# CITY OF GREENSBORO 2012 WATER QUALITY RESULTS

## MONITORED LEAVING THE TREATMENT PLANT

<table>
<thead>
<tr>
<th>SUBSTANCE</th>
<th>UNIT</th>
<th>HIGHEST ALLOWED by EPA MCL</th>
<th>PUBLIC HEALTH QUALITY MCLG</th>
<th>ANNUAL COMPLIANCE TESTING</th>
<th>AVERAGE</th>
<th>RANGE</th>
<th>Violation</th>
<th>Comment</th>
<th>POTENTIAL SOURCE OF SUBSTANCES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ammonium</strong></td>
<td>mg/L</td>
<td><strong>REGULATED</strong> 1</td>
<td><strong>0.20</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Biological oxidizer, fish refugia, fertilizer, leachate from organic waste materials, agricultural runoffs</td>
</tr>
<tr>
<td><strong>Chloride</strong></td>
<td>mg/L</td>
<td><strong>REGULATED</strong></td>
<td>250</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Erosion of natural deposits, metal refinery, ore processing, fertilizer runoff, wastewater treatment plants</td>
</tr>
<tr>
<td><strong>Chlorine, Total</strong></td>
<td>mg/L</td>
<td>4.0 MRLG</td>
<td>4.0 MRLG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Chlorine residual tested every 2 hours, monitored continuously on-line</td>
</tr>
<tr>
<td><strong>Fluoride</strong></td>
<td>mg/L</td>
<td><strong>REGULATED</strong></td>
<td>1.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Water additive which promotes strong teeth, prevents tooth decay</td>
</tr>
<tr>
<td><strong>Lead</strong></td>
<td>µg/L</td>
<td><strong>NOT REGULATED</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Erosion of natural deposits, metal refinery, ore processing, fertilizer runoff, wastewater treatment plants</td>
</tr>
<tr>
<td><strong>Nitrate as Nitrogen</strong></td>
<td>mg/L</td>
<td>10.0</td>
<td>10.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Natural or synthetic fertilizer, wastewater treatment plants</td>
</tr>
<tr>
<td><strong>Phosphorous, Total</strong></td>
<td>mg/L</td>
<td><strong>NOT REGULATED</strong></td>
<td>8.5-9.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Natural and agricultural runoff, sludge, industrial waste</td>
</tr>
<tr>
<td><strong>Residual from the Treatment Process</strong></td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Erosion of natural deposits, metal refinery, ore processing, fertilizer runoff, wastewater treatment plants</td>
</tr>
<tr>
<td><strong>Sodium</strong></td>
<td>mg/L</td>
<td><strong>NOT REGULATED</strong></td>
<td>17.40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Water additive which promotes strong teeth, prevents tooth decay</td>
</tr>
<tr>
<td><strong>Sulfate</strong></td>
<td>mg/L</td>
<td><strong>REGULATED</strong></td>
<td>250</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Natural occurring minerals in the soil</td>
</tr>
<tr>
<td><strong>Total Residual Disinfectant Levels (TRD)</strong></td>
<td>mg/L</td>
<td><strong>REGULATED</strong></td>
<td>60.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Maximum Residual Disinfectant Level of 0.2 mg/L, Analyzed as each biological sample is collected (0/24) in 2012. Disinfection agent used to control microbial contaminants.</td>
</tr>
<tr>
<td><strong>Total Trihalomethanes (TTHM)</strong></td>
<td>µg/L</td>
<td>50.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>By-product of drinking water disinfection</td>
</tr>
<tr>
<td><strong>Trihalomethanes (THM)</strong></td>
<td>µg/L</td>
<td><strong>REGULATED</strong></td>
<td>42.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>By-product of drinking water disinfection</td>
</tr>
<tr>
<td><strong>Trihalomethane Acetol HAA5</strong></td>
<td>µg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Erosion of natural deposits, metal refinery, ore processing, fertilizer runoff, wastewater treatment plants</td>
</tr>
<tr>
<td><strong>Trihalomethane Acetol HAA5</strong></td>
<td>µg/L</td>
<td><strong>REGULATED</strong></td>
<td>37.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>By-product of drinking water disinfection</td>
</tr>
<tr>
<td><strong>Volatile Organic Compounds (VOC's)</strong></td>
<td>µg/L</td>
<td><em>NA</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Includes pesticides and herbicides.</td>
</tr>
<tr>
<td><strong>Acetate</strong></td>
<td>µg/L</td>
<td>20.0-150</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Discharge from rubber &amp; chemical factories</td>
</tr>
<tr>
<td><strong>Nitrate</strong></td>
<td>mg/L</td>
<td>15.0</td>
<td>15.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Non-enforceable standard for aesthetic considerations such as taste, color and odor. These substances are not considered a risk to human health at the established levels.</td>
</tr>
<tr>
<td><strong>Nitrite</strong></td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>Nitrogen, Total</strong></td>
<td>mg/L</td>
<td><strong>NOT REGULATED</strong></td>
<td>11.2-25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Naturally occurring nitrogen in the soil</td>
</tr>
<tr>
<td><strong>Hard Water</strong></td>
<td>mg/L</td>
<td>4.0 MRLG</td>
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<td></td>
<td></td>
<td></td>
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## DISINFECTION BY-PRODUCTS PRECURSORS

- **Total Organic Carbon**: mg/L
  - **T**: mg/L
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## DISINFECTION BY-PRODUCTS

- **Total Trihalomethanes (TTHM)**: µg/L
  - 50.0
  - NA
  - RA
  - 3.5
  - 4.8
  - 4.8

## MONITORED IN THE DISTRIBUTION SYSTEM

### Definitions and Key to Abbreviations Used in Table

| T | Chloraminated Water Plant located northeast of Greensboro, with source water supplied by Lake Thonson |
| T | Mitchell Water Plant, located in central Greensboro, with source water supplied by Lake Brandt |
| T | Industrial Water Plant, located in northwest Greensboro, with source water supplied by Lake Martin |
| T | Millipore per liter equivalent to Parts per million (ppm). (Corresponds to one penny at $10.00, or one minute in two years.)

## MONITORED AT THE CUSTOMER'S TAP

| Lead | Jan-Jun. 2012 | mg/L | 15.0 | 15.0 | | | | | A minimum of 10% homes tested by a State certified lab for copper & lead |
| Copper | Jan-Jun. 2012 | mg/L | 1.30 AL | 1.30 | | | | | Corrosion of household plumbing |

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