

Mill Creek Area Municipal Authority
Annual Drinking Water Quality Report
P.W.S. ID # 4310050

This report contains important information about your drinking water. Este informe contiene informacion muy importante sobre su agua beber. Traduzcalo o hable con alguien que lo entienda bien.

We're pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality of water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water sources are Mill Creek Well # 1 and Mill Creek Well # 2. They are located on Mountain Road just past the intersection with Haul Road, in Brady Township.

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 Keith Bollinger at (814) 643-3620. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on **the last Monday of every month at 7:00 pm at the Mill Creek Borough Building.**

The Mill Creek Area Municipal Authority routinely monitors for constituents in your drinking water, according to Federal and State laws. This table shows the results of our monitoring for the period of January 1st, to December 31st, **2013**. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

In 2013 The Authority had Monitoring Violations for failing to do check samples the following month after testing positive for Bacteria. Check samples were done the following day, and no Bacteria was present. Also, the reporting of the Ground water rule in October wasn't submitted to D.E.P. correctly. Also failure to monitor for some SOC (Synthetic Organic Contaminants). 2,3,7,8- TCDD(DIOXIN) and PCBS. And failure to notify the public. We are in the process of obtaining wavers for theses constituents. In 2012, some SOCs were sampled wrong. The public was notified in the 2012 CCR, but it wasn't soon enough.

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Non-Detects (ND) - laboratory analysis indicates that the contaminant is not present at a detectable level.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter (ug/l) - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Picocuries per liter (pCi/l) (a measure of radioactivity)

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

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

Maximum Contaminant Level - The “Maximum Allowed” (MCL) is 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 - The “Goal”(MCLG) is 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 contamination.”

Environmental Protection Agency – (EPA)

Standard Methods – (SM) Testing procedures, which are acceptable, by the Pennsylvania Dept. of Environmental protection.

TEST RESULTS, DETECTED CONTAMINANTS YR 2013						
Inorganic Contaminants						
Contaminant (Unit of measurement)	Violation Y/N	Level Detected	Range of Detections	Action level (AL)	Minimum Allowed	Likely Source of Contamination
Chlorine (ppm) Entry Point(beginning of system)	N	1.37	0.4 to 1.37	4.0	0.4	Water additive used to control microbes
Contaminant (Unit of measurement)	Violation Y/N	Level Detected	Range of Detections	Action level (AL)	MCLG	Likely Source of Contamination
Chlorine (ppm) Distribution (middle or end of system)	N	0.92	0.39 TO 0.92	4.0	1	Water additive used to control microbes
Nickel	N	0.524	EPA 200.7	1	1	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Contaminant (Unit of measurement)	Violation Y/N	90th percentile value	# of sites above AL of total sites	Action level (AL)	MCLG	Likely Source of Contamination
Copper (ppm)	N	1.26	0 of 10	1.3	0	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood deposits
Lead (ppb)	N	0	0 of 10	15	0	Corrosion of household plumbing systems, erosion of natural deposits
Volatile Organic Contaminants						
Contaminant (Unit of measurement)	Violation Y/N	Level Detected	Range of Detections	MRDL	MRDLG	Likely Source of Contamination
TTHM [Total trihalomethanes] (ppb)	N	3.28	0 to 3.28	0	80	By-product of drinking water chlorination

TEST RESULTS, DETECTED CONTAMINANTS YR 2012						
Inorganic Contaminants						
Barium (ppm)	N	0.0372	Method EPA 200.7	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits

TEST RESULTS, DETECTED CONTAMINANTS YR 2003						
Radioactive Contaminants						
Contaminant (Unit of measurement)	Violation Y/N	Level Detected	Method	MCLG	MCL	Likely Source of Contamination
Beta/photon emitters (pCi/l)	N	2.21	SM 7110	0	(c) 50	Decay of natural and man-made deposits
Radium 226 (pCi/l)	N	0.0850	EPA	0	5	Erosion of natural deposits
Uranium (ug/l)	N	0.39	SM 7500-U A-B	0	30	Erosion of natural deposits

As you can see by the table, our system had no violations other than monitoring and reporting. We're proud that our drinking water **Meets or exceeds all Federal and State requirements.** We have learned through our monitoring and testing that some constituents have been detected.

We also tested for the following contaminants none of which were detected.

2012 (Volatile Organic Contaminants): 1,4-Dichlorobenzene; Benzene; Carbon Tetrachloride; Chlorobenzene; 1,2-Dichlorobenzene; 1,2-Dichloroethane; 1,1-Dichloroethene; cis-1,2-Dichloroethene; trans-1,2-Dichloroethene; 1,2-Dichloropropane; Ethylbenzene; Methylene chloride; Styrene; Tetrachloroethene; Toluene; 1,2,4-Trichlorobenzene; 1,1,2-Trichloroethane; 1,1,1-Trichloroethane; Trichloroethene; Vinyl chloride; Xylenes (total)
(Inorganic Contaminants): Antimony; Arsenic; Beryllium; Cadmium; Chromium; Cyanide (free); Fluoride; Mercury (inorganic); Nitrate (as Nitrogen); Selenium; Thallium

2011 (Synthetic Organic Contaminants): All required by the EPA

2010 (Inorganic Contaminants): Nitrate as N. Nitrite as N.

(Microbiological Contaminants): Total Coliform, Fecal coliform/E.Coli.

2009 (TTHM/HAA5): Bromodichloromethane; Bromoform; Dibromochloromethane; Chloroform; Dibromoacetic Acid; Dichloroacetic Acid; Monobromoacetic Acid; Monochloroacetic Acid; Trichloroacetic Acid

2006 (Inorganic Contaminants): Arsenic

2003 (Radioactive Contaminants): Gross Alpha; Radium 228

Footnotes:

- Lead and copper are reported as the 90th percentile. Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's disease should consult their personal doctor.

Health effects:

Inorganic Contaminants:

Barium. Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.

Copper. Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's disease should consult their personal doctor.

Lead. Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

Radioactive Contaminants:

Beta/photon emitters. Certain minerals are radioactive and may emit forms of radiation known as photons and beta radiation. Some people who drink water containing beta and photon emitters in excess of the MCL over many years may have an increased risk of getting cancer.

Alpha emitters. Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

Combined Radium 226/228. Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.

Lead: Lead in drinking water is rarely the sole cause of lead poisoning, but it can add to a person's total lead exposure. All potential sources of lead in the household *should be identified and removed, replaced or reduced.*

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791).

"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 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 storm water 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 storm water 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 storm water 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 prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. All drinking water may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the 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 at 1-800-426-4791.

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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Please call our office if you have questions. (814) 643-5666

Thank you,
Keith Bollinger, Chief Operator

CCR Certification Form

Name of CWS: Mill Creek Area Mun. Auth. Water PWSID: Number: 4310050

The community water system (CWS) indicated above hereby confirms that the Consumer Confidence Report (CCR) for the period of January 1, 2013 through December 31, 2013 has been distributed to customers (and appropriate notices of.....-.-

Availability has been given). Further more, the CWS certifies that the information contained in the CCR is correct and consistent with the compliance self-monitoring data previously submitted to the Pennsylvania Department of Environmental Protection (DEP).

System-specific details on CCR distribution to customers are outlined below (check all that apply).

1. CCR was distributed by mail or other direct delivery to all bill paying customers if other direct delivery was used , describe in the space below or on an attached piece of paper.

2. "Good faith" efforts were used to reach non-bill paying customers. Those efforts include one or more of the following methods (Check all that apply).

a. CCR was posted on the internet at _____

b. CCR was mailed to postal patrons within service area. (Attach a list of zip codes used).

c. Advertised that CCR was available in news media. (Attach a copy of advertisement).

d. Published actual CCR in local news paper(s). Attach a copy.

e. Posted CCR in public places. (Attach a list of the locations). Local post office 17060

f. Delivered multiple copies of CCR to bill paying customers who serve water to other persons such as apartments, businesses, schools, and large private employers.

g. Delivered copies of CCR to community organizations, libraries, etc. (Attach list).

3. CCR was posted on a public accessible internet site because this system serves 100,000 or more people. Indicate internet site in spaces below, if different than above.

4. Delivered CCR to the other agencies specified by DEP. Attach a list.

Certified by: Signature; _____

Print name; Keith Bollinger

Title: Chief Operator

Phone number: (814) 643-5666 Date: 06-29-2013

For DEP use only: Checked by: _____ Date: _____

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