



MAINE CDC DRINKING WATER PROGRAM

Department of Health & Human Services

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DRINKING WATER ORDERS ISSUANCE AND REMOVAL POLICY

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PURPOSE:

This policy documents the issuance and removal of Drinking Water Orders. Pursuant to 22 M.R.S.A., Section 2614, a drinking water order may be issued when in the judgment of the Drinking Water Program ("DWP"), a threat to the public may exist from the presence of biological, chemical, or radiological contamination in a public water system. The following policy was developed by the DWP to administer this statutory requirement.

SCOPE:

This policy applies to DWP Staff's decision-making and actions related to issuing and removing drinking water orders to Maine public water systems.

OWNER: DWP Director

DEFINITIONS:

- **ACUTE:** Characterized by a rapid onset, severe, said of some diseases.
- **ACUTE EXPOSURE:** A single exposure to a toxic substance which results in severe biological harm or death.
- **BWO:** Boil Water Order. To protect individuals consuming water from pathogenic microorganisms, a Boil Water Order, requiring that water be heated to a rolling boil for one minute, is issued to consumers of a public water system.
- **CT:** The product of "residual disinfectant concentration" (C) in mg/l determined before or at the first customer, and the corresponding "disinfectant contact time" (T) in minutes, i.e., "C" x "T".
- **CHRONIC:** A persistent and lasting condition, developing slowly with repeated exposure.
- **DNDO: Do Not Drink Order:** To protect individuals consuming water from biological, chemical, or radiological contaminants in exceedance of their maximum contaminant level(s), a Do Not Drink Order is issued to consumers of a public water system.
- **DNUO: Do Not Use Order:** To protect individuals consuming water from biological, chemical, or radiological contaminants that may cause immediate personal harm or injury due to respiratory, topical, or internal exposure, a Do Not Use Order is issued to consumers of a public water system.
- **DWP:** The Maine Drinking Water Program
- **EC:** E. coli
- **EPI:** The Maine Epidemiology Program
- **GWR:** Ground Water Rule
- **HIP:** The Maine Health Inspection Program (Health Inspector, Sanitarian)
- **MCL:** Maximum Contaminant Level: the maximum permissible level of a contaminant in water which is delivered to any user of a public water system.
- **MHB:** The Maine Manufactured Housing Board
- **PI:** The DWP PWS Inspector
- **PWS:** Public Water System
- **TC:** Total Coliform;

RESPONSIBILITIES:

Responsibilities apply to DWP staff who determine, with input from the water system, that a drinking water order should be issued and announced (or removed and announced) to the DEH Drinking Water Orders Distribution List and/or to the general public.

POLICY:

1. BOIL WATER ORDERS

I. DEFICIENCIES REQUIRING A BOIL WATER ORDER (TABLE 1.)

Deficiency	Immediate Action	Corrective Action
<p>1. Acute Bacteria (E. Coli)</p> <p>For a Non-PUC-regulated PWS, a BWO is ordered by the DWP based on a single finished water positive E. Coli sample* at the PWS.</p> <p>For PUC-regulated PWS, a single finished water positive E. Coli sample* initiates a management decision, working with the PWS, on whether a BWO is necessary system wide or on a portion of the system to protect public health.</p> <ul style="list-style-type: none"> • A raw water E. Coli positive sample warrants consideration for a BWO only on an undisinfected system. • “MCL violation” = confirmed E. Coli. <p>Confirmed E. Coli = Two or more samples collected within a 30 day period, both Total Coliform positive and at least one E. Coli positive.</p>	<ul style="list-style-type: none"> • Issue a Boil Water Order. • Provide Public Notification as soon as possible and within 24 hours. • Notification is posted until the order is lifted. • PWS contacts DWP immediately upon the notice of an E. coli positive. • Instruct PWS to include their 24/7 contact information on Boil Water Order posting. • When recheck samples are necessary, rechecks are taken “as soon as samples can be taken”. • Instruct PWS not to shock chlorinate their well before rechecks are taken. 	<p>A. For Initial E. Coli that is Not Confirmed (by recheck samples):</p> <p>Take required number of Boil Water Order removal samples (same as required by the CFR for routine TCR sampling), minimum three (per Maine Rules Relating to Drinking Water).</p> <p>B. For Confirmed E. Coli (MCL Violation):</p> <ul style="list-style-type: none"> • For a non-chlorinating system, see this policy section 1.III.1. <ul style="list-style-type: none"> a. Continuous Chlorination, or b. Repair and Confirm, or c. New Source. • For chlorinating systems, section 1.III.2. • Minimum three (3) Boil Water Order Removal samples collected by DWP or approved delegate** (lift if negative). • Follow-up samples may be required by the DWP. <hr/> <p>Boil Water Order Removal Samples and three weeks of TC sampling (to confirm that a fix has worked) shall be take by the PWS Inspector, MRWA, or by a licensed operator, at the discretion of the PWS Inspector.</p>

Deficiency	Immediate Action	Corrective Action
<p>2. Turbidity MCL Violation (Turbidity above 5.49 NTU)</p> <p>For surface water systems.</p>	<ul style="list-style-type: none"> • Issue a Boil Water Order. • Provide Public Notification as soon as possible and within 24 hours. • Notification is posted until the order is lifted. • PWS calls DWP to inform DWP of turbidity exceedance. 	<ul style="list-style-type: none"> • Reduce turbidity levels to less than 5.49. • Minimum three (3) Boil Water Order Removal samples collected by DWP or approved delegate (lift if negative). • Follow-up samples may be required by the DWP.
<p>3. Inadequately treated (lack of filtration or disinfection) surface water entering groundwater source or ground/surface water distribution system or storage e.g. flood, open storage, etc.</p> <ul style="list-style-type: none"> • See 9. for unfiltered surface water systems. 	<ul style="list-style-type: none"> • Issue a Boil Water Order. • Provide Public Notification as soon as possible and within 24 hours. • Notification is posted until the order is lifted. • PWS calls DWP to inform DWP of inadequate filtration or disinfection. • When recheck samples are necessary, rechecks are taken “as soon as samples can be taken”. 	<ul style="list-style-type: none"> • Repair, disinfect, flush (See Appendix A for guidance on flushing measures). • For a non-chlorinating system, see this policy Section 1.III.1. <ul style="list-style-type: none"> a. Continuous Chlorination, or b. Repair and Confirm, or c. New Source. • For chlorinating systems, section 1.III.2. • Minimum three (3) Boil Water Order Removal samples collected by DWP or approved delegate (lift if negative). • Follow-up samples may be required by the DWP.
<p>4. System or portions of systems that cannot be properly flushed/disinfected after an event causing zero or negative pressure e.g., a broken water main.</p> <ul style="list-style-type: none"> • For additional information, see DWP0212, Guidance on Issuing Drinking Water Orders to Protect Public Health during an Event Resulting in Low, Zero, or Negative Water Pressure. 	<ul style="list-style-type: none"> • See Appendix A and B. • If Boil Water Order is issued, provide Public Notification as soon as possible and within 24 hours. • Notification is posted until the order is lifted. • PWS calls DWP when BWO conditions are met. 	<ul style="list-style-type: none"> • See Appendix A and B. • Follow-up samples may be required by the DWP. • When a Boil Water Order is issued, minimum three (3) Boil Water Order Removal samples collected by DWP or approved delegate (lift if negative).

Deficiency	Immediate Action	Corrective Action
<p>5. Malfunctioning Chlorinator (either required or not required by the DWP).</p> <ul style="list-style-type: none"> • Found randomly or through responding to an initial positive sample. • PUC regulated systems with voluntary Chlorination are exempt from this requirement. • NOTE: THIS SECTION ON RESOLVING A MALFUNCTIONING CHLORINATOR SUPERSEDES DEFICIENCY #1: ACUTE BACTERIA VIOLATION (listed above). 	<ul style="list-style-type: none"> • Issue a Boil Water Order. • Provide Public Notification as soon as possible and within 24 hours. • Notification is posted until the order is lifted. • PWS calls DWP to inform DWP of Chlorination failure. • When recheck samples are necessary, rechecks are taken “as soon as samples can be taken”. 	<ul style="list-style-type: none"> • Repair Chlorinator and return residual to all taps (within reason) to normal levels (typical of what system is reporting). • Lift Boil Water Order after returning chlorination to normal levels or take three (3) Boil Water Order Removal samples collected by DWP or approved delegate (lift if negative). • DWP retains the option to require negative BWO removal samples to lift BWO or DWP confirmation of chlorine residual levels. • Follow-up samples may be required by the DWP. • For rechecks taken after Chlorine is returned, a positive bacteria sample (Total Coliform or E. coli) may require additional investigation or action.
<p>6. Malfunctioning Ultra Violet (UV) light disinfection (either required or not required by the DWP) for ground water systems only.</p> <ul style="list-style-type: none"> • Found randomly or through responding to an initial positive sample. • A bypassed UV system is required to be on a Boil Water Order. 	<ul style="list-style-type: none"> • Issue a Boil Water Order. • Provide Public Notification as soon as possible and within 24 hours. • Notification is posted until the order is lifted. • PWS calls DWP to inform DWP of UV disinfection failure. • When recheck samples are necessary, rechecks are taken “as soon as samples can be taken”. 	<ul style="list-style-type: none"> • Repair UV system and repair solenoid shut-off valve if present. • Shocking system with chlorine recommended. • Flush thoroughly (See Appendix A for guidance on flushing). • Minimum three (3) Boil Water Order Removal samples (after chlorine residual from shocking system is zero) collected by DWP or approved delegate. (lift if negative). • For rechecks taken after UV disinfection is returned, a positive bacteria sample (Total Coliform or E. coli) may require additional investigation or action. • Follow-up samples may be required by the DWP.

Deficiency	Immediate Action	Corrective Action
<p>7. Dead Animals (mice, rats, birds, etc.) observed in any groundwater source or any finished water storage.</p>	<ul style="list-style-type: none"> • Issue a Boil Water Order. • Provide Public Notification as soon as possible and within 24 hours. • Notification is posted until the order is lifted. • PWS calls DWP to inform DWP of dead animal found. • When recheck samples are necessary, rechecks are taken “as soon as samples can be taken”. 	<ul style="list-style-type: none"> • Remove the dead animal, disinfect, flush (See Appendix A guidance on flushing measures). • Repair/modify infrastructure so animals cannot access water system. • Minimum three (3) Boil Water Order Removal samples collected by DWP or approved delegate (lift if negative). • Follow-up samples may be required by the DWP.
<p>8. System failed to provide sample results or reports as required, and chronic contamination or repeat non-acute bacteria violations have occurred.</p>	<ul style="list-style-type: none"> • Issue a Boil Water Order. • Provide Public Notification as soon as possible and within 24 hours. • Notification is posted until the order is lifted. • BWO issued by DWP staff. 	<ul style="list-style-type: none"> • Respond to an engineering order regarding repeat non-acute bacteria violations. • Submit necessary results and/or reports. • Resolve any outstanding violations. • Follow-up samples may be required by the DWP.
<p>9. Equipment failure resulting in inadequate CT of a filtered or unfiltered surface water supply for more than one day (24 hrs)... this includes when some disinfection is present.</p>	<ul style="list-style-type: none"> • Issue a Boil Water Order. • Provide Public Notification as soon as possible and within 24 hours. • Notification is posted until the order is lifted. • PWS calls DWP to inform DWP of equipment failure. 	<ul style="list-style-type: none"> • Return disinfection to required specification. • Minimum three (3) Boil Water Order Removal samples collected by DWP or approved delegate (lift if negative). • Follow-up samples may be required by the DWP.

Deficiency	Immediate Action	Corrective Action
<p>10. An unprotected direct cross connection with sanitary wastewater (connecting a water pipe to a sewer pipe) without an acute violation.</p> <ul style="list-style-type: none"> Also See Appendix B regarding a broken water main (pipe) in the same trench as a broken sewer main (pipe). NOTE: IF CROSS CONNECTION IS FOUND AS A RESULT OF AN ACUTE VIOLATION, FOLLOW RESOLUTION FOR DEFICIENCY #1: ACUTE BACTERIA VIOLATION. 	<ul style="list-style-type: none"> Issue a Boil Water Order. Provide Public Notification as soon as possible and within 24 hours. Notification is posted until the order is lifted. PWS calls DWP to inform DWP of cross connection. When recheck samples are necessary, rechecks are taken “as soon as samples can be taken”. 	<ul style="list-style-type: none"> Remove cross connection or protect against cross connection with a backflow prevention device per the Maine Internal Plumbing code requirements. Shocking system with chlorine recommended, flush thoroughly (See Appendix A). Minimum three (3) Boil Water Order Removal samples collected by DWP or approved delegate (lift if negative). Follow-up samples may be required by the DWP.

II. PROVIDING PUBLIC NOTIFICATION

When a Public Water System meets the criteria for issuing a Boil Water Order (See Table 1.), the PWS shall appropriately notify affected consumers as soon as possible but at least within 24 hours of its issuance. Notification shall be made with the Boil Water Order notice (See Appendix D). Modifications to any/all notices must be approved by the DWP prior to distribution. Notification may be made through radio, television, daily newspaper, e-mail, other electronic media, or public address methods for systems where hand delivery is impractical. In some instances, the federal Environmental Protection Agency (EPA) may require additional public notification. With schools and daycares, the DWP strongly recommends that parents be notified. See the Drinking Water Orders SOP (DWP0042) for further notification details.

For known contamination, the Boil Water Order notice shall be modified to include: “Discard any uncooked food or drink (and ice) that was previously prepared with water.”

Boil Water Orders may be issued to a localized section of a water system (not the whole water system) if the contamination is clearly isolated to that localized section of the water system. The DWP must approve of the use of a localized drinking water order.

When a Boil Water Order is issued by a Public Water System (PWS), the PWS shall notify the Drinking Water Program of the order and related information such as the affected area and plan for resolution of the order.

To announce the end of a Boil Water Order (“lifting” the order), public notification shall be accomplished using the same method the order was announced with.

III. REMOVING A BOIL WATER ORDER

A Boil Water Order can be removed from a public water system when both of the following conditions are met:

- 1) The correction of a deficiency occurs; and

- 2) Satisfactory Total Coliform samples are collected, analyzed and reported. In the case of a malfunctioning chlorinator, chlorine residual in the distribution system is returned to normal levels at all taps (within reason). However, the DWP retains the option to require satisfactory Total Coliform samples to lift a BWO, or DWP confirmation of chlorine residual levels.

1. Resolving a Boil Water Order due to Confirmed Acute Contamination at a Non-Chlorinated Water System.

- a. When a Boil Water Order is issued due to confirmed acute contamination at a PWS with a non-chlorinated water system, the PWS has three options to remove the Boil Water Order:

- i. Repair the well or distribution system. If a PWS decides to make a repair to their system to resolve a BWO, the following applies:

Note 1: A BWO due to confirmed acute contamination cannot be removed by simply shocking a well or system and getting negative BWO removal samples; the cause of the contamination must be identified and resolved. To this end, the following policy is written.

Note 2: The Ground Water Rule now requires distribution system rechecks and a raw water sample, potentially enabling a differentiation between bacterial contamination of the source vs. the distribution system. Resolution of a BWO for contamination of either section of the water system by using a “repair” requires the following:

- i. Before a plan for a repair is accepted as a potential method of resolving a BWO, the DWP (including at least one manager) must agree that the problem being repaired is a likely cause of the system’s bacterial contamination. If the DWP does not agree, then the repair proposed will not be accepted as a method for resolving the BWO.
- ii. The DWP may require that a licensed water professional be hired to evaluate a water system as part of an effort to identify a physical system defect that could have caused the acute contamination and could potentially be repaired.
- iii. The DWP may require that a licensed water professional complete a repair to potentially resolve a BWO.
- iv. If a PWS chooses to repair a part of their water system to remove a BWO, after the repair the system must remain on a BWO for three (3) weeks and take a weekly bacteria sample for each of the three weeks to verify the effectiveness of the repair. Three weeks of weekly samples must be taken in consecutive weeks unless approved by the Compliance Supervisor. This applies to all situations in this policy requiring weekly samples. If all three weekly samples come back negative for bacteria, then the necessary number of BWO removal samples may then be taken. If all BWO removal samples come back negative, then the BWO may be lifted. If any of the BWO removal samples come back positive, a successive repair will require that the three weeks of weekly sampling be started again in order to verify the effectiveness of the new repair (a positive BWO sample after a repair indicates that the repair did not solve the problem and the resolution process shall resume at step (a.) above, or install continuous chlorination)

Example: For rechecks that confirm acute contamination of the well (raw water recheck is positive), a repair such as a jazzwell seal installed in the well requires three (3) weeks of weekly sampling (in three consecutive weeks) while on a BWO to confirm that the jazzwell seal solved the contamination problem.

- v. When a contaminated water source is repaired, weekly samples are taken from the source.
- vi. When a contaminated distribution system is repaired, weekly samples are taken from the distribution system, downstream of the repair.

- vii. Boil Water Order removal samples shall come from the distribution system.
- viii. Three clean “weekly samples” taken from the distribution system, used to verify the effectiveness of a repair may be used as Boil Water Order removal samples. (See vii) In contrast, three weekly samples from the source may not be used as BWO removal samples.
- ix. DWP Staff shall take the three (3) weeks of weekly samples, each after confirming the chlorine residual is zero (0), unless delegated to another approved individual. The chlorine residual must be checked before each weekly sample.
- x. For rechecks that confirm contamination of the distribution system (raw water sample clean and positive rechecks from the distribution system), continuous chlorination can be used to resolve the BWO, but UV cannot be used (UV disinfection does not address contamination in the distribution system). To use a “repair” of the distribution system to resolve the BWO, the DWP must agree that the distribution system defect that was repaired was the probable cause of the acute contamination. The program may require additional sampling to identify the source of the contamination including samples from the water source. (See the DWP Revised Total Coliform Recheck Sample Policy and Procedure [DWP0092] for guidance on what to look for at a PWS; see section describing the components of a standard recheck inspection). A distribution system repair must be followed by three (3) weeks of weekly bacteria samples, taken down stream of the repair. If these three weekly samples are all negative, then these samples can be used as BWO removal samples.
- xi. Any positive weekly samples must have three (3) rechecks taken (together, at one time). A confirmed positive Total Coliform or E. coli sample verifies that the system repair was not effective.
- xii. The department reserves the right to waive the three (3) weeks of weekly samples while under a BWO. Waivers must be approved by a DWP Supervisor. Waivers to this requirement may be considered when (for example):
 - A system is small (making the system more easily evaluated for compromised equipment/piping)
 - When pressure testing is used to verify the integrity of the system
 - When it is determined that the system fully meets the Maine Internal Plumbing Code
 - When review of the system by a licensed water professional shows that thorough system evaluation supports the integrity of the water system
 - A well-video camera verifies the effectiveness of a well repair, to the satisfaction of DWP personnel.
 - When a main break is suspected to be the cause of an acute bacteria BWO that is issued after the break is repaired (samples show up later that are positive for E. coli), the BWO may be lifted by verifying that chlorine levels have been returned to normal or by taking BWO removal samples after the main is disinfected per AWWA C651-92 or later standards. After lifting a BWO in this case, three (3) weeks of weekly sampling under a BWO may be waived, but three weeks of weekly sampling (off the BWO) may be required by the DWP to verify that the main break was the cause of the original EC positive sample, and that another source of bacterial contamination is not present.
 - Other information and data is provided to the DWP that would support a waiver.

Note: Appropriate BWO removal samples must be taken and be negative before issuing a waiver of the three (3) weeks of weekly samples under a BWO.

- II. Install disinfection. Continuous chlorination facilities must be designed and built to provide 4- log virus inactivation but, unless required by the Ground Water Rule or otherwise by the DWP, the system does not have to meet 4-log inactivation during normal operation.

UV disinfection may not be installed to resolve a BWO due to acute contamination (E. coli).

- III. Drill a new well or find a new well source and bring it on-line using the new well approval process. Upon abandoning (physically disconnecting) the old source and activating the new source (after final well approval if not already an active PWS well), negative BWO removal samples are required to lift the BWO.

2. Resolving a Boil Water Order due to Confirmed Acute Contamination at a Chlorinated Water System.

- a. Repair compromised portions of the water system infrastructure as needed (well, source water intake, treatment equipment, distribution system, etc.)
- b. If the chlorination system is not operating properly, return chlorination system to acceptable operations as shown by an acceptable free chlorine residual measured in the distribution system. (See BWO Deficiency #5 in Table 1).
- c. Flush system thoroughly
- d. Lift Boil Water Order after returning chlorination to all taps (within reason) to normal levels (typical of what the system is reporting) or take the necessary number of Boil Water Order Removal Samples (lift if negative).

3. Resolving a Boil Water Order due to Confirmed Acute Contamination at a System with Ultraviolet Disinfection.

A public water system using ultraviolet disinfection that experiences a confirmed E.-coli sample has the following options for removing a Boil Water Order:

- a. Repair of water system defect (source of the E.coli).
 - a. For repairs of the water system follow 1.III.1 for resolving a boil water order due to acute contamination at a non-chlorinated water system. Note that when a confirmed e-coli occurs due to a failed UV unit, a repair of the UV unit will not resolve the boil water order; The source of the E. coli must be repaired, or the system can use options b) or c).
- b. Install continuous chlorination disinfection
- c. Find and obtain approval for a new source of water (drill a new well).

4. Resolving a Boil Water Order due to Acute Contamination that is not Confirmed (by Recheck Samples).

When all E. Coli recheck samples come back negative for both Total Coliform and E. Coli, then the initial E. Coli positive is not confirmed. When an E. Coli positive sample is not confirmed, the Boil Water Order can be lifted by taking the necessary number of Boil Water Order removal samples, and all sample results are negative. The number of required samples is the number of routine total coliform samples for that PWS, but not less than three.

IV. BOIL WATER ORDER REMOVAL SAMPLES

Boil Water Order removal samples must be analyzed by a Maine certified laboratory.

Boil Water Order removal samples for confirmed E. Coli may be collected only after approved treatment is installed for acute coliform MCL violations or significant deficiencies are corrected for identifiable operational problems, or the source of contamination is eliminated (e.g., new source or intentional contamination ceased).

The required number of Boil Water Order Removal Samples must be taken on the same day, at separate locations, when possible. The samples taken must be representative of the distribution system affected by the Boil Water Order and must all be negative for total coliform bacteria in order to remove the Boil Water Order.

When repairing a system where weekly samples are required to verify the effectiveness of the repair, weekly samples taken from the distribution system, downstream of a repair, can count as Boil Water Order removal samples.

The required number of samples taken to lift a Boil Water Order shall correspond to the population requirement of the Total Coliform Rule (TCR), but in no case shall be less than three. Population determination for the Boil Water Order shall be based upon the affected area of the Boil Water Order.

Systems must have their Boil Water Order removal samples collected by the DWP PWS Inspector, Maine Rural Water Association Water Quality Specialist, or licensed operator as approved by the DWP. The DWP may require or allow variations to this sampling protocol on a case-by-case basis.

V. ROUTINE COMPLIANCE SAMPLE COLLECTION DURING A BOIL WATER ORDER

During a Boil Water Order, all routine compliance samples shall be collected.

2. DO NOT DRINK ORDERS

I. DEFICIENCIES REQUIRING A DO NOT DRINK ORDER

A Do Not Drink Order is issued to consumers when biological, chemical, or radiological contaminants are present in drinking water that exceed established MCLs and/or present an “acute” risk to consumers via ingestion. If topical or respiratory contact with the contaminated water presents an acute risk to consumers, the issuance of a Do Not Use Order shall be considered and issued as necessary (See Do Not Use Order below).

1. When required treatment for resolving an MCL failure, as shown by a routine sample exceeding the MCL, the PWS shall be placed on a Do Not Drink Order.
2. For non-PUC regulated PWS, when an unapproved well is connected and is supplying water to the system, if there are no bacteria or nitrate (acute contaminant) test results, a Do Not Drink Order is placed on the PWS. For an unapproved well that is supplying water to a PUC-Regulated PWS, seek DWP management guidance.

II. PROVIDING PUBLIC NOTIFICATION

When a Public Water System is issued a Do Not Drink Order, the PWS shall appropriately notify affected consumers as soon as possible but at least within 24 hours of its issuance. Notification shall be made with the Do Not Drink Order Notice (See Appendix D). Modifications to the notice must be approved by the DWP prior to distribution. Notification may be made through radio, television, daily

newspaper, e-mail, other electronic media, or public address methods for systems where hand delivery is impractical. In some instances, the federal Environmental Protection Agency (EPA) may require additional public notification. With schools and daycares, the DWP strongly recommends that parents be notified. See the Drinking Water Orders SOP (DWP0042) for further notification details.

For known contamination, the Do Not Drink Order notice shall include: "Discard any food or drink (and ice) that was previously prepared with water."

Do Not Drink Orders may be issued to a localized section of a water system (not the whole water system) if the contamination is clearly isolated to that localized section of the water system. The DWP must approve of the use of a localized drinking water order.

When a Do Not Drink Order is issued by a Public Water System (PWS), the PWS shall notify the Drinking Water Program of the order and related information such as the affected area and plan for resolution of the order.

To announce the end of a Do Not Drink Order ("lifting" the order), public notification shall be accomplished using the same method the order was announced with.

III. REMOVING A DO NOT DRINK ORDER

A Do Not Drink Order can be removed from a public water system when the following conditions are met:

- 1) the correction of a deficiency occurs; or
- 2) contamination source is eliminated; or
- 3) an approved new source of water (not bottled water) is provided; or
- 4) DWP approved treatment is installed; and
- 5) the entire system is flushed thoroughly (in some cases the system may need specialized cleaning), and
- 6) satisfactory samples are collected, analyzed and reported.

1. PROCEDURE

- 1) Identify the source of the contamination
- 2) Remove the source of contamination, correct system deficiencies, install DWP approved treatment, or provide an approved new source of water
- 3) Flush the system thoroughly (in some cases the system may need specialized cleaning)
- 4) If deemed necessary by the DWP, disinfect the system thoroughly
- 5) Develop and implement a sampling plan that will adequately ensure safe drinking water upon gaining satisfactory sample results, per this policy.

2. DO NOT DRINK ORDER REMOVAL SAMPLES

Do Not Drink Order removal samples must be analyzed by a Maine certified laboratory.

Do Not Drink Order removal samples may be collected only after approved treatment is installed for MCL violations or significant deficiencies are corrected for identifiable operational problems, or the source of contamination is eliminated (e.g., new source or intentional contamination ceased).

The type and required number of samples taken to lift a Do Not Drink Order shall be determined by the DWP. Policy for determining the number of samples to lift a BWO may be considered in this decision-making process.

The required number of Do Not Drink Order Removal Samples must be taken on the same day, at separate locations, when possible. The samples taken must be representative of the distribution system affected by the Do Not Drink Order and must all be at acceptable levels for the contaminant identified in order to remove the Do Not Drink Water Order.

Systems must have their Do Not Drink Order removal samples collected by the DWP PWS Inspector or other designee approved by the DWP. The DWP may require or allow variations to this sampling protocol on a case-by-case basis.

IV. ROUTINE COMPLIANCE SAMPLE COLLECTION DURING A DO NOT DRINK ORDER

During a Do Not Drink Order, all routine compliance samples shall be collected.

3. DO NOT USE ORDERS

I. DEFICIENCIES REQUIRING A DO NOT USE ORDER

A Do Not Use Order is issued to consumers when biological, chemical, or radiological contaminants are present in drinking water that exceed established MCLs and/or present an “acute” topical, respiratory, or ingestion risk to consumers, or when an unknown contaminant is present or suspected to be present.

A Do Not Use Order may or may not include the prohibition on using sanitary water for toilet flushing, noting that a Do Not Use Order that includes a prohibition on the use of sanitary water is extremely impacting to the public. A Do Not Use Order that includes a prohibition on using sanitary water will be placed when a fuming contaminant is in the water.

II. PROVIDING PUBLIC NOTIFICATION

Determine whether or not the Do Not Use Order will include a prohibition on the use of sanitary water for toilet flushing.

When a Public Water System is issued a Do Not Use Order, the PWS shall appropriately notify affected consumers as soon as possible but at least within 24 hours of its issuance. Notification shall be made with the Do Not Use Order Notice (See Appendix D). Modifications to the notice must be approved by the DWP prior to distribution. Notification may be made through radio, television, daily newspaper, e-mail, other electronic media, or public address methods for systems where hand delivery is impractical. In some instances, the federal Environmental Protection Agency (EPA) may require additional public notification. With schools and daycares, the DWP strongly recommends that parents be notified. See the Drinking Water Orders SOP (DWP0042) for further notification details.

For known contamination, the Do Not Use Order notice shall be modified to include: “Discard any food or drink (and ice) that was previously prepared with water.”

Do Not Use Orders may be issued to a localized section of a water system (not the whole water system) if the contamination is clearly isolated to that localized section of the water system. The DWP must approve of the use of a localized drinking water order.

When a Do Not Use Order is issued by a Public Water System (PWS), the PWS shall notify the Drinking Water Program of the order and related information such as the affected area and plan for resolution of the order.

To announce the end of a Do Not Use Order (“lifting” the order), public notification shall be accomplished using the same method the order was announced with.

III. REMOVING A DO NOT USE ORDER

A Do Not Use Order can be removed from a public water system when the following conditions are met:

- 1) the correction of a deficiency occurs; or
- 2) contamination source is eliminated; or
- 3) an approved new source of water (not bottled water) is provided; or
- 4) DWP approved treatment is installed; and
- 5) The entire system is flushed thoroughly (in some cases the system may need specialized cleaning), and
- 6) satisfactory samples are collected, analyzed and reported.

A. PROCEDURE

- 1) Identify the source of the contamination
- 2) Remove the source of contamination, correct system deficiencies, install DWP approved treatment, or provide an approved new source of water
- 3) Flush the system thoroughly (in some cases the system may need specialized cleaning)
- 4) If deemed necessary by the DWP, disinfect the system thoroughly
- 5) Develop and implement a sampling plan that will adequately ensure safe drinking water upon gaining satisfactory sample results, per this policy.

B. DO NOT USE ORDER REMOVAL SAMPLES

Do Not Use Order removal samples must be analyzed by a Maine certified laboratory.

Do Not Use Order removal samples may be collected only after approved treatment is installed for MCL violations or significant deficiencies are corrected for identifiable operational problems, or the source of contamination is eliminated (e.g., new source or intentional contamination ceased).

The type and required number of samples taken to lift a Do Not Use Order shall be determined by the DWP. Policy for determining the number of samples to lift a BWO may be considered in this decision making process.

The required number of Do Not Use Order Removal Samples must be taken on the same day, at separate locations, when possible. The samples taken must be representative of the distribution system affected by the Do Not Use Order and must all be at acceptable levels for the contaminant identified in order to remove the Do Not Use Order.

Systems must have their Do Not Use Order removal samples collected by the DWP PWS Inspector or other designee approved by the DWP. The DWP may require or allow variations to this sampling protocol on a case-by-case basis.

IV. ROUTINE COMPLIANCE SAMPLE COLLECTION DURING A DO NOT USE ORDER

During a Do Not Use Order, all routine compliance samples shall be collected.

ASSOCIATED DOCUMENTS:

- Drinking Water Order SOP (DWP0042)
- Guidance on Issuing Drinking Water Orders to Protect Public Health during an Event Resulting in Low, Zero, or Negative Water Pressure (DWP0212)
- DWP Revised Total Coliform Rechecks Policy (DWP0092)
- DWP UV Policy (DWP0047)
- New System or Well Approval Policy and Procedure (DWP0068)
- Guidance on Issuing Drinking Water Orders to Protect Public Health during an Event Resulting in Low, Zero, or Negative Water Pressure, DWP0212,

SUPERCEDED DOCUMENTS: Original BWO Policy

RETENTION: This document is retained per the DWP Documentation Control Procedure.

REVISION LOG

Section	Page	Revision	Date	Description Of Change	Approved by:
All	All	Original	4/25/01		Roger Crouse
All	All	A	12/28/05		Roger Crouse
All	All	B	10/28/08	Updated format & terms, based on new 2008 SOP	Roger Crouse
Appendix A & AWWA Standard	4 and 5	C	1/08/09	Added Appendix A Flowchart & AWWA Standard	Tera Pare
All	All	D	4/8/2010	Updated Doc. Format – Modified Footer. Corrected this Revision Log to reflect finding an earlier “Original” – Note that previous document revision labels are incorrect. Earlier revisions can be identified by the policy date as shown here.	Roger Crouse

Section	Page	Revision	Date	Description Of Change	Approved by:
All	All	E	8/17/2011	Name and scope change to include all drinking water orders: BWO, DNDO, DNUO. Added BWO policy for non-chlorinated and chlorinated system. Added Appdx A on Reducing Risk and Appdx D: Drinking Water Order Notices	Roger Crouse
1.I. Table 1 1.III.1 1.III.1 1.III.2 1.III.3 Assoc Doc Appdx B	7, #7 10 iv) 11 x) 12 d) 13 3) 18 22	F	9-14-2011	Add... repair infrastructure – Use “consecutive weeks” – Changed reference document – Clarification Detail provided – Added an Associated Document – Removed... lift BWO by returning CL2 residual only... not applicable here.	Roger Crouse
APPDX D Sec 1. Sec 2. Sec 3.	25 9 14 16	G	5-22-2013	Added “rolling boil” language to the BWO posting in Appendix D. Replaced Do Not Use posting in Appendix D. Added info on contacting DWP and “lifting” orders to each of three order’s Public Notification section.	Roger Crouse
1.IV 2.III.B 3.II.B Appndx B	13 15 17 22	H	5-22-2-15	DWO removal samples must be analyzed by a Maine certified lab. Samples used to evaluate the safety of water after a low pressure event (main break) do not have to be analyzed by a certified lab and are not compliance samples, but do have to use an EPA approved presence/absence test.	Nathan Saunders
Appndx D	25-28	J	5-26-2015	BWO, DNDO, DNU Orders replaced with versions that have both pictorial messages and translated phrases	Nathan Saunders
All	All	K	12-21-2016	Changes related to the DWP Reorganization, specifically changing “Field Inspector” to “PWS Inspector”. Appendix A was removed from this document and made into its own document DWP0212. Related to the creation of DWP0212, Appendices C and D were removed.	Nathan Saunders
BWO, DNDO, DNUO sections	13,15,17	L	1-6-2017	All routine compliance samples shall be collected during a BWO, DNDO, or a DNUO. This decision was made by the DWP Management Team and is captured in this revision.	Nathan Saunders
BWO Table 1	4	M	11-15-2021	Updated BWO Table to reflect BWO after a single EC. Miscellaneous additions.	Amy Lachance
2. DNDO	15	N	12-8-2021	Added failed MCL treatment as a requirement for a DNDO	Amy Lachance

Section	Page	Revision	Date	Description Of Change	Approved by:
All	All	NA	5/6/2024	Corrections to formatting, egregious grammar, and minor punctuation issues; no content was revised. -PB	

Appendix A

Guidance on Issuing Drinking Water Orders to Protect Public Health during an Event Resulting in Low, Zero, or Negative Water Pressure

This appendix has been made into its own, stand-alone document DWP0212. See the Drinking Water Program Website: www.medwp.com under the categories Public Water System and then Emergency Response.

APPENDIX B

This Appendix has been removed/deleted.

APPENDIX C

This Appendix has been removed/deleted.

APPENDIX D

DRINKING WATER ORDER NOTICES:

1. Boil Water Order Notice
2. Do Not Drink Order Notice
3. Do Not Use Order Notice



Boil Water Order



Due to the possibility of unsafe water, _____ consumers are directed to **Boil All Water** for one minute at a rolling boil before drinking, making ice cubes, washing foods, brushing teeth or in any other activity involving consumption of water. This Order shall remain in effect until further notice!

Questions regarding this notice should be directed to:

_____ at

or to the

State of Maine Drinking Water Program at
(207) 287-2070 during normal business hours.

TO BE POSTED IMMEDIATELY.

Boil Water Order (English)	امر بغلي الماء (Arabic)	Avis D'ébullition De L'eau (French)	Kar Kari biyah (Somali)	Orden de Hervir el Agua (Spanish)
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This entire notice is available in the following languages at www.medwp.com: Arabic, French, Somali, and Spanish.



Do Not Drink the Water



Due to unsafe drinking water conditions, _____ consumers are directed to Not Drink the Water. This includes making ice cubes, food preparation, brushing teeth or any other activity involving consumption of water. This Order shall remain in effect until further notice!

Questions regarding this notice should be directed to:

_____ at

or to the

State of Maine Drinking Water Program at
(207) 287-2070 during normal business hours.

TO BE POSTED IMMEDIATELY.

Do Not Drink the Water (English)	الرجاء عدم شرب الماء (Arabic)	Ne Buvez Pas L'eau (French)	Hacabin Biyaha (Somali)	No Beba El Agua (Spanish)
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This entire notice is available in the following languages at www.medwp.com: Arabic, French, Somali, and Spanish.



Do Not Use the Water



Due to unsafe drinking water conditions, _____ consumers are directed to Not Use the Water. This includes making ice cubes, food preparation, brushing teeth, washing hands, showering, or any other activity involving the use of water for people or pets. The use and flushing of toilets is permitted. This Order shall remain in effect until further notice!

Questions regarding this notice should be directed to:

_____ at

or to the

State of Maine Drinking Water Program at
(207) 287-2070 during normal business hours.

TO BE POSTED IMMEDIATELY.

Do Not Use the Water (English)	الرجاء عدم استعمال الماء (Arabic)	N'utilisez Pas L'eau (French)	Ha Isticmaalin Biyaha (Somali)	No Use el Agua (Spanish)
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This entire notice is available in the following languages at www.medwp.com: Arabic, French, Somali, and Spanish.