



MISSISSIPPI STATE DEPARTMENT OF HEALTH



Guidelines for Issuing a Boil-Water Notice

Revised December 1, 2016

When a water system is placed on a Boil-Water Alert, whether by the Bureau of Public Water Supply or by the water system, there are usually many questions that arise. This document attempts to answer most of these questions so that the water system operator/official can prepare and respond when necessary.

1. When are Boil-Water Alerts necessary/required and who issues them?

Boil-Water Alerts can be issued by the Bureau of Public Water Supply or by the officials of the water system. In most cases, it is preferred that the water system officials issue the alert. However, if there is a significant threat to public health, the water system has failed to take the initiative in potentially hazardous situations, and/or the water system needs assistance, the Bureau of Public Water Supply will issue the alert.

The Bureau of Public Water Supply will issue a “state-imposed” Boil-Water Alert when:

- A water system receives an E. coli result for a Revised Total Coliform Rule (RTCR) routine sample or re-sample;
- A water system loses pressure or the system is compromised and there is a significant probability that contamination can or will enter the potable water supply, and the water system officials have not issued the alert themselves;
- A catastrophic event or natural disaster occurs; or
- A water system not providing 4-log inactivation of viruses collects an E. coli positive source water sample in response to the Groundwater Rule (GWR).

A water system should issue a “self-imposed” Boil-Water Alert when:

- The system loses pressure on all or part of the system; or
- There is reason to believe the system is compromised and there is the possibility that all or part of the water system can or will become contaminated.

2. If the water system needs to issue a Boil-Water Alert, what are the steps?

First, contact the Bureau of Public Water Supply at 601-576-7518 [or 769-798-4258 after hours] to let them know what has occurred. You should then contact those affected. If only a few customers were affected, notify them by personal contact, door-hangers, or notes taped to their doors. If a large part (or all) of the water system is affected, then you should also notify the media. Contact the radio stations, television stations, and newspapers that serve your area. Offer to fax a copy of the alert (news release) to them if you can. If you need assistance with the news media, the Bureau of Public Water Supply can issue the news release for you. The most important thing is to know how your customers typically get information. Other ways to reach customers are by providing signage at intersections or using automated methods (text, email, or automated dialing systems). **You are responsible for ensuring adequate notification, not MSDH.** Keep in mind that although most may be reached by the media, some may not and will require other means of notification. Consider sensitive populations such as the elderly and young children.

3. What does the Boil-Water Alert need to say?

The language included in a Boil-Water Alert depends on the situation. Regardless of the circumstances, the language should be factual, concise, and easily understood. See the example (pages 5-6) to use as a guide when preparing your notice.

4. What should the water system do to get the Boil-Water Alert released?

Again, this depends on why the system was placed on Boil-Water Alert. If the system lost

pressure, pressure must be restored and the distribution system flushed. After flushing, check to insure that there is adequate chlorine residual throughout the distribution system. The Bureau of Public Water Supply typically recommends a free chlorine residual of 0.5 mg/l at the ends of your distribution system. When satisfied that system pressure will be maintained and there is adequate chlorine residual, begin sampling.

If a precautionary Boil-Water Alert is issued by the system in response to total coliform positive samples or other circumstances not associated with loss of pressure, the water system officials/operator should determine the source of contamination and whether the disinfection treatment process is working properly (checking chlorine residuals). When adequate chlorine residual is verified throughout the distribution system, the system should immediately begin collecting samples from the affected area. If the entire system is placed on Boil-Water Alert, samples should be collected from sites representing the entire water system.

The sampling requirement chart (page 4) shows how many samples are required based on the number of customers affected. One (1) round of clear samples is required to release a self-imposed precautionary Boil-Water Alert, but the system may choose to collect two (2) rounds.

If a state-imposed Boil-Water Alert is issued by the Bureau of Public Water Supply, the Bureau will give explicit instructions on how many samples are required and where to collect them. Two (2) consecutive rounds of clear samples are required to release a “**state-imposed**” Boil-Water Alert. The samples do not have to be collected on consecutive days as long as two (2) consecutive rounds of clear samples are obtained. Boil-Water Alerts issued by the Bureau of Public Water Supply will be emailed to the Bureau’s distribution list which includes the Mississippi Emergency Management Agency (MEMA) and all other public and private parties who have previously requested to be included.

5. What do I use to submit microbiology samples?

All samples submitted in response to a Boil-Water Alert should be submitted on a 425 form with “Boil-Water Alert” checked as reason for testing. List complete physical addresses and be sure to affix barcodes to each sample and corresponding form to avoid sample rejection. Total and free chlorine residuals should be recorded on the form.

6. Who releases the Boil-Water Alert?

If the Boil-Water Alert was issued by the Bureau of Public Water Supply, only the Bureau of Public Water Supply can release the alert. Again, if you need assistance with contacting the media, we can assist you. See the example (page 7) to use when preparing your notice to release the Boil-Water Alert.

***Remember . . .** We are all in the business of providing safe drinking water to the people of Mississippi. All systems will eventually have an occasion when a Boil-Water Alert is warranted. Do not hesitate to issue the notice yourself or to contact the Mississippi State Department of Health, Bureau of Public Water Supply, for assistance. We must all be willing to err on the side of protecting public health rather than worrying about a customer’s temporary inconvenience.*

Sampling Requirements

# of Connections Affected	# of Samples	# of Connections Affected	# of Samples
1-100	2	4,301-5,700	18
101-300	3	5,701-8,300	20
301-500	4	8,301-11,000	30
501-700	5	11,001-13,000	40
701-900	6	13,001-16,000	50
901-1,100	7	16,001-19,000	60
1,101-1,300	8	19,001-23,000	70
1,301-1,600	9	23,001-27,000	80
1,601-2,200	10	27,001-32,000	90
2,201-2,500	11	32,001-43,000	100
2,501-2,800	12	43,001-73,000	120
2,801-4,300	15	73,001-107,000	150

NOTE: Equivalent connections (and population served) will be considered when determining the number of samples which must be collected for a system with a large ratio of population to connections.

Public Health Lab Schedule

Local County Health Department	Monday-Wednesday
Public Health Lab (direct delivery only)	Monday-Thursday 8:00 am – 4:00 pm

Samples may be submitted in any local County Health Department. Days and hours of operation are subject to change without notice.

Submissions which require prior approval from the Bureau of Public Water Supply	
Local County Health Department	*Thursday-Friday
Public Health Lab (direct delivery only)	* Friday 8:00 am – 2:00 pm * Saturday at 7:30 am

* You must **call 601-576-7518 for prior approval** if you wish to submit samples during these expanded days/hours.

Be aware that the Public Health Laboratory will make adjustments to this schedule during holiday weeks.



MISSISSIPPI STATE DEPARTMENT OF HEALTH

BOIL-WATER ALERT

Effective date: **[Date]**

Public Water System: **[PWS Name][PWS ID]**

Located in: **[County Name]**

Customers affected: This affects approximately **0000** customers who are served by the **[PWS Name]**. **[additional service area information – if necessary]**.

[PWS Name][PWS ID] issued a Boil-Water Alert for customers who receive their drinking water from their water supply located in **[County Name]** County.

Water system officials notified the Mississippi State Department of Health of a **[description of Boil-Water Alert]**.

When a distribution system loses pressure, contaminants can siphon back into the water. Public health officials consider any system that loses pressure contaminated until tests prove otherwise. Health officials strongly recommend that all water be boiled vigorously for one (1) minute before it is consumed.

The water system will be notified when tests show that the water is safe to drink.

Checklist for Safe Water Use During a Boil-Water Alert

DO NOT...

- Do not drink tap water while the water system is under a Boil-Water Alert advisory;
- Do not drink from water fountains in parks, public or private buildings that receive water from the affected system;
- Do not use ice unless it has been made with boiled water; freezing will not necessarily kill harmful bacteria; and
- Do not use tap water to make fountain soft drinks or coffee.

DO...

- Wash your dishes in boiled water, or use paper plates for the next few days;
- Wash your fruits and vegetables with boiled or bottled water since they may have been exposed to affected water from grocery store sprayers;
- Wash your hands and bathe as usual. Bathing is safe as long as no water is swallowed;
- Brush your teeth with boiled or bottled water;
- Cook with tap water if the food will be boiled for at least one (1) minute; and
- Use boiled water to make drinks, juices or infant formula



MISSISSIPPI STATE DEPARTMENT OF HEALTH

BOIL-WATER ALERT

AND REMEMBER...

Properly chlorinated water in swimming pools is safe.
Fish in aquariums are not affected.

Bringing water to a rolling boil for **one (1) minute** will inactivate all major types of harmful bacteria.

When your Boil-Water Alert is lifted...

Flush faucets for a total of ten (10) minutes to introduce system water throughout house plumbing.

Example:

- 1 faucet — run for 10 minutes
- 2 faucets — run both for 5 minutes
- 3 faucets — run each for 3-4 minutes

Flush any faucet **a minimum of two (2) minutes** to ensure clearing of the line serving the faucet.

- **Discard any drinks**, ice, food, etc, made during the Boil-Water Alert.
- **Rewash** any food or drink contact items (knives, forks, plates, etc.) with "cleared" system water.
- **Check water filters** (in faucets, refrigerators and elsewhere) and replace if necessary.
- **Run dishwasher** through a cycle or two before washing dishes.

MSDH, Bureau of Public Water Supply: Karen Walters, 601-576-7518 (8am - 5pm).
769-798-4258 (After hours ONLY)

Epidemiology hotline: 601-576-7400 (24 hours)

Press Contact: Office of Communications, 601-576-7667 (8am - 5pm)
After hours or during emergencies, call 1-866-HLTHY4U (1-866-458-4948) for media inquiries.



MISSISSIPPI STATE DEPARTMENT OF HEALTH

BOIL-WATER ALERT LIFTED

Effective date: **[Date]**

Public Water System: **[PWS Name][PWS ID]**

Located in: **[County Name]**

Customers affected: This affects approximately 0000 customers who are served by the **[PWS Name]**. **[additional service area information – if necessary]**.

[PWS Name] – **[PWS ID]** lifted the precautionary “Boil-Water Alert” for customers who get their drinking water from their water system in **[County Name]** County.

Tests performed by the **[Name of Laboratory]** laboratory indicate the water is now safe to drink.

When your Boil-Water Alert is lifted

Flush faucets for a total of ten (10) minutes to introduce system water throughout house plumbing.

Example:

1 faucet — run for 10 minutes

2 faucets — run both for 5 minutes

3 faucets — run each for 3-4 minutes

Flush any faucet **a minimum of two (2) minutes** to ensure clearing of the line serving the faucet.

- **Discard any drinks**, ice, food, etc, made during the Boil-Water Alert.
- **Rewash** any food or drink contact items (knives, forks, plates, etc.) with "cleared" system water.
- **Check water filters** (in faucets, refrigerators and elsewhere) and replace if necessary.
- **Run dishwasher** through a cycle or two before washing dishes.