

## **2016 ANNUAL DRINKING WATER QUALITY REPORT**

**PWSID #: 5320041 NAME: Indiana County Municipal Services Authority – Arcadia**

*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 Michael Duffalo, Executive Director or Tricia Lefko, Compliance Superintendent at 724-349-6640, ext. 102 or ext. 107. 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 on the second Tuesday of each month at 7:30 pm, ICMSA office, 602 Kolter Drive, Indiana, PA 15701.

### **SOURCE(S) OF WATER:**

Our water source(s) is/are: (Name-Type-Location)

The source of water for the Arcadia system is the Arcadia Reservoir, a surface water impoundment located a half mile east of the village of Arcadia, Montgomery Township, Indiana. The reservoir has an approximate volume of 500,000 gallons. The average daily use is 4,800 gallons per day, the source is more than adequate to meet the needs of the system.

**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 potentially most susceptible to storm water runoff, accidental spills or petroleum products and accidental releases of known and unknown contaminants. Overall, our source(s) has little risk of significant contamination. A summary report of the Assessment is available on the Source Water Assessment Summary Reports eLibrary web page: <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 (Pittsburgh)**

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 to December 31, 2016. 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 liter

**DETECTED SAMPLE RESULTS:**

<b>Chemical Contaminants</b>								
Contaminant	MCL in CCR Units	MCLG	Level Detected	Range of Detections **	Units	Sample Date	Violation Y/N	Sources of Contamination
Chlorine	4	4	2.8	0.8 – 2.8	ppm	October 2016	N	Additive used to control microbes.
Nitrate	10	10	2.88	Annual sample	ppm	7/12/2016	N	Fertilizer runoff.
Barium	2	2	0.075	Annual sample	ppm	3/23/2016	N	Discharge of drilling wastes
Dalapon	200	200	1.11***	Bi annual sample.	ppb	2016	N	Runoff from herbicide used on rights of way.
TTHM *	80	80	52.5	49.3 - 107	ppb	2016	N	Chlorination by-product.
HAA5 *	60	60	110	105 - 190	ppb	2016	Y	Chlorination by-product.

\*Highest annual average for individual sample locations. \*\*Range represents sampling at individual locations.

\*\*\* Average of two samples.

<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	1.0	1.0 – 3.1	ppm	9/12/2016	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	0.0	ppb	0	N	Corrosion of household plumbing.
Copper	1.3	1.3	0.032	ppm	0	N	Corrosion of household plumbing.

<b>Turbidity</b>						
<b>Contaminant</b>	<b>MCL</b>	<b>MCLG</b>	<b>Level Detected</b>	<b>Sample Date</b>	<b>Violation Y/N</b>	<b>Source of Contamination</b>
Turbidity	TT=1 NTU for a single measurement	0	0.3 NTU	06/15/16	N	Soil runoff
	TT= at least 95% of monthly samples ≤0.3 NTU		100%	2016	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 - 45	39.1 – 73.1	0	N	Naturally present in the environment

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

The Arcadia Water system met all the water quality standards of the Safe Drinking Water Act in 2016 with the exception of the following: The average MCL for HAA5's exceeded the MCL of 60 mg/l in 2016. Some people who drink water containing haloacetic acids (HAA5s) in excess of the MCL over many years may experience problems with their liver, kidneys or central nervous systems, and may have an increased risk of getting cancer. We sent a notice warning customers of this problem when it occurred. We are currently working with the state to help alleviate this issue.

**OTHER VIOLATIONS:**

A reporting violation for chlorine occurred in the fourth quarter of 2016. The laboratory responsible for entering the chlorine result used an incorrect form when entering the result into the DEP's reporting site, once the error was discovered the correct form was entered however, it was past the DEP's due date. The error was corrected but a reporting violation still occurred due to missing the due date, however in no way was water quality compromised.

**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. Indiana County Municipal Services Authority – Arcadia 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 questions, regarding this report of your drinking water, please do not hesitate to call during business hours (8am-4pm) 724-349-6640. Our phone is a 24/7 number and can be used to report any water emergency after 4pm. To keep our customers updated and informed, we have developed a new website @ [www.icomsa.org](http://www.icomsa.org) please visit to learn more.

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