2016 ANNUAL DRINKING WATER QUALITY REPORT

PWSID #: 4140082 - College Township Water Authority

Este informe contiene información muy importante sobre su agua de beber. Tradúzcalo ó hable con alguien que lo entienda bien. (This report contains very important information about your drinking water. Translate it, or speak with someone who understands it.)

WATER SYSTEM INFORMATION:

This report shows our water quality and what it means. If you have any questions about this report or concerning your water utility, please contact Adam Brumbaugh, Manager at (814) 231-3021. We want you to be informed about your water supply. If you want to learn more, please attend any of our regularly scheduled meetings. They are held the first Wednesday of each month at 7:00 pm in the College Township Municipal Building, 1481 E. College Avenue, State College, PA 16801. You may confirm meeting dates by referring to www.collegetownship.org.

SOURCE(S) OF WATER:

Our water sources are: (Name-Type-Location)

1) Spring Creek Park – well – Balmoral Way, College Township, and 2) Rogers – well – Trout Road, College Township

A Source Water Assessment of our sources was completed in 2003 by the PA Department of Environmental Protection (PADEP). The Assessment has found that our sources are potentially most susceptible to accidental spills along roads and leaks in underground storage tanks and other effects of urban and suburban influences on groundwater. Overall, our sources have moderate risk of significant contamination. Summary reports of the Assessment are available by writing to the College Township Water Authority, 1481 E. College Ave., State College, PA, 16801 and will be available on the PADEP website at www.depweb.state.pa.us (Keyword: “source water”). Complete reports were distributed to municipalities, water supplier, local planning agencies and PADEP offices. Copies of the complete report are available for review at the PADEP North-Central Regional Office, Records Management Unit, 570-327-3636.

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/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

MONITORING YOUR WATER:

We routinely monitor for contaminants in your drinking water according to federal and state laws. The following tables show the results of our monitoring for the period of January 1 to December 31, 2016. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data is from prior years in accordance with the Safe Drinking Water Act. The date has been noted on the sampling results table.

VIOLATIONS:

There were no (0) violations during the reporting period (January 1, 2016 to December 31, 2016). Note: the two elevated lead samples noted in the detected sample results below were re-tested and found to be within acceptable parameters. No additional treatment or action was required.

DETECTED SAMPLE RESULTS:
<table>
<thead>
<tr>
<th>Sources of Contamination</th>
<th>Violation</th>
<th>Sample Date</th>
<th>Units</th>
<th>Range of Detection</th>
<th>Detection Level</th>
<th>Residual (ppm)</th>
<th>Minimum Action Level</th>
<th>MCLG</th>
<th>Action Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrosion of house plumbing</td>
<td>N</td>
<td>2016</td>
<td>ppm</td>
<td>0.45 to 1.41</td>
<td>0.45</td>
<td>0.40</td>
<td>Copper</td>
<td>0.15</td>
<td>Lead</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>2016</td>
<td>ppm</td>
<td>0.62 ppm</td>
<td>1.3 ppm</td>
<td>0.62 ppm</td>
<td>Copper</td>
<td>0.15</td>
<td>Lead</td>
</tr>
</tbody>
</table>

**Note:** If the water from your drinking water system has been found to contain a substantial amount of a contaminant, your health care provider should be consulted for advice from your health care provider.

In drinking water can cause harm. Nitrates may also cause birth defects and other health problems.

- **Nitrate (ppm):** Nitrates in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels may reduce the amount of oxygen available to the body and cause symptoms such as irritability, excessive sleepiness, and breathing problems.

- **Haloacetic Acids (ppm):** Haloacetic acids may increase the risk of developing cancer.

- **Boron (ppm):** Or/Source of contamination, Violation, Sample Date, Units, Range of Detection, Detection Level, Residual, Minimum Action Level, MCLG, Action Level.

**Chemical Contaminants:**

- **Total Arsenic (ppm):** Arsenic is a poison that can cause cancer and other health problems.

- **Chlorine (ppm):** Chlorine is a disinfectant used to kill harmful bacteria and viruses in drinking water. Excessive levels of chlorine can cause eye irritation and respiratory problems.

- **Chloride (ppm):** Chlorides are a natural component of water and are essential for human health. Excessive levels of chloride can cause health problems such as diarrhea and vomiting.

- **Fluoride (ppm):** Fluoride is an essential mineral that helps prevent tooth decay. However, excessive levels of fluoride can cause dental issues such as dental fluorosis.

**Other Factors:**

- **Discharge from metal degreasing sites and by-product of drinking water disinfection:** These factors can contribute to the presence of certain chemicals in drinking water.

- **Nitrate from fertilizer run-off:** Nitrate is a nutrient that is essential for plant growth. However, it can also cause health problems such as cancer.

- **Chlorides:** Chlorides are a natural component of water and are essential for human health. Excessive levels of chloride can cause health problems such as diarrhea and vomiting.

- **Fluoride:** Fluoride is an essential mineral that helps prevent tooth decay. However, excessive levels of fluoride can cause dental issues such as dental fluorosis.

- **Chlorine:** Chlorine is a disinfectant used to kill harmful bacteria and viruses in drinking water. Excessive levels of chlorine can cause eye irritation and respiratory problems.

**Exposure:** Exposure to these contaminants can occur through drinking water, food, or air. Exposure to certain contaminants can cause health problems such as cancer, birth defects, and other health issues.

**Health Effects:**

- **Nitrate:** Nitrate may cause birth defects and other health problems. Nitrate levels in drinking water should be monitored to ensure they remain within safe limits.

- **Haloacetic Acids:** Haloacetic acids are harmful chemicals that can increase the risk of developing cancer. These chemicals are formed when certain chemicals react with water and are present in drinking water.

- **Boron:** Boron is a mineral that is essential for human health. However, excessive levels of boron can cause health problems such as skin irritations and respiratory problems.

**References:**


**Summary:**

Drinking water is important for maintaining good health. It is necessary for the proper functioning of the body and can help prevent certain health problems. Therefore, it is essential to ensure that the water you drink is safe and free from harmful contaminants. By monitoring the levels of these contaminants in your drinking water, you can help protect your health and the health of those around you.
DEFINITIONS AND ABBREVIATIONS:

**Action Level (AL)** - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements.

**Maximum Contaminant Level (MCL)** - The highest level of a contaminant that is allowed in drinking water. MCLs are set as close 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. 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 disinfectants to control microbial contaminants.

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

- Mrem/year = millirems per year (a measure of radiation absorbed by the body);
- \( pCi/L \) = picocuries per liter (a measure of radioactivity);
- \( ppb \) = parts per billion, or micrograms per liter (\( \mu g/L \));
- \( ppm \) = parts per million, or milligrams per liter (\( mg/L \));
- \( ppg \) = parts per quadrillion, or picograms per liter;
- \( ppt \) = parts per trillion, or nanograms per liter.

EDUCATIONAL INFORMATION:

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. Contaminants 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 run-off, 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, 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, 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 and DEP prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

OTHER INFORMATION: College Township Water Authority continues implementation of a multi-year cross-connection & backflow prevention program. Customers will be notified by mail regarding this program. The Authority has completed the development of a new well in the Oak Hall area of the Township which will serve the new Oak Hall Regional Park Facility. In addition, the Authority is proceeding to fully develop a second well at this location to provide an additional source of water and help ensure our ability to meet the water demands of existing customers throughout the system.

Changes have been made to expand the Zone 1 Protection Areas surrounding the Authority's wellheads. The Zone 1 Protection Area now encompasses a 1,200-foot radius from a wellhead, an increase from the previous 400-foot radius. Certain types of development activities are precluded while others are restricted within this radius. These wellhead protections have been adopted as part of the College Township Code and are jointly administered by the Township and Authority.