

Shalersville Water Plant- Table 1

Provides drinking water to surrounding Shalersville Township, the City of Streetsboro, the City of Aurora, Aqua Ohio Water Company Inc., and as far south as portions of Franklin Township, and uses ground water wells as its drinking water source. 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.

Brimfield Water Plant- Table 1 Provides drinking water service to the local Brimfield area, Aqua Ohio Water Company Inc., Rootstown Water Company, and as far north as the Meadowview Plaza in Franklin and Ravenna Townships, and uses ground water wells as its source. Supplemental water is purchased from the City of Ravenna at an average of 0.10 million gallons per day. The City of Ravenna water system uses surface water drawn from Lake Hodgson. Ravenna's water quality data is included in **Table (2)**.

Rivermoor Water Plant- Table 1 Provides drinking water service to the local Rivermoor area, and uses ground water wells as its source.



About your Drinking Water

The EPA requires regular testing to ensure drinking water safety. Portage County Water Resources conducted sampling for bacteria and inorganic and organic contaminants during 2014. Samples were collected for a number of different contaminants most of which were not detected in the Portage County Water Resources water supply. The Ohio EPA requires 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, though accurate, are more than one year old.



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 330-297-3670. The Board of Commissioners' meetings are held weekly on Tuesdays and Thursdays beginning at 9:30 AM and are open to the public.

PORTAGE COUNTY

WATER QUALITY REPORT

2014

Water Quality Exceeds Mark

Shalersville Water Plant
Brimfield Water Plant
Rivermoor Water Plant

Portage County Water Resources has prepared the following report to provide information to you, the consumer, on the quality of our drinking water from our three water treatment plants. Included within this report is general health information, water quality test results, how to participate in decisions concerning your drinking water and water system contacts.



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 MCLGs 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.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Parts per million (ppm), or milligrams

per liter (mg/l): Are units of measure for concentration of a contaminant.

Required Health 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, other contaminants, and can pick up substances resulting from the presence of animal 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 urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming;
3. Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff and residential uses;
4. 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; and
5. 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, USEPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water, which shall 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 may be obtained by calling the Federal Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791). Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised people such as people with cancer undergoing chemotherapy, people 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 from their health care providers about drinking water. USEPA/Centers for Disease Control and Prevention (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).

COMPLIANCE WITH DRINKING WATER REGULATIONS:

Portage County Water Resources is in compliance with all Maximum Contaminant Levels and Treatment Techniques for drinking water. Portage County has current Licenses, issued by the Ohio Environmental Protection Agency, to operate our three water systems.

Table 1
An Explanation of the Water Quality Data

The following table presents the information on any regulated contaminant that was found to be present in our three drinking water plants.

Substances we detected (Units)	What's Allowed (MCL)	What's the goal? (MCLG)	Rivermoor Water Plant		Brimfield Water Plant		Shalersville Water Plant		Violation?	When we checked	Where can it come from?
			Level Found	Range	Level Found	Range	Level Found	Range			
Fluoride (ppm)	4	4	<0.10	NA	1.00	0.91-1.07	1.08	0.95-1.14	NO	2014	Erosion of natural deposits; Water additive which promotes strong teeth
Copper (ppm)	AL = 1.3	1.3	.355 90%	.030-.460	1.10 90%	<.010-1.10	.550 90%	<.010-.810	NO	2013 Rivermoor 2013 Brimfield 2013 Shalersville	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb) (1)	AL= 15	0	<2.0 90%	<2.0	2.6 90%	<2.0-7.0	4.45 90%	<2.0-8.9	NO	2013 Rivermoor 2013 Brimfield 2013 Shalersville	Corrosion of household plumbing systems; Erosion of natural deposits
Barium (ppm)	2	2	0.110	NA	0.110	NA	0.032	NA	NO	2013	Discharge of drilling wastes; Discharge from metal refineries
Bromodichloro Methane (ppb)	NA	NA	1.6	NA	3.6	NA	6.1	NA	NO	2014	Byproduct of drinking water chlorination
Bromoform (ppb)	NA	NA	1.0	NA	<0.5	NA	2.4	NA	NO	2014	Byproduct of drinking water chlorination
Chloroform (ppb)	NA	NA	1.1	NA	2.9	NA	2.4	NA	NO	2014	Byproduct of drinking water chlorination
Dibromochloro Methane (ppb)	NA	NA	2.1	NA	2.7	NA	8.2	NA	NO	2014	Byproduct of drinking water chlorination
Gross Alpha	15	0	<3	NA	<3	NA	6.38	NA	NO	2013	Decay of natural deposits
Radium 228	5	0	<1	NA	1.73	NA	0.04	NA	NO	2013	Decay of natural deposits
TTHM's (ppb) DS 201	80 ARA	80	NA	NA	(2) 91.2	63.7-105.0	NA	NA	YES	2014	Byproduct of drinking water chlorination
HAA5's (ppb) DS 201	60 ARA	60	NA	NA	(3) 63.3	45.6-71.6	NA	NA	YES	2014	Byproduct of drinking water chlorination
TTHM's (ppb) DS 202	80 ARA	80	5.8	NA	76.08	52.0-100.6	40.5	NA	NO	2014	Byproduct of drinking water chlorination
HHA5's (ppb) DS 202	60 ARA	60	<6.0	NA	21.6	0.0-37.2	8.9	NA	NO	2014	Byproduct of drinking water chlorination
Total Chlorine (ppm)	MRDL = 4	MRDLG=4	.77	0.40-0.90	1.00	0.60-1.10	1.00	0.70 – 1.10	NO	2014	Water additive to control microbes

- (1)** 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. Portage County Water Resources is responsible for providing high-quality drinking water but cannot control the variety of materials used in plumbing components in the home. 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 at 800-426-4791 or at <http://www.epa.gov/safewater/lead>.
- (2)** TTHM Violation- The levels detected do not pose an immediate risk to your health, however, some people who drink water containing trihalomethanes 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. Portage County had a MCL violation during the Oct, Nov, Dec. quarter at 5409 Powder Mill Road in 2014. To solve the problem, we have discontinued taking supplemental water from another water source.
- (3)** HAA Violation- The levels detected do not pose an immediate risk to your health, however, some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer. Portage County had a MCL violation during the Oct, Nov, Dec. quarter at 5409 Powder Mill Road in 2014. To solve the problem, we have discontinued taking supplemental water from another water source.

Table 2
An Explanation of the Water Quality Data

The following table is for the water produced by the Ravenna WTP and purchased as supplemental water for the Brimfield system, normally in the northeastern portion of the Brimfield distribution system and during emergencies.

Substances we detected (Units)	What's Allowed (MCL)	What's the goal? (MCLG)	Level Found	Range	Violation?	When we checked	Where can it come from?
Nitrate (ppm)	10	10	0.33	0.10-0.56	NO	2014	Runoff from fertilizer use; Erosion of natural deposits
Fluoride (ppm)	4	4	1.00	0.85-1.18	NO	2014	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer plants and aluminum factories
Copper (ppm)	AL = 1.3	1.3	0.24 90%	.031-0.58	NO	2012	Corrosion of household plumbing systems.
Lead (ppb)	AL= 15	0	5.40 90%	0-17	NO	2012	Corrosion of household plumbing systems.
Total Chlorine (ppm)	MRDL = 4	MRDLG=4	1.46	0.9-2.3	NO	2014	Water additive to control microbes
Chlorite (ppm)	1.0	0.8	0.63	0.22-0.93	NO	2014	Byproduct of drinking water chlorination
Turbidity (NTU) 99% of samples were below the TT value of 0.3	0.3	TT	0.17	0.03-0.17	NO	2014	Soil Runoff
Total Coliform Bacteria	1	0	0	NA	NO	2014	Naturally present in the environment
Total Organic Carbon (ppm)	TT	NA	1.43	1.14-1.65	NO	2014	Naturally present in the environment
Barium(ppm)	2.0	.010	.029	NA	NO	2014	Discharge of drilling waste; erosion of natural deposits
Radium 228 (pCi/L)	5	0	<1	NA	NO	2010	Decay of natural deposits
Bromodichloro Methane (ppb)	NA	NA	12.4	NA	NO	2014	Byproduct of drinking water chlorination
Chlorodibromomethane (ppb)	NA	NA	2.14	NA	NO	2014	Byproduct of drinking water chlorination
Chloroform (ppb)	NA	NA	32.8	NA	NO	2014	Byproduct of drinking water chlorination
TTHM's (ppb) DS 201	80 ARA	80	62.3	42.5-88.5	NO	2014	Byproduct of drinking water chlorination
HAA5's (ppb) DS 201	60 ARA	60	54.7	32.6-102	NO	2014	Byproduct of drinking water chlorination
TTHM's (ppb) DS 202	80 ARA	80	60.8	39.1-98.4	NO	2014	Byproduct of drinking water chlorination
HAA5's (ppb) DS 202	60 ARA	60	57.2	35.4-107	NO	2014	Byproduct of drinking water chlorination
TTHM's (ppb) DS 203	80 ARA	80	60.4	25.4-98.8	NO	2014	Byproduct of drinking water chlorination
HAA5's (ppb) DS 203	60 ARA	60	56.9	19.9-114	NO	2014	Byproduct of drinking water chlorination
TTHM's (ppb) DS 204	80 ARA	80	53.0	27.9-82.2	NO	2014	Byproduct of drinking water chlorination
HHA5's (ppb) DS 204	60 ARA	60	54.5	23.3-108	NO	2014	Byproduct of drinking water chlorination