Annual Drinking Water Quality Report for 2011
Hector Water District
5097 NYS RT 227, Burdett, NY 14818
Public Water Supply ID# NY4801191

INTRODUCTION

To comply with State regulations, the Hector Water District 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 Mr. Robert Stapleton, Superintendent, 607-546-5286. 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 on the second Tuesday of each month at the Hector Town Hall at 7pm.

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 926 People through 419 service connections as well as supplying water to the Village of Burdett. Our water source is ground water from two wells (34 feet and 37 feet deep) and an infiltration gallery. The water is filtered and treated with chlorine (for disinfection) and phosphate (for corrosion control).

The revised Source water Assessment Report was not available at the time of printing. This information will be printed in next year's Annual Water Quality Report (if available)

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, 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 Hornell Health Department at 324-8371.

Table of Detected Contaminants

Contaminant	Violation	Sample Date	Level Detected	Unit of Measurement	MCGL	MCL or AL	Likely Source of Contamination
Nitrate	No	9/15/11	<0.05	mg/L	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; Erosion of natural deposits.
Baruim	No	10/19/11	.025	mg/L	2	2	Discharge of drilling wastes; Erosion of natural deposits.
Fluoride	No	9/22/09	0.13	mg/L	n/a	2.2	Discharge of natural deposits; water additive that promotes strong teeth; discharge from fertilizer.
Copper - 5 samples	No	9/22/09	90%: 0.937 Range: .109 - .942	mg/L	1.3	AL-1.3	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives.
Lead - 5 samples	No	9/22/09	90th %: 4.7 Range:0.8 – 6.3	ug/L	0	AL-15	Corrosion of household Plumbing; erosion of natural deposits.
Total Organic Carbon	No	1st Qtr 2010 2nd Qtr 2010 3rd Qtr 2010 4th Qtr 2010	1.1 1.8 1.2 1.4	mg/L	n/a	n/a	Naturally present in the environment
Stage 2 DBP Sampling – Hi & Low HAA5 for Special monitoring**	No	5/12/09 8/24/09 12/10/09 3/3/10	10.5 / 17.4 16.2 / 14.8 9.7 / 7.8 7.1 / 6.9			60	Byproduct of drinking water chlorination needed to kill harmful organisms.
Stage 2 DBP Sampling – Hi & Low TTHM for Special monitoring**	No	5/12/09 8/24/09 12/10/09 3/3/10	26.8 / 23.8 60.5 / 51.6 26.9 / 15.0 18.7 / 12.5	ug/L	N/a	80	Byproduct of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.
Haloacetic Acids	No	8/15/11 12/6/11	20 17.6	ug/L	n/a	60	Byproduct of drinking water chlorination needed to kill harmful organisms.
Total Trihalomethanes (Maximum Residence Time)	No	8/15/11 12/6/11	62.0 17.6	ug/L	n/a	80	Byproduct of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.
Total Trihalomethanes (Entry Point)	No	10/19/11	10.3	ug/L	n/a	80	Byproduct of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.
Gross Alpha	No	Composite of four quarters in 2008	<2.E	Pci/L	0	15	Erosion of natural deposits.
Gross Beta	No	Composite of four quarters in 2008	<1.3E	Pci/L	0	50	Decay of natural deposits and man-made emissions.

Radium 228	No	Composite of four quarters in 2008	<.6E	Pci/L	0	5 (226 + 228)	Erosion of natural deposits.
Turbidity	No	**.024 NTU**	Highest Single Measurement:	NTU	N/A	TT = < 1 NTU	Soil runoff
Turbidity	No	**.0173 NTU**	Lowest monthly % of samples meeting prfm. Std of .3 NTU:	NTU	N/A	TT=95 % of samples ≤ 0.3 NTU	Soil Runoff

Turbidity is a measure of the cloudiness of the water. We test it because it is a good indicator of the effectiveness of our filtration system. Our highest single turbidity measurement NTU for the year occurred on January 25th, 2011. State regulations require that turbidity must always be below 5 NTU. The regulations require that 95% of the turbidity samples collected have measurements below 1.0 NTU. Although January was the month when we had the fewest measurements meeting the treatment technique for turbidity, the levels recorded were within the acceptable range allowed and did not constitute a treatment technique violation.

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 that, 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).
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. 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?

Last year, our system did not exceed any maximum contaminant levels.

General Information on Lead in Drinking Water:

If present, elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children. It is possible that lead 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. The Town of Hector is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at *http://www.epa.gov/safewater/lead*.

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; 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 an 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. Currently we are in the design Stages for expansion of the water system, Filtration and increased capacity and security. 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.