SOUTHERN ILLINOIS UNIVERSITY EDWARDSVILLE
WATER QUALITY REPORT – 2016

To: SIUE Students, Faculty and Staff
The attached report summarizes the quality of the water that is made available to you, the students, faculty, and staff. It details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. We are constantly working to provide you with a safe and dependable supply of drinking water.

If you have any questions about this report or consuming your water system, please contact Ed Minick (60-2238) at Facilities Management, Monday through Friday, 7:30 a.m. to 4 p.m.

WATER SUPPLY INFORMATION
The University water system receives water from the City of Edwardsville into a 400,000 gallon underground water tower. Water is pumped from there through a network of underground mains serving the entire campus and into a 500,000 gallon elevated tank which maintains system water pressure. A second connection to the Edwardsville water system at the east edge of campus near Highway 117 provides with a backup should the primary system experience failure.

The Edwardsville water works system is a municipal utility owned by the City of Edwardsville. Water is obtained from a well field located near the water treatment plant which draws water from the American Bottoms Underground Aquifer. There are several wells drilled to an average depth of approximately 114 feet. The water is filtered, softened and chemically treated with an anti-microbial agent.

SOURCE WATER ASSESSMENT
A Source Water Assessment Plan (SWAP), is now available from the City of Edwardsville. This plan is an assessment of the delineated area and the listed sources through which contaminants, if present, could migrate and reach our source water. It also includes a review of potential of sources of contamination within the delineated area, and a determination of the water’s susceptibility to contamination by the identified potential sources. According to the Source Water Assessment Plan, our water system had a susceptibility rating of “medium.”

A complete copy of this assessment is available from the City of Edwardsville by calling 618-755-1001.

IMPORTANT HEALTH INFORMATION
Some people may be more vulnerable to contaminants in drinking water than the general population. These groups include:

- Immigrants, such as soils 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;
- People 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 avoid advice from their health care providers about drinking water. USEPA/CDC (Center for Disease Control) guidelines on appropriate measures to lessen the risk of infection by Cryptosporidium and other microorganisms are available from USEPA’s Safe Drinking Water Hotline, 800-411-3768.

SUBSTANCES THAT MIGHT BE IN DRINKING WATER
To ensure that tap water is safe to drink, the USEPA prescribes regulations limiting the amount of certain contaminants in water systems.

- U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide same protection for public health. Drinking water, including bottled water, may be reasonably expected to contain small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and groundwater wells. As water travels over the surface 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. Possible contaminants consist of:
  - Microbiological contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wastewater. A list of contaminants, their effects, and possible sources are listed in the table below.
  - Trihalomethanes, such as chloroform and bromoform, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming;
  - Radionuclides, which may come from a variety of sources such as agriculture, urban storm water runoff and residential areas;
  - Organic chemical contaminants, including synthetic and naturally occurring substances which are by-products of industrial processes and petroleum production and can also come from gas and oil production, urban storm water runoff and septic systems; and
  - Radioactive contaminants, which may be naturally occurring or result from the release of oils and gas production and mining activities.

More information about contaminants and potential health effects can be obtained by calling 877-EPA-Safe (877-372-7233) or 800-411-3768.

LEAD AND DRINKING WATER
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. There are no underground lead service lines on the Edwardsville campus. The City of Edwardsville 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 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 drinking water and wish to have your water tested, you may contact the Madison County Environmental Control Lab at (618) 286-6324.

In addition to the drinking water, testing, methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at www.epa.gov/lead/leadassistance.

As of the date of our campus water system, the University is required to regularly test the water. Testing performed in August 2016 found that water in five buildings contained lead exceeding the federal and state action level of 15 parts per billion. At previous years of testing had identified isolated instances of such a level of lead, the University conducted extensive additional sampling testing in campus buildings. Water containing lead over the action level was found to be limited to specific locations in the five buildings. All other samples taken across campus were below the action level for lead.

As a result, lead is a mechanical item and several conduit offsets were cut out to be used for drinking water and other three flushing downstream have been or will be replenished. The University also conducted additional testing for the campus water system in accordance with the regulations of the Illinois Environmental Protection Agency. As expected, no lead was found in the water provided by the City of Edwardsville. Based on an ongoing evaluation of the chemical inventory, USEPA guidelines recommended additional treatment to reduce the potential to dissolve or carry lead from building plumbing fixtures. The city water plant increased the corrosion control treatment of the water supplied to the campus. Follow-up water testing was conducted in February 2017. Of the more than 30 samples taken at 22 buildings, at only two locations was lead found to exceed the action level. The two locations were drinking fountains that have been permanently turned off, as previously noted, will be replaced. Additional testing is planned for Fall 2017 to continue monitoring the campus water quality and the effectiveness of the increased corrosion control treatment.

WATER QUALITY DATA TABLE
The 2015 Water Quality Data Table, which follows, was prepared with data supplied by the Illinois Environmental Protection Agency. This table lists only the pertinent information sections to the Table. The first column shows data from the parent source, as detailed in the City of Edwardsville. The second column provides data drawn directly from samples taken from the SWAP campus. The Water Quality Data Table lists detected water contaminants and their typical sources, the maximum contaminant level goal (MCLG), the maximum contaminant level (MCL), the level of potential contamination, and the level of contaminants at and dates of sampling. Unlisted water contaminants are not listed in the Table. Sampling dates ranging back to 2016 at the SWAP campus and as a monitor near contaminants less than once per year because their concentrations do not change frequently.

2015 WATER QUALITY DATA—CITY OF EDWARDSVILLE SAMPLING

<table>
<thead>
<tr>
<th>CONTAMINANTS (units)</th>
<th>MCLG</th>
<th>MCL</th>
<th>Amount Detected</th>
<th>Range of Detection</th>
<th>Violation</th>
<th>Date of Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>BARIUM (ppm)</td>
<td>2</td>
<td>2</td>
<td>0.072</td>
<td>0.072 - 0.072</td>
<td>No</td>
<td>2015</td>
</tr>
<tr>
<td>FLUORIDE (ppm)</td>
<td>4</td>
<td>4</td>
<td>1.14</td>
<td>1.14 - 1.14</td>
<td>No</td>
<td>2015</td>
</tr>
<tr>
<td>NITRATE (ppm)</td>
<td>10</td>
<td>10</td>
<td>1.0</td>
<td>1.0 - 1.0</td>
<td>No</td>
<td>2015</td>
</tr>
<tr>
<td>AMMONIUM</td>
<td>0</td>
<td>0</td>
<td>1.1</td>
<td>1.1</td>
<td>No</td>
<td>2015</td>
</tr>
<tr>
<td>MANGANESE (ppm)</td>
<td>150</td>
<td>150</td>
<td>13</td>
<td>13 - 13</td>
<td>No</td>
<td>2015</td>
</tr>
<tr>
<td>ZINC</td>
<td>5</td>
<td>5</td>
<td>0.018</td>
<td>0.018 - 0.018</td>
<td>No</td>
<td>2015</td>
</tr>
<tr>
<td>COMBINED RADON 222Rn/222Rn</td>
<td>0.0</td>
<td>1.328</td>
<td>No violation</td>
<td>No violation</td>
<td>No</td>
<td>2015</td>
</tr>
<tr>
<td>GROSS ALPHASIUM</td>
<td>0</td>
<td>21.0</td>
<td>2.11 - 21.11</td>
<td>Yes</td>
<td>Yes</td>
<td>2014</td>
</tr>
<tr>
<td>SODIUM (ppm)</td>
<td>N/A</td>
<td>N/A</td>
<td>140</td>
<td>140 - 140</td>
<td>No</td>
<td>2015</td>
</tr>
</tbody>
</table>

2016 WATER QUALITY DATA – SIUE SAMPLING

<table>
<thead>
<tr>
<th>CONTAMINANTS (units)</th>
<th>MRLD4=4</th>
<th>MRLD4=4</th>
<th>0.9</th>
<th>0.5 - 1</th>
<th>No</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHLORINE ppm</td>
<td>N/A</td>
<td>60</td>
<td>6</td>
<td>6 - 6.3</td>
<td>No</td>
<td>2016</td>
</tr>
<tr>
<td>HALOACIDIC ACIDS</td>
<td>N/A</td>
<td>60</td>
<td>6</td>
<td>6 - 6.3</td>
<td>No</td>
<td>2016</td>
</tr>
<tr>
<td>NRAD 1000</td>
<td>N/A</td>
<td>80</td>
<td>51</td>
<td>51 - 56</td>
<td>No</td>
<td>2016</td>
</tr>
<tr>
<td>COPPER</td>
<td>1.3</td>
<td>AL+1</td>
<td>1.03</td>
<td>50% (90%ile)</td>
<td>Yes</td>
<td>2015</td>
</tr>
<tr>
<td>LEAD WOOD PRESERVATIVE</td>
<td>0.0</td>
<td>15</td>
<td>25.7</td>
<td>Yes</td>
<td>2016</td>
<td></td>
</tr>
</tbody>
</table>

Water Quality Data Table Footnotes:

**FLUORIDE**
Fluoride in water supplies is to help protect strong teeth. The Illinois Dept. of Public Health recommends optimal fluoride levels of 0.8 to 1.2 ppm.

**UNREGULATED CONTAMINANTS**
These contaminants are not subject to any federal or state standard for drinking water. The health effects of these contaminants have not been fully evaluated by regulatory agencies. The purpose for monitoring these contaminants is to ensure USEPA is monitoring for the occurrence of unexpected contaminants in drinking water, and

**WATER QUALITY DATA DEFINITION OF TERMS**
MCLG: Maximum Contaminant Level Goal, an unenforced level of a contaminant, refers to the lowest level of a contaminant that is allowed in drinking water. MCLG are set as close as possible to the MCL but are enforceable levels of a contaminant that is determined by the USEPA using the best scientific data available.
MCL: Maximum Contaminant Level, an enforceable level of a contaminant, that is determined by the USEPA using the best scientific data available.

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**AIR PollUTION**
A response for those living in areas with high levels of air pollution. The Illinois Dept. of Public Health recommends optimal levels of 12 to 12 ppm.

**WATER QUALITY DATA**
A response for those living in areas with high levels of water quality. The Illinois Dept. of Public Health recommends optimal levels of 12 to 12 ppm.