

Annual Drinking Water Quality Report for 2015
City of Corning
500 Nasser Civic Center Plaza
Corning, NY 14830
(Public Water Supply ID# NYS 5001209)
(Public Water Supply ID# NY 5030114)

INTRODUCTION

To Comply with State regulations, the City of Corning 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 Tom Schwartz, Water Distribution System Supervisor, at (607) 962-0340 ext. 1304. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled City Council meetings. The meetings are held the first Monday of every month at City Hall Council Chambers at 7:00 PM.

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.

At the time of this report, a source water assessment was not available from the NYS Department of Health. For any questions regarding this assessment, please contact the Hornell District Office of the NYS Department of Health at 607-324-8371.

The City of Corning (PWS-NY5001209) and the Hornby Water District (PWS-NY5030114) derives its water supply from the Chemung Valley Aquifer. Water is withdrawn from this aquifer by five wells located throughout the City. These wells yield ample reserve capacity to supply all demands of the City including firefighting.

The City of Corning provides the following treatment to its water supply:

- Chlorination for disinfection on all its wells
- Air stripping for removal of TCE at wells 1, 2 and 8A
- Addition of poly-phosphate for the purpose of sequestering calcium at wells 1, 2 and 8A

FACTS AND FIGURES

Our water system serves over 11,100 full time residents (approximately 4300 service connections). The total water produced in 2015 was 478 million gallons. The amount delivered to our customers was 338 million gallons. 53 million gallons was accounted for in hydrant flushing and meter inaccuracy. This leaves an unaccounted for total of 40 million gallons. Water industry standard is 10% or less for unaccounted for water. We did locate a large leak on a privately owned service line that accounted for an estimated 36 million gallons of water. The City notified the owner of their leak and it was fixed. Our number was 8% unaccounted for water for 2015.

In 2015, water customers were charged per the following chart.

Meter Size	Reading Frequency	#of Units* Base Block	Base Charge
5/8"	Quarterly	9	\$ 45.81
3/4"	Quarterly	10	\$ 50.54
1"	Quarterly	75	\$ 158.98
1-1/2"	Quarterly	150	\$ 285.83
2"	Quarterly	300	\$ 549.18
2" (High-Volume)**	Monthly	150	\$ 321.18
3"	Monthly	200	\$ 657.43
4"	Monthly	300	\$ 905.82
6"	Monthly	400	\$1,282.73
8" & Above	Monthly	500	\$1,691.77

* -1 Unit equals 100 cubic feet of water

** -2” High Volume users shall be defined as an account having a use history which exceeded one-hundred (100) units per month for seven (7) out of twelve (12) months in the previous fiscal year.

Effective July 1, 2015, additional units of water above the base block shall be billed at \$1.52 per unit through 15 units; \$1.51 per unit for units 16 through 25; \$1.50 per unit for units 26 through 75; \$1.49 per unit for units 76 through 150; \$1.48 per unit for units 151 through 300; \$1.47 per unit for units 301 through 500; \$1.46 per unit for units 501 through 1,000; \$1.45 per unit for units 1,001 through 2,000; \$1.44 per unit for units 2,001 through 4,000; \$1.43 per unit for units 4,001 through 8,000; \$1.42 per unit for 8001 units or more.

The annual average residential water charge per user in 2015 was \$263.54

SECURITY

Since 9/11, the City of Corning has taken steps to improve the security of your water supply. As funds become available, we will continue to improve our security systems. We encourage our customers to report any suspicious activity regarding our water facilities to the City of Corning Police Department (962-0340) ext. 1500 and the City of Corning Water Department (962-0340) ext. 1300. Unauthorized use of City hydrants and shut-offs is strictly prohibited.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include: inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, haloacetic acids, radiological and synthetic organic compounds, and numerous other unregulated contaminants. Additionally, your water is tested for coliform bacteria ten times a month. In 2015, we tested for more than 140 contaminants. The table 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 New York State Department of Health, 107 Broadway, Hornell, NY 14843 - Phone (607) 324-8371.

TABLE OF DETECTED CONTAMINANTS

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Maximum) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination & Health Effects
Inorganic Contaminants							
Barium	NO			mg/l	2	2	Discharge of drilling wastes; Discharge from metal refineries; erosion of natural deposits. Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.
Barium - Well 1&2		8/10/15	0.29	mg/l			
Barium - Well 3		8/12/13	0.11	mg/l			
Barium - Well 8A		8/10/15	0.27	mg/l			
Barium - Well 9		8/25/14	0.12	mg/l			
Chromium	NO			ppb	100	100	Discharge from steel and pulp mills; Erosion of natural deposits. Some people who use water containing chromium well in excess of the MCL over many years could experience allergic dermatitis.
Chromium - Well 1&2		8/10/15	2.1	ppb			
Chromium - Well 3		8/12/13	4.5	ppb			
Chromium - Well 8A		8/10/15	2.3	ppb			
Chromium - Well 9		8/25/14	3.0	ppb			
Selenium	NO			ppb	50	50	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines Selenium is an essential nutrient. However, some people who drink water containing selenium in excess of the MCL over many years could experience hair or fingernail losses, numbness in fingers or toes, or problems with their circulation.
Selenium - Well 1&2		8/10/15	2.9	ppb			
Selenium - Well 8A		8/15/12	1.0	ppb			
Selenium - Well 9		8/25/14	1.0	ppb			
Nitrate and Nitrite	NO			mg/l	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits. Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.
Nitrate - Well 1&2		8/10/15	2.0	mg/l			
Nitrate - Well 3		8/10/15	1.4	mg/l			
Nitrate - Well 8A		8/10/15	1.1	mg/l			
Nitrate - Well 9		8/10/15	0.85	mg/l			

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Maximum) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
LEAD	NO	7/11/14	(1) 90 th percentile 7.2 Range: <1-12	ppb	0	15	Corrosion of household plumbing systems; Erosion of natural deposits.
LEAD: Health Effects	Infants and children who drink water-containing lead in excess of the action level could experience delays in the physical and mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water.						
COPPER	NO	7/11/14	(2) 90 th Percentile 0.65 Range: 0.058-1.0	ppm	1.3	1.3	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives
COPPER: Health Effects	Copper is an essential nutrient, but some people who drink water-containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water-containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.						

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Maximum) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination & Health Effects
Gross Alpha Well 1 &2	NO	8/12/13	3.66	pCi/L	15	15	Erosion of natural deposits Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.
Gross Alpha Well 3	NO	8/12/13	2.71	pCi/L	15	15	
Gross Alpha Well 8	NO	8/12/13	3.48	pCi/L	15	15	
Gross Alpha Well 9	NO	8/12/13	2.21	pCi/L	15	15	
Gross Beta Well 1 &2	NO	8/12/13	1.27	pCi/L	50	50	
Gross Beta Well 3	NO	8/12/13	1.56	pCi/L	50	50	
Gross Beta Well 8	NO	8/12/13	1.13	pCi/L	50	50	
Gross Beta Well 9	NO	8/12/13	1.13	pCi/L	50	50	

Radium 226 Well 1 & 2	NO	8/12/13	.16	pCi/L	5	5	Erosion of natural deposits of certain minerals that are radioactive and may emit a form of radiation known as alpha radiation. Increased risk of cancer.
Radium 226 Well 3	NO	8/12/13	.13	pCi/L	5	5	
Radium 226 Well 8	NO	8/12/13	.14	pCi/L	5	5	
Radium 226 Well 9	NO	8/12/13	.16	pCi/L	5	5	
Radium 228 Well 1 & 2	NO	8/12/13	.47	pCi/L	5	5	
Radium 228 Well 3	NO	8/12/13	.66	pCi/L	5	5	
Radium 228 Well 8	NO	8/12/13	.56	pCi/L	5	5	
Radium 228 Well 9	NO	8/12/13	.35	pCi/L	5	5	

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Average) (Quarter) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination & Health Effects
Total Trihalomethanes	NO			ppb	N/A	80	Byproduct of drinking water disinfection. Liver, kidney or central nervous system problems; increased risk of cancer.
Mt. Brow Apts.	NO	8/14/15	35	ppb	N/A	80	
22 West 3 rd Street	NO	8/14/15	26	ppb	N/A	80	
Total Haloacetic Acids	NO			ppb	N/A	60	Byproduct of drinking water disinfection. Increased risk of cancer.
Mt. Brow Apts.	NO	8/14/15	16	ppb	N/A	60	
22 West 3 rd Street	NO	8/14/15	4.0	ppb	N/A	60	

(1) The level presented represents the 90th percentile of the 31 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 90th percentile is equal to or greater than 90% of the lead values detected at your water system. In this case, 31 samples were collected at your water system and the 90th percentile value was 7.2 parts per billion (ppb).

2) The level presented represents the 90th percentile of the 31 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 90th percentile is equal to or greater than 90% of the copper values detected at your water system. In this case, 31 samples were collected at your water system and the 90th percentile value was 0.65 parts per million (ppm).

DEFINITIONS

Maximum Contaminant Level (MCL): The highest level of contaminant that is allowed in drinking water. MCLs are set as close to 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 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 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 in one trillion parts of liquid (parts per trillion - ppt).

Picograms per liter (pg/l): Corresponds to one part of liquid in 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.

Std. Units: Standard Units, used to describe pH; pH can range from 1 Std. Unit (highly acidic) to 14 Std. Units (highly basic) with 7.0 being neutral

WHAT DOES THIS INFORMATION MEAN?

As you can see by our 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.

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 City of Corning 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 2015, our system was in compliance with all applicable State drinking water requirements for operations.

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. 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 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.

FREQUENTLY ASKED QUESTIONS

What can I do about chlorine odors in tap water?

1. Chlorine odors may be more noticeable when the weather is warmer.
2. Chlorine is essential to kill organisms that may cause disease.

The following are ways you can remove the chlorine odor from your drinking water:

- Fill a pitcher and let it stand in the refrigerator overnight. (This is the best way)
- Fill a glass or jar with water and let it stand in sunlight for 30 minutes.
- Pour water from one container to another about 10 times.
- Heat the water to about 100 degrees Fahrenheit.

Once you remove the chlorine, be sure to refrigerate the water to limit bacterial re-growth.

Sometimes my water is a rusty brown color. What causes this?

Brown water is often the result of street construction or water main work being done in the area. Any disturbance to the main, including the opening of a fire hydrant, can cause pipe sediment to shift, resulting in brown water. The settling time of the main will vary, depending on the size of the water main. In addition, brown water is commonly associated with plumbing corrosion problems inside buildings and from rusting hot water heaters. If you have a problem with brown water, it is recommended that you run your cold water for 2 - 3 minutes if it has not been used for an extended period of time. This will flush the line. You can avoid wasting water by catching your "flush" water in a container and using it to water plants or for other purposes.

Drinking water often looks cloudy when first taken from a faucet, but then clears up. Why?

Air becomes trapped in the water during main repairs. The water as a result, can sometimes appear cloudy or milky. This condition presents no threat to public health. The cloudiness is temporary and clears quickly after the water is drawn from the tap and the excess air is released.

ADDITIONAL COPIES

Additional copies of this report may be obtained by calling 607-962-0340 ext 1300 or by visiting the Customer Service Center at 381 Market Street Ext.

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, our way of life and our children's future. Please call our office if you have questions.

SPECIAL NOTICE FROM THE CITY OF CORNING

WASTEWATER TREATMENT PLANT AND COLLECTION SYSTEM

The mission of the Wastewater Treatment Plant is to intercept and clean wastewater of the city of Corning to prevent pollution of New York State waterways, and preserve this natural resource. The treatment plant is permitted by the New York State Department of Conservation to treat and return to the Chemung River up to 3 million gallons per day.

FATS - OILS - GREASE

The sanitary collection system, consisting of over 46 miles of pipe and hundreds of access manholes, is maintained by the City of Corning Department of Public Works. They need your cooperation in reducing the concentration of fats, oils and grease (FOG) that are introduced into the collection system and ultimately treated at the Wastewater Treatment Plant. Food wastes that go down City of Corning household drains add to FOG congestion in underground sanitary sewer pipes. FOG can cause blockages that result in costly maintenance and backups. We recommend that solid food wastes - like soup and stew skimming, gravies, old sour cream, chesses, and other spoiled foods, and especially pan fat or drippings from cooked meat - bacon, hamburgers, chicken, etc., - be cooled and disposed of into solid waste receptacles like garbage pails and trash cans, and not liquid waste receptacles like sinks and toilets.

The introduction of FOG into our aging sanitary collection system requires frequent use of high pressure water jetting, and dosing with grease dissolving chemicals in order to dislodge it. **WISDOM** requires us to avoid subjecting this expensive asset of pipes and manholes to any further wear and tear than necessary. By following the above recommendations the ongoing repair and replacement of our sanitary infrastructure may be stretched out over many years if we presently are careful in reducing FOG.