Andrews University 2017 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.
- Level 1 Assessment: A study of the water supply to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Regulated Contaminant	MCL	MCLG	Highest Level Detected	Sample Date	Violation Yes / No	Typical Source of Contaminant
Fluoride (ppm)	4	4	Non-Detect	8/8/2017	No	Erosion of natural deposits. Discharge from fertilizer and aluminum factories
Nitrate (ppm)	10	10	2.5	8/8/2017	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)			26	8/8/2017	N/A	Erosion of natural deposits
Sulfate (ppm)			33	8/8/2017	N/A	Erosion of natural deposits
Hardness (ppm)			437	8/8/2017	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	3	No	Naturally present in the environment
Fecal Coliform and *E. coli*	Routine and repeat sample total coliform positive, and one is also fecal or *E. coli* 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	10.7	10.7 - 10.7	2017	No	Disinfection Byproducts
Haloacetic Acids (ppb)	60	N/A	1	1	2017	No	Disinfection Byproducts
Free Chlorine Residual (ppm)	MRDL	MRDLG	RAA	0.24 – 1.92	2017	No	Water additive used to control microbes
	4	4	0.88				

During the past year we were required to conduct one level 1 assessment. One level 1 assessment was completed. In addition, we were required to take no corrective actions.

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct the problems that were found during these assessments.

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.

_____

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, 2018