

**2015 Annual Drinking Water Quality Report**  
Warwick Township Municipal Authority  
“Rothsville” Water System PWSID# 7360120

*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 very important information about your drinking water. Translate it, 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 call the Warwick Township Municipal Authority (“WTMA”) office at (717) 627-2379.** We want you to be informed about your water supply and are pleased to present this year’s Annual Drinking Water Quality Report. If you want to learn more, please attend any of our regularly scheduled meetings held on the third Tuesday of each month at 7:00 p.m. at the Warwick Township Municipal Building, 315 Clay Road, Lititz, PA 17543. **You can also visit [www.warwicktownship.org](http://www.warwicktownship.org) and click on “sewer/water” for information about the WTMA and your water supply and/or sanitary sewer service.**

**SOURCES OF WATER:** The Rothsville Water System serves approximately 761 connections within the village of Rothsville. The water source for WTMA’s Rothsville Water System is a well located within Rothsville. The well is permitted by the Pennsylvania Department of Environmental Protection (PADEP) to produce 288,000 gallons of water per day. There are two 440,000 gallon storage tanks which provide an emergency water storage supply. Following the recommendations of the Wellhead Protection Plan, WTMA drilled, tested, and has received approval from the Susquehanna River Basin Commission (SRBC) and the PADEP for a second well. The second well will provide a backup source of water supply for the Rothsville system. The Rothsville recharge zone can easily be identified by signs indicating the water supply area. **Please be mindful that pollution affects your water supply.**

WTMA continues its efforts to protect your drinking water through its Wellhead Protection Program which was approved by the PADEP in 2002. The Wellhead Protection Committee consists of representatives of municipal and county government and agencies, local businesses and interested citizens. The group meets annually to discuss the status of existing programs and to suggest additional ways in which we can protect our precious resource. Due to the success of its “Ag-Management” Program, WTMA has been invited to share the results of this innovative partnership with others through forums such as the Pennsylvania Municipal Authorities Association, PADEP, and SRBC Seminars. The Ag-Management Program owes a large portion of its success to the outstanding cooperation provided by our farming partners.

In 2005, the PADEP prepared a Source Water Assessment Report which identified the primary activities to which the water source is susceptible. On a scale from A (high priority) to F (low priority) the report rated Agricultural Activities as a “B” and Residential Activities as a “C”. The Source Water Assessment Report is available for review at the WTMA office.

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* (800-426-4791).

**MONITORING AND TREATMENT OF YOUR DRINKING WATER:** The goal of the WTMA is and always has been to provide you with a safe and dependable supply of drinking water. Four of WTMA's employees are PA certified water operators who routinely monitor for contaminants in your drinking water according to federal and state regulations. In addition, an outside laboratory collects random water samples throughout the water system on a monthly basis. Test results are reported to the PADEP. Water from the Rothsville well is treated using chlorine and a nitrate removal process. Fluoride is **not** added to the treated water. Due to the limestone geology, water in the Rothsville system is considered "hard" having between 21 and 24 grains of hardness.

The Rothsville Water System is routinely monitored for contaminants in your drinking water according to federal and state laws. The following table shows the results of our monitoring for the period of **January 1 to December 31, 2015**. 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 data could be from prior years in accordance with the Safe Drinking Water Act. The year in which the data is from prior years is noted in 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 that is 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.

**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.

**ppb** = parts per billion, or micrograms per liter ( $\mu\text{g/L}$ )

**ppm** = parts per million, or milligrams per liter ( $\text{mg/L}$ )

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

**DETECTED SAMPLE RESULTS:**

<b>Chemical Contaminants</b>								
Contaminant	MCL in CCR Units	MCLG	Level Detected	Range of Detections	Units	Sample Date	Detections in Violation Y/N	Sources of Contamination
BARIUM	2	2	0.045	0.045	ppm	2015	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
RADIUM 226	5	0	0.25	0.25	pCi/L	2015	N	Erosion of natural deposits
FLUORIDE	2	2	0.10	0.10	ppm	2015	N	Water additive which promotes strong teeth
NITRATE	10	10	5.2	4.7 - 5.7	ppm	2015	N	Runoff from fertilizer use; leaching from septic tanks, sewage
HALOACETIC ACIDS <sup>1</sup>	60	n/a	ND	ND	ppb	2015	N	By-product of drinking water chlorination
TRIHALOMETHANES	80	n/a	12.8	11.9 – 13.6	ppb	2015	N	By-product of drinking water chlorination

<b>Entry Point Disinfectant Residual</b>							
Contaminant	Min RDL	Lowest Level Detected	Range of Detections	Units	Sample Date	Detections in Violation Y/N	Sources of Contamination
CHLORINE	0.4	0.48	0.48 – 0.88	ppm	2015	N	Water additive to control microbes.

<b>Distribution Disinfectant Residual</b>							
Contaminant	MRDL	Month of Highest Average Result	Highest Average Result	Range of Average Results	Units	Results in Violation Y/N	Sources of Contamination
CHLORINE	4.0	December 2015	0.25	0.11 – 0.25	ppm	N	Water additive 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	Detections in Violation Y/N	Likely Source of Contamination
COPPER	1.3	1.3	0.21	ppm	0 of 10	N	Corrosion of household plumbing
LEAD	15	0	11	ppb	0 of 10	N	Corrosion of household plumbing

<sup>1</sup>Sampling was performed for Haloacetic Acids (HAA5) and Haloacetic Acid compounds but there were no detections.

## **NOTICE OF VIOLATIONS:**

On March 17, 2016, a notice of violation was issued by the PADEP to the WTMA for failing to sample the correct number of sites for lead and copper analyses, failing to conduct an adequate evaluation to locate appropriate lead and copper service taps for sampling sites and failing to update its plan for lead and copper sampling sites. The WTMA has mailed survey letters to customers in effort to gather information that may allow the WTMA to determine if additional sampling sites meet the regulatory criteria. If additional acceptable sites are found, the WTMA will request permission from these customers to sample their drinking water.

**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 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 agriculture, urban storm water run-off 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 storm water run-off 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 assure 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 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* (800-426-4791).

**INFORMATION ABOUT NITRATES:** Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider. **Nitrate reduction facilities were online for the entire year of 2015.**

**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. Lititz Borough 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 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>