

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF SAFE DRINKING WATER

Consumer Confidence Report (CCR) Certification Form

Name of CWS: Borough of Zelienople	PWSID Number: <u>5100093</u>
December 31, 2018 has been distributed to customers (a	firms that its CCR for the period of January 1, <u>2018</u> through and appropriate notices of availability have been given). The correct and consistent with the compliance monitoring data Environmental Protection (DEP).
Please check all items that apply to your CCR deliver	ry.
☐ E-mail – direct URL to CCR*	e via a direct uniform resource locator (URL)* Date mailed: June 27, 2019
 □ E-mail – CCR sent as an attachment to the e-m □ E-mail – CCR sent embedded in the e-mail* * If the CCR was provided electronically, attach a degree of the CCR was provided electronically, attach a degree of the CCR was provided electronically, attach a degree of the CCR was provided electronically, attach a degree of the CCR was provided electronically, attach a degree of the CCR was provided electronic newsletter or listserv (attach a copy of the CCR was provided electronic newsletter or listserv (attach a copy of the CCR in public places (attach a copy of the CCR in electronic newsletter or listserv (attach a copy of the CCR in electronic newsletter or listserv (attach a copy of the CCR in electronic newsletter or listserv (attach a copy of the CCR in electronic newsletter or listserv (attach a copy of the CCR in listser (attach a copy of the CCR in	escription of how a customer requests a paper copy. Ing consumers: Ing.org Vice area (attach a list of zip codes used) Inedia (attach copy of announcement) Independent of the property o
	social media outlets (attach list of outlets utilized) et site because this system serves 100,000 or more.
	ption Form have been sent to the DEP district office (or the oversight and support of this water system. (See back of form Print Name: Donald C. Pepe Phone: (724) 452-6610 Date: 8/20/2020
For DEP use only. Checked by:	Date:

Safe Drinking Water Program Regional Office and County Health Department Contact Information for CCR and CCR Certification Form Submissions

- The completed form is to be addressed to: PA DEP Safe Drinking Water and sent to the address of the appropriate district office or county health department (CHD) having jurisdiction over the water system.
- District and CHD addresses by county can be found within DEP document number 3930-FM-BSDW0560. This
 document can be located by searching under "forms" for document number 3930-FM-BSDW0560 on eLibrary at
 the following link: http://www.depgreenport.state.pa.us/elibrary/GetFolder?FolderID=3195.

2018 ZELIENOPLE BOROUGH ANNUAL DRINKING WATER QUALITY REPORT PWSID #: 5100093 NAME: BOROUGH OF ZELIENOPLE

Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, ó hable con alguien que lo entienda. (This report contains important information about your drinking water. Have someone translate it for you, or speak with someone who understands it.)

WATER SYSTEM INFORMATION:

This report shows our water quality and what it means. If you have any questions about this report or concerning your water utility, please contact the Public Works Director_at 724-452-6610 x 242 or pwzelieboro@zoominternet.net. We want you to be informed about your water supply. If you want to learn more, please attend any of our regularly scheduled meetings. They are held the 2nd and last Monday of the Month at 7:30 p.m. at the Municipal Building.

PROVIDER AND SOURCE OF WATER:

The Borough of Zelienople is consecutive water system which purchases its water from Beaver Falls Municipal Authority (BFMA) for its customers. The source of water for BFMA is the Beaver River, which is formed by the confluence of the Mahoning and Shenango Rivers near New Castle. There are also several smaller tributaries, including the Connoquenessing Creek, Pymatuning Creek and Brush Creek, that feed into the watershed that supplies the water treatment plant.

A Source Water Assessment of the Beaver River was completed by the PA Department of Environmental Protection (Pa. DEP). The Assessment has found that the Beaver River is potentially most susceptible to accidental spills along roads and railways that border the river for almost its entire length. Overall, our source has a high risk of significant contamination. A summary report of the Assessment is available on the Source Water Assessment & Protection Web page at (http://www.dep.state.pa.us/dep/deputate/watermgt/wc/Subjects/SrceProt/SourceAssessment/default.htm). Complete reports were distributed to municipalities, water supplier, local planning agencies and PADEP offices. Copies of the complete report are available for review at the Pa. DEP Pittsburgh Regional Office, Records Management Unit at (412) 442-4000.

Some people may be more vulnerable to contaminants 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 about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the *Safe Drinking Water Hotline* (800-426-4791).

MONITORING YOUR WATER:

We routinely monitor for contaminants in your drinking water according to federal and state laws. The following tables show the results of our monitoring for the period of January 1 to December 31, 2018. The State allows 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 is from prior years in accordance with the Safe Drinking Water Act. The date has been noted on the sampling results table.

DEFINITIONS:

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

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 using the best available treatment technology.

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 contaminants.

Minimum Residual Disinfectant Level (MinRDL) - The minimum level of residual disinfectant required at the entry point to the distribution system.

Level 1 Assessment – A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment – A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an *E. coli* MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

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

Mrem/year = millirems per year (a measure of radiation absorbed by the body)

(mg/L)

pCi/L = picocuries per liter (a measure of radioactivity)

ppq = parts per quadrillion, or picograms per liter

ppm = parts per million, or milligrams per liter

ppb = parts per billion, or micrograms per liter ($\mu g/L$)

ppt = parts per trillion, or nanograms per liter

DETECTED SAMPLE RESULTS: Borough of Zelienople

Chemical Contan	Chemical Contaminants – Borough of Zelienople							
Contaminant	MCL in CCR Units	MCLG	Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Chlorine	4	4	1.47	0.56-1.47	ppm	7/2018	N	Water additive used to control microbes
TTHMs (Total trihalomethanes)	80	N/A	50.53	24-88.5	ppb	Quarterly	N	By-product of drinking water disinfection
Haloacetic Acids (HAA)	60	N/A	23.1	15-33.8	ppb	Quarterly	N	By-product of drinking water disinfection
Dichloroacetic Acid	60	N/A	11.2	9-11.2	ppb	Quarterly	N	By-product of drinking water disinfection
Trichloroacetic Acid	60	N/A	9.62	7.21-9.62	ppb	Quarterly	N	By-product of drinking water disinfection

Lead and Copper – Borough of Zelienople								
Contaminant	Action Level (AL)	MCLG	90 th Percentile Value	Units	# of Sites Above AL of Total Sites	Violation Y/N	Sources of Contamination	
Lead	15	0	0.005	ppb	2	N	Corrosion of household plumbing.	
Copper	1.3	1.3	0.199	ppm	0	N	Corrosion of household plumbing.	

Turbidity						
Contaminant	MCL	MCLG	Level Detected	Sample Date	Violation Y/N	Source of Contamination
Turbidity	TT=1 NTU for a single measurement	0	0.11	6/28/19	N	Soil runoff
	TT= at least 95% of monthly samples<0.3 NTU		100%	6/28/19	N	

DETECTED SAMPLE RESULTS: Beaver Falls Municipal Authority (BFMA)

Chemical Contar	ninants -	BFMA			For the			
	MCL in							
Contaminant	CCR Units	MCLG	Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Copper	1.3	1.3	0.329	0.015-1.3	ppm	6/2018	N	Corrosion of household plumbing, erosion of natural deposits
Lead	15.0	0.00	0.0	0.0-3.88	ppb	6/2018	N	Corrosion of household plumbing, erosion of natural deposits
Nitrate	10.0	10.0	1.13	1.13	ppm	9/2018	N	Runoff from fertilizer use, Leaching from septic tanks and sewage, erosion of natural deposits
Fluoride	2	2	0.54	0.54	ppm	6/2018	N	Erosion of natural deposits; Additive to promote strong teeth; discharge from fertilizer and aluminum factories
Chlorine	4.0	4.0	3.06	0.2-3.06	ppm	Monthly	N	Water additive to control microbes
Chloramines	4.0	4.0	2.51	0.07-2.51	ppm	Monthly	N	Water additive to control microbes
TTHMs (Total trihalomethanes)	80	N/A	49.48	11.7-91.0	ppb	Quarterly	N	By-product of drinking water disinfection
Haloacetic Acids (HAA)	60	N/A	34.40	14.1-56.0	ppb	Quarterly	N	By-product of drinking water disinfection
Dichloroacetic Acid	60	0.00	11.2	9-11.2	ppb	Quarterly	N	By-product of drinking water disinfection
Trichloroacetic Acid	60	0.00	9.62	7.21-9.62	ppb	Quarterly	N	By-product of drinking water disinfection

Entry Point Disinfectant Residual - BFMA							
Contaminant (Units)	Minimum Disinfectant Residual	Lowest Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Chlorine (ppm)	0.2	0.80	0.80-2.67	ppm	2018	N	Water additive used to control microbes.

Total Organic Ca	arbon (TOC) - BFMA				
Contaminant	Range of % Removal Required	Range of percent removal achieved	Number of quarters out of compliance	Violation Y/N	Sources of Contamination
TOC	25-45	31.7-55.9	0	N	Naturally decaying organic matter

UNREGULATED CONTAMINANT MONITORING - BFMA Finished water (sampled in March, June, September, December 2018)							
Germanium	0.300	<0.300	N/A				
Manganese	0.400	1.16 – 2.28	50	Naturally occurring element			
Alpha – hexachlorocyclohexane	0.010	<0.010	N/A	Pesticide			
Chlorpyrifos	0.029	<0.029	N/A	Organophosphate insecticide			
Dimethipin	0.192	<0.192	7.3	Runoff from herbicide use			
Ethoprop	0.029	<0.029	N/A	Pesticide			
Oxyfluorfen	0.048	<0.048	N/A	Runoff from herbicide use			
Profenofos	0.288	<0.288	N/A	Pesticide for cotton crops			
Tebuconazole	0.192	<0.192	N/A	Agricultural Fungicide			
Permethrin	0.038	<0.038	N/A	Residential/Industrial pesticide			
Tribufos	0.067	<0,067	N/A	Pesticide for cotton crops			
1-Butanol	2.00	<2.00	N/A	Solvent, fuel additive, plasticizer			
2 - Methoxyethanol	0.400	<0.400	N/A	Jet fuel anti-icing additive; solvent for resins, coatings, dyes			
2-Propen-1-ol	0.500	<0.500	N/A	Herbicide			
ВНА	0.0297	<0.0297	N/A	Antioxidant and preservative in food, animal feed, cosmetics, rubber, petroleum products; also used in medicines			
o-Toluidine	0.00693	<0.00693	N/A	Manufacture of dyes			
Quinoline	0.0198	<0.0198	N/A	Discharges from petroleum, coal			

Untreated water (sampled in March, June, September, December 2018) - BFMA						
Contaminant	Reporting Limit	Range Detected (ug/L)	Health Advisory Level	Likely Source of Contamination		
Bromide	20.0 (ug/L)	<20.0 - 265	N/A	Naturally occurring		
Total Organic Carbon	0.500 (mg/L)	4.12 - 6.38	N/A	Naturally decaying organic matter		
Total Microcystin	0.300	<0.300	0.3 children, 1.6 adults	Produced by certain species cyanobacteria		
Anatoxin-a	0.0300	<0.0300	N/A	Produced by certain species cyanobacteria		
Cylindrosperopsin	0.0900	<0.0900	0.7 children, 3 adults	Produced by certain species cyanobacteria		

Distribution System (sampled in March, June, September, December 2018)						
Contaminant	Reporting Limit (ug/L)	Range Detected (ug/L)	MCL (ug/L)	Likely Source of Contamination		
Monochloroacetic Acid	2.00	<2.0 – 18.9	60	By-product of disinfection		
Monobromoacetic Acid	0.300	<0.300 – 1.04	60	By-product of disinfection		
Dichloroacetic Acid	0.200	6.4 – 16	60	By-product of disinfection		
Trichloroacetic Acid	0.500	6.38 – 22.9	60	By-product of disinfection		
Bromochloroacetic Acid	0.300	1.94 – 4.95	N/A	By-product of disinfection		
Dibromoacetic Acid	0.300	<0.300 – 2.49	60	By-product of disinfection		
Bromodichloroacetic Acid	0.500	2.53 – 7.41	N/A	By-product of disinfection		
Chlorodibromoacetic Acid	0.300	<0.300 – 2.35	N/A	By-product of disinfection		
Tribromoacetic Acid	2.00	<2.00	N/A	By-product of disinfection		

^{*}EPA's MCL for fluoride is 4 ppm. However, Pennsylvania has set a lower MCL to better protect human health.

VIOLATIONS: BFMA

Beaver Falls Municipal Authority had one violation in 2018: failure to monitor an individual filter effluent, which necessitated the attached public notification. (see the attached Public Notification)

EDUCATIONAL INFORMATION:

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 activity. Contaminants 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, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater run-off, 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 can also come from gas stations, urban stormwater runoff, and
 septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA and DEP prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA and DEP 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 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 Environmental Protection Agency's *Safe Drinking Water Hotline* (800-426-4791).

Information about Lead

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 Borough of Zelienople 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. 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 or at http://www.epa.gov/safewater/lead.

A paper copy of this report can be picked up at the Zelienople Municipal Building or you may request a copy by calling the Borough office at 724-452-6610.

PUBLIC NOTICE

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER FAILURE TO MONITOR

ESTE INFORME CONTIENE INFORMACION IMPORTANTE ACERA DE SU AGUA POTABLE. HAGA QUE ALGUIEN LO TRADUZCA PARA USTED, O HABLE CON ALGUIEN QUE LO ENTIENDA.

Monitoring Requirements Not Met for Beaver Falls Municipal Authority

Our water system violated a monitoring requirement in 2018. Even though this was not an emergency, as our customers, you have a right to know what happened and what we did to correct the situation.

What should I do?

There is nothing you need to do at this time.

What Happened? What was done?

On September 25, 2018, one of our eight online filter turbidity analyzers was broken, which required grab samples from that specific filter effluent every 4 hours. During that time, the 7pm grab sample was missed. When this discovery was made, a sample was taken immediately at 11pm on September 25, and the turbidity was in compliance. Since then, the online analyzer was replaced and is recording as required.

For more information, please contact Tracy Price at (724)847-7387

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartment, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent to you by the Beaver Falls Municipal Authority.

PWS ID#: 5040012 Date Distributed: 3/13/19