Microbiological Contaminants

Laboratories testing finished bottled water for microbiological contaminants shall meet the requirements of Subpart 5-6 Bottled and Bulk Water Standards. Bottled water shall mean any product, including natural spring or well water taken from municipal or private utility systems or other water …, which are put into sealed bottles, packages or other containers, to be sold for domestic consumption or culinary use, … (Subpart 5-6.3.d).

There is no maximum contaminant level (MCL) established for heterotrophic bacteria. Heterotrophic bacteria are used as an indicator of possible contamination. The MCL for total coliform is a no positive coliform result (Subpart 5-6.11, Table 1).

Heterotrophic Bacteria:

<table>
<thead>
<tr>
<th>Sample Type</th>
<th>Approved HPC Method</th>
<th>Incubation Time and Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finished bottled water</td>
<td>Refer to Item 180.1.</td>
<td>72 ± 4 hours and 35 ± 0.5 °C^A</td>
</tr>
</tbody>
</table>

^A As referenced in EPA-600/8-78/017 – Microbiological Manual 1978, Part III, Section 5.5.2

Coliform Organisms

Coliform organisms are to be tested using approved methods listed in Certification Manual Item 180.1. There are four “technology” types: Chromofluorogenic (enzyme substrate), Fermentation Broth, Multi-Tube Fermentation Broth, and Membrane Filtration.

Preservation and Hold Times

There are no preservation and hold time requirements for sealed containers of bottled water. However, once the seal is broken, the water sample must be tested within the hold time noted in Certification Manual Item 245.