Microbiology Laboratory Certification Checklist

References
1. Manual for the Certification of Laboratories Analyzing Drinking Water – Fifth Edition, January 2005 (Primarily Chapters 3 and 5) www.epa.gov/safewater/labcert/labindex.html
2. Rules of Tennessee Department of Environment and Conservation Bureau of Environment Division of Water Resources – Rule 0400-45-01-.14
3. Standard Methods for the Examination of Water and Wastewater, 18th – 23rd Edition.

Requirements
1. Clean Laboratory with adequate space for performing analysis.
2. Written Quality Assurance Plan (Detailed in chapter 3 section 11 of Certification Manual).
3. Written SOPs for each laboratory procedure.
4. Successful completion of Proficiency Testing Samples from an approved laboratory (must be performed each calendar year).
5. Certification by the Laboratory Certification Section of the Division of Water Resources.

Equipment
1. Sample Bottles
2. Chromogenic Media
3. NIST Standardized Thermometers (minimum 0.5 degree increments for incubator, minimum 1 degree increments for refrigerator)
4. Incubator
5. Color Comparator (in bottle and in Quanti-Tray if needed)
6. Positive and Negative Controls (for checking each new lot of media)
7. Tryptic Soy Broth (for checking each new lot of sample bottles)
8. Sterile Water
9. Ultraviolet Light (with box for maximum safety)
10. pH Meter with buffers
11. Sealer and Quanti-Trays (if you are planning to count results rather than just reporting positive or negative)

Forms
1. Sample Log
2. Temperature Log for Refrigerator
3. Temperature Log for Incubator
4. Maintenance Log
5. Sample Rejection Log
6. Logs for recording the testing new lots of sample bottles and media
7. Sample information form

This list is not meant to be conclusive. There may be many other materials that are needed for your laboratory to complete the testing. This is merely to guide you in what would be needed for starting up your own in-house laboratory.