

Boil Orders



**Boil Water
Notice**

THE GOOD AND THE BAD

What is a Boil Order?

- ▶ A Boil Order is a notice to potentially affected customers advising them to boil water prior to using for any drinking or culinary purposes.
- ▶ The Boil Order must be issued by Public Water Supply official(s).
- ▶ Boil Orders typically issued when microbial contamination is present –or- conditions are present for suspected microbial contamination.



When a Boil Order should be considered

- ▶ When bacteriological sampling indicates the persistent presence of contamination.
 - ▶ If presence is indicated by routine coliform monitoring, repeat samples should be taken first, unless initial sampling indicates multiple positive samples and wide-spread contamination. Positive e-coli samples may require additional consideration.
 - ▶ Important to remember that boil order samples cannot be used as routine samples (Best reason not to wait until the end of the month to take routine samples) .

When a Boil Order should be considered (cont'd)

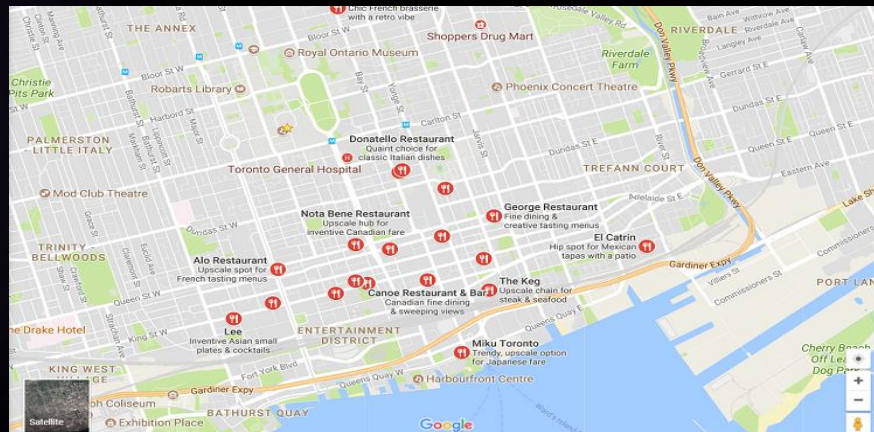
- ▶ Repair or maintenance of a finished water storage tank that cannot be isolated when intrusion of the tank is required.
- ▶ Any major disruption within the treatment scheme that causes a compromised disinfection practice or particulate removal.
- ▶ When turbidities exceed 1.0 NTU in the finished water.
- ▶ When system pressure has dropped below 20 psi for an extended period whether it is localized or system-wide. Exceptions may apply.

When a Boil Order should be considered (cont'd)

- ▶ Surface water has entered wells and/or finished water storage tanks.
- ▶ The disinfectant contact time (CT) has been reduced due to changes in treatment and/or clearwell maintenance.
- ▶ Distribution water quality has changed significantly with indicators being turbid, discolor, odor, etc.
- ▶ Any other suspicion that bacterial contamination may be present.

Types of Boil Orders

- ▶ System-Wide Order
- ▶ Localized Boil Order
 - ▶ Typically used for distribution maintenance and repair (water main break, localized pressure loss, water main replacement, etc.)



Who Should Be Notified When a Boil Order is Issued?

- ▶ All affected customer must be advised of the boil order as soon as possible.
- ▶ Appropriate IEPA Regional Office (discussion regarding corrective actions and sampling requirements). After hours or weekends: contact Illinois Emergency Management Agency at 1-800-782-7860.
- ▶ County and/or local health department.

How Should Customer Notification Be Distributed?

- ▶ Exhaustive efforts should be taken to notify all customers that are affected. Notification delivery methods may vary depending on the size of population affected and may require multiple delivery methods.
 - ▶ Local radio and television station
 - ▶ Hand delivery (door hangers)
 - ▶ Road Signs
 - ▶ Postings at conspicuous locations (post office, library, city hall, etc.)
 - ▶ Telephone (reverse 911)
 - ▶ Email/Texting

What should be included in the Boil Order Notification?

- ▶ Effective Date and Time
- ▶ Affected Area
- ▶ Public Water Supply Contact information
- ▶ Actions to be taken by customer (5-minute rolling boil for consumption and culinary purposes)
- ▶ Notification procedure for Boil Order termination

Boil Order Sampling

- ▶ Specific sampling instructions should be given by the appropriate IEPA Regional Office.
- ▶ Boil Order samples can be analyzed using any presence/absence method.
- ▶ One set of satisfactory samples: during instance of pressure drop and remediation has occurred.
- ▶ Two sets of satisfactory samples: when persistent contamination is evident as a result of flooding or previous confirmed sample results.

Boil Order Considerations

- ▶ Remember – the boil order is issued by the system and should be used as a tool to protect public health
- ▶ While boil orders can be a pain, they are an effective way to protect your system from liabilities. Better safe than sorry.
- ▶ Stuff happens. Don't be afraid to issue a boil order when suspected contamination may be present and the boil order is warranted.

Boil Order Considerations (cont'd)

- ▶ Boil orders are not to be issued in all circumstances where discoloration and/or turbid problems exist (i.e. nitrates, metals, etc).
- ▶ Be prepared for issuing boil orders and have the door hangars, signs, appropriate telephone numbers on hand.
- ▶ Make Boil Order procedures part of your Emergency Operations Planning
- ▶ DO NOT PUT A SUNSET OF THE BOIL ORDER WHEN ISSUING THE NOTIFICATION !!!

Are Boil Orders a Regulatory Requirement?

- ▶ Heck YES:
- ▶ 35 IAC 604.135 outlines requirements for issuing boil orders and boil order notifications.



Questions or Comments?

