2015

CITY OF BEREA, OHIO

Water Quality Report

About Your Drinking Water

The City of Berea public water system has prepared the following report on the quality of our drinking water. Included are general health information, water quality test results, suggestions on how you can participate in decisions concerning your drinking water and how to contact us.

Public comments are encouraged at regular meetings of Berea City Council, which meets on the first and third Mondays of each month at 7:30 pm at City Hall (except in July and August).

For more information on this report, contact Kenneth Yee, Water Treatment Superintendent, at (440) 234-5652 or e-mail waterplant@cityofberea.org.

Where does my water come from?

Coe Lake

The City of Berea public water system (PWS No. 18000111) uses surface water drawn from the East Branch of the Rocky River. Water also can be drawn from Coe Lake and Baldwin Creek when needed.

Surface waters are susceptible to contamination. Sources of contamination include urban and agricultural runoff, industrial sources, oil and gas production, sanitary sewer overflows, municipal wastewater treatment discharges and septic systems, train and motor vehicle accidents or spills.

The City of Berea public water system treats the water to meet drinking water quality standards, but no single treatment technique can address all potential contaminants. More detailed information is provided in Berea's Drinking Water Source Assessment report, available by contacting the Ohio EPA at (800) 686-6330, by going to epa.state.oh.us/ddagw/pdu/swap or by calling the Berea Water Plant Superintendent at (440) 234-5652.

SAY NO TO WATER POWERED SUMP PUMPS!

Although it sounds like a cool idea, The City of Berea advises against the use of sump pumps that are water powered. These devices can lead to unnecessary waste of water, high bills, and even more worrisome are the potential health hazards associated with these pumps from drinking water contamination. Also, these devices require that a backflow preventor be installed per Ohio EPA rules and must be tested annually by a properly licensed plumber.

Mayor
Cyril M. Kleem

Director of Public Service
Paul Anzalone

Water Superintendent
Kenneth Yee

Water Service Contact Numbers:

Water Billing : (440) 891-3308 Meter repair, To have water turned off/on, questions on Water bill, to schedule a final read.

Service Garage: (440) 826-5853
7 am to 3 pm for water main breaks, hydrant leaks or sewer problems.
After 3 pm call **S. W. Dispatch (440) 238-7373**

Water Treatment Plant: (440) 234-5652
If water is discolored, questions on backflow devices, water quality or low pressure.
Extension 0 rings all phones.

Meter Project Questions: (440) 234-5652
For questions or additional information on the Meter project, call Sandra Vozar. **ext. 6225**

Nitrate information

Nitrate in drinking water at levels above 10 ppm is a health risk for infants less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

Lead information

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 home plumbing. The Berea Water Department 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. 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 http://www.epa.gov/safewater/lead. Berea will be sampling residences in 2017 for lead and copper. If you wish to participate in the sampling , have concerns about lead, or need more information on your service line, please contact us.

Sources of contamination to drinking water

Sources for tap water and bottled water can be contaminated as they travel over the surface or through the ground. The water dissolves naturally occurring minerals and in some cases radioactive material plus waste from animals and humans.

Contaminants may include:

°Microbes: viruses, bacteria, Cryptosporidium, Giardia, which come from sewage treatment plants, septic systems, livestock and wildlife.

°Inorganics: salts and metals, which can occur naturally or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

°Pesticides and herbicides.

°Organic chemicals: synthetic and volatile chemicals that are byproducts of industry, petroleum production, gas stations, urban water runoff and septic systems.

°Radioactive material: can occur naturally or be the result of oil and gas production and mining.

The EPA regulations limit the amount of certain contaminants in drinking water. The FDA regulates contaminants in bottled water. Both can be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily mean the water poses a health risk.

Some people may be more vulnerable to contaminants in drinking water. Immuno-compromised people such as those undergoing chemotherapy, those 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 providers about drinking water. EPA/CDC guidelines on how to lessen the risk of infection from Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hot Line, (800) 426-4791.

The EPA requires regular sampling to ensure drinking water safety. The chart on the next page contains information on those contaminants that were found in the City of Berea Water System.

Definitions:

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

Parts per Million (ppm) or Milligrams per Liter (mg/L): Units of measure for concentration of a contaminant. A part per million corresponds to one second in a little over 11.5 days.

Parts per Billion (ppb) or Micrograms per Liter (µg/L): Units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.

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 contaminants.

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.

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

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

(A) Turbidity is the measure of cloudiness of water and effectiveness of our filtration system. The highest recorded result for 2014 was 0.15 NTU. It shall not exceed 5 NTU at any time.
(B) Total trihalomethanes and haloacetic acids are reported as the highest annual rolling average and highest and lowest quarterly measurement.
(C) Value reported under level found for Total Organic Carbon is lowest ratio between percentage of TOC actually removed to percentage of TOC required to be removed. A value of greater than (1) indicates that the water system is in compliance with TOC removal requirements.
(D) NOTE: We are required by USEPA to test unregulated contaminants under UCMR Rule 3. We conducted testing in 2013 for four consecutive quarters as required and there were no significant findings.

Sampling Berea's Drinking Water

The City of Berea Water Department **has a current, unconditioned license to operate our water system.** We conducted sampling for bacteria, inorganic, synthetic organic and volatile organic contaminants during 2015. Samples were collected for 93 different contaminants, most of which were not detected in the City of Berea public water supply. The Ohio EPA requires us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, are more than one year old.

Contaminants	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
Bacteriological							
Turbidity (NTU)	NA	TT	0.160	0.047-0.160	NO	2015	Soil run off
Turbidity % meeting standard See (A)	NA	TT	100%	100%	NO	2015	
Total Organic Carbon See (C)	NA	TT	2.31	2.17-2.42	NO	2015	Naturally present in the environment
Inorganic Contaminants							
Fluoride (ppm)	4	4	0.99	0.75-1.04	NO	2015	Erosion of natural deposits, Additive to promote strong teeth. Discharge from fertilizer and aluminum factories
Barium (ppm)	2	2	0.0161	NA	NO	2015	Discharge from metal refineries, erosion of natural deposits
Nitrate (ppm)	10	10	6.42	1.24-6.42	NO	2015	Runoff from fertilizer use; leaching from septic tanks, sewage, Erosion of natural deposits
Cyanide, total (ppm)	0.2	0.2	0.017	NA	NO	2015	Discharge from steel/metal, plastic, fertilizer factories
Copper (ppm)	1.3	AL=1.3	0.007	NA	NO	2014	Corrosion of household plumbing systems; erosion of natural deposits
(*90th percentile) Zero out of 30 samples in excess of the Action Level.							
Lead (ppb)	15	AL=15	<.002	NA	NO	2014	Corrosion of household plumbing systems; erosion of natural deposits
(*90th percentile) Zero out of 30 samples in excess of the Action Level.							
Volatile Organic Contaminants							
HAA5 (ppb) See B	NA	60	13.1	6.75-16.6	NO	2015	By-product of drinking water chlorination
TTHMs (ppb) See B	NA	80	69.2	25.77-69.22	NO	2015	
			Avg.	Range			
Chloroform (ppb)	NA	NA	20.3	4.48-25.04	NO	2015	
Bromoform (ppb)	NA	NA	6.35	0.66-6.70	NO	2015	
Bromodichloromethane (ppb)	NA	NA	18.75	8.34-23.23	NO	2015	
Dibromochloromethane (ppb)	NA	NA	18.46	6.0-22.41	NO	2015	
Residual Disinfectants							
Total Chlorine (ppm)	4	4	0.83	0..56-0.96	NO	2015	Water additive to control microbes

City of Berea
11 Berea Commons
Berea, Ohio 44017

PRESORTED STANDARD
U.S. PAID
BEREA, OH
PERMIT #225
ECRWSS

POSTAL PATRON

NECO
Smart Solutions, Water Powered

Berea Water Meter Replacement Program

What is the Berea Water Meter Replacement Program?

The Berea Water Department has initiated a program to replace approximately 4,000 of the City's residential and commercial water meters and add the associated meter transmitting units (MTUs). MTUs are small, grey, electronic boxes that work with the water meter to transmit meter readings to the billing office.
Meters will be replaced between June-December 2016.

How do I schedule an appointment?

NECO, the installation contractor, will be contacting residents by letters and door hangers with information on how to call to schedule an appointment. They will perform the work in neighborhood zones. Please wait for a letter from NECO requesting you to make your appointment. Get updated info or schedule through their web portal http://www.necowater.com/berea/

Is there a cost for the meter and MTU?

The project cost will be shared equally by all Berea Water Departments customers. A monthly surcharge of approximately $2.00 will be added to each customer account. It also covers the computer, software ,and related equipment and upgrades.

Questions?

Contact Sandra Vozar, Utility Engineer, 440-234-5652 ext. 6225 or email svozar@cityofberea.org

How will I identify the installer?

The City has selected NECO as the contractor who will conduct the water meter and MTU installations. NECO employees will carry badges with their name, title, signature and employees will be wearing NECO uniforms.

Do I have to be home at the time of installation?

Yes. An adult, 18 years or older, must be present at the time of installation. A wide range of time slots will be available to accommodate our customers' busy schedules.

Will I need to do anything to my home before the installer arrives?

Please secure all pets away from meter location and clear space around the water meter located inside your property. A 3' area in front of and around the meter will be required to access the meter for replacement. Property owners with tenants will need to notify them of an installation appointment time and the brief interruption in water service that may occur.

How long will the appointment take?

In most cases, the appointment will take less than one hour. During this time the installer will replace your water meter and add an MTU.