

2022 ANNUAL DRINKING WATER QUALITY REPORT

Duncannon Water System **PWSID #:** 7500019

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 Miller Environmental Inc - John P. Farrier at 1-484-513-1404. Our water sources are the Catskill Formation, Sherman Creek member aquifer with four wells at various locations within the Borough limits. 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 3rd Tuesday of each month at the Duncannon Borough main Office Building @ 428 North High Street.

SOURCES OF WATER:

Our water sources are:

A Source Water Assessment of our sources was completed by the PA Department of Environmental Protection (Pa. DEP). The Assessment has found that our sources are potentially most susceptible to road deicing materials, accidental spills along roads, leaks in underground storage tanks, agricultural use, future land devilmnt and water pollution control facilities. Overall, our sources have little risk of significant contamination. A summary report of the Assessment is available on the Source Water Assessment Summary Reports elibrary web page: www.elibrary.dep.state.pa.us/dsweb/View/Collection-10045. Complete reports were distributed to municipalities, water suppliers, local planning agencies and PADEP offices. Copies of the complete report are available for review at the Pa. DEP South Central Regional Office, Records Management Unit at (717) 705-4700.

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, 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)

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

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

ppq = parts per quadrillion, or picograms per liter

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

ppt = parts per trillion, or nanograms per lit

DETECTED SAMPLE RESULTS:

Chemical Contaminants								
Contaminant	MCL in CCR Units	MCLG	Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Arsenic	10	N/A	11.0	3.9-11.0	PPB	12/27/2022	Y	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics wastes
Chlorine	MRDL= 4	MRDL=4	2.20	0.33-2.50	PPM	01/11/2022	N	Water Additive used to control microbes
Barium	2	2	0.44	0.0787 – 0.440	PPM	08/25/2021	N	Erosion of natural deposits
Calcium	N/A	N/A	38.8	13.0-38.8	PPM	11/09/2021	N	Water additive to control microbes
Nitrate	10	10	4.14	1.61-4.14	PPM	08/25/2021	Y	Runoff from fertilizer use; leaching from septic tanks, seage; Erosion of natural deposits
Selenium	50	50	2.68	0.0-2.68	PPB	08/08/2018	N	Discharge from petroleum & metal refineries; Erosion of natural deposits
TTHM's	80	N/A	8.58	N/A	PPB	09/27/2022	N	By-products of drinking water chlorination
Alpha/Excl. Radon & Uranium	30	0	1.386	0.824-1.386	pCi/l	06/01/2021	N	Errorsion of natural deposits

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

Entry Point Disinfectant Residual							
Contaminant	Minimum Disinfectant Residual	Lowest Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Chlorine	0.40	0.36	0.36-2.52	ppm	02/05/2022	Y	Water additive used to control microbes.

Lead and Copper							
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	0.00052	ppb	11	N	Corrosion of household plumbing.
Copper	1.3	1.3	0.04100	ppm	11	N	Corrosion of household plumbing.

Microbial (related to Assessments/Corrective Actions regarding TC positive results)					
Contaminants	TT	MCLG	Assessments/ Corrective Actions	Violation Y/N	Sources of Contamination
Total Coliform Bacteria	Any system that has failed to complete all the required assessments or correct all identified sanitary defects, is in violation of the treatment technique requirement	N/A	See detailed description under "Detected Contaminants Health Effects Language and Corrective Actions" section	N	Naturally present in the environment.

Microbial (related to E. coli)					
Contaminants	MCL	MCLG	Positive Sample(s)	Violation Y/N	Sources of Contamination
<i>E. coli</i>	Routine and repeat samples are total coliform-positive and either is <i>E. coli</i> -positive or system fails to take repeat samples following <i>E. coli</i> -positive routine sample or system fails to analyze total coliform-positive repeat sample for <i>E. coli</i> .	0	0	N	Human and animal fecal waste.
Contaminants	TT	MCLG	Assessments/ Corrective Actions	Violation Y/N	Sources of Contamination
<i>E. coli</i>	Any system that has failed to complete all the required assessments or correct all identified sanitary defects, is in violation of the treatment technique requirement	N/A	See description under "Detected Contaminants Health Effects Language and Corrective Actions" section	N	Human and animal fecal waste.

Raw Source Water Microbial					
Contaminants	MCLG	Total # of Positive Samples	Dates	Violation Y/N	Sources of Contamination
<i>E. coli</i>	0	0		N	Human and animal fecal waste.

DETECTED CONTAMINANTS HEALTH EFFECTS LANGUAGE AND CORRECTIVE ACTIONS:

Arsenic - Some people who drink water containing arsenic more than the Maximum Contaminant Levels over many years could experience skin damage or problems with their circulatory system and may have an increased risk of getting cancer. While the Duncannon drinking water has a low level of arsenic present, steps are being taken to treat the levels found in the drinking water system. Minimum Contaminant Levels. The MCL is 0.010 MG/L and one well tested at 0.011 MG/L on June 22, 2022 and 0.011 MG/L October 17, 2022.

Chlorine - The operating Chlorine results have been established to ensure proper disinfectant is always experienced in the water system, on 2/5/2022 to Chlorine Level at one well out of 5 well, dropped to an unacceptable level below 0.40 MG/L, corrective action was taken by with the well being removed from service as this concern was corrected ASAP.

OTHER VIOLATIONS:

Lead & Copper - Trihalomethanes - Haloacetic Acids - The samples required were collected and found to be below the set MCC levels for the elements, but the time and locations of the samples collected was not correct based on the Duncannon Operating sampling program.

Unaccountable water - The Duncannon water system is required to reduce water lost in the water system and this was not completed by the due date established by the PaDEP. The Borough of Duncannon is still actively looking to repair and eliminate leaks in the water system to come into compliance. Please report any leaks noticed in the water system so they can be repaired ASAP, or a contractor can repair as needed.

Nitrate – The Duncannon system was tested for Nitrates, but the results were reported late by the certified lab retained for the analytical process.

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 Duncannon Water System 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:

If you have any more questions, please call the Duncannon main Office at 717-834-4311