

Bureau of Resource Protection Division of Water Supply (DEP/BRP/DWP Policy 87-06

Boil (Water) Orders

or

Do Not Drink Orders

(Year 2000 Printing)

DWP P87-06

Date: 10-15-87

Amended: 1-10-96

Policy, SOP or Guideline #87-06

This policy is established to provide guidance to the Drinking Water Program staff when confronted with a situation where there is an existing or potential risk of microbiological or other contamination of a community or non-community water supply which poses a threat to public health. The policy includes guidance, procedures and formats for imposing and terminating Boil Water Orders and Do not drink orders. Boil Water orders are generally used with microbiological contamination and Do Not Drink orders with chemical contamination.

POLICY

A. IMPOSING BOIL WATER ORDERS

PURPOSE

A Boil Water Order should be issued whenever, in the opinion of the Regional Director or his/her designee, there is an existing or potential risk of microbiological contamination of a community or non-community water supply which poses a threat to public health. Examples of situations which may present such a threat include but are not limited to:

1. Loss of pressure due to equipment or pipe failure resulting in flood;
2. Persistent (one month) and or severe violation of the MCL for bacteria; and
3. Evidence that an identified epidemiological incident may be water-supply related. (Department of Public Health information)

PROCEDURE

1. Staff involved in handling the problem should collect as much information as possible about the incident and the system, as quickly as possible, on a priority basis. Information should be collected in writing and include:
 - a. date(s), time(s), and identity(ies) of the person(s) making the initial report of the problem;
 - b. assessment of the accuracy and reliability of the report;
 - c. any verification needed or obtained;
 - d. whether or not e.coli has been tested for and/or detected;
 - e. type(s) of source(s) of water, treatment, and reliability of operation;
 - f. weather conditions if applicable, and other factors that might apply, such as utility construction or maintenance, main breaks, excess demand caused by a fire, etc.; and
 - g. all system deficiencies identified in the most recent sanitary survey.If a persistent and severe violation (See A2.) is occurring, the DWP must require the PWS to begin to speciate the sample to determine the type of organism of concern.
2. The DWP regional staff will assess any situation which may warrant issuance of a Boil Water or Do Not Drink Order and will immediately make a recommendation to the Regional Director.¹ If a Boil Water Order is recommended the order will be drafted following the format in Attachment 1 (If a Boil Water or Do Not Drink Order is not recommended, the DWP regional staff should identify the mitigating circumstance which assure the protection of public health.
3. In the case of an epidemiological incident, DWP regional staff will develop the recommendation in concurrence with the DEP ORS (who will contact the DPH Bureau of Environmental Health Assessment) and the DWP Director.

¹ Sometimes Boil Water orders are called by local officials. When and if the Department concurs with the local decision, the Department **must** initiate a formal Boil order for the following reasons:

- To give the Department control over the conditions for correcting the problem and the lifting of the Boil Water order.
- To provide enforcement documentation for State and Federal enforcement requirements.
- To meet Federal and State primacy agreement conditions for appropriate enforcement and compliance action.

Please note: If the Department does not concur with the local decision no formal action is required. However, a memo to the Department's system files must be created explaining why the state did not concur with the local decision.

(Note, the DPH Bureau of Environmental Health Assessment is expected to inform all other appropriate DPH programs)

4. The supplier should be informed of the Order by phone immediately, and the Order should be hand delivered with receipt signature required or next day express mailed or faxed or email.(Fax or email require voice confirmation)
5. The DWP regional staff will notify the DWP Director of any Boil Water or Do Not Drink order immediately. The DWP Director will inform the EPA by telephone within 24-hours of the issuance of a Boil Water or Do Not Drink Order.
6. The DWP regional staff will notify the DPH Bureau of Environmental Health Assessment as soon as possible by telephone, fax or e-mail
7. The Regional Director or Designee will inform the Office of Public Affairs and the Legislative Liaison Office, Municipal Chief elected official Board of Health and DPH on issuance of a Boil Water or DO NOT DRINK Order.

B. TERMINATING BOIL WATER OR DO NOT DRINK ORDERS

PURPOSE

A Boil Water or Do Not Drink Order can be terminated when, in the opinion of the Regional Director, the risk of microbiological or other contamination of a Public Water Supply no longer poses a threat to Public Health. In making this determination, the Regional Engineer should use the following guidelines while carefully considering the specific circumstances of each case.

GUIDELINES

1. (a) Incident Specific-Microbiological

When the existing or potential microbiological contamination can be attributed to a specific incident (such as a pipe break, equipment failure, or flood) and the supplier has taken appropriate corrective actions, three consecutive days of compliance with the MCL for bacteria is generally sufficient to confirm that a threat to public health no longer exists.

(b) Incident Specific-Chemical

When the existing or potential chemical contamination can be attributed to a specific incident (such as a spill, etc.) and the supplier has taken appropriate corrective action, compliance with the MCL and an appropriate warning mechanism (such as monitoring wells) is generally sufficient to confirm that the threat to public health no longer exists.

2. Giardia Cryptosporidium or other Disease Causing Organism Incidents

When there is evidence of giardia or Cryptosporidium or other disease causing organism contamination of a water supply, a Boil Water Order should not be terminated until the minimum criteria presented in (Attachment 2) have been met.

3. Short Term System Failures

When the existing or potential microbiological contamination cannot be attributed to a specific correctable incident, the supplier should be directed to implement a cross connection survey and initiate symptomatic treatment procedures including, but not limited to, increased disinfection and flushing. When the system responds positively to these procedures within three weeks, two weeks (at least eight monitoring days) of compliance with the MCL for bacteria is generally sufficient to confirm that the threat to public health no longer exists.

4. Persistent System Failures

The DWP recognizes that public water supplies distribution systems can be colonized by coliform bacteria. Experience has shown that such situations are very complex, difficult to correct, and frustrating. The risk is two-fold, first that pathogenic organisms may be present, and, second that high background levels mask the ability to use the coliform test to monitor for contamination incidences such as cross connections. In these cases speciation is required after three weeks of experiencing these problems, or as specified by the water supply section chief. If necessary ORS will review the speciation results and make a determination as to the type of contamination and its impact on public health.

Because of the complexity of these persistent system failures, the DWP has established the Special Interagency Task Force on Microbial Contamination of Drinking Water Systems.

Director DWP, - Chairperson
Regional Director

Director ORS

Director WES

Representative DPH, Bureau of Environmental Health Assessment and/or Division of Epidemiology Immunization and Communicable Diseases

Representative EPA

The Task Force members have experience with persistent system contamination and can provide advice and guidance on these difficult situations. In any case where implementation of symptomatic procedures fails to produce results after three weeks, the Regional Director should review the facts including speciation results, with the Director, who will determine if it is appropriate for the Task Force to convene.

The DWP Director is responsible for convening the Task Force

Once convened, the Task Force will meet with the supplier to review the facts and to assist in the development of an action plan designed to identify any potential causes of contamination, additional corrective measures which can be taken, and strategies to protect public health.

PROCEDURE

1. The Regional Director with the concurrence of the following individuals, shall determine when a threat to public health no longer exists:

All Boil Water or Do Not Drink Orders Director DWP

Epidemiological related Orders DPH&DWP Director & ORS
Director

Persistent System related Orders Director DWP or
Special Task Force

2. The Regional Director will prepare a letter terminating the Boil Water or Do Not Drink Order.
3. If appropriate, the Regional Director will simultaneously issue an order directing the supplier to take any further actions deemed necessary to protect public health. Such actions may include, but are not limited to, more frequent or extensive monitoring, special reporting, or corrective measures.
4. The Regional Director or designee will inform the Office of Public Affairs, the Legislative Liaison Office and DPH of the terminating of the Boil Order.

5. The DWP Director or designee will inform the EPA of the terminating of the Boil Order by telephone or email .
6. The Regional DWP staff will inform DPH, Bureau of Environmental Health Assessment of the terminating of the Boil Order by telephone, fax or E-mail.

Approved: 10-15-87

Effective: 11-15-87

Amended: 1-10-96, Correction to include email notification: 12/10/98