

## **Our Drinking Water Is Regulated**

This report shows our water quality and what it means. If you have any questions about this report, please contact Helen Piccone at 610-926-5477.

## **Public Participation Opportunities**

We want you to be informed about your water supply. If you want to learn more, please attend any of our regularly scheduled meetings.

Date: Third Tuesday of the month

Time: 4 p.m.

Phone: (610) 406-6300

Location: City Hall  
Penn Room  
815 Washington St.  
Reading PA 19601

## **En Español**

Este informe contiene información muy importante sobre su agua de beber. Tradúzcalo ó hable con alguien que lo entienda bien.

**North Heidelberg Water Company**  
1801 Kutztown Road  
Reading, PA 19604

# **North Heidelberg WATER COMPANY**

PWS ID# 3060115



# **2016 Annual Drinking Water Quality Report**

## Source of Drinking Water

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.

## Where Do We Get Our Drinking Water?

We operated on two wells in 2016. Well #1 is located along Par Lane off Chalet Drive. Well #2 is located next to the water storage tank on top of the old ski slope. In 2013, a committee was formed to implement a source water protection plan (SWPP) for both of the wells that provide water to the North Heidelberg Water System.

Meetings were held to gather local input, receive feedback about the project results and recommendations and to interact with government agencies.

A Steering Committee meeting was held in May of 2015 to bring interested stakeholders together to discuss the North Heidelberg SWPP management options, and to provide an update on how the plan has been implemented. Education and Outreach was provided by RAWA's SWPP team to the residents located in the immediate proximity to Well #1 to discuss the importance of fertilizer application rates and response notifications in the event of a home heating oil release.

## All Drinking Water May Contain Contaminants

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).

## Required Additional Health Information for 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. North Heidelberg Water Company 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 (800-426-4791) or at <http://www.epa.gov/safewater/lead>.

## People Who May Be More Vulnerable to Contaminants

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).

## VIOLATIONS

Our water system is supposed to monitor on a monthly basis for total coliform bacteria and did not conduct this monitoring during February 2016. Total coliform bacteria samples were taken in March 2016 and no total coliform bacteria were detected. The monthly samples taken at the North Heidelberg Water System in 2016 were consistently and reliably absent of total coliform bacteria.

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.

## Entry Point 101 Disinfectant Residual\*

Contaminant (Units)	Minimum Disinfectant Residual	Lowest Level Detected	Range of Detections	Sample Date	Likely Source of Contamination
Chlorine (ppm)	0.80	0.16*	0.16 - 1.97	August 2016	Water additive used to control microbes

\*A violation would occur if we failed to maintain the minimum entry point residual disinfectant for more than four hours. In August 2016, the entry point residual disinfectant was above the minimum required within four hours.

## Entry Point 102 Disinfectant Residual\*

Contaminant (Units)	Minimum Disinfectant Residual	Lowest Level Detected	Range of Detections	Sample Date	Likely Source of Contamination
Chlorine (ppm)	0.40	1.00	1.00-1.98	August 2016	Water additive used to control microbes

## Chemical Contaminants

Chemical (Units)	MCL in CCR Units	MCLG	Highest Level Detected	Range of Detections	Sample Date	Violation Y/N	Likely Source of Contamination
Chlorine (Monthly Average of Distribution System) (ppm)	MRDL=4	MRDL=4	1.77	0.325-1.77	Dec. 2016	N	Water additive used to control microbes
Total Trihalomethanes (TTHM) (ppb)	80	N/A	15.7	3.1-15.7	Aug. 2016	N	By-product of drinking water chlorination
Haloacetic Acid (HAA5) (ppb)	60	N/A	3	0-3	Aug. 2016	N	By-product of drinking water chlorination

## Microbial Contaminants

Contaminant	TT	MCLG	Assessments/ Corrective Actions	Violation Y/N	Likely Source of Contamination
Total Coliform Bacteria	Any system that has failed to complete all required assessments or correct all identified sanitary defects, is in violation of the treatment technique requirement	N/A	None Required	N	Naturally present in the environment

North Heidelberg Water Company is required, based on population served, to do two bacteriological samples per month. There were no total coliform positive samples in 2016.

## Lead and Copper

Contaminant (Units)	Violation Y/N	Date Sampled	Action Level	MCLG	90th Percentile	# Sites Over AL	Likely Source of Contamination	If you think you have a single family structure that contains lead pipes, or copper pipes with lead solder <b>installed after 1982</b> , and/or are serviced by lead service lines, please contact the Water Authority office at 610-406-6300.
Copper (ppm)	N	2016	1.3	1.3	0.123	0 out of 13	Corrosion of household plumbing systems	
Lead (ppb)	N	2016	15	0	3.7	0 out of 13	Corrosion of household plumbing systems	

In August 2016, to comply with the Lead and Copper rule, North Heidelberg Water Company conducted one study of 13 samples. 0 out of 13 samples was found to be above the action level established for Lead and Copper.

**Synthetic Organic Compounds (SOCs):** We had no detections for SOC's in 2016.

### Entry Point 102 Volatile Organic Chemicals

Contaminant (Units)	MCL	MCLG	Highest Level Detected	Sample Date	Violation	Sources of Contamination
Trihalomethanes (TTHM) (ppb)	80	80	0.6	February, 2015	N	By-product of drinking water chlorination

### Entry Point 101 Inorganic Chemicals

Contaminant (Units)	MCL	MCLG	Highest Level Detected	Sample Date	Violation	Sources of Contamination
Fluoride (ppm)	2.0*	2.0	0.60	February, 2015	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate as Nitrogen (ppm)	10.0	10.0	2.1	February, 2016	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Barium (ppm)	2.0	2.0	0.0860	February, 2015	N	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits

\* EPA's MCL for fluoride is 4 ppm. However, Pennsylvania has set a lower MCL to better protect human health.

### Entry Point 102 Inorganic Chemicals

Contaminant (Units)	MCL	MCLG	Highest Level Detected	Sample Date	Violation	Sources of Contamination
Fluoride (ppm)	2.0*	2.0	0.60	February, 2015	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate as Nitrogen (ppm)	10.0	10.0	3.56	February, 2016	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Barium (ppm)	2.0	2.0	0.0510	February, 2015	N	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits

\* EPA's MCL for fluoride is 4 ppm. However, Pennsylvania has set a lower MCL to better protect human health.

## Definitions and Abbreviations

In the table you might find terms and abbreviations you are not familiar with. To help you better understand these terms we've provided the following 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.

**Detection Limit** - The lowest level detected by the laboratory.

**ND (Non-Detectable)** - A result below the detection limit for the chemical.

**Mrem/year** - millirems per year (a measure of radiation absorbed by the body)

**pCi/L** - Pico curies per liter (a measure of radioactivity)

**ppb** - parts per billion, or micrograms per liter (µg/L). The equivalent of one minute in 2,000 years, or one penny in \$10 million.

**ppm** - parts per million, or milligrams per liter (mg/L). The equivalent of one minute in two years, or one penny in \$10,000.

**ppq** - parts per quadrillion, or picograms per liter

**ppt** - parts per trillion, or nanograms per liter