Valparaiso Water Quality Report 2018

Your Water Quality is Our First Priority

The Valparaiso City Utilities Department of Water Works is pleased to provide you with our annual Water Quality Report. The purpose of this report is:

• To provide you with information about your drinking water.

• To comply with the United States Environmental Protection Agency (EPA) reporting requirements.

We have summarized information about your water supply sources, the water facilities that deliver water to your tap, and the quality of your drinking water. We are taking this opportunity to present additional information about other programs that are helping to ensure you have safe and dependable drinking water.

As new challenges to drinking water safety emerge, we will be diligent in maintaining the highest water supply infrastructures and policies in place to protect your drinking water. We encourage you to contact your health care provider for any questions related to your drinking water.

The Valparaiso Department of Water Works was the first public water supply in Indiana to complete its Wellhead Protection Program, which was designed to protect our wells from contamination. The Department was also the first public water utility in Indiana to complete the phase II update to the Wellhead Protection Program. For further information on the Wellhead Protection Program, please contact Mr. Shaun Shifflett, Water Systems Administrator, by phone at (219) 462-6174 ext. 1322 or by e-mail at sshifflett@valpo.us

The Valparaiso Department of Water Works has two drinking water treatment plants and four drinking water well fields. The water treated by the Flint Lake Treatment Plant comes from nine wells located in the Lake Michigan Basin Aquifer and water treated by the Airport Treatment Plant comes from eleven wells located in the Kankakee Basin Aquifer.

The Valparaiso Department of Water Works is located in the Kankakee Basin Aquifer. Treatment Plant comes from eleven wells located in the Lake Michigan Basin Aquifer and water treated by the Airport Treatment Plant comes from nine wells located in the Kankakee Basin Aquifer. The Valparaiso Department of Water Works has two drinking water treatment plants and four drinking water well fields. The water treated by the Flint Lake Treatment Plant comes from nine wells located in the Lake Michigan Basin Aquifer and water treated by the Airport Treatment Plant comes from eleven wells located in the Kankakee Basin Aquifer.

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Community Participation

You are invited to attend the Valparaiso City Utilities Board meetings to voice your concerns about your drinking water. The Utilities Board meetings are open to the public and are held at 205 Billings Street every second and fourth Tuesday of each month at 5:00 p.m.

Benefits of Water Efficiency

The average household spends as much as $1,100 per year on its water and sewer bill. By making just a few simple changes to use water more efficiently, you could save about $350 per year. If all U.S. households installed water-efficient appliances, the country would save more than 3 trillion gallons of water and more than $17 billion dollars per year! Also, when we use water more efficiently, we reduce the need for costly water supply infrastructure investments and new wastewater treatment facilities.

By reducing household water use, you can not only help reduce the energy required to supply and treat public water supplies, but also can help address climate change. When purchasing new appliances and bath room products, look for the ENERGY STAR label and the WATERSENSE label for higher energy and water efficiencies.

Information on the Internet

For more information on the Valparaiso Department of Water Works, please visit our website at www.valparaisoutilities.org. The U.S. EPA Office of Water website water.epa.gov and the Centers for Disease Control and Prevention website www.cdc.gov provide information on many issues related to water resources, water conservation, and public health. The Indiana Department of Health’s website www.in.gov/isdh provides complete and current information on water issues in our state.
Drinking Water Summary

The Valparaiso City Utilities Department of Water Works is proud of the high quality of its water supply, which meets or exceeds all state and federal drinking water quality requirements. The Department routinely monitors for more than 100 chemicals in the drinking water making sure the water is safe to drink. Out of those monitored chemicals, only a small portion are included in this report. The reported chemicals are those that are found in the water and also are the EPA regulated chemicals (chemicals subject to an MCL, MRDL, TT or AL) and unregulated chemicals for which EPA or Indiana Department of Environmental Management requires monitoring under 40 CFR 141.40. If you are interested in a complete list of chemicals that are tested in the drinking water, please contact Shihua Chen by phone at 462-6174 ext. 1341, or by email at schen@valpo.us or by mail at 205 Billings Street, Valparaiso, IN 46383.

**SUBSTANCE TESTED FOR AT THE TREATMENT PLANTS AND IN THE DISTRIBUTION SYSTEM**

<table>
<thead>
<tr>
<th>SUBSTANCE</th>
<th>YEAR</th>
<th>SAMPLED</th>
<th>UNITS OF MEASURE</th>
<th>MCL</th>
<th>MCLG</th>
<th>AMOUNT AVERAGE</th>
<th>AMOUNT RANGE</th>
<th>MCL VIOLATION</th>
<th>POTENTIAL HEALTH EFFECT</th>
<th>TYPICAL SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barium</td>
<td>2017</td>
<td>ppm</td>
<td>2</td>
<td>0.05</td>
<td>0.04 - 0.05</td>
<td>NO</td>
<td>Increase in blood pressure</td>
<td>Emission of natural deposits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chlorine</td>
<td>2017</td>
<td>ppm</td>
<td>MRDL = 4.0</td>
<td>0.8</td>
<td>0.2 - 1.6</td>
<td>NO</td>
<td>Eye/ nose irritation, stomach discomfort</td>
<td>Water additive used to control microbiota</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fluoride (adjusted)*</td>
<td>2014</td>
<td>ppm</td>
<td>4.0</td>
<td>0.7</td>
<td>0.4 - 1.0</td>
<td>NO</td>
<td>Bone disease; children may get mottled teeth</td>
<td>Drinking water additive that promotes tooth enamel formation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nickel</td>
<td>2017</td>
<td>ppm</td>
<td>UNREGULATED</td>
<td>NA</td>
<td>0.0001 - 0.0002</td>
<td>NO</td>
<td>May cause shortening of breath and blue baby syndrome for infants</td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrate</td>
<td>2017</td>
<td>ppm</td>
<td>10</td>
<td>10</td>
<td>NONE</td>
<td>NA</td>
<td>None</td>
<td>No</td>
<td>Ingestion of natural deposits</td>
<td></td>
</tr>
<tr>
<td>Chromium (total)</td>
<td>2017</td>
<td>ppm</td>
<td>0.1</td>
<td>0.0017</td>
<td>0.0015 - 0.0019</td>
<td>NO</td>
<td>May cause allergic dermatitis if using water with chromium in excess of MCL over many years</td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Trihalomethanes</td>
<td>2017</td>
<td>ppb</td>
<td>80</td>
<td>NA</td>
<td>19</td>
<td>12 - 33</td>
<td>NO</td>
<td>None</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Total Haloacetic Acids</td>
<td>2017</td>
<td>ppb</td>
<td>60</td>
<td>NA</td>
<td>9</td>
<td>4 - 16</td>
<td>NO</td>
<td>None</td>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

*Information on fluoride and the preparation of infant formula can be found at http://www.cdc.gov/fluoridation/safety/infant_formula.htm

**SUBSTANCE TESTED FOR AT CUSTOMER’S TAP (33 SAMPLES TESTED)**

<table>
<thead>
<tr>
<th>SUBSTANCE</th>
<th>YEAR</th>
<th>SAMPLED</th>
<th>UNITS OF MEASURE</th>
<th>HOMES ABOVE AVERAGE</th>
<th>ACTION LEVELAL</th>
<th>AMOUNT AVERAGE</th>
<th>AMOUNT RANGE</th>
<th>MCL VIOLATION</th>
<th>POTENTIAL HEALTH EFFECT</th>
<th>TYPICAL SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper</td>
<td>2017</td>
<td>ppm</td>
<td>0</td>
<td>1.3</td>
<td>0.3</td>
<td>0 - 1.0</td>
<td>NO</td>
<td>Gastrointestinal distress</td>
<td>Corrosion of household plumbing systems; Emission of natural deposits</td>
<td></td>
</tr>
<tr>
<td>Lead</td>
<td>2017</td>
<td>ppm</td>
<td>0</td>
<td>15</td>
<td>1</td>
<td>0 - 4</td>
<td>NO</td>
<td>Kidney problems</td>
<td>Corrosion of household plumbing systems; Emission of natural deposits</td>
<td></td>
</tr>
</tbody>
</table>

Table Definitions:

**Action Level (AL):** The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

**Amount Average:** This column represents an average of sample result data collected during the reporting year. In some cases, it may represent a single sample if only one sample was collected.

**Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to MCLGs as feasible using the best available treatment technology.

**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 Residual Disinfectant Level (MRDL):** The highest level of a disinfectant allowed in drinking water.

**Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a drinking water disinfectant below which there is no known or expected risk to health.

**NA:** Not Applicable.

**ND:** Not detectable at testing limits.

**Picocuries per liter (pCi/L):** A measure of radioactivity.

**Parts per billion (ppb):** One part per billion (or micrograms per liter).

**Parts per million (ppm):** One part per million (or milligrams per liter).

**Amount Range:** This column represents a range of individual samples results, from lowest to highest, that were collected during the reporting year.

**Treatment Technique (TT):** A required process intended to reduce the level of contaminant in drinking water.

**Substances Found in Drinking Water**

To ensure that tap water is safe to drink, the EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. 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 these contaminants does not necessarily indicate that the 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 at 1-800-426-4791.

Public water systems and water bottlers use a variety of water sources. These sources include rivers, lakes, ponds, reservoirs, springs, and groundwater wells. As water travels over the surface of the land or through the ground, it can acquire naturally occurring minerals, radioactive material (if present), and can pick up substances resulting from the presence of animals or from human activity. Substances that may be present in source water include:

- **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 contaminants**, which may come from sources such as agriculture, urban storm water runoff, and residential uses.
- **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.
- **Radioactive contaminants** can naturally occur, or be the result of oil and mining activities.

**Special Health Information**

Thanks to the Safe Drinking Water Act, the United States arguably has the safest water supply and distribution system in the world. However, if you have special health requirements, you should know 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 guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

**Special Information on 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. Valparaiso City Utilities Department of Water Works 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 thirty (30) seconds to two (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. For more information on lead in drinking water, you may visit our website at http://www.valparaisoutilities.org/DocumentCenter/View/733 or EPA’s website at http://www.epa.gov/safewater/lead.