

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



## 2021 ANNUAL DRINKING WATER QUALITY REPORT

**PWSID #:** 5300012      **NAME:** East Dunkard Water Authority

*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 Justin Robinson at 724-943-3713. 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 1st Thursday of the month at 6 PM at the water plant office located at 2790 South Eighty Eight Road, Dilliner, PA, 15327.

### SOURCE(S) OF WATER:

Our water source is:

Monongahela River, Surface Water, 2790 South Eighty Eight Road, Dilliner, PA, 15327.

A Source Water Assessment of our source(s) was completed by the PA Department of Environmental Protection (Pa. DEP). The Assessment has found that our source(s) of is/are potentially most susceptible to:

Potential Sources of Contamination	Contaminants of Concern	Description	Protection Priority
Transportation corridors/Road deicing,	Metals, turbidity, SOCs	Road deicing and potential for spills along roads, bridges	A
“Wildcat” sewers, Combined Sewer Outfalls	Pathogens, bacteria, viruses, nutrients	Raw sewage entering water source	A
Utility substations	Heavy metals, SOCs, VOCs	Accidents near water source	A
Marinas, River Barges/Shipping	Petroleum products	Accidental spills from marinas/boats	
Urban Areas	Metals, nitrate/nitrite, VOCs, SOCs	Stormwater runoff from lawns, septic, and parking areas	A-B
Power plants	Heavy metals	Waste piles	B
Strip mines	Turbidity, metals, heavy metals, acidity	Storm water runoff from stripped area	B
Wastewater Treatment	Pathogens, bacteria, viruses, nutrients	Regulated discharges and overflow	B

Overall, the Monongahela River has a high risk of significant contamination. A summary report of the Assessment is available on the Source Water Assessment Summary Reports eLibrary web page:

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[www.elibrary.dep.state.pa.us/dsweb/View/Collection-10045](http://www.elibrary.dep.state.pa.us/dsweb/View/Collection-10045). 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 Southwest 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, 2022 to December 31, 2022. 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)

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

*ppb* = parts per billion, or micrograms per liter (µg/L)

*ppm* = parts per million, or milligrams per liter (mg/L)

*ppq* = parts per quadrillion, or picograms per liter

*ppt* = parts per trillion, or nanograms per liter

**DETECTED SAMPLE RESULTS:**

<b>Chemical Contaminants</b>								
	MCL in CCR Units	MCLG	Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Barium	2	2	0.039	0.039-0.039	ppm	2021	N	Discharge of drilling wastes; discharge from metal refineries; erosion of natural desposits
TTHMS (total trihalomethanes)	80	N/a	38.6	17.5-57.8	ppb	2021	N	by-product of drinking water chlorination
Haloacetic Acids (FIVE)	60	n/a	15.5	0-36.9	ppb	2021	N	by-product of drinking water disinfection
Chlorine	MRDL L=4	MRDL G=4	0.48	0.05-0.91	ppm	2021	N	water additive used to control microbes

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

<b>Entry Point Disinfectant Residual</b>							
Contaminant	Minimum Disinfectant Residual	Lowest Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Chlorine	0.2	0.5	0.5-2.9	ppm	2021	N	Water additive used to control microbes.

<b>Lead and Copper</b>							
Contaminant	Action Level (AL)	MCLG	90 <sup>th</sup> Percentile Value	Units	# of Sites Above AL of Total Sites	Violation Y/N	Sources of Contamination
Lead	15	0	0	ppb	0 of 20 sites	N	Corrosion of household plumbing.
Copper	1.3	1.3	0.028	ppm	0 of 20 sites	N	Corrosion of household plumbing.

<b>Turbidity</b>						
Contaminant	MCL	MCLG	Level Detected	Sample Date	Violation Y/N	Source of Contamination
Turbidity	TT=1 NTU for a single measurement	0	5	08-25-2021 and 10-27-201	Y	Soil runoff
	TT= at least 95% of monthly samples ≤0.3 NTU		99.95%	07-2021	N	

<b>Total Organic Carbon (TOC)</b>					
<b>Contaminant</b>	<b>Range of % Removal Required</b>	<b>Range of percent removal achieved</b>	<b>Number of quarters out of compliance</b>	<b>Violation Y/N</b>	<b>Sources of Contamination</b>
TOC	35%	-883.05% to 43.06%	2	Y	Naturally present in the environment

**DETECTED CONTAMINANTS HEALTH EFFECTS LANGUAGE AND CORRECTIVE ACTIONS:**

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.

Customers were alerted of the issues and public notices were sent. Corrective actions were taken to fix the turbidity and TOC issues. Additional employees and expert consultants were hired in early 2022. The sediment pond and clarifier were cleaned in March and April 2022, The clarifier was repaired in April 2022 and is fully operational.

**OTHER VIOLATIONS:**

EDWA has received several other violations. In July 2021, an electrical storm caused the malfunction of the chlorine analyzer at Griffin Tank. EDWA failed to call DEP to report. The chlorine analyzer was repaired and the issues caused by the storm were corrected. In September 2021, an electrical storm again caused the malfunction of the chlorine analyzer at Griffin. EDWA failed to report the issue within 1 hour required by DEP. Again, The chlorine analyzer was repaired and the issues caused by the storm were corrected.

The certified plant operator resigned in October 2021. EDWA failed to hire a certified licensed operator by the deadline established by DEP. A certified licensed operator has since been hired.

Samples for Total Coliform and chlorine are taken at the same time at locations approved by the DEP throughout the distribution system each week. EDWA did obtain all chlorine and total coliform samples as required. However, it failed to properly submit some results for chlorine from July to December 2021. The testing results have since been submitted to correct the issue.

Public notices were sent to customers regarding all the issues and violations.

**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 byproducts 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. 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>.

### **OTHER INFORMATION:**

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

If you have any questions or concerns, please give us a call at 724-943-3713 Monday through Friday 8 AM to 4 PM. If you experience a water emergency outside of regular business hours, please call 724-998-0054 or 724-231-4993. If there is no answer, please leave a message. We will return your call.

Thank you for allowing us to continue providing your family with clean, quality water this year. We realize that we have struggled but everyone at East Dunkard Water Authority is working around the clock to provide top quality water to every tap. We ask that all our customer help us protect our water sources, which are the heart of our community, our way of life, and our children's future.