

# Guidance for Issuance of a Boil Water Advisory

## New Jersey Department of Environmental Protection Bureau of Safe Drinking Water

**Water Boiling Time:** Vigorous and complete boil for 1 minute (not including the time it takes to come to a complete boil) to mitigate any possible microbial pathogen contamination.

A system wide boil water advisory may not be warranted if the problem is isolated to a specific zone or tap.

### **Issuance of a boil water advisory:**

1. An acute bacteriological violation occurred (confirmed presence of fecal coliform or *E. coli* bacteria). Professional expertise must be utilized with regard to the scope or severity of the problem (number and location of positive samples) in relation to the size of the system. The confirmed presence of other pathogens such as *Giardia* and *Cryptosporidium* at a level and under circumstances that New Jersey Department of Environmental Protection (NJDEP) and New Jersey Department of Health and Senior Services (NJDHSS) deem a risk.
2. High turbidity levels in filtered surface water indicate the potential for pathogen breakthrough and interference with disinfection efficiency. Therefore, the sustained turbidity readings greater than 1 NTU for 6 or more hours, OR a confirmed turbidity level greater than 5 NTU shall trigger a boil water advisory unless the turbidity is attributable to other circumstances unrelated to filter malfunction. \*
3. A water treatment plant malfunction occurs (which is not immediately repaired) which results in unfiltered surface water OR the following non-chlorinated waters being discharged into a distribution system:
  - Surface water
  - Groundwater under the direct influence of surface water
  - Groundwater with a known history coliform contamination
4. A water treatment plant failure (i.e. extensive flooding or power outage), water main break, pump failure or other water distribution system malfunction resulting in portions of the system without water or with negative pressure zones.
5. The occurrence of a cross connection or known back siphon episode with an unapproved water supply in which the microbiological quality of the water may be compromised.

6. State or local health department officials have confirmed a waterborne disease outbreak with the water supply as the suspected disease source.

**Distribution of Notification:**

1. If NJDEP (either the Bureau of Safe Drinking Water or the Regional Water Compliance and Enforcement Office) issues a boil water order to a water utility, NJDEP will immediately notify the local health department, the local task force chairperson and NJDHSS.

If the water utility issues a boil water advisory, the local health department, NJDEP, NJDHSS, and the local task force will be notified. All reasonable attempts will be made to notify the local health department, NJDEP, NJDHSS, and the local task force prior to issuing the boil water advisory.

If the local health department issues a boil water advisory, the water utility, NJDEP, NJDHSS, and the local task force will be notified. All reasonable attempts will be made to notify the water utility, NJDEP, NJDHSS, and the local task force prior to issuing the boil water advisory.

2. The water utility will be responsible for distributing information on the boil water advisory to customers.
3. NJDHSS will be responsible for coordinating with the local health departments in informing hospitals, nursing homes, and other sensitive populations about the event if appropriate. NJDHSS will also coordinate with the local health department to determine if the event has resulted in any increase in diseases that may be attributable to the boil water advisory event.
4. NJDHSS will be responsible for coordinating with the local task force (if a task force has been formed) to keep the task force informed.
5. The State Task Force will be kept informed during the event.

**Rescinding a Boil Water Advisory:**

1. Implementation and completion of corrective action as documented to the Bureau of Safe Drinking Water, **AND**
2. Satisfactory analytical results (bacteriological and/or turbidity) coupled with chlorine residuals of 0.2 mg/l or greater throughout the distribution system.

3. The following guidance applies to the number of samples to be collected:

For any acute violation incurred, the minimum number of bacteriological samples to be collected must follow the normal protocol for repeat sampling, as per the Total Coliform Rule. With regard to a system-wide boil water advisory, the minimum number of samples to be collected must follow the number specified in the chart below or the required number of bacteriological repeat samples, whichever is greater.

<u>Population Served</u>	<u>Minimum # of Samples</u>
25-1000	3
1001-2000	4
2001-3000	5
3001-4000	6
4001-7000	7
7001-10,000	8
10,001-50,000	9
50,001-130,000	10
> 130,000	10% of Required Monthly Samples

Samples (which are not required repeat samples) must be collected at separate, representative locations within the distribution system on the same day. If 10 samples or less are collected, all sample results must be negative to remove the boil water advisory.

If a small or medium sized system (as defined in NJAC 7:10-3) opts to collect more than 10 samples, no more than one sample may be positive to remove the boil water advisory.

To remove a system-wide boil water advisory for a water supply serving a population greater than 130,000, the allowable percentage of positive sample results should be no more than the "normal" monthly average of positive samples reported by the system, based upon the preceding two years of monthly bacteriological reports submitted.

If a boil water advisory is restricted to a smaller distribution system area or zone, the required number of bacteriological samples should be proportionally lower.

4. In conjunction with the above, sufficient water displacement has occurred in the distribution system to eliminate water that was or might have been contaminated.

Approved by: original signed by \_\_\_\_\_ Date: 9/30/99  
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