



**Harold G. Huff, Director  
Water Resources Department**

**PORTAGE COUNTY WATER RESOURCES  
SHALERSVILLE WATER SYSTEM**

**“We have a current, unconditioned license to operate our water system”**

**2009 ANNUAL CONSUMER WATER QUALITY REPORT**

**Billing Information: 330-297-3670**

**Customer Service: 330-297-3685**

**24-Hour Number: 330-626-5283**

**This report is also available on our web site: [www.portageco.com/waterresources.htm](http://www.portageco.com/waterresources.htm)**

**Water Quality Exceeds Mark**

Portage County Water Resources is committed to providing our customers with a safe and reliable supply of high quality drinking water. The water meets both state and federal standards for quality and safety. This annual “Consumer Confidence Report” required by the Safe Drinking Water Act, explains where your water comes from, what the tests show about it, and other things you should know about drinking water.

**Water Source**

The Shalersville Water Treatment Plant (WTP), which provides drinking water to the surrounding Shalersville Township, the City of Streetsboro, the City of Aurora, Ohio American Water, and as far South as portions of Franklin Township uses ground water wells as its drinking water source. The Shalersville Water Treatment Plant has 5 deep wells located on the treatment plant property. The plant produced an average of 2.6 million gallons of water per day in 2009. The Shalersville plant utilizes ion exchange softening units to soften the water from over 300 ppm down to about 150 ppm of hardness. In addition, measures have been taken to assure a constant water supply through agreements to purchase water from the City of Ravenna and the City of Cleveland water systems. Supplemental water was purchased from the City of Ravenna at an average of 0.18 million gallons per day. The City of Ravenna water system uses surface water drawn from Lake Hodgson. At present, there is an emergency connection to the City of Cleveland for back-up water to be used during line breaks and other emergencies; the water is drawn from Lake Erie. Both Cleveland and Ravenna are surface water suppliers and meet all state and federal standards. In the late summer of 2010 a new water main from the City of Cleveland will provide drinking water to the Shalersville system to assure we continue to provide an uninterrupted service of safe drinking water for our valued customers.



## Source Water Protection

The sources of drinking water, for 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 can pick up substances resulting from the presence of animals or from human activity. The aquifer that supplies drinking water to the Shalersville area has a high susceptibility to contamination due to the sensitive nature of the aquifer in which the drinking water wells are located and existing potential known contamination sources. More information is available by calling the EPA at 1-800-963-1292. Portage County Water Resources vigilantly safeguards its ground water supplies. Future contamination may be avoided by implementing protective measures, and once again we are able to report that the department has never had a violation of a contaminant level or of any other water quality standard. 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 1-800-426-4791). Contaminants which may become present in source water include: (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural or 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 runoff, and residential uses; (D) Organic chemical contaminants, including synthetic and volatile organic chemicals, which can come from industry, gas stations, urban storm water runoff, and septic systems; (E) Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

Portage County Water Resources has actively monitored the area around its well field for thirty-five (35) years to protect it from potential pollution. Ohio EPA has approved the Shalersville "Wellhead Protection Area Delineation" and has prepared a "Drinking Water Source Assessment" on the Shalersville well field area. This document can be found on our web site at [www.portageco.com/waterresources.htm](http://www.portageco.com/waterresources.htm). There are presently no known sources of pollution affecting our ground water and we intend to use public education and regular monitoring to continually improve our protection program. We need the cooperation of everyone living and working in the area where our water originates to prevent contamination.

## Special Information Available

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-compromised persons such as persons with cancer who are undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly people and infants can be particularly at risk from infection. 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). 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. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

## ***An Explanation of the Water Quality Data Tables***

The following two (2) tables present the information on any regulated contaminant that was found to be present in any amount in the drinking water. Table A is for the water produced by the Shalersville WTP. Table B is for the water produced by the Ravenna WTP and purchased as supplemental water for the Shalersville system, normally in the northeastern portion of the County distribution system and during emergencies.



**TABLE A**  
**2009 Shalersville Treated Water Quality**  
**Detected Contaminants**

Inorganic Contaminants							
Contaminant Units	MCL	MCLG	LEVEL FOUND	RANGE OF DETECTION	VIOLATION	YEAR SAMPLED	Sources of Contaminate
Fluoride (ppm)	4	4	1.0027	0.69-1.37	NO	2009	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer plants and aluminum factories
Copper (ppm)	AL = 1.3	1.3	0.700	0.32-0.730	NO	2009	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	AL= 15	0	16.55	<2.0-30.0	YES	2009	Corrosion of household plumbing systems; Erosion of natural deposits
Chromium (ppb)	100	100	16	NA	NO	2007	Discharge from steel and pulp mills; Erosion of natural deposits
Sodium	NA	NA	132.8	95-160	NA	2009	Naturally occurring deposits
Barium (ppm)	2	2	0.025	NA	NO	2007	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Iron (ppm)	NA	NA	0.10	0.08 – 0.11	NO	2009	Naturally occurring deposits
Manganese (ppm)	NA	NA	0.03	0.03 – 0.036	NO	2009	Naturally occurring deposits
Hardness (ppm)	NA	NA	149.1	136.0-165.6	NO	2009	Naturally occurring deposits
Phosphate	NA	NA	0.20	0.20-0.23	NA	2009	Naturally occurring deposits
Chlorides (ppm)	NA	NA	65.8	58-112	NA	2009	Naturally occurring deposits
Volatile Organic Contaminants							
Bromodichloro methane	NA	NA	6.4	NA	NA	2007	Byproduct of drinking water chlorination
Bromoform	NA	NA	2.2	NA	NA	2007	Byproduct of drinking water chlorination
Chloroform	NA	NA	2.3	NA	NA	2007	Byproduct of drinking water chlorination
Dibromochloro methane	NA	NA	8.6	NA	NA	2007	Byproduct of drinking water chlorination
HAA5 (ppb) HALOACETIC ACIDS	60 ARA	60	22.2	7.3-50.4	NO	2009	Byproduct of drinking water chlorination
TTHM (ppb) Total	80 ARA	80	46.7	30.5-97.5	NO	2009	Byproduct of drinking water chlorination
Trihalomethanes IDSE TTHMs (ppb)							
	NOT REQUIRED						
IDSE HAA5 (ppb)							
	NOT REQUIRED						
Total Chlorine (ppm)	MRDL = 4	MRDLG=4	1.31	0.92 – 1.74	NO	2009	Water additive to control microbes



**TABLE B**  
**2009 Ravenna Treated Water Quality**  
**Detected Contaminants**

Contaminant	Date Tested	Unit	MCL	MCLG	Detected Level	Range	Major Sources In Drinking Water	Violation
<b>Inorganic Contaminants</b>								
Nitrate	2009	ppm	10	10	0.49	0.10- 0.49	Runoff from fertilizer, Leaching from septic tanks, Sewage; Erosion of natural Deposits	NO
Fluoride	2009	ppm	4	4	1.03	0.90-1.13	Erosion of natural deposits: Water additive.	NO
Copper	2009	ppm	1.3 AL	1.3	0.42	0-1.10	Corrosion of household plumbing systems.	NO
No samples exceeded AL					90%-0.42		Erosion of natural Deposits	
Lead	2009	ppb	15 AL	0	12.0	0 – 93	Corrosion of household plumbing systems.	NO
No samples exceeded AL					90%-12.0		Erosion of natural	
Barium	2009	ppm	2	2	0.026	N/A	Discharge of drilling wastes; Metal refineries or Erosion of natural deposits	NO
Cadmium	2009	ppm	0.005	0.005	0.0008	N/A	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; Runoff from waste batteries & paints.	NO
Nickel	2009	ppm	0.10	0.10	0.033	N/A	Erosion of natural deposits; Discharge from electroplating, stainless steel, and alloy products; Mining & refining operations	NO
Chlorine, Total	2009	ppm	4	4	1.0	0.2-1.7	Water additive used to control microbes.	NO
Chlorite	2009	ppm	1.0	0.8	0.99	0.21-0.99	By-product of drinking water	NO
<b>Microbiological Contaminants</b>								
Turbidity	2009	NTU	0.3	TT	0.30	0.06-0.3	Soil runoff	NO
100% of the samples were Below the TT value of 0.3								
Total Coliform Bacteria	2009	0	1	0	0	NA	Naturally present in environment	NO
Total Organic Carbon (UV254)	2009	ppm	TT	N/A	1.67	1.27-2.36	Naturally present in the environment	NO
<b>Radioactive Contaminant</b>								
Total Beta	2004	pci/L	50	0	4.4	N/A	Decay of natural & man made deposits	NO
<b>Volatile Organic Contaminants</b>								
Bromodichloromethane	2009	ppb	NA	NA	8.0	NA	Byproduct of chlorination	NO
Clorodibromomethane	2009	ppb	NA	NA	1.9	NA	Byproduct of chlorination	NO
Chloroform	2009	ppb	NA	NA	19.0	NA	Byproduct of chlorination	NO
<b>Trihalomethanes</b>								
TTHMs(Total trihalomethanes)	2009	ppb	80 ARA	0	48.0	31.5-69.7	Byproduct of chlorination	NO
<b>Haloacetic Acids</b>								
Total Haloacetic acids	2009	ppb	60 ARA	NA	31.0	12.3-50.9	Byproduct of chlorination	NO
IDSE TTHM's (ppb)*	2009	ppb	NA	NA	NA	23.3-108	Byproduct of chlorination	NO
IDSE HAA5 (ppb)*	2009	ppb	NA	NA	NA	13.1-58.2	Byproduct of chlorination	NO



## **Lead and Copper Precautions**

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. Shalersville Water System is responsible for providing high quality drinking water, but can not control the variety of materials used in home plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing for 30 seconds to 2 minutes before using water for drinking and 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 <http://www.epa.gov/safewater/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.

## **Disinfectants/Disinfection Byproducts Rule (D/DBPR)**

Our public water system was not required to perform the new series of evaluations.

## **Customer Views Welcome**

If you are interested in learning more about the water department and water quality or participating in the decision-making process there are a number of opportunities available. Questions about water quality can be answered by calling our Customer Service office at 330-297-3685. Inquiries about public participation and policy decisions can be made by calling the main office at 330-297-3670. The Board of Commissioners meetings are Tuesday and Thursday at 9:00 am and open to the public.

### **Additional Information and Relative Measurements**

EPA considers 50 pCi/L to be the level of concern for Beta particles

Iron and manganese have only secondary maximum contaminant levels (SMCL):

SMCL for iron = 0.300 ppm

SMCL for manganese = 0.050 ppm

### **DEFINITIONS OF TERMS**

**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 MAXIMUM 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 MCLG AS FEASIBLE USING THE AVAILABLE TREATMENT TECHNOLOGY.

**MAXIMUM RESIDUAL DISINFECTANT LEVEL (MRDL):** THE HIGHEST RESIDUAL DISINFECTANT LEVEL ALLOWED.

**MAXIMUM RESIDUAL DISINFECTANT LEVEL GOAL (MRDLG):** THE LEVEL OF RESIDUAL DISINFECTANT BELOW WHICH THERE IS NO KNOWN OR EXPECTED RISKS TO HEALTH.

**ACTION LEVEL (AL):** THE CONCENTRATION OF A CONTAMINANT, WHICH IF EXCEEDED, TRIGGERS TREATMENT OR OTHER REQUIREMENTS WHICH A WATER SYSTEM MUST FOLLOW.

**PARTS PER MILLION (ppm), OR MILLIGRAMS PER LITER (mg/L):** ARE UNITS OF MEASURE FOR CONCENTRATION OF A CONTAMINANT. A PART PER MILLION CORRESPONDS TO ONE SECOND IN 11.5 DAYS.



PARTS PER BILLION (ppb) OR MICRO GRAMS PER LITER (ug/L): ARE UNITS OF MEASURE FOR A CONTAMINANT. A PART PER BILLION CORRESPONDS TO ONE SECOND IN 31.7 YEARS.

THE "<" SYMBOL WHICH MEANS LESS THAN. A RESULT OF <5 MEANS THAT THE LOWEST LEVEL THAT COULD NOT BE DETECTED WAS 5 AND THE CONTAMINANT IN THAT SAMPLE WAS NOT DETECTED.

IDSE: INITIAL DISTRIBUTION SYSTEM EVALUATION

ARA: ANNUAL RUNNING AVERAGE

NA: NOT APPLICABLE

PICOCURRIES PER LITER (pCi/L) A MEASURE OF RADIATION

MILLIONS OF FIBERS PER LITER (MF/L): A MEASURE OF ASBESTOS

USEPA: UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

EPA: ENVIRONMENTAL PROTECTION AGENCY

