks were pinpointed and repaired. These two leaks alone accounted for about 90,000 gallons a day that was being lost.

The Authority Board approved the following rate schedule for the year 2002: a monthly service charge of \$7.50 (based on 3/4" residential connection, higher if a larger meter is installed) and a \$3.98 rate per thousand gallons of water used. Each year the Authority Board sets the water rates at an advertised public meeting.

# ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As State regulations require, we routinely test your drinking water for numerous contaminants. The table presented below depicts which compounds were detected in your drinking water. These contaminants include: turbidity, free chlorine residual, lead, copper, and total trihalomethanes. 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 reasonably be 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 Dutchess County Health Department (845) 486-3404.

Table of Detected Contaminants							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Average) (Range)	Unit Measure- ment	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
			Inorgan	ic Contan	ninants		
Copper	No	5/02	1.14 (1) 0.076-1.27	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits
Lead	No	5/02	2 (2) ND-4	ppb	0	AL=15.0	Corrosion of household plumbing systems; erosion of natural deposits
			Disinfectio	n By	yproduc	ets	
Total Trhalomethanes	No	11/02	48.05 (3) 37.1-64.3	ug/l	n/a	MCL=80	By-product of drinking water chlorination
Haloacetic Acids (HAA5)	No	11/02	24.3 (3) 3.5-60.9	ug/l	N/A	MCL=60	By-product of drinking water chlorination
Chlorine Residual	N/A	4/month	Avg=.13 Range ND64	ppm	N/A	4 see note 4	By-product of drinking water chlorination
Microbiological	Contami	nants					
Entry Point Turbidity	No	Daily	Avg=.18 Range .0839	NTU	N/A	MCL=5.0 See note 5	Soil Runoff
Distribution System Turbidity	No	5/Week	Avg=.25 Range .09-3.1	NTU	N/A	MCL=5.0 See note 5	Soil Runoff

A minimum of two samples were taken each month and tested for the presence of coliform bacteria. All tested "absent" of the bacterium. Please note the following list of contaminates tested for is what was tested for at the Hyde Park Plant which is now the source water for the Staatsburg System. In other testing the following contaminants were tested for and were "non-detected": asbestos, arsenic, cadmium, chromium, fluoride, mercury, selenium, nitrate, nitrite, benzene, bromobenzene, bromochloromethane, bromomethane, n-Butylbenzene, sec-Butylbenzene, tert-Butylbenzene, carbon tetrachloride, chlorobenzene, chloroethane, chloromethane, 2-Chlorotoluene, 4-Chlorotoluene, dibromomethane, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, dichlorodifluoroomethane, 1,1-Dichloroethane, 1,2-Dichloroethane, 1,1-Dichloroethene, cis-1,2-Dichloroethene, trans-1,2-Dichloroethene, 1,2-Dichloropropane, 1,3-dichloropropane, 2,2-Dichloropropane, 1,1-Dichloropropene, cis-1,3-Dichloropropene, trans-1,3-Dichlorpropene, ethylbenzene, hexachlorobutadiene, isopropylbenzene, p-isopropyltoluene, methylene chloride, n-Propylbenzene, styrene, 1,1,1,2-Tetrachloroethane, 1,1,2,2-Tetrachloroethane, tetrachloraethene, toluene, 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, trichloroethene, trichlorofluoromethane, 1,2,3-Trichloropropane, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, p/m-Xylene, o-Xylene, p/m-Xylene, vinyl chloride, methyl tert butyl ether, alachlor, aldicarb, aldicarb sulfoxide, aldicarb sulfone, atrazine, carbofuran, chlordane, Dibromochloropropane, 2,4-D, endrin, ethylene dibromide, heptachlor, heptachlor epoxide, lindane, methoxychlor, PCB 1016, PCB 1221, PCB 1232, PCB 1242, PCB 1248, PCB 1254, PCB 1260, pentachlorophenol, toxaphene, 2,4,5-TP (silvex), aldrin, benzo(a)pyrene, butachlor, carbaryl, dalapon, di(2ethylhexyl)adipate, di(2-ethylhexyl)phthalate, dicamba, dieldrin, dinoseb, hexachlorobenzene, hexachloroxyclopentadine, 3-hydroxycarbofuran, methomyl, metolachlor, metribuzin, oxamyl (vydate), picloram, propachlor, simazine,

#### **Notes:**

- 1. The level presented represents the  $90^{th}$  percentile of the 20 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  $90^{th}$  percentile is equal to or greater than 90% of the copper values detected at your water system. In this case, twenty samples were collected at your water system and the  $90^{th}$  percentile value was 1.14 The action level for copper was not exceeded at any of the sites tested.
- 2. The level presented represents the 90<sup>th</sup> percentile of the 20 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, twenty samples were collected at your water system and the 90<sup>th</sup> percentile value was 2. The action level for lead was not exceeded at any of the sites tested.
- 3. This level represents the annual quarterly average calculated from data collected.
- 4. The value reported represents the Maximum Disinfectant Level (MRDL), which is a level of disinfectant added for water treatment that may not be exceeded at the consumers tap without an unacceptable possibility of adverse health effects. MRDLs are currently not regulated but in the future they will be enforceable in the same manner as MCLs. This MRDL becomes effective for surface water systems serving 10,000 or more people on January 1, 2002 5. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indication of the effectiveness of the Hyde Park Plants filtration system and the condition of the distribution systems serving the Staatsburg system. State regulations require that we sample five times per week and the monthly average for these samples must below 5.0 NTUs.

#### **Definitions:**

<u>Maximum Contaminant Level</u> (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.

**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.

<u>Milligrams per liter (mg/1)</u>: Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).

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

#### 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 New York State. If you wish more information about the Staatsburg system test results or the Hyde Park plant test information contact the Water Authority office at 845-486-3601.

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

During 2002, our system was in compliance with all applicable State drinking water requirements. In the year 2002, 17 water line repairs were made within the Staatsburg distribution system. While this is a significant number these repairs helped to reduce the unaccounted for water within this system. We included funds in the 2002 budget to have a leak detection survey performed on the system. It was our hope to have the major leaks located and repaired early in 2002. To that end, by February of 2002 the leak survey was performed and two major leaks and two minor leaks were located. All leaks were repaired. The daily average of water provided to the Staatsburg system dropped from 207,000 gallons of water per day to 105,000 gallons of water per day after the leaks were repaired. We continue to look for and fix leaks as we find them. If anyone hears water running in their home or sees a wet spot where one normally doesn't exist we urge them to let the Authority know so we can check for leakage. The re-chlorination station was put on the line to Staatsburg in mid 2002. This is to insure that an ample chlorine residual can be made present at all times in the system without effecting the chlorine residual in the Hyde Park system.

## 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 sources, 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 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.

### **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 implement improvements not already included in current rate structures. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future. Please call our office if you have questions.

Staatsburg Water Service Area

