Wright State University Public Water System 2012 Drinking Water Consumer Confidence Report

The Wright State University (WSU) Physical Plant Department and Department of Environmental Health and Safety have prepared this report to provide information to you, the consumer, on the quality of your drinking water. This report contains general health information, water quality test results, potential sources of drinking water contamination, and persons to contact regarding WSU's water system. This report is required by the 1996 amendments to the Safe Drinking Water Act. Regulations governing the content and other requirements for this report can be found in Federal rule 40 CFR 141.151 through 155. We have a current, unconditional license to operate our water system.

What is the source of your drinking water?

WSU operates its own public drinking water system that draws water from the Mad River Buried Valley Aquifer. The Water Supply Plant is located at the west end of Lot #20 adjacent to Kauffman Avenue. Ground water is delivered to the Water Supply Plant from two separate wells utilizing two well pumps at the northwest end of Lot #20. The Water Supply Plant has supplied drinking water to the university since 1977.

Water drawn from the wells is treated at the Water Supply Plant by aeration, iron and manganese filtration, water softening, and chlorine disinfection. The Water Supply Plant is operated and maintained by university employees certified by the Ohio Environmental Protection Agency. WSU's Department of Environmental Health and Safety oversees the required sampling and analysis of the drinking water. In 2012, the Water Supply Plant produced 61.26 million gallons of potable water for the university. The Water Supply Plant supplies drinking water to WSU's main campus buildings, Hamilton Hall and the Rockafield House. Forest Lane and other student resident apartments receive their water from the City of Fairborn.

WSU has an emergency connection with the City of Fairborn for use during emergency conditions and only after approval from the city. Such emergencies include, but are not limited to: power failures, fires, maintenance or repairs, and severe drought. On average this connection is used three times a year with each use usually less than eight hours in duration. This report does not include information on the 13.7 million gallons of water supplied from the City of Fairborn, in 2012. A copy of Fairborn's Consumer Confidence Report can be obtained by contacting the Fairborn Water Department at (937) 754-3097 or at the city's website (fairborn.oh.us/water).

Finished in 2012, the water mains at Wright State were replaced over the entire campus. Over 15,000 feet of pipe has been replaced during this project. This resulted in several boil advisories while the project was completed.

Has your Source Water been assessed?

The 1996 Amendments to the Safe Drinking Water Act require the Ohio Environmental Protection Agency (OEPA) to conduct source water assessments for all Public Water Systems

(PWS's). The assessment information will assist PWS's in understanding the potential threats to their water supply and help them protect their water supply. According to the OEPA Source Water Assessment Report for Wright State University, the aquifer that supplies drinking water to WSU has a high susceptibility to contamination. This is due to the sensitive nature of the aquifer and the existing potential contaminant sources identified. This does not mean that this wellfield will become contaminated; only that conditions exist for the ground water to be impacted by potential contaminant sources.

What are sources of contamination to drinking water?

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.

Potential contaminants include: (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife; (B) 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; (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses; (D) 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; (E) 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, the United States Environmental Protection Agency (EPA) promulgated regulations limiting the amount of certain contaminants in public water systems. Food and Drug Administration 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. Further information regarding contaminants and their potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

Who needs to take special precautions? Additional Health Information

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, persons with HIV/AIDS or some other immune system disorder, and some elderly and infants can be particularly at risk from infection. These people should seek advice about drinking water from their health care providers. EPA and Center for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Is your drinking water monitored?

The EPA requires regular sampling to ensure drinking water safety. WSU is required to conduct sampling for certain bacteria, inorganic, synthetic organic, volatile organic and radiological contaminants as set forth by the EPA. Over the last five years (the required reporting time frame of this report) samples were collected for over 105 different contaminants (some more than once) most of which were not detected in WSU's drinking water supply. Over 296 water samples were taken in 2012.

Listed below is information on those contaminants that were detected in WSU's drinking water supply over the past five years. This data represents the most recent testing done in accordance with EPA regulations. No contaminant was detected at a level considered a violation by the EPA. Definitions for the terms used in the table are also listed.

WATER QUALITY MONITORING INFORMATION

Contaminants (units)	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contamination
INORGANIC CONTAMINANTS							
Barium (ppm)	2	2	0.307	N/A	NO	2011	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Nitrate (ppm)	0	AL=15	<0.1	BDL-0.1	NO	2012	Discharge from fertilizer or septic tanks
Lasso, Atrazine, Simazine(ppb)	3.0 ug/l 3.0 ug/l 4.0 ug/l	3.0 3.0 4.0	<0.2 <0.3 <0.3	BDL-0.2 BDL-0.3 BDL-0.3	NO	2012	Pesticides/herbicide runoff from crops
Fluoride (ppm)	4	4	0.700	N/A	NO	2011	Erosion of natural deposits/ possible discharge from fertilizer or aluminum factories
VOLATILE ORGANIC CONTAMINANTS							
TTHMs [Total Trihalomethanes] (ppb)	N/A	80	25.6	0.5-25.6	NO	2012	By-product of drinking water chlorination
Haloacetic acids [HAA] (ppb)	N/A	60	2.2	1.0-2.2	NO	2012	By-product of drinking water chlorination

None of the samples taken exceeded the AL.

The EPA also requires certain operational data to be monitored by water plant personnel. This includes water volume production rates, hardness levels, iron and manganese levels, and levels of chlorine in the water for disinfection. Information on operational data can be obtained by contacting the Physical Plant Department at (937) 775-2307 or (937) 775-3658.

Lead notice

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. Wright State 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 at http://www.epa.gov/safewater/lead or 800-426-4719. (This paragraph is required by State of Ohio EPA to be included in all CCR reports).

Definitions:

<u>AL (Action Level)</u> – The concentration of a contaminant that, if exceeded, triggers treatment or other requirements, which a water system must follow.

<u>BDL</u> (<u>Below Detection Level</u>) - concentration of a contaminant is lower than the level of detection by current chemical tests.

<u>MCLG (Maximum Contaminant Level Goal)</u> – The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

<u>MCL (Maximum Contaminant Level)</u> – The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

<u>N/A</u> - Abbreviation for "not applicable."

<u>ppb (parts per billion or micrograms per liter)</u> – Unit of measure for concentrations of a contaminant. A part per billion corresponds to one second in 31.7 years.

<u>ppm (parts per million or milligrams per liter)</u> – Unit of measure for concentrations of a contaminant. A part per million corresponds to one second in a little over 11.5 days.

How can the public get more information or participate in decision making?

Information concerning WSU's public water supply operation can be obtained by calling Cris Wadham, Plant Operations and Maintenance Manager, at (937) 775-2307 or Bryan Vest, Maintenance Services Supervisor, WSU Physical Plant at (937) 775-3658. Information concerning sampling and analysis of contaminants can be obtained by calling Joseph Whitlock, WSU Department of Environmental Health and Safety at (937) 775-4131. March 5, 2013