Special Considerations Regarding Children, Pregnant Women, Nursing Mothers, and Others

Children may receive a slightly higher amount of a contaminant present in the water than do adults. On a body-weight basis, because they may drink a greater amount of water per pound of body weight than do adults. For this reason, reproductive or developmental effects are used for calculating drinking water standards if these effects occur at lower levels than other health effects of concern. If there is sufficient toxicity information for a chemical [e.g., lack of data on reproductive or developmental effects], an extra uncertainty factor may be incorporated into the calculation of the drinking water standard thus making the standard more stringent, to account for additional uncertainties regarding these effects. For nitrate and lead, effects on infants and children are the health endpoints upon which the standards are based.

Nitrate

Nitrate in drinking water at levels above 10ppm 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 agriculture activity. If you are caring for an infant, you should ask for advice from your health care provider.

Lead

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels in your home may be higher than in other homes in the community as a result of materials used in your home plumbing. If you are concerned about elevated lead levels in your home water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the 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, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contamination that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which can 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 stormwater runoff, industrial or domestic wastewater discharges, oil and gas projection, mining, or farming.
- Pesticides and herbicides, which may come from sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants including synthetics and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can come from gas stations, urban stormwater 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 prescribes 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.
We are pleased to present our Annual Drinking Water Quality Report for 2011, as required by the federal Safe Drinking Water Act.

This "Consumer Confidence Report" is designed to inform you about the quality of your water and services that the Borough supplies to you every day. It shows that our sources of water and water treatment facilities both conform to all federal and state regulations.

Our Water Department is committed to delivering top quality water to every tap. We hope this report will help you appreciate the efforts the Department makes to provide you with a safe, dependable supply of drinking water, to continually improve the water treatment process.

Owing to events involving national security, we have increased security at our facilities and continue to vigilantly protect our water resources.

If you have questions about this report or about the Borough’s water supplies, you may:

- Call the Director of Utilities, Joseph R. Keating, at 429-0183 x 122;
- Attend and ask questions at - Board of Commissioners’ meetings, held in the Borough Hall (Room 102) at 7:30 pm on the second and fourth Tuesdays of each month;
- Contact us directly at the numbers given below.

Questions or Concerns?

Some people may be more vulnerable to contaminants in drinking water than the general populations. Immuno-compromised persons – persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, persons with HIV/AIDS or other immune system disorders, some elderly persons, and infants – can be particularly at risk from infections. Such people should seek advice about drinking water from their health care providers.

Health Effects

- **Alpha Emitters:** Certain minerals are radioactive and may emit a form of radiation known as alpha particles. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.
- **Barium:** Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.
- **Copper:** Copper is an essential nutrient, but some people who drink water containing copper in excess of the Action Level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the Action level over many years could suffer liver or kidney damage. People with Wilson’s Disease should consult their doctor.
- **Fluoride:** Some people who drink water containing fluoride in excess of the MCL over many years could get mottled teeth. If present, elevated levels of fluoride in drinking water over many years could develop kidney problems or high blood pressure. Fluoride: Copper is an essential nutrient, but some people who drink water containing copper in excess of the Action Level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the Action level over many years could suffer liver or kidney damage. People with Wilson’s Disease should consult their doctor.
- **Nitrate (as nitrogen):** Infants below the age of six months who drink water containing nitrate in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.
- **Lead:** Infants and children who drink water containing lead in excess of the Action Level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

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. The Borough of Haddonfield 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 of lead exposure by flushing your tap for 30 seconds to 2 minutes before using water drinking or cooking. If you are concerned about lead in your water, you may wish to have it tested. Information on lead in drinking water is available from the Safe Drinking Water Hotline (800-426-4791) or at http://epa.gov/safewater/lead.

### Definitions and Explanations

- **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 Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. MCLs are set at the level below which there is no known or expected risk to health. MCLs do not reflect the benefits of the use of disinfectants to control microbial contamination.
- **Removal Technique:** A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

### Radiocative Emissions

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Violation?</th>
<th>Level Detected in Haddonfield’s Water</th>
<th>Maximum Contaminant Level (MCL)</th>
<th>Maximum Contaminant Level Goal</th>
<th>Likely Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Radioactive Emissions:</strong> (Tested 2011)</td>
<td>No</td>
<td>3.08 pCi/l</td>
<td>0.0 pCi/l</td>
<td>15.0 pCi/l</td>
<td>Erosion of natural deposits</td>
</tr>
<tr>
<td><strong>Inorganic Emissions:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Copper (Tested 2011)</td>
<td>No</td>
<td>90 percentile 0.483 ppm</td>
<td>&lt; 1.00 ppm</td>
<td>Action Level: 1.3 ppm</td>
<td>Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives</td>
</tr>
<tr>
<td>Lead (Tested 2009)</td>
<td>No</td>
<td>90 percentile 0.001 ppm</td>
<td>0.0 ppb</td>
<td>Action Level: 0.015 ppm</td>
<td>Corrosion of household plumbing systems; Erosion of natural deposits</td>
</tr>
<tr>
<td>Fluoride (Tested 2011)</td>
<td>No</td>
<td>&lt; 0.5 ppm RL</td>
<td>4.0 ppm</td>
<td>4.0 ppm</td>
<td>Erosion of natural deposits; Water additive which promotes strong teeth; runoff from fertilizer and aluminum factories</td>
</tr>
<tr>
<td>Nitrate (as nitrogen) (Tested 2011)</td>
<td>No</td>
<td>&lt; 1.0 ppm</td>
<td>10.0 ppm</td>
<td>10.0 ppm</td>
<td>Runoff from fertilizer use; Leaching from septic tanks; Sewage; Erosion of natural deposits</td>
</tr>
</tbody>
</table>

### Treatment By-Products:

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Violation?</th>
<th>Range</th>
<th>Annual Rolling Average</th>
<th>Maximum Contaminant Level (MCL)</th>
<th>Likely Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Trihalomethanes</td>
<td>No</td>
<td>2.18 to 9.60 ppb</td>
<td>5.9 ppb</td>
<td>80.0 ppb</td>
<td>By product of drinking water chlorination</td>
</tr>
</tbody>
</table>

A copy of Environmental Protection Agency/Centers for Disease Prevention and Control guidelines on appropriate means to protect the risk of infection by cryptosporidium and other microbiological contaminants may be obtained by calling the Safe Drinking Water Hotlines: 800-426-4791.

A list of contaminants that were tested for in Haddonfield’s water but not detected, and of contaminants that are present at levels below those that can be detected using reliable methods, may be obtained by calling our Water Department at 429-0183 x 122.

Letitia G. Colombi
Mayor
428-0348

Edward F. Borden, Jr.
Commissioner
354-770x143

Jeffrey Stephen Kasko
Commissioner
429-4700 x 316