Annual Drinking Water Quality Report for 2013
Town of Wallkill Cons. W.D. #1
99 Tower Drive Building A, Middletown, N.Y. 10941
Public Water Supply ID# 3503584

To comply with State and Federal regulations, The Town of Wallkill Consolidated Water District #1 (Cons. W. D. #1) 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 your system has never violated a maximum contaminant level or any other water quality. Last year, we conducted tests for over one hundred (100) contaminants; we detected eight (8) of those contaminants, and found none of those contaminants at a level higher than the State allows. 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 Tim Grogan, Supervisor of Water and Sewer, at 342-1668. 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 7:30pm on the second and fourth Thursday of the month during January through May and September through December and on the fourth Thursday of the month during June through August. If you are unable to attend, you may wish to watch the meetings on Time Warner Cable channel 23. Dates and times of Water Committee meetings are announced at the Town Board meetings.

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.

Your water source is entirely a ground water (well) supply consisting of two sixteen-inch wells ranging in depth of thirty-four to fifty-three feet. Six eight and ten-inch wells ranging in depth of twenty-one to thirty-five feet. Three sixteen-inch wells ranging in depth of fifty-six feet to sixty feet, and six sixteen to twenty four inch wells ranging in depth from forty-one feet to sixty-two feet.

During 2013, the water was pumped from the wells to the treatment plants where chlorine and potassium permanganate are added to enhance the iron and manganese removal process as it passes through green sand filters. The water is disinfected with chlorine, the pH is raised using sodium hydroxide, and a blended phosphate is added before it leaves the treatment facilities.

The Consolidated Water District #1 has approximately Five Thousand connections, and services approximately Sixteen thousand two hundred people. The total amount of water produced in 2013 was 913 million gallons. The daily average of water treated and pumped into the distribution system was 2.5 million gallons per day. Our highest single day production was 3.8 million gallons. The amount of water delivered to customers was 711 million gallons or an average of 1.95 million gallons per day. The difference accounts for an average loss of .55 million gallons per day, which can be attributed to water main breaks, hydrant flushing, system losses, etc. In 2013, the annual charge for

water was $2.30 per thousand gallons.

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, total trihalomethanes, and synthetic organic compounds. Table I 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. A supplement containing all the test results is available for viewing by Tim Grogan at the Water Department. Please call 342-1668. You may request a copy of the supplement containing these results.

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 Health Department at (845) 291-2331.

New York State Law requires water suppliers to notify their customers about the risks of Cryptosporidiosis and Giardiasis. Cryptosporidosis can be very serious for people with weak immune systems, such as chemotherapy, dialysis, or transplant patients, as well as people with Crohn's Disease or HIV infection. People with weakened immune systems should discuss with their health care providers the need to take extra precautions such as boiling water, using a certified bottle water, or specially approved home filter. Individuals who think they may have Cryptosporidiosis or Giardiasis should contact their health care provider immediately. The New York State Department of Health (NYDOH) has determined that ten (10) of the town's wells are under the influence of the Wallkill River. This increases the risk for Cryptosporidiosis and Giardiasis contamination. However, **CRYPTOSPORIDIOSIS AND GIARDIASIS HAVE NEVER BEEN DETECTED IN THE TOWN'S WATER SUPPLY**.

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).

The NYSDOH has completed a source water assessment for this system, based on available information. Possible and actual threats to this drinking water source are evaluated. The state source water assessment includes a susceptibility rating based on the risk posed by each potential source of contamination and how easily contaminants can move through the surface 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 resource managers with additional information for protecting source waters into the future.

As mentioned before, in 2013, our water is derived from 17 drilled wells. The source water assessment has rated these wells as having high susceptibility to microbials, nitrates, industrial solvents, and industrial contaminants. These ratings are due primarily to the close proximity of SPDES and NPDES permitted discharge facilities (industrial/commercial facilities that discharge wastewater into the environment and are regulated by the state and/or federal government), and low-level residential activity assessment area. In addition, the wells draw from confined and unconfined aquifers and the overlying soils are not known to provide adequate protection from potential contamination. While the source water assessment rates our wells as being susceptible to microbials, please note that

our water in disinfected to ensure that the finished water delivered into your home meets New York State's drinking water standards for microbial contamination.

It is important to note that this source water assessment estimates the **potential** for contamination of **sources** of drinking water **not finished water.** A copy of the assessment, including a map of the assessment area, can be obtained by contacting us, as noted in this report.

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, especially during the present drought conditions:

- 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 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.

There are presently four New York State Department of Health certified water operators employed by the Town of Wallkill. Each operator must receive continuing education throughout the year. We at the Town of Wallkill Water Department work around the clock to provide top quality water at every tap. We ask that all of 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 MY OFFICE IF YOU HAVE ANY QUESTIONS 342-1668.

Tim Grogan, Supervisor

Town of Wallkill Water/Sewer

TABLE I

TABLE OF DETECTED CONTAMINANTS							
Contaminant	Violation Of sample Yes/No	Date of Sample	Level Detected (Average Range)	Unit Measure	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination.
INORGANIC COMPOUNDS							
Copper	No	7-12	90th = 1.27 Range = .065 to 1.63	mg/L	1.3	1.3	Corrosion of household plumbing systems.
Barium	No	6-12	0.019-0.037	mg/L	2.0	2.0	Erosion of natural deposits.
Nitrate	No	6-12	Max = 0.7 Range = 0.41 to 0.7	mg/L	10	10	Erosion of natural deposits.
Lead*	No	7-12	90th= 3.8** ND to 5.4	ug/L	0	15	Corrosion of household plumbing systems.
Arsenic	No	6-12	0.7	ug/l	N/A	MCL = 10	Erosion of Natural Deposits
Nickel	No	6-12	Max = 3.9 Range =3.4 to 3.9	ug/l	100	MCL = 100	Erosion of Natural Deposits
Gross Alpha	No	7-12	1.9	pCi/L	0	15	Erosion of Natural Deposits
Sodium	No	2008	Max=32.3 Range= 21.6 to 32.3	mg/L	N/A	See Note 3	Naturally Occuring
Turbidity[1]	No	3-26-13	.29	NTU	N/A	TT= ≤ 1.0 NTU	Soil Runoff
Turbidity[1]	No	2013	100%	NTU	N/A	TT=95% of samples ≤ 0.3 NTU	Soil Runoff
ORGANIC COMPOUNDS							
Total Trihalomet-hanes (TTHM)	No	2013	56.01 [2] range 25.0-84.0	ug/l	N/A	MCL= 80	By-Product of drinking water chlorination.
Haloacetic Acids (HAA5)	No	2013	22.7[2] range 1.7-49.7	ug/l	N/A	MCL= 60	By-Product of drinking water chlorination.

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.

2 – This level represents the annual quarterly average calculated from data collected.

3- Water containing more than 20 mg/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.

*The level presented represents the 90th percentile of thirty-four (34) sites tested. A percentile is a volume on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90th percentile is equal to a greater than 90% of the copper values detected at our water system. In this case, thirty-four (34) samples were collected from our system and the 90th percentile level was 1.0 mg/L. Only two samples exceed the action level of 1.3 mg/L.
** The level presented represents the 90th percentile of forty-one (41) sites tested. A percentile is a volume on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90th percentile is equal to a greater than 90% of the lead values detected at our water system. In this case, forty-one (41) samples were collected from our system and the 90th percentile level was 3.3 ug/L. None of these samples exceeded the action level (AL) for lead.

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.
Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
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.
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).