Annual Drinking Water Quality Report for 2008
Village of Newark Valley Water District
9 Park St, PO Box 398,Newark Valley NY 13811
(Public Water Supply ID# NY5304407)

INTRODUCTION

To comply with State regulations, Village of Newark Valley 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 **Bill Foster, DPW Supervisor at 642-8700**. 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. The meetings are held the second Tuesday of each month in the Noble Room at the Municipal Building at 7:00 P.M.

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 over 1200 people through about 450 service connections. Our water source is two groundwater wells. The groundwater is drawn from two deep-drilled wells. Well # 3 is located on Whig Street adjacent to the Village Highway Department and approximately 120 feet deep. Well # 4 is located at the Trout Ponds Park and has a well depth of 144 feet. The water is treated with sodium hypochlorite solution to a minimum of 0.2 and a maximum of 4.0 ppm as a disinfectant prior to distribution and is stored in a underground concrete reservoir which provides about 400,000 gallons of finished water for distribution.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include: Turbidity and total coliform, which is bacteria in the water and is tested for each month, Nitrate, nitrite are tested yearly. Inorganic compounds, leads and copper, volatile organic compounds, total trihalomethanes, and synthetic organic compounds are tested every three years. The table presented below depicts some 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 Tioga county Health Department at (1-800-426-4791).
As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include: total coliform, turbidity, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, and synthetic organic compounds. None of the compounds we analyzed for were detected in your drinking water.

Table of Detected Contaminants

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measure-ment	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
LEAD	NO	6706/07	<0.001-0.002	Mg/L	0.001	0.015	Corrosion of lead service pipe, brass fitting and household plumbing components
COPPER	NO	6/06/07	<0.25	Mg/L	0.025	1.3	Corrosion of household plumbing. runoff from fertilizer use.
NITRATE WELL 3	NO	2/22/08	1.39	Mg/L		10	Common sources of nitrate contamination include fertilizers, animal wastes, septic tanks, municipal sewage treatment systems, and decaying plant debris.
NITRATE WELL 4	NO	2/22/08	1.34	Mg/L		10	

We had no contaminant levels that exceeded government EPA and Health Department recommended limits.

FOR YOUR INFORMATION

Notes:
1 – 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. State regulations require that turbidity must always be below 1 NTU. The regulations require that 95% of the turbidity samples collected have

measurements below 0.3 NTU. 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, 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. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below the level allowed by the State.

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* ***Village of Newark Valley Water District*** *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.*

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2008, a section of our water system has a low pressure situation located at the far north end of our system and was not in compliance with applicable State drinking water operating, monitoring and reporting requirements. This required a boil water notice to be put in place and is still in effect at this time for this effected area. Water users in the Town of Newark Valley and Village of Newark Valley have formed committees to investigate the problem and are looking into long-term solutions to correct the problem; also in the same area of the low-pressure situation three sections of distribution pipes were not at the required four-foot deep. One of these areas have been repaired and buried with much help from the Town of Candor and The Town of Newark Valley. The resaviour is also an issue that is being investigated to check on its structural integrity.

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 2008, we collected four representative water samples per quarters that were analyzed for radon. The Radon results ie, average of the eight samples per well was,
Well # 3 Radium-226 0.05 and Radium-228 1.18,
Well # 4 Radium-226 0.12 and Radium-228 0.44
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?

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. Immune-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 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 address these improvements. We ask that all our customers help us protect our water sources, which are the heart of our community. Please remember to call if you have to dig anywhere near a water line, any damage done to the water system can be reflected in your water bill. Please call our office if you have questions.

FOR LETTERS FROM TIOGA COUNTY HEALTH DEPARTMENT
SEE THE NEXT FEW PAGES

VILLAGE OF NEWARK VALLEY COMMUNITY WATER SYSTEM SUMMARY REPORT

ON

WATER SERVICES OUTSIDE THE VILLAGE LIMITS

January 23, 2009

Written By:
Erica Gifford, PE
Public Health Engineer

Prepared By:
Tioga County Health department
1062 State Rt 38
PO Box 120
Owego, NY 13827-0120

TIOGA COUNTY HEALTH DEPARTMENT

Division of Environmental Health

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January 23, 2009

James Tornatore
Mayor, Village of Newark Valley
110 Cook Street
Newark Valley NY 13811

Re: Water Service to Unapproved Water District

Dear Mr. Tornatore,

Enclosed is a summary report of events that have transpired over that last 18 months regarding the Village serving water to an unapproved water district and the effects of an aging system jeopardizing the health of your community.

The Tioga County Health Department (TCHD) has been patiently waiting for the Village and Town to rectify the identified service and sale of water to an unapproved water district and to correct the low pressure problems that are accruing within the system which has placed them in violation of Title 10 Part 5 of the NYSCRR.

This department has tried to help both the Village and the Town to come to a compromised solution but has done all we can do under TCHD regulatory law. The Village is required to supply to this office a written statement of how they plan on correcting this problem within 60 day of the date of this letter. If we do not receive a written statement, TCHD will have no choice but to hand this outstanding "service and sale" violation over to the Department of Environmental Conservation (DEC). The DEC is the agency which regulates the state resources and authorizes the taking of water to be supplied to any other service area not explicitly permitted by law.

I you have any outstanding question or issues please call me at (607) 687-8565.

Sincerely,

Erica Gifford

Erica Gifford, PE
Public Health Engineer and
Supervisor of Environmental Health

EG:bjb

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This report is to summarize the sequence of events and a brief history in regard to the Village of Newark Valley serving water to an unapproved water district. It is also to address the over-due repairs desperately needed for a detrimentally aging water system which potentially places the residence of the Village of Newark Valley in harms way and becoming victims of a preventable public heath disaster.

The Village's water distribution system encompasses the entire Village limits and extends north of the Village along Howard Hill Road and ends on Shirley Road. Along this northern route, the Village provides water to 45 residences outside the village limits who reside in the Town of Newark Valley. At one point in history, approximately in 1904 when the system was constructed, the Village's water source was a reservoir located north of the Village. Throughout the years the reservoir has sense been abandoned and replaced with a reservoir located within the Village supplied by two groundwater supply sources. This describes how the Howard Hill and Shirley Road connection came into existence.

On June 29th 2007, Justin Lewis received a call from Bill Foster who identified an area in the furthest reaches of the distribution system that had a pressure lower than the 20psi, which is the minimum pressure noted in part 5-1 of the New York Sanitary Code. There where six homes identified to be affected by the low pressure and they were placed on a boil water notice from Tioga County Health Department (TCHD). A small leak was detected and fixed which seamed to correct the problem at that time. On July 5, 2007 the boil water notice was lifted due to the system being able to maintain pressure readings above 20psi. This length of distribution was to be monitored continually for any loss of pressure. The TCHD also pointed out that a formal agreement must be developed between the Town and the Village to develop a possible water district to address this situation and provide water outside of the Village limits to an unapproved water district.

On August 8, 2007 a letter was sent to James Tornatore, the Mayor of the Village, stated that the Village was in violation of Section 5-1.1 and 5-.24 for having part of their water system fall below the minimum pressure of 20psi and that they are serving water outside their water district without a inter-municipal agreement with the town to provide water to the Howard Hill and Shirley Road residences. According to inter-municipal law it is illegal to provide water to a defined public water system outside the limits of a municipal water system. The definition of a public water system is "that it serves at least 25 individuals daily for more than 60 days of the year".

At that time, the Village of Newark Valley had already contracted with Hunt Engineering to do a comprehensive water system evaluation to outline the water system deficiencies. Within that report, it was noted that the Howard Hill water main had minimal ground coverage in several areas, had insufficient fire flow and extends to a higher elevation which effectively minimizes fire flows throughout the lower portions of the water system. Large demands at any location within the system lower pressures within the Howard Hill water main to a level below the recommended 20psi. The Howard Hill water main is drastically susceptible to cross connection through infiltration of surface water due to its pressure dropping below 20psi and the significant deficiencies within the structure of the water main itself. These two variables tied into the entire

the entire system and these effects of the Howard Hill extension of this water system is the number one potential risk for contamination of the entire water system. In the report, prepared by HUNT Engineers the TCHD recognizes three potential options that may help and or correct the Howard Hill water main problems; they are as follows:

Corrections to Infrastructure to help pressure problem:

Option 1
Abandon the water main north of the Newark Valley west creek crossing and have each home owner install there own private well.

Option 2
Repair and replace damaged parts of the water main within the Howard Hill right of way. Fixing these may help increase flow which may in turn help with the low pressure problem.

Option 3
Repair and replace damaged parts of the water main and install a booster pump station at the village limits to increase pressure to the Howard Hill water main.

The ultimate dilemma is that the Village must apply for funding to help with the cost of improving a significant aging system. The largest problem this system faces is that it experiences low pressure in the Howard Hill water main which makes the entire system vulnerable to untreated surface water infiltrating into the system creating a public health hazard. The Village, under inter-municipal law, has neither obligation nor authority to correct any problems outside its water district without a municipal agreement to do so.

With that identified, the Village hosted several meetings with the 45 residences that reside on that portion of the water system outside the districts service limits. The result of the initial meeting was for these individuals to create a committee to understand and review all of their options, with the understanding that the Village, Town and County where there to answer any of their questions and any assistance possible. Once the committee comes up with an executable plan that is acceptable by the residences, the Village, Town and County will facilitate all necessary means to complete the plan. The county has provided two solution, they are as follows.

Solutions for the service and sale of water to an unapproved water district:

Solution1
Disconnect the water main at the village limits and have each home owner drill there own well for water use. The option for several homes to share a well is an option due to space constraints.

Solution 2
Have the customers on the Howard Hill water main make a decision to form a water district which will be administrated by the Town of Newark Valley.

As of the present date, neither the committee nor the Village has committed to an acceptable solution to this open violation and the health treats it presents to the whole community. The TCHD request, yet again, for the Village and this committee to come to a compromising solution to mitigate the health risk.