

**2011**  
**Annual Drinking Water Quality Report**  
**Ayersville Water and Sewer District**  
**Defiance, Ohio**

We are pleased to present to you this year's Annual Quality Water Report. This report is designed to inform you about the quality 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 source is surface water taken from the Maumee River.

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 the office at (419) 395-1733. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regular scheduled Board meetings. They are held every third Thursday at 7:00 pm in the Ayersville Water and Sewer Building at 13961 Fruit Ridge Road, Defiance, Ohio.

The Ayersville Water and Sewer District is a satellite district of Defiance. Therefore, the Ayersville Water and Sewer District is influenced by Defiance's test results. In accordance with the Federal and State laws, we routinely monitor for chlorine, daily; bacteria, monthly; total trihalomethanes, quarterly; and lead and copper, annually. The table on page three shows the results and violations of the Defiance Water Treatment Plant monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup> 2011. All drinking water, including bottled drinking water, may reasonably be expected to contain small amounts of some contaminants. It is important to remember that the presence of these contaminants does not necessarily pose a health risk.

Contaminants that may be present in source water include: (A) Microbial contaminants such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife; (B) 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; (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and septic systems; (E) Radioactive contaminants, which can be naturally-occurring or be the result of oil gas production and mining activities.

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

**Non-detects (ND)**- laboratory analysis indicates that the contaminant is not present.

**Parts per million (ppm) or Milligrams per liter (mg/l)**- a part per million corresponds to one second in a little over 11.5 days.

**Parts per billion (ppb) or Micrograms per liter**- a part per billion corresponds to one second in 31.7 years.

**Pico curies per liter (pCi/l)**- Pico curies per liter is a measure of the radioactivity in the water.

**Millirems per year (mrem/yr)**- measure of radiation absorbed by the body.

**Million Fibers per liter (MFL)**- million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

**Less Than = <**

**More Than = >**

**Nephelometric Turbidity Unit (NTU)**- nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**Action Level (AL)**= the concentration of a contaminant which, if exceeded, triggers treatment of other requirements which a water system must follow.

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

**Maximum Contaminant Level** - The "Maximum Allowed" (MCL) is the highest level of a Contaminant that is allowed in drinking water. MCL'S are set as close to the MCLG's 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. MCLG's allow for a margin of safety.

**Maximum Residual Disinfectant Level (MRDL)**- The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

#### **Microbiological Contaminants:**

- 1 Turbidity. Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. The organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

#### **Inorganic Contaminants:**

- 2 Nitrate. Infants below the age of six months who drink water-containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.

Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites, which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

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. 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.

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, a person would have to drink two (2) liters of water every day at the MCL level for a lifetime to have a one-in-million chance of having the described health effect.

As a precaution Defiance always notify physicians and health care providers in this area if there is ever a higher than normal level of nitrates in the water supply.

In our continuing efforts to maintain a safe and 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. Rate adjustments may be necessary in order to address these improvements.

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding.

Some people may be more vulnerable to contaminants in the drinking than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplant, 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 are an 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 any questions. We, at Ayersville Water and Sewer District work around the clock to provide top quality to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

**Ayersville Water and Sewer District  
13961 Fruit Ridge Rd.  
Defiance, Ohio 43512  
(419) 395-1733**

## 2011 TEST RESULTS FOR CITY OF DEFIANCE WATER DIVISION

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detection	Violation Yes/No	Year Sampled	Typical Sources of Contaminants
<b>Microbiological Contaminants</b>							
Turbidity (NTU)	N/A	TT	0.2	0.06-0.20	No	2011	Soil Water Runoff
Turbidity (% Samples meeting standard)	N/A	TT=95%	99%	99 - 100%	No	2011	
Total Coliform Bacteria (TC)	0	1	0	0%	No	2011	Naturally present in the environment
Total Organic Carbon (TOC)	TT	N/A	2.07	1.3-2.5	No	2011	Naturally present in the environment
The value reported under "Level Found" for TOC is the lowest ratio between percentage of TOC actually removed to the percentage of TOC required to be removed. A value of greater than one (1) indicates that the water system is in compliance with TOC removal requirements. A value of less than one (1) indicates a violation of the TOC removal requirements.							
<b>Residual Disinfectants</b>							
Total Chlorine (ppm)	MRDLG =4.0	MRDL =4.0	1.4	1.3-1.4	No	2011	Water additive used to control microbes.
<b>Inorganic Contaminants</b>							
Copper (ppb)	1350	AL = 1350	96.3	N/A	No	2010	Corrosion of household plumbing systems; Erosion of natural deposits.
	No samples were found to have copper levels in excess of the Action Level of 1350 ppb.						
Lead (ppb)	0	AL = 15	4.44	N/A	No	2010	Corrosion of household plumbing systems; Erosion of natural deposits.
	No samples were found to have lead levels in excess of the Action Level of 15 ppb.						
Fluoride (ppm)	4	4	1.04	0.87 - 1.21	No	2011	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate (ppm)	10	10	3.62	0.488 - 3.62	No	2011	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Barium (ppm)	2	2	0.0220	0.0220	No	2011	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
<b>Synthetic Organic Contaminants including Pesticides &amp; Herbicides</b>							
Atrazine (ppb)	3	3	0.5	0.0-0.5	No	2011	Runoff from herbicide used on row crops.
Simazine (ppb)	4	4	0.1	0.0 - 0.1	No	2011	Runoff from herbicide used on row crops.
<b>Volatile Organic Contaminants</b>							
Total Trihalomethanes (TTHM) (ppb)	N/A	80	62.2	32.52 - 90	No	2011	By-product of drinking water chlorination
Haloacetic Acid (HAA5) (ppb)	N/A	60	31.58	13.90-33.0	No	2011	By-product of drinking water chlorination
<b>RadioActive Contaminants</b>							
Combined Radium 226/228 (pCi/L)	0	5	1.00	1.00	No	2010	By-product of drinking water chlorination

2011 TEST RESULTS FOR CITY OF DEFIANCE WATER DIVISION

2011 TEST RESULTS FOR AYERSVILLE WATER & SEWER DISTRICT							
Contaminants (Units)	MCLG	MCL	Level Found	Range of Detection	Violation Yes/No	Year Sampled	Typical Sources of Contaminants
<b>Residual Disinfectants</b>							
Total Chlorine (ppm)	MRDL=4	MRDL=4	1.1	1.0-1.3	No	2011	Corrosion of household plumbing systems; Erosion of natural deposits.
<b>Inorganic Contaminants</b>							
Copper (ppm)	1.3	AL = 1.3	<50	0 - 0.08	No	2011	Corrosion of household plumbing systems; Erosion of natural deposits.
	0	AL = 15	<5	0.0 - 94.5	No	2011	Corrosion of household plumbing systems; Erosion of natural deposits.
Lead (ppb)	Two out of thirty samples were found to have lead levels in excess of the lead action level of 15ppb.						Erosion of natural deposits.
<b>Volatile Organic Contaminants</b>							
Total Trihalomethanes (TTHM) (ppm)	N/A	80	63	38.4-70.5	No	2011	By-product of drinking water chlorination
Haloacetic Acid (HAA5) (ppm)	N/A	60	28	14.8-28.9	No	2011	By-product of drinking water chlorination

# CERTIFICATION THAT THE CCR WAS DISTRIBUTED

Mail this form and your CCR to OEPA Central Office, DDAGW, POB 1049, Colts., OH 43216-1049

I hereby certify that the attached CONSUMER CONFIDENCE REPORT was distributed to all customers on the public water system and that the information is correct and consistent with the compliance monitoring data previously submitted to the Ohio EPA.

	Required Methods of Distribution	Actual Methods of Distribution <i>Fill in all appropriate blank(s)</i>
1	Mail or hand deliver a copy of the CCR to each customer (service connection) and make the CCR available upon request.	Date(s) of mail delivery: <u>6-15-12</u> or Date(s) of hand delivery: _____
2	Keep CCRs on hand so they are available upon request.	Contact name: <u>Ayersville Water &amp; Sewer Dist</u> <u>DAW Limber</u> Contact phone no. of contact for requests: <u>(419) 395-1733</u> Location(s) where CCRs are kept on hand: <u>13961 Fruit Ridge Rd</u> <u>Defiance OH 43512</u>
3	Publish CCR on the Internet. (Systems with a population of 100,000 or more.)	Date CCR posted on the Internet: _____ Web site address: _____
4	Make a Good Faith effort to reach non-bill paying consumers. (Check all that apply.)	<input checked="" type="checkbox"/> Post the CCR on the Internet @ <input checked="" type="checkbox"/> Mail the CCR to postal patrons within the service area. (Attach zip codes used.) <u>43512</u> <input type="checkbox"/> Advertise availability of the CCR in news media. (Attach copy of the announcement.) <input type="checkbox"/> Publication of CCR in local newspaper (attach copy). <input type="checkbox"/> Post the CCR in public places (attach a list of locations). <input type="checkbox"/> Deliver multiple copies to single bill addresses serving many people i.e., apt. bldgs, businesses, lg. private employers. <input type="checkbox"/> Other _____
5	Wholesalers	Date information was delivered to each master metered community public water system _____
6	Include public notification in CCR to satisfy a Tier 3 monitoring violation or the fluoride secondary MCL	Contaminant for which public notification was included _____ Date or date range of violation _____

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 DDAGW  
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*DAW Limber*  
Signature of Responsible Official

Ayersville Water + Sewer Dist.  
Name of Public Water System

DAW Limber Manager  
Printed Name and Title of Responsible Official

2000903  
PWS ID

Defiance  
County

Date 6-18-12

For Calendar Year 2011

For OEPA Use Only	
Date received	_____
Date reviewed	<u>6/25/12</u>
Reviewer	<u>[Signature]</u>