The University of Iowa Water Plant

University of Iowa Campus
2005 Water-Quality Report

Dear Customer: We are pleased to present a summary of the quality of the water provided to you during the past year. The Safe Drinking Water Act (SDWA) requires that utilities issue an annual “Consumer Confidence” report to customers in addition to other notices that may be required by law. This report details where our water comes from, what it contains, and the risks our water testing and treatment are designed to prevent. The University of Iowa Water Plant is committed to providing you with the safest and most reliable water supply.

**Water Produced at the University of Iowa Water Treatment Plant meets or surpasses all federal and state drinking-water standards at this time.**

For information about the University of Iowa water supply, call us at 319-335-5168.

**Water Source**
The University of Iowa Water Plants’ primary source of water is the Iowa River. Alternate sources are a Jordan Aquifer well and water purchased from Iowa City.

A source water assessment has been completed and is available for viewing at the Water Plant.

**How to Read This Table**
This report is based upon tests conducted in the year 2005 by The University of Iowa Water Plant. Terms used in the Water-Quality Table and in other parts of this report are defined here.

- **Maximum Contaminant Level or 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 or 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.

**Key to Table**

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Date Tested</th>
<th>Unit</th>
<th>MCL</th>
<th>MCLG</th>
<th>Detected Level</th>
<th>Major Sources</th>
<th>Violation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inorganic Contaminants</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lead</td>
<td>09/08/04</td>
<td>ppb</td>
<td>AL=15</td>
<td>0</td>
<td>32 – 0 – 32</td>
<td>Corrosion of household plumbing systems; Erosion of natural deposits</td>
<td>NO</td>
</tr>
<tr>
<td>Nitrate</td>
<td>07/20/05</td>
<td>ppm</td>
<td>10</td>
<td>10</td>
<td>7.8 – 0.7 – 7.8</td>
<td>Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits</td>
<td>NO</td>
</tr>
<tr>
<td>Turbidity</td>
<td>09/03/05</td>
<td>ppm</td>
<td>AL=0.3</td>
<td>AL=0.3</td>
<td>0.20 – 0.05 – 0.2</td>
<td>Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives</td>
<td>NO</td>
</tr>
<tr>
<td>Fluoride</td>
<td>04/05/05</td>
<td>ppm</td>
<td>4</td>
<td>4</td>
<td>1.44 – 0.86 – 1.44</td>
<td>Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories</td>
<td>NO</td>
</tr>
<tr>
<td>Sodium</td>
<td>04/05/05</td>
<td>ppm</td>
<td>N/A</td>
<td>N/A</td>
<td>12 – 0 – 12</td>
<td>Erosion of natural deposits</td>
<td>NO</td>
</tr>
<tr>
<td><strong>Microbiological Contaminants</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Naturally present in the environment</td>
<td>NO</td>
</tr>
<tr>
<td>Total Coliform</td>
<td>10/19/05</td>
<td>samples</td>
<td>5%</td>
<td>0</td>
<td>1</td>
<td></td>
<td>NO</td>
</tr>
<tr>
<td><strong>Synthetic Organic Contaminants Including Pesticides and Herbicides</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Atrazine</td>
<td>09/22/03</td>
<td>ppb</td>
<td>3</td>
<td>3</td>
<td>0.1 – 0 – 0.41</td>
<td>Runoff from herbicide used on row crops</td>
<td>NO</td>
</tr>
<tr>
<td>Metolachlor</td>
<td>07/17/00</td>
<td>ppb</td>
<td>1</td>
<td>1</td>
<td>0.0002 – 0 – 0.0002</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Des-Ethyl-Atrazine</td>
<td>07/17/00</td>
<td>ppb</td>
<td>0.0002</td>
<td>0 – 0.0002</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ppm = parts per million, or milligrams per liter (mg/l)

ppb = parts per billion, or micrograms per liter (µg/l)
**Volatile Organic Contaminants**

<table>
<thead>
<tr>
<th></th>
<th>05/26/05</th>
<th>ppb</th>
<th>N/A</th>
<th>72</th>
<th>26 - 72</th>
<th>By-products of drinking water chlorination</th>
<th>YES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Trihalomethanes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Haloacetic Acids</td>
<td>11/30/05</td>
<td>ppb</td>
<td>N/A</td>
<td>20</td>
<td>16 - 20</td>
<td>By-products of drinking water chlorination</td>
<td>NO</td>
</tr>
</tbody>
</table>

**Explanation of Minor and Non Violations High Levels**

**Total coliform**
- **Duration:** 1 sample only, unable to reproduce in follow up sampling
- **Health Effects:** Fecal coliforms and E.Coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these waters can cause short term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.
- **Action Taken:** Recheck samples taken at location and at locations up and down stream, unable to reproduce positive sample, attributed bad sample to collection error.

**Total Trihalomethanes**
- **Duration:** running annual average, high first quarter 2005, compliant by 2nd quarter
- **Health Effects:** Liver, Kidney, or central nervous system problems; increased risk of cancer
- **Action Taken:** sample collected maximum contact time point in system, recheck significantly lower, within MCL

**Lead**
- **Duration:** one sample
- **Health Effects:** Physical and mental development problems in children, Kidney and high blood pressure in adults
- **Action Taken:** 90th percentile complete- no exceedance

**Unregulated Contaminants**

The University of Iowa Water Plant did test for some unregulated contaminants; these results are available by contacting the Water Plant.

**Required Additional Health Information**

To ensure that tap water is safe to drink, EPA prescribes limits on the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled 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 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 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:

- **(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 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, stormwater runoff, and residential uses.
- **(D) Organic chemical contaminants**, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater 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, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than is 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 are available from the Safe Drinking Water Hotline (800-426-4791).

**Concerning Nitrate in Our Water**

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

**National Primary Drinking Water Regulation Compliance**

For more information, call The University of Iowa Water Plant at 335-5168.