Annual Water Quality Report

Water testing performed in 2007

CELINA
OHIO

Celina Utilities WTP

PWS ID#: 5400011

Meeting the Challenge

We are once again proud to present to you our annual water quality report. This edition covers all testing completed from January 1, 2007 through December 31, 2007. As in the past, we are committed to delivering the best-quality drinking water and continually strive to adopt new and better methods for delivering the water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the challenges of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

Please share with us your thoughts about the information in this report. After all, well-informed customers are our best allies.

Community Participation

You are invited to participate in our public forum and voice your concerns about your drinking water. We meet the second and fourth Monday of each month beginning at 7:00 p.m. at City Hall.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

Where Does My Water Come From?

The Celina Utilities Water Treatment Plant receives its drinking water from Grand Lake. Grand Lake is fed entirely by agricultural and residential runoff from a 190-square-mile watershed. The principal streams and storage areas of the Grand Lake Watershed are Upper Beaver Creek, Grass Creek, Coldwater Creek, Burntwood Creek, and Grand Lake. To learn more about our watershed, contact the Grand Lake Watershed coordinator at the Mercer County Soil and Water Office in Celina.

A source water assessment has been performed for our area to provide baseline data about the quality of water before it is treated and distributed to our customers. This is important because it identifies the origins of contaminants within our area and indicates the susceptibility of our water system to such contaminants. For the purposes of source water assessments, all surface waters in Ohio are considered to be susceptible to contamination. By their nature, surface waters are readily accessible and can be contaminated by chemicals

> "WELL-INFORMED CUSTOMERS ARE OUR BEST ALLIES."

and pathogens that may rapidly arrive at the public drinking water intake with little warning or time to prepare. The City of Celina's drinking water source protection area contains potential contaminant sources such as agriculture, home construction, industrial and commercial businesses, septic systems, wastewater treatment plants, airports, landfills, roadways, and railways.

The City of Celina's public water system treats the water to meet drinking water quality standards, but no single treatment technique can address all potential contaminants. Implementing measures to protect Grand Lake can further decrease the potential for contaminants to impact water. More detailed information is provided in the City of Celina's Drinking Water Report, which can be obtained by calling T. Mike Sudman, Jr., Superintendent of Water and Distribution, at (419) 586-2270.

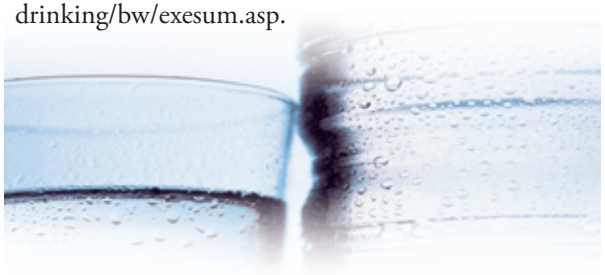
Tap vs. Bottled

Thanks in part to aggressive marketing, the bottled water industry has successfully convinced us all that water purchased in bottles is a healthier alternative to tap water. However, according to a four-year study conducted by the Natural Resources Defense Council (NRDC), bottled water is not necessarily cleaner or safer than most tap water. In fact, about 25% of bottled water is actually just bottled tap water (40% according to government estimates).

The U.S. Food and Drug Administration (FDA) is responsible for regulating bottled water, but these rules allow for less rigorous testing and purity standards than those required by the U.S. EPA for community tap water. For instance, the high mineral content of some bottled waters makes them unsuitable for babies and young children. Further, the FDA completely exempts bottled water that's packaged and sold within the same state, which accounts for about 70% of all bottled water sold in the United States.

People spend 10,000 times more per gallon for bottled water than they typically do for tap water. If you get your recommended eight glasses a day from bottled water, you could spend up to $1,400 annually. The same amount of tap water would cost about 49 cents. Even if you installed a filter device on your tap, your annual expenditure would be far less than what you'd pay for bottled water.

For a detailed discussion of the NRDC study results, check out their Web site at www.nrdc.org/water/drinking/bw/exesum.asp.



Questions?

For more information about this report, or for any questions relating to your drinking water, please call T. Mike Sudman, Jr., Superintendent of Water and Distribution, at (419) 586-2270.

Substances That Might Be in Drinking Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

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, in some cases, radioactive material, and substances resulting from the presence of animals or from human activity. Substances that may be present in source water include:

Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Lead and Drinking Water

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and your home's plumbing. Celina Utilities 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 two minutes before using the 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 at (800) 426-4791 or at www.epa.gov/safewater/lead.

What Causes the Pink Stain on Bathroom Fixtures?

The reddish-pink color frequently noted in bathrooms on shower stalls, tubs, tile, toilets, sinks, toothbrush holders, and on pets' water bowls is caused by the growth of the bacterium *Serratia marcesens*. *Serratia* is commonly isolated from soil, water, plants, insects, and vertebrates (including man). The bacteria can be introduced into the house through any of the above-mentioned sources. The bathroom provides a perfect environment (moist and warm) for bacteria to thrive.

The best solution to this problem is to continually clean and dry the involved surfaces to keep them free from bacteria. Chlorine-based compounds work best, but keep in mind that abrasive cleaners may scratch fixtures, making them more susceptible to bacterial growth. Chlorine bleach can be used periodically to disinfect the toilet and help to eliminate the occurrence of the pink residue. Keeping bathtubs and sinks wiped down using a solution that contains chlorine will also help to minimize its occurrence.

Serratia will not survive in chlorinated drinking water.

Findings and Orders

Currently, our system is operating under Ohio EPA-mandated Findings and Orders. Under the terms of the Orders, we are required to notify water customers in our service area of our high TTHMs levels. The following paragraphs will outline the Orders, which have not been completed and are considered in violation. The Orders have not yet been completed due to cost restrictions. A surface water study has been completed, as well as a granular activated carbon (GAC) study and pilot test. By mid-2007, bids for the design of a GAC facility addition to the existing water plant will be complete, with construction and drinking water compliance to follow.

- Not later than five (5) months from the effective date of these Orders (May 31, 2003), the Utility shall submit pilot study protocols to the Ohio EPA for review and approval. The pilot study protocols shall describe the procedures necessary to evaluate the source water for both the groundwater treatment system and surface water treatment system. Completed October 31, 2003.
- If Ohio EPA should require any revisions to the pilot study protocols, the Utility shall make any such changes or modifications and/or submit any additional information to the Ohio EPA within ten (10) business days of receiving a comment letter from the Ohio EPA. A letter was received and the reply was forwarded to the Ohio EPA prior to the deadline.
- At least sixty (60) days prior to commencement of any proposed upgrade and/or repair of the PWS, the Utility shall submit to the Ohio EPA documentation and engineering information pertaining to such activity. The Ohio EPA Engineering Department will notify the Utility should pilot testing be necessary for the proposed work. Both the Clarifiers and Ozone System were tested for possible retrofits. The clarifier option would require a four-quarter pilot study. As outlined in the following Orders, time for a major project was not allowed under the Director's Ruling.
- Not later than eighteen (18) months from the effective date of these Orders, the Utility shall have achieved compliance with the MCL for TTHMs pursuant to OAC Rule 3745-81-12(B). Compliance with the MCL for TTHMs shall be based upon a running annual average, and for purposes of measuring compliance with this Order only, April 2003 shall commence the running annual average timeframe.
- Should the Utility be unable to complete the requirements of the previous Order, within thirty (30) days of notification by the Ohio EPA, the Utility shall proceed as indicated by the following schedule:

(A) Within twenty-five (25) months from the effective date of these Orders, the Utility shall submit a written report on the findings and results of the completed pilot study to the Ohio EPA.

(B) If the Ohio EPA should require any revisions to the pilot study, the Utility shall make any changes or modifications and/or submit any additional information to the Ohio EPA within ten (10) business days of receiving a comment letter from the Ohio EPA.

(C) Within twenty-eight (28) months from the effective date of these Orders, the Utility shall submit a General Plan, in accordance with OAC Rule 3745-91-02(C), to the Ohio EPA for review and approval. The General Plan shall describe the construction of a new groundwater treatment plant and/or surface water treatment plant, and shall include a detailed compliance schedule with applicable milestone dates of significant events that are necessary to attain compliance.

(D) Within thirty-one (31) months from the effective date of these Orders, and subject to approval of the pilot study, the Utility shall submit detailed plans to the Ohio EPA for the construction of a water treatment plant in accordance with OAC Chapter 3745-91.

(E) If the Ohio EPA should require any revisions to the detail plans, the Utility shall make any changes or modifications and/or submit any additional information to the Ohio EPA within thirty (30) business days of receiving a comment letter from the Ohio EPA.

(F) Within three (3) months of the General Plan approval, in accordance with detail plans approved by the Ohio EPA and the OAC Chapter 3745-91, the Utility shall begin construction of the new water treatment plant.

(G) Within eighteen (18) months of beginning construction, in accordance with detailed plans approved by the Ohio EPA and OAC Chapter 3745-91, the Utility shall complete construction of the new water treatment plant to meet all applicable treatment requirements of OAC Chapter 3745-81 and OAC Rule 3745-91-09.

(H) Within three (3) months of operating the new water treatment plant, the Utility shall cease operation and physically separate the existing water treatment plant from the distribution system.

(I) Within seven (7) business days after the deadlines given, the Utility shall send written notification of compliance with the requirements of each of the Orders to the Ohio EPA.

- The Utility shall monitor in accordance with its current chemical monitoring schedules and all subsequent schedules provided by the Director.
- After the effective date of these Orders, The Utility shall provide public notice once every three (3) months until compliance is attained with the TTHMs MCL in accordance with OAC Rule 3745-81-32(C)(2)(b).
- The Utility's obligations under these Orders shall terminate when the Utility certifies in writing and demonstrates to the satisfaction of the Ohio EPA that the Utility has performed all obligations under these Orders and/or has achieved compliance with the running annual average MCL for TTHMs pursuant to OAC Rule 3745-81-12(B), and the Chief of the Ohio EPA's DDAGW acknowledges, in writing, the termination of these Orders.

About Our Violation

Celina Utilities has reported a violation for total trihalomethanes (TTHMs) for the four quarterly samples taken in 2007. Compliance with the Maximum Contaminant Level (MCL) is based on a running annual average for the four most recent quarterly samples taken. We are investigating and taking the necessary steps to correct the problem as soon as possible. Some people who drink water that contains trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

Sampling Results

During the past year we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The table below shows only those contaminants that were detected in the water.

The state requires us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Barium (ppm)	2007	2	2	0.008	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Bromate (ppb)	2007	10	10	8	ND–8	No	By-product of drinking water disinfection
Chlorine (ppm)	2007	[4]	[4]	3.8	0.5–3.8	No	Water additive used to control microbes
Haloacetic Acids [HAA] (ppb)	2007	60	NA	51.8	22.8–84.7	No	By-product of drinking water disinfection
Nitrate (ppm)	2007	10	10	1.78	ND–1.78	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
TTHMs [Total Trihalomethanes][1] (ppb)	2007	80	NA	243.4	113.7–367.4	Yes	By-product of drinking water chlorination
Turbidity[2] (NTU)	2007	TT	NA	0.28	0.02–0.28	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2007	TT	NA	100	NA	No	Soil runoff

Tap water samples were collected from 30 sample sites throughout the community.

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	ACTION LEVEL	MCLG	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE ACTION LEVEL	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2005	1.3	1.3	0.1	0	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

[1] Currently, our system is operating under Ohio's EPA-mandated Findings and Orders, which impose a compliance schedule requiring actions leading to compliance. Under the terms of the Orders, we are required to notify water customers in our service area of our high TTHM levels.

[2] Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system.

Definitions

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

MCL (Maximum Contaminant Level): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG (Maximum Contaminant Level Goal): 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.

MRDL (Maximum Residual Disinfectant Level): 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.

MRDLG (Maximum Residual Disinfectant Level Goal): 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 contaminants.

NA: Not applicable.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.