

Andrews University 2016 Consumer Confidence Report

Is my water safe?

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies.

Do I need to take special precautions?

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/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

Where does my water come from?

The Andrews University Drinking water is supplied from three groundwater wells located on campus.

Source water assessment and its availability

The State performed an assessment of our source water in 2012 to determine the susceptibility or the relative potential of contamination. The susceptibility rating is on a seven-tiered scale from "very-low" to "very-high" based primarily on geologic sensitivity, water chemistry and contaminant sources. The susceptibility of our source is "very high" for wells 1, 3, and 4. Copies of this report are available at Andrews University Plant Services Department. For more information, or for a copy of the SWAS, please contact Jay Ouzts from F&V Operations at (616)-588-2900 or jouzts@fv-operations.com, or Andrews University at (269) 471-7771

Why are there contaminants in my drinking water?

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 (EPA) Safe Drinking Water Hotline (800-426-4791).

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:

- **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 runoff, 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 and residential uses.
- **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.
- **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 runoff, and septic systems.

How can I get involved?

Questions about Drinking Water Quality please contact Jay Ouzts from F&V Operations at (616)-588-2900 or jouzts@fv-operations.com, or Andrews University at (269) 471-7771

Water Quality Data Table

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants

less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one-year-old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions:

- **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 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 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.
- **N/A:** Not applicable. **ND:** not detectable at testing limit. **ppb:** parts per billion or micrograms per liter. **ppm:** parts per million or milligrams per liter. **pCi/L:** picocuries per liter, a measure of radiation
- **Action Level:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Regulated Contaminant	MCL	MCLG	Highest Level Detected	Sample Date	Violation Yes / No	Typical Source of Contaminant
Fluoride (ppm)	4	4	0.09	12/27/2016	no	Erosion of natural deposits. Discharge from fertilizer and aluminum factories
Nitrate (ppm)	10	10	2.3	12/27/2016	no	Run off from fertilizer use; leaching from septic tanks, sewage; Erosion of natural deposits
Special Monitoring and Unregulated Contaminant *			Highest Level Detected	Sample Date	Violation Yes / No	Typical Source of Contaminant
Sodium (ppm)			34.2	12/27/2016	N/A	Erosion of natural deposits
Sulfate (ppm)			45	12/27/2016	N/A	Erosion of natural deposits
Hardness (ppm)			438	12/27/2016	N/A	Erosion of natural deposits

* Unregulated contaminants are those for which EPA has not established drinking water standards. Monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants.

Contaminant Subject to AL	Action Level	MCLG	90% of Samples ≤ This Level	Sample Date	Number of Samples Above AL	Typical Source of Contaminant
Lead (ppb) **	15	0	3	8/25/2015	0	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm)	1.3	1.3	.08	8/25/2015	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

**** Additional 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. Andrews University 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 or at <http://www.epa.gov/safewater/lead>.

Contaminants	MCL	MCLG	Your Water	Sample Date	# Samples Exceeding MCL	Exceeds MCL	Typical Source
Gross Alpha (pCi/L)	15	0	0.72	9/3/2013	0	No	Erosion of natural deposits
Total Radium 226/228 (pCi/L)	5	0	1.89	9/23/2017	0	No	Erosion of natural deposits

Microbial Contaminants	MCL	MCLG	Number Detected	Violation Yes / No	Typical Source of Contaminant
Total Coliform Bacteria	>1 positive monthly sample (>5.0% of monthly samples positive)	0	0	no	Naturally present in the environment
Fecal Coliform and <i>E. coli</i>	Routine and repeat sample total coliform positive, and one is also fecal or <i>E. coli</i> positive	0	0	no	Human and animal fecal waste

Disinfection Byproducts	MCL	MCLG	Level Detected	Range	Sample Date	Violation Yes/No	Typical Source of Contaminant
Trihalomethane (ppb)	80	N/A	10.9	10.9 - 10.9	2016	Yes	Disinfection Byproducts
Haloacetic Acids (ppb)	60	N/A	1	1	2016	Yes	Disinfection Byproducts
Free Chlorine Residual (ppm)	MRDL	MRDLG	RAA	0.20 – 1.72	2016	No	Water additive used to control microbes
	4	4	0.78				

We will update this report annually and will keep you informed of any problems that may occur throughout the year, as they happen. Copies are available at Andrews University Plant Services Department.

For more information about your water, or the contents of this report, please contact Jay Ouzts from F&V Operations at (616)-588-2900 or jouzts@fv-operations.com, or Andrews University at (269) 471-7771. For more information about safe drinking water, visit the U.S. Environmental Protection Agency at www.epa.gov/safewater.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Monitoring Requirements Not Met for Andrews University

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During August 2016, we did not complete all monitoring for Total Trihalomethanes (TTHMs), and Haloacetic Acids (HAA5s), and during January 1 - September 30, 2016 we did not complete all monitoring for nitrate; therefore, cannot be sure of the quality of our drinking water during that time.

What should I do? There is nothing you need to do at this time. This is not an emergency. You do not need to boil water or use an alternative source of water at this time. Even though this is not an emergency, as our customers, you have a right to know what happened and what we did to correct the situation.

The table below lists the contaminants we did not properly test for during 2016, how often we are supposed to sample for this contaminant and how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date we collected follow-up samples.

Contaminant	Required sampling frequency	Number of samples taken	When all samples should have been taken	Date additional samples were (or will be) taken
TTHMs	1 sample per year	0	August 1 – August 31, 2016	August 2017
HAA5s	1 sample per year	0	August 1 – August 31, 2016	August 2017
Nitrate	1 sample per year	0	January 1– Sept. 30 2016	December 31, 2016

What happened? What is being done? We failed to collect the necessary TTHMs and HM5s samples for the monitoring period August 2016. We collected a follow up sample on September 22, 2016, to verify water quality was acceptable, and will also sample again during the next compliance period of August 2017. We also failed to collect a nitrate sample during the monitoring period of January 1, 2016-September 30, 2016. We are working with the Michigan Department of Environmental Quality (MDEQ) and reviewing our sampling schedule to ensure this does not occur again.

For more information, please contact:

Jay Ouzts / 616-588-2900 / jouzts@fv-operations.com
2960 Lucerne Dr. Ste. 100
Grand Rapids MI 49546

You may also contact the MDEQ at 269-567-3610.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent to you by Andrews University and Jay Ouzts of F&V Operations and Resource Management.

CERTIFICATION: #11262

WSSN: 0210

I certify that this water supply has fully complied with the public notification regulations in the Michigan Safe Drinking Water Act, 1976 PA 399, as amended, and the administrative rules.

Signature:



Title: Sr. Project Manager

Date Distributed: July 1, 2017