

## Appendix A

### Water Quality Testing Requirements for Source Approval

All testing must be done in accordance with 310 CMR 22.00 (Massachusetts Drinking Water Regulations). Among these requirements are the use of a laboratory certified in the specific analyte, using approved methodology and reporting on MA Department forms (pursuant to 310 CMR 22.11A) as well as meeting all applicable method detection limits.

- |  |  |         |          |        |        |             |           |         |         |             |          |          |         |        |          |         |      |          |   |
|--|--|---------|----------|--------|--------|-------------|-----------|---------|---------|-------------|----------|----------|---------|--------|----------|---------|------|----------|---|
| <p>1.     <b>Coliform Bacteria*</b></p>  | <p>5.     <b>Radionuclides</b></p>   |         |          |        |        |             |           |         |         |             |          |          |         |        |          |         |      |          |   |
| <p>2.     <b>Inorganic Compounds</b></p> <table border="0" style="margin-left: 20px;"> <tr><td>Arsenic</td><td>Mercury</td></tr> <tr><td>Antimony</td><td>Nickel</td></tr> <tr><td>Barium</td><td>Nitrate (N)</td></tr> <tr><td>Beryllium</td><td>Nitrite</td></tr> <tr><td>Cadmium</td><td>Perchlorate</td></tr> <tr><td>Chromium</td><td>Selenium</td></tr> <tr><td>Cyanide</td><td>Sodium</td></tr> <tr><td>Fluoride</td><td>Sulfate</td></tr> <tr><td>Lead</td><td>Thallium</td></tr> </table> | Arsenic  | Mercury | Antimony | Nickel | Barium | Nitrate (N) | Beryllium | Nitrite | Cadmium | Perchlorate | Chromium | Selenium | Cyanide | Sodium | Fluoride | Sulfate | Lead | Thallium | <p>Gross alpha activity<br/>Radium-226 &amp; 228<br/>Beta particle activity**<br/>Photon activity***<br/>Tritium***<br/>Strontium-90***<br/>Radon<br/>Uranium****</p> |
| Arsenic  | Mercury  |         |          |        |        |             |           |         |         |             |          |          |         |        |          |         |      |          |   |
| Antimony   | Nickel   |         |          |        |        |             |           |         |         |             |          |          |         |        |          |         |      |          |   |
| Barium   | Nitrate (N)  |         |          |        |        |             |           |         |         |             |          |          |         |        |          |         |      |          |   |
| Beryllium  | Nitrite  |         |          |        |        |             |           |         |         |             |          |          |         |        |          |         |      |          |   |
| Cadmium  | Perchlorate  |         |          |        |        |             |           |         |         |             |          |          |         |        |          |         |      |          |   |
| Chromium   | Selenium   |         |          |        |        |             |           |         |         |             |          |          |         |        |          |         |      |          |   |
| Cyanide  | Sodium   |         |          |        |        |             |           |         |         |             |          |          |         |        |          |         |      |          |   |
| Fluoride   | Sulfate  |         |          |        |        |             |           |         |         |             |          |          |         |        |          |         |      |          |   |
| Lead   | Thallium   |         |          |        |        |             |           |         |         |             |          |          |         |        |          |         |      |          |   |
| <p>3.     <b>Synthetic Organic Compounds (SOCs)</b></p> <p style="margin-left: 20px;">All regulated and unregulated SOC's per 310 CMR 22.07A(1) and 22.07C(7) excluding:<br/>               Diquat<br/>               Endothall<br/>               Glyphosate<br/>               2,3,7,8 -TCDD (Dioxin)</p> <p style="margin-left: 20px;">Surface water sources do not have to test for EDB and DBCP.</p>  | <p>6.     <b>Secondary Contaminants</b></p> <p>TDS<br/>Color<br/>Odor<br/>pH<br/>Alkalinity-Total (CaCO<sub>3</sub>)<br/>Hardness (CaCO<sub>3</sub>)<br/>Calcium (Ca)<br/>Manganese (Mn)<br/>Potassium (K)<br/>Iron (Fe)<br/>Magnesium (Mg)<br/>Sulfate (SO<sub>4</sub>)<br/>Chloride (Cl)<br/>Silver (Ag)<br/>Turbidity<br/>Aluminum (Al)<br/>Zinc (Zn)<br/>Copper (Cu)</p> |         |          |        |        |             |           |         |         |             |          |          |         |        |          |         |      |          |   |
| <p>4.     <b>Volatile Organic Compounds (VOCs)</b></p> <p style="margin-left: 20px;">All VOCs as per 22.07B(1), 22.07C(5)</p>  | <p>7.     <b>Other</b></p> <p>Carbon dioxide<br/>Nitrogen (Ammonia)<br/>Specific conductance<br/>Temperature</p>   |         |          |        |        |             |           |         |         |             |          |          |         |        |          |         |      |          |   |

\* If the result of any analysis is positive for total coliform, then the sample must be analyzed for enterococci (and/or coliphage at MassDEP's discretion).

\*\* If required by MassDEP

\*\*\* Testing for these parameter is only required if the gross beta particle activity is equal to or greater than 50 pCi/L.

\*\*\*\* Testing for this parameter is only required if the gross alpha activity is greater than 15 pCi/L.