Center Township Water Authority PWS 5040007

Annual Drinking Water Quality Report for 2016

Este informe contiene informacion muy importante sobre su aqua beber.
Tranduzcalo o hable con alguiren que lo entienda bien.

Business Office: 224 Center Grange Road, Aliquippa, PA 15001 – Tel: 724-774-7960
Maintenance Office: 200 Fairview Drive, Monaca, PA 15061 – Tel: 724-774-7766
Water Treatment Plant: 3000 Wagner Road Extension South, Monaca, PA 15061 – Tel: 878-313-3137
Website: www.ctwa.us

This report is designed to inform you about the quality and services the Center Township Water Authority (Authority) delivers to you every day. Our goal is to provide a dependable supply of drinking water from our water source of four (4) groundwater wells located along the Ohio River (that were operational until Sept. 2016) and our newly constructed Ohio River Surface Water Intake (that was placed online in Sept. 2016). We want you to understand the efforts we put forth to continually improve the water process and protect our water resources. The Authority is committed to ensuring the quality of your water. **We are pleased to report that our drinking water meets Federal and State requirements. If you have any questions about this report, please contact the Center Township Water Authority at 724-774-7766 Monday through Friday from 7 a.m. to 3 p.m.** We want our customers to be informed about their water utility. You may attend any of our regularly scheduled meetings held on the third Tuesday of each month at 4 p.m. at the Authority's office located at 224 Center Grange Road. The Authority routinely monitors for contaminants in your drinking water according to Federal and State laws. Information on the following pages outline the results of the latest monitoring required by regulation for the period from Jan. 1 through Dec. 31 of the year 2016.

DEFINITIONS: ***The tables on the following pages contain terms and definitions that may be unfamiliar to you. To help you understand these terms, we have provided the following definitions:***

Parts per million (ppm) — One part per million. Equal to one minute in two years or a single penny in $10,000.
Parts per billion (ppb) — One part per billion. Equal 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 (MCL) — The 'Maximum Allowed' is the highest level of a contaminant 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 'Goal' 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 contaminants.
Minimum Residual Disinfectant Level (MinRDL) — The minimum level of residual disinfectant required at the entry point to the distribution system.
Treatment Technique (TT) – A required process intended to reduce the level of a contaminant in drinking water.

We're proud that your drinking water meets or exceeds all Federal and State requirements.

OUR WATER SOURCE:

A source water assessment of our groundwater sources (that were used until Sept. 2016) was completed in 2003 by the PA Department of Environmental Protection (PADEP). The assessment found that the groundwater source is potentially susceptible to accidents and spills along nearby transportation corridors (roadways, railroads, and river traffic), or at local industrial sites. Overall, the groundwater source has a high risk of significant contamination.

Our newly constructed water treatment plant utilizes surface water obtained from an intake structure in the Ohio River (placed online in Sept. 2016). A Source Water Assessment of our surface water source was completed by the River Alert Information Network (RAIN) in 2016. The assessment found that our surface water source is potentially susceptible to accidents and spills along nearby transportation corridors (roadways, railroads, and river traffic), bridges, boating, marinas, barge traffic, auto repair shops, truck terminals, utility substations, residential developments, combined sewer overflows, road deicing, and salt storage. Overall, surface water source has a high risk of significant contamination.

Complete reports of our Source Water Assessments were distributed to the Authority and PADEP offices. Copies of the complete reports are available for review at the PADEP Southwest Regional Office in Pittsburgh, Records Management Unit at 412-442-4000. Summary reports of the assessment are available at the Center Township Water Authority Business Office and also on the PADEP website at:
www.dep.state.pa.us/dep/deputate/watermgt/wc/Subjects/SrceProt/SourceAssessment/default.htm.

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 at 1-800-426-4791.

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 materials, 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 storm water 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 agricultural, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial process and petroleum productions, 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 and DEP prescribe 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 at 1-800-426-4791.

In keeping with our pledge to provide a good drinking water source, the Department of Environmental Protection has approved and recognized the efforts of the Center Township Water Authority for its Wellhead Protection Plan. This plan assists in protecting the wells from possible contaminants from entering the wells and protects public health and safety.

We at the Center Township Water Authority work around the clock to provide quality water to every tap. We ask all our customers to help us protect our water resources, which are the heart of our community, our way of life and our children's future.

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 Center Township Water 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 two 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, 1-800-426-4791, or online at http://www.epa.gov/safewater/lead

DETECTED SAMPLE RESULTS:

DISTRIBUTION CONTAMINANTS AND DISINFECTANTS						
Contaminants (Unit of Measurement)	**Violation? Y/N**	**Level Detected (Sample Date)**	**Range**	**MCLG / MRDLG**	**MCL / MRDL**	**Likely Source of Contaminants**
Total Trihalomethanes (ppb)	N	46.1 (12/15/15) (1)	33.5 – 46.1	0	80	By-product of drinking water disinfection
Haloacetic Acids (ppb)	N	3.0 (12/15/15) (1)	2.16 – 3.0	0	60	By-product of drinking water disinfection
Barium (ppm)	N	0.138 (5/21/15) (1)	--	2	2	Discharge of drilling wastes, metal refineries; Erosion of natural deposits
Selenium (ppb)	N	9.3 (5/21/15) (1)	--	50	50	Discharge from petroleum and metal refineries, mines; Erosion of natural deposits
Nitrate (ppm)	N	1.0 (7/27/16) (1)	--	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Chlorine (ppm)	N	2.66 (September)	0.15 – 2.66	4.0	4.0	Additive used to control microbes

Footnotes: (1) Samples taken on dates shown. These are the latest samples analyzed for the contaminants shown. Refer to Violations section below for information on Monitoring/Reporting Requirements for these contaminants.

ENTRY POINT DISINFECTANTS						
Disinfectant (Unit of Measurement)	**Violation? Y/N**	**Lowest Level Detected**	**Range**	**Sample Date**	**MinRDL**	**Likely Source of Contaminants**
Chlorine (ppm) EP 101(1)	N	0.24(3)	0.24 – 1.98	2/22/16	0.40	Additive used to control microbes
Chlorine (ppm) EP 102(2)	N	0.45	0.45 – 2.26	9/25/16	0.2	Additive used to control microbes

Footnotes: (1) EP 101: Entry Point 101 refers to the entry point to the distribution system at the ground water treatment plant (plant utilized until Sept. 2016)
(2) EP 102: Entry Point 102 refers to the entry point to the distribution system at the new surface water treatment plant placed online in Sept. 2016. EP 101 was discontinued when EP 102 was placed online.
(3) System not in violation since lowest level event lasted less than (4) four hours.

LEAD AND COPPER						
Contaminants (unit of measurement)	**Violation? Y/N**	**90th Percentile Value**	**# of Samples Above AL of Total Samples**	**MCLG**	**AL**	**Likely Source of Contaminants**
Lead (ppb)	N	5.8	2 out of 44	0	15	Corrosion of household plumbing, erosion of natural deposits
Copper (ppm)	N	2.53*	65 out of 157	1.3	1.3	Corrosion of household plumbing, erosion of natural deposits

*NOTE: As part of the transition to the new source of supply (Ohio River) and our newly constructed surface water treatment plant, the Authority conducted several rounds of lead/copper sampling in the distribution system beyond what DEP normally requires for routine lead/copper sampling. Multiple sets of samples were collected at approximately 40 locations before and after the new treatment plant was placed online. This additional sampling allowed the Authority to create a profile of our distribution system over time and monitor lead/copper levels during the transition to identify and if required, mitigate any potential water quality issues related to the change of source and treatment. Results from the last round of sampling for the year (Sept. 28) revealed all 39 copper

samples and 38 of 39 lead samples were below the regulatory Action Levels (AL). 90th Percentile Levels for this last round of samples were 0.8327 ppm copper (<1.3 ppm AL) and 5.05 ppb lead (<15 ppb AL).

Copper Health Effects Language: 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.

TURBIDITY						
Contaminants (unit of measurement)	**Violation? Y/N**	**Level Detected**	**Sample Date**	**MCLG**	**MCL**	**Likely Source of Contaminants**
Turbidity	N	0.868	9/23/16	0	TT = 1 NTU for a single measurement	Soil runoff
	N	99%	September	100%	TT = at least 95% of monthly samples ≤0.3 NTU	

TOTAL ORGANIC CARBON (TOC)					
Contaminants (unit of measurement)	**Violation? Y/N**	**Range of % Removal Achieved**	**% Removal Required**	**# of Quarters Out of Compliance**	**Likely Source of Contaminants**
TOC	N	64 – 73%	35%	0	Naturally present in the environment

We also analyzed water samples for the following contaminants, and *DID NOT* detect these compounds over Safe Drinking Water limits:

Volatile Organic Contaminates (6/14)(1)	**Inorganic Contaminants (5/15)**(1)	**Unregulated Contaminants (6/15)**(1)
BENZENE	ANTIMONY	1,4-DIOXANE
CARBON TETRACHLORIDE	ARSENIC	COBALT
CHLOROBENZENE	BERYLLIUM	1,2,3-TRICHLOROPROPANE
O-DICHLOROBENZENE	CADMIUM	1,3-BUTADIENE
P-DICHLOROBENZENE	CHROMIUM	CHLOROMETHANE (METHYL CHLORIDE)
1,2-DICHLOROETHANE	CYANIDE	1,1-DICHLOROETHANE
1,2-DICHLOROETHYLENE	FLUORIDE	BROMOCHLOROMETHANE (HALON 1011)
CIS- 1,2-DICHLOROETHYLENE	NICKEL	BROMOMETHANE (METHYL BROMIDE)
TRANS- 1,2-DICHLOROETHYLEUE	MERCURY	CHLORODIFLUOROMETHANE (HCFC-22)
DICHLOROMETHANE	THALLIUM	VANADIUM
1,2-DICHLOROPROPANE	GROSS ALPHA 3/14	CHROMIUM-6 (HEXAVALENT CHROMIUM)1
ETHYLBENZENE	COMBINED URANIUM 3/14	CHLORATE
STYRENE		PERFLUOROOCTANESULFONIC ACID (PFOS)
TETRACHLOROETHYLENE		PERFLUOROOCTANOIC ACID (PFOA)
1,2,4-TRICHLOROBENZENE		PERFLUORONONANOIC ACID (PFNA)
1,1,1-TRICHLOROETHANE		PERFLUOROHEXANESULFONIC ACID (PFHxS)
1,1,2-TRICHLOROETHANE		PERFLUOROHEPTANOIC ACID (PFHpA)
TRICHLOROETHYLENE		PERFLUOROBUTANESULFONIC ACID (PFBS)
TOLUENE		MOLYBDENUM
XYLENES		STRONTIUM

Semi-Volatile Organic Compounds (9/14)(1)		
1, 2-DIBROMO, 3-CHLOROPROP (SOC)	DI (2-ETHYLHEXYL) ADIPATE (SOC)	HEXACHLOROBENZENE (SOC)
2,3,7,8-TCDD (DIOXIN) (SOC)	DI (2-ETHYLHEXYL) PHTHALATE (SOC)	HEXACHLOROCYCLOPENTADIENE (SOC)
2,4 – D (SOC)	DINOSEB (SOC)	LINDANE (SOC)
2,4,5 – TP SILVEX (SOC)	DIQUAT (SOC)	METHOXYCHLOR (SOC)
ALACHLOR (SOC)	ENDOTHALL (SOC)	QXYMAL (VYDATE) (SOC)

ATRAZINE (SOC)	ENDRIN (SOC)	PCBS (AROCHLOR) – 7 TESTS (SOC)
BENZO(A) PYRENE (SOC)	ETHYLENE DIBROMIDE (EDB) (SOC)	PENTACHLOROPHENOL (SOC)
CARBOFURAN (SOC)	GLYPHOSATE (SOC)	PICLOREM (SOC)
CHLORDANE (SOC)	HEPTACHLOR (SOC)	SIMAZINE (SOC)
DALPON (SOC)	HEPTACHLOR EPOXIDE (SOC)	TOXAPHENE (SOC)

Footnotes: (1) The date of last sample collection for each contaminant group shown. Refer to violations section below for information on Monitoring/Reporting requirements for these contaminants.

Microbiological Contaminants – Total Coliform Tested Monthly

UNREGULATED CONTAMINANT MONITORING – IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Availability of Monitoring Data for Unregulated Contaminants for Center Township Water Authority. Our water system has sampled for a series of unregulated contaminants. Unregulated contaminants are those that don't yet have a drinking water standard set by EPA. The purpose of monitoring for these contaminants is to help EPA decide whether the contaminants should have a standard. As our customers, you have a right to know that these data are available. If you are interested in examining the results, please contact us at 724-774-7766.

VIOLATIONS:

- *Monitoring and reporting violations* – During the transition to our new treatment plant in the fourth quarter of the 2016, several monitoring and reporting requirements were not met initially (turbidity, lead, copper, SOCs, VOCs, nitrate/nitrite, radiologicals, TTHMs/HAA5s). We have worked with DEP to ensure we meet compliance requirements for all sampling and reporting going forward. Please refer to the Public Notification attached to this CCR regarding the monitoring and reporting violations.

WATER EMERGENCY TELEPHONE NUMBERS

724-774-7766	CTWA MAINTENANCE OFFICE 7 AM TO 3 PM MONDAY TO FRIDAY
724-775-0880	NON-EMERGENCY POLICE NO. – AFTER HOURS
911	BEAVER COUNTY EMERGENCY SERVICES CENTER

Center Township Water Authority
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IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER
FAILURE TO MONITOR

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

Monitoring Requirements Not Met for Center Township Water Authority

Our water system violated several drinking water standards over the past year. Even though these were not emergencies, as our customers, you have a right to know what happened and what we did to correct these situations.

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 fourth quarter of 2016 we did not compete all monitoring or testing for 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 last 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
SOCs	1 set each quarter	0	12/31/2016	2/27/2017
VOCs	1 set each quarter	0	12/31/2016	2/27/2017
Nitrate/Nitrite	1 set each quarter	0	12/31/2016	2/27/2017
Radiologicals	1 set each quarter	0	12/31/2016	2/27/2017
Trihalomethanes/ Haloacetic Acids (Five)	4 sets each year	0	12/15/2016	5/30/2017

Synthetic Organic Chemicals (SOCs): Endrin, Lindane, Methoxychlor, Toxaphene, Dalapon, Diquat, Endothall, Glyphosate, Di (2-Ethylhexyl) Adipate, Oxymal (Vydate), Simazine, Di (2-Ethylhexyl) Phthalate, Piclorem, Dinoseb, Hexachlorocyclopentadiene, Carbofuran, Atrazine, Alachlor, 2,3,7,8-TCDD (Dioxin), Heptachlor, Heptachlor Epoxide, 2,4 – D, 2,4,5 – TP Silvex, Hexachlorobenzene, Benzo(a)pyrene, Pentachlorophenol, PCBs, 1,2-Dibromo,3-Chloroprop, Ethylene Dibromide (EDB), Chlordane

Volatile Organic Chemicals (VOCs): 1,2,4-Trichlorobenze, cis-1,2-Dichloroethylene, Xylenes (Total), Dichloromethane, o-Dichlorobenzene, Para-Dichlorobenzene, 1,1-Dichloroethylene, trans-1,2-Dichloroethylene, 1,2-Dichloroethane, 1,1,1-Trichloroethane, Carbon Tetrachloride, 1,2-Dichloropropane, Trichloroethylene, 1,1,2-Trichloroethane, Tetrachloroethylene, Chlorobenzene, Benzene, Toluene, Ethylbenzene, Styrene

Radiologicals: Alpha/Excl. Radon & Uranium, Combine Uranium, Radium-226, Radium-228

What happened? What was done?

We have since taken the required samples, as described in the last column of the table above. Results received for SOCs, VOCs, Nitrate/Nitrite, Radiologicals samples show we are meeting drinking water standards for these contaminants.

For more information, please contact Bill DiCioccio, Jr., 200 Fairview Drive, Monaca, PA 15061 at 724-774-7766.

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.

This notice is being sent to you by Center Township Water Authority.
PWS ID#: 5040007 Date distributed: 6/5/2017