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 MassDEP forms (pursuant to 310 CMR 22.11A) as well as meeting all applicable method detection limits.

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

2. ***Secondary Contaminants***
   - Alkalinity-Total ($CaCO_3$)
   - Aluminum
   - Calcium
   - Chloride
   - Color
   - Copper
   - Hardness ($CaCO_3$)
   - Iron
   - Manganese
   - Magnesium
   - Odor
   - pH
   - Potassium
   - Silver
   - Sulfate
   - TDS
   - Turbidity
   - Zinc

3. ***Lead***

4. ***Nitrate***

5. ***Nitrite***

6. ***Perchlorate***

7. ***PFAS*** (by MassDEP-approved methods)

8. ***Inorganic Compounds***
   - Antimony
   - Arsenic
   - Barium
   - Beryllium
   - Cadmium
   - Chromium
   - Cyanide
   - Fluoride
   - Mercury
   - Nickel
   - Selenium
   - Sodium
   - Thallium

9. ***Volatile Organic Compounds (VOCs)***
   All VOCs as per 22.07B(1) and 22.07C(5)

10. ***Synthetic Organic Compounds (SOCs)***
    All regulated and unregulated SOCs per 310 CMR 22.07A(1) excluding:
    Diquat
    Endothall
    Glyphosate
    2,3,7,8-TCDD (Dioxin)

    Note: Surface water sources do not have to test for EDB and DBCP.

11. ***Radionuclides***
    - Radon
    - Gross alpha activity
    - Radium 226 & Radium 228
    - Uranium
    - Beta particle and photon activity [if required, see 310 CMR 22.09A(3)]
      - Additional testing is required if the gross beta particle activity less the naturally occurring potassium-40 is greater than 50 pCi/L.
      - Iodine-131 (if required)
      - Tritium (if required)
      - Strontium-90 (if required)

12. ***Field Testing***
    Carbon dioxide (not for TNCs <10,000 gpd)
    Nitrogen (Ammonia) – may substitute a laboratory analysis
    pH
    Specific conductance
    Temperature

13. ***Other Contaminants*** of public health concern as per Section 4.3.1.2.3.j.(2)(g).