

The Caernarvon Township Authority
2015 Annual Drinking Water Quality Report
Public Water Supply ID No. 3060052
March 2016

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

Water System Information:

We are pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality drinking water and services we deliver to you every day. Our constant goal is to provide you with a 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. We are pleased to report that our drinking water meets all Federal and State requirements.

If you have any questions about this report or concerning your water utility, please contact Robert L. Weaver, Authority Chairman or Carol Bowman, Assistant Treasurer at (610) 286-1017. 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 first Wednesday of each month at 7:00 P.M. in the Authority's office building located at 601 Hemlock Road, in the Morgantown Business Park, Morgantown, PA.

Sources of Water:

Our water is drawn from five (5) wells located at three (3) sites throughout the community. The wells are located at the following sites:
Swamp Road (Well No. 1, 4 and 5), Mill Road (Well No. 6), and Morgantown Business Park (Well No. 8)

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).

In our continuing efforts to maintain a dependable water supply it may be necessary to make improvements in your water system. The costs of these improvements may be reflected in the rate structure. Periodic rate adjustments may be necessary in order to address these improvements.

Monitoring Your Water:

The Caernarvon Township Authority routinely monitors for contaminants in your drinking water according to Federal and State laws. The following table shows the results of our monitoring for the period of January 1st to December 31st, 2015. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. If data is from prior years, in accordance with the Safe Drinking Water Act, the date has been noted on the sampling results table.

DEFINITIONS:

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.

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 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 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 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.

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

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

Educational Information:

Sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the land surface 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:

1. Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
2. Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from storm water run-off, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
3. Herbicides and pesticides which may come from a variety of sources such as agriculture, storm water run-off or residential uses.
4. Organic chemical contaminants, including synthetic and volatile organic chemical, which are by-products of industrial processes and petroleum production and can also come from gas stations, storm water run-off or septic systems.
5. Radioactive contaminants which can be naturally occurring or can be the result of oil and gas production or mining activities.

All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or man made. All 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 the water poses a health risk. In order to ensure that tap water is safe to drink, EPA & DEP prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. FDA & DEP regulations establish limits for contaminants in bottled water which must provide the same protection for public health. More information about contaminants and potential health effects can be obtained by calling the EPA's *Safe Drinking Water Hotline* at 1-800-426-4791.

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of 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.

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 Caernarvon Township Authority 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>.

Detected Sample Results

Chemical Contaminants

Contaminant (Units)	MCL in CCR Units	MCLG	Level Detected	Range of Detections	Sample Date	Violation (Y/N)	Sources of Contamination
Chlorine (ppm)	MRDL=4	4	1.25	0.90-1.25	2015	N	Water Additive used to control microbes.
Nickel (ppb)	100	NA	6	NA	8/14/2015	N	Byproduct of mining and refining operations
Nitrate (ppm)	10	10	8.92	2.03-8.92	2015	N	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Thallium (ppb)	2	0.5	2	1-2	8/14/2015	N	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories
Haloacetic Acids (HAA5) (ppb)	60	NA	1	NA	8/14/2015	N	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHMs) (ppb)	80	NA	19.7	NA	8/14/2015	N	Byproduct of drinking water disinfection
Combined Uranium (pCi/l)	20	0	7.54	NA	8/14/2015	N	Erosion of natural deposits
Radium-226 (pCi/l)	5	0	1.38	NA	8/14/2015	N	Erosion of natural deposits

Entry Point Disinfectant Residual

Contaminant (Units)	MCL in CCR Units	MinRDL	Level Detected	Range of Detections	Sample Date	Violation (Y/N)	Sources of Contamination
Chlorine (ppm)	MRDL=4	0.4	Lowest=0.27	0.27-2.01	5/4/15 & 9/4/15	N	Water additive used to control microbes

Lead & Copper

Contaminant (Units)	MCL in CCR Units	MCLG	Level Detected	Range of Detections	# Sites Above AL	Violation (Y/N)	Sources of Contamination
¹ Copper (ppm)(2013)	AL=1.3	1.3	90th Percentile Value=0.3	NA	0 of 20	N	Corrosion of household plumbing; erosion of natural deposits; leaching from wood preservatives
¹ Lead (ppb)(2013)	AL=15	0	0	NA	1 of 20	N	Corrosion of household plumbing

Microbials

Contaminants	MCL	MCLG	Highest # or % of Positive Samples	Violation Y/N	Sources of Contamination
Total Coliform Bacteria	For systems that collect <40 samples/month: More than 1 positive monthly sample For systems that collect ≥ 40 samples/month: 5% of monthly samples are positive	0	1	Y	Naturally present in the environment.

¹The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently.

Other Violations:

In August 2015 a positive Coliform sample was received during routine testing throughout the distribution system. Operators took additional samples from the same tap and others over the following 2 days. No positive samples were received in subsequent samples. On 9/24/15 a public notification about the results was mailed to customers.

In October 2015, due to a pump failure, there was a lapse in chlorination at the Authority's Well No. 8. This resulted in the issuance of a boil water advisory 10/7/15 and 10/8/15. Since that time steps have been taken to prevent future events.

Samples are required for Combined Uranium, Radium-226 & 228 every 6 years and Gross Alpha every 9 years. Sampling was scheduled in 2015; however it did not occur. A violation was received. Sampling was conducted on February 9, 2016 with negative test results.

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 apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

Please call our office if you have questions.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

ESTE INFORME CONTIENE INFORMACION MUY IMPORTANTE SOBRE SU AGUA DE BEBER.
TRADUZCALO O HABLE CON ALGUIEN QUE LO ENTIENDA BIEN.

Monitoring Requirements Not Met for Caernarvon Township MA

Our water system violated drinking water standards over the past year. Even though this was not an emergency, as our customers, you have a right to know what happened and what we did to correct this situation.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During the 2015 we did not complete all monitoring or testing for all contaminants and therefore cannot be sure of the quality of our drinking water during that time.

What should I do?

There is nothing you need to do at this time.

The table below lists the contaminant(s) we did not properly test for during the year, how often we are supposed to sample for these contaminants and how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date on which follow-up samples were (or will be) taken.

Contaminant	Required sampling frequency	Number of samples taken	When all samples should have been taken	When samples were or will be taken
Radiologicals including gross alpha, radium-226 & radium-228	9-years	3	2015	2/9/16 100, Swamp Rd 101, Mill Rd 102, Well #8

What happened? What was done?

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This notice is being sent to you by Caernarvon Township MA.

PWS ID#: 3060052

Date distributed: March 31, 2016