

Public Notification

DRINKING WATER WARNING

Tests Show Presence of Coliform Bacteria in Water

The water is non-potable. Do not use it for drinking, food or beverage preparation, hand washing, teeth brushing, or any other consumptive use.

We are required to sample for coliform bacteria on our aircraft [list frequency (i.e., monthly, quarterly, semi-annually, annually)]. On [give date], we received notice that the sample collected on [give date] showed the presence of total coliform bacteria in our water.

What This Means

This is not an emergency. Total coliform bacteria themselves are generally not harmful.

Coliform are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present. Coliforms were found in [INSERT NUMBER OF SAMPLES DETECTED] samples collected and this is a warning of potential problems. If human pathogens are present, they can cause short-term health effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems.


People at increased risk should be particularly careful to avoid this water.

Steps We Are Taking

[Describe corrective action (e.g., We will disinfect and flush the water system as soon as possible and conduct follow-up sampling to ensure the water no longer contains coliform bacteria.)]

We will inform you when additional samples show no coliform bacteria. We anticipate resolving the problem within [estimated time frame].

This notice is provided by [Aircraft Carrier]. Date distributed: _____.



Public notification requirements are part of the Public Right-to-Know provisions of the SDWA.

40 CFR 141.805 covers the Public Notification aspects of the ADWR.

Chapter 6 of the guidance manual discusses the PN requirements, and Appendix D includes templates for a variety of situations and violations.

This session will review when public notice is required, the form and duration of the notices, and language requirements for each PN event.

Public Notification: Purpose and Recipients

- Purpose of Public Notification (PN)
 - Intended to alert consumers to potential health risks from violations of the drinking water standards or other situations that may present a health risk
- Recipients of PN
 - Passengers and crew that are on board the aircraft during the time that PN is required must receive notification.
 - Notice to passengers is not required under certain circumstances

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Public notification requirements of the NPDWRs are intended to alert consumers to potential health risks from violations of the drinking water standards or other situations that may present a health risk.

Passengers and crew that are on the aircraft at the time PN is required must receive the notice. Passengers and crew that were on previous flights of the same aircraft are not required to be notified, even if the situation first developed at the time they were on the aircraft (such as the collection of a coliform sample that indicated the presence of total coliforms). This is consistent with the public notice provisions of stationery transient non-community systems.

Public Notification: Restricting Public Access

- PN is always required when public access to the water system is restricted
- PN is one of three key requirements under restricting public access
- The other two are:
 - Disconnecting/shutting off the water when feasible (not just convenient)
 - Providing alternatives to the aircraft water system such as bottled water or antiseptic hand gels
 - enable passengers and crew to maintain sanitary hygiene

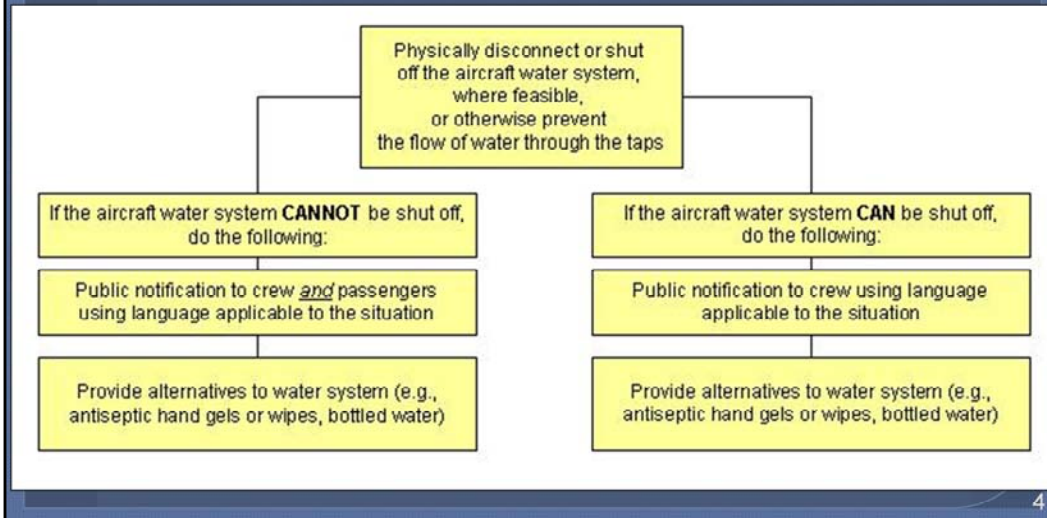
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Public notification is always required as part of restricting public access, even if the water is shut off or physically disconnected so that the public cannot access water from the aircraft water system.

The other two requirements of restricting public access are shutting off the water when it is feasible, and enabling maintenance of sanitary hygiene by providing antiseptic gels or hand wipes.

Restricting Public Access

- Exhibit 4.4, page 37



Public Notification: Passengers and Crew, or Crew Only

- If water has been physically disconnected or shut off...
 - Provide public notice to crew only
- If water has not been physically disconnected or shut off...
 - Provide posted public notice to crew **and** passengers

Display and Content When Water Cannot be Shut Off

○ Passenger Notice

- Must be prominently displayed in each lavatory and at any drinking fountains
- Must include a clear statement that the water is non-potable and should not be used for drinking, food or beverage preparation, hand washing, teeth brushing, or any other consumptive use

○ Crew Notice

- Must be prominently displayed in the galley
- Content depends on the violation/situation requiring notification

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The public notice for passengers must be displayed in each lavatory and at any drinking fountains and must consist of a prominently displayed, clear statement indicating that the water is non-potable and should not be used for drinking, food or beverage preparation, hand washing, teeth brushing, or any other consumptive use. Refer to the next slide for the template for passenger notice.

The public notice for the crew must be displayed in the galley for crew viewing if not provided by verbal crew briefing. The content of the notice will depend on the violation or situation that triggered the notice. Content for crew notifications will be discussed for each violation or situation requiring notice.

Notice to the Passengers – Template 1

WARNING DO NOT DRINK THE WATER



The water is non-potable. Do not use it for drinking, food or beverage preparation, hand washing, teeth brushing, or any other consumptive use.

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This is template language, as provided in the ADWR guidance manual that can be used for any violation or situation triggering PN to passengers.

When PN is required to be issued to passengers, it must be posted in each lavatory and the language must:

- 1) Be displayed in a conspicuous way
- 2) Not contain overly technical language or very small print
- 3) Not be formatted in a way that defeats the purpose of the notice
- 4) Not contain language that nullifies the purpose of the notice
- 5) Must contain information in the appropriate language(s) regarding the importance of the notice, reflecting a good faith effort to reach the non-English speaking population served including where applicable, an easily recognized symbol for non-potable water.

Public Notification: Presentation

- Presentation
 - Must be displayed in a conspicuous way
 - Must not be overly technical or contain small print
 - Must not be formatted to defeat its purpose
 - Must not contain language nullifying purpose
 - Must make a good faith effort to address non-English speaking population
- ADWR Guidance Appendix D contains templates that meet the content and clarity requirements for PN

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Whether notice is conveyed verbally or posted, the requirements for the content and clarity of the information are the same.

The Templates in Appendix D of the guidance manual are suggested public notices that can be edited to suit a particular situation.

PN Content for Crew

- Clear statement that the water is non-potable and should not be used for drinking food or beverage preparation, hand washing, teeth brushing, or any other consumptive use
- Description of the violation or situation
- When the violation or situation occurred
- Potential adverse health effects language
 - Specified in the ADWR and different for TC+ and EC+
- Population at risk including sensitive subpopulations
- What air carrier is doing to correct the violation/situation
- When air carrier expects to return water system to unrestricted public access

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Notice to the crew must consist of a prominent notice in the galley that includes the following:

- A clear statement that the water is non-potable and should not be used for drinking, food or beverage preparation, hand washing, teeth brushing, or any other consumptive use.
- A description of the violation or situation triggering the notice, including the contaminant of concern.
- When the violation or situation occurred.
- Any potential adverse health effects from the violation or situation, including the required health effects language for total coliform bacteria or *E. coli* bacteria, as provided in this section of the rule.
- The population at risk, including sensitive subpopulations particularly vulnerable if exposed to the contaminant (the provided health effects language should address this element).
- What the air carrier is doing to correct the violation or situation.
- When the air carrier expects to return the system to unrestricted public access.

Public Notification for Crew Only: Optional Mandatory Crew Briefing

- Crew briefing for crew-only notification
 - Only allowed when the water system is shut off or physically disconnected, or the flow of water to the taps is prevented
- Notice must be read in its entirety during each pre-flight crew briefing
- Notice must include all of the required content and be identical to a posted notice in design and content
- Records of the notice must be maintained and made available to the crew to refer to, in addition to being available EPA upon request

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EPA considers verbal mandatory crew briefings to only be appropriate when the aircraft water system has been shut off or disconnected, etc. such that passengers and crew do not have access to the aircraft water system.

A verbal briefing of the crew will provide information to the crew on the water system and will address concerns of the air carriers that passengers that see a posted notice in the galley may misinterpret the information, although they are at no risk because they cannot access the water.

Notice must be posted for crew and passengers if access to the water is not prevented by shutting off the flow or disconnecting the system.

In cases where a crew-only notification is appropriate, reading the notice during the MEL crew briefing may be used as a “public notification.” This can only be used when the water is physically disconnected or otherwise restricted to the passengers. All crew members must be present while the notification is read.

The presentation must be identical to a standard public notification in design and content. The only real difference is that it must be conspicuous only to the crew, and located where the crew would be able to view it during their normal course of duties.

The notice must then be kept in the aircraft logbook to allow for any crewmember to refer to later, and to provide a record of the notification.

Events that Trigger PN

1. Public access restricted due to routine, repeat, or follow-up TC+ or EC+ sample result
2. Non-EC+ events
3. EC+ events
4. EPA, air carrier, or crew determine notification is necessary to protect public health

Non-EC+ event – Water quality issue not due to an *E. coli* detection in water supply or unsafe boarding procedures resulting in *E. coli* in the water supply

EC+ event – *E. coli* has been detected or is otherwise introduced in the water boarded on the aircraft.

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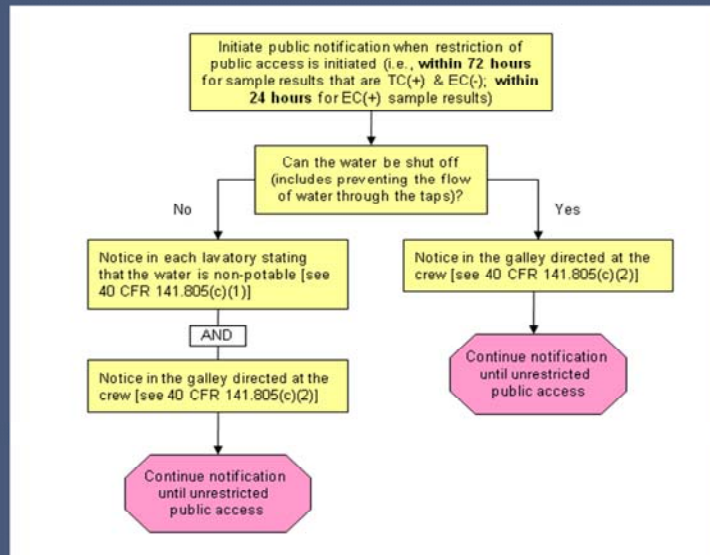
Air carriers must issue public notice to passengers and crew for the following events.

1. When public access to the water is restricted due to a routine, repeat or follow-up total coliform-positive or *E. coli*-positive sample result.
2. Non-EC+ events
3. EC+ events
4. The EPA, the air carrier, or the crew otherwise determine that public notification is necessary to protect public health.

A “non-*E. coli*-positive” event is a situation that results in a non-acute event. In other words, the water quality issue is not due to an *E. coli* detection in the water supply and unsafe boarding procedures have not knowingly resulted in *E. coli* in the water supply.

An “*E. coli*-positive” event is an event where *E. coli* has been detected or is otherwise introduced in the water boarded on the aircraft.

Exhibit 6.1, page 72 -- PN for a Routine, Repeat, or Follow-up TC+ or EC+ Result



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Public notification is required when public access to the aircraft water system is restricted in response to a TC+ sample or an EC+ sample. Air carriers must issue notice within 24 hours of receiving sample results that are EC+ and within 72 hours of receiving sample results/event that are TC+ and EC-. Recall that for a TC+ routine or repeat sample that is EC- air carriers are not automatically required to restrict public access. If they choose to collect repeat samples or conduct disinfection and flushing within 72 hours of learning of the positive sample, they are not required to restrict public access or provide public notification. Samples positive for *E. coli*, however, always require restriction of public access including public notification no later than 24 hours after the laboratory notifies the air carrier of the EC+ result.

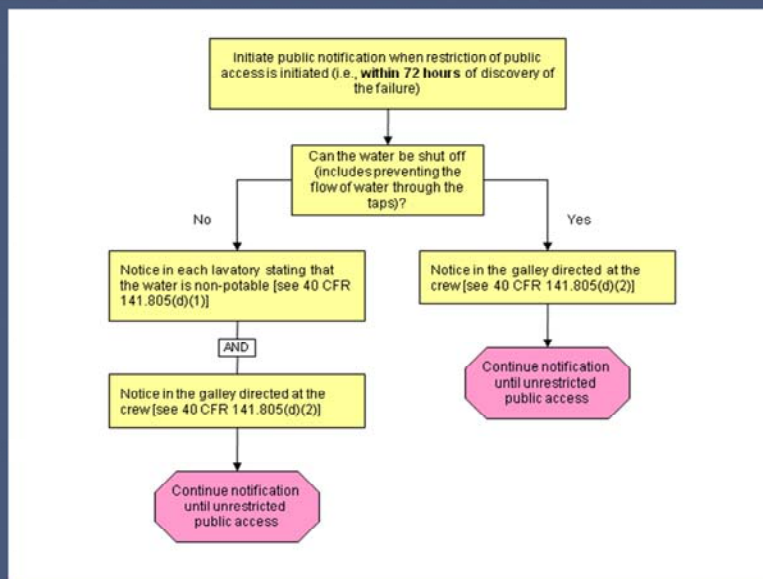
PN for a Routine, Repeat, or Follow-up TC+ or EC+ Result

• Duration

- If EC+ event, post notice until a set of follow-up samples is TC-
- If TC+ and EC- event, post PN until disinfection and flushing conducted and follow-up samples collected.
 - If follow-up samples are coliform-positive, post notice until a set of follow-up samples is TC-

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Exhibit 6.2, page 75 -- PN for Non-EC+ Events



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PN for Non-EC+ Events, cont.

• Duration

- Post PN until disinfection and flushing conducted and follow-up samples collected.
- If follow-up samples are coliform positive, post notice until a set of follow-up samples is TC-

• Types of Non-EC+ events

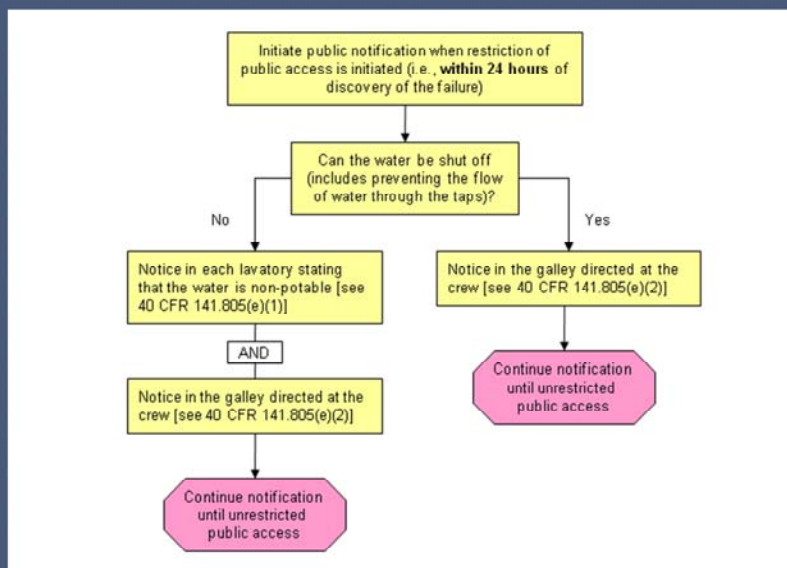
- Failure to perform routine D&F or routine sampling
- Failure to collect repeat or follow-up samples in response to C+/EC-
- Boarding water that does not meet FDA regulations, EPA standards, or is otherwise unsafe

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Public notification must be issued to the passengers and/or crew and restriction of public access implemented **within 72 hours**.

Air carriers must provide public notice if they fail to collect required routine samples, if they fail to perform required routine disinfection and flushing, or if they fail to collect repeat or follow-up samples in response to a sample result that is total coliform-positive and *E. coli*-negative. In addition, notice is required when an air carrier becomes aware of a non-*E. coli*-positive event resulting from water that has been boarded from a watering point not in accordance with FDA regulations, that does not meet EPA requirements for TNCWSs, or that has been otherwise determined to be unsafe due to non-compliance with the procedures for boarding water as described in the aircraft water system O&M plan.

Exhibit 6.3, page 78 -- PN for EC+ Events



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PN for EC+ Events, cont.

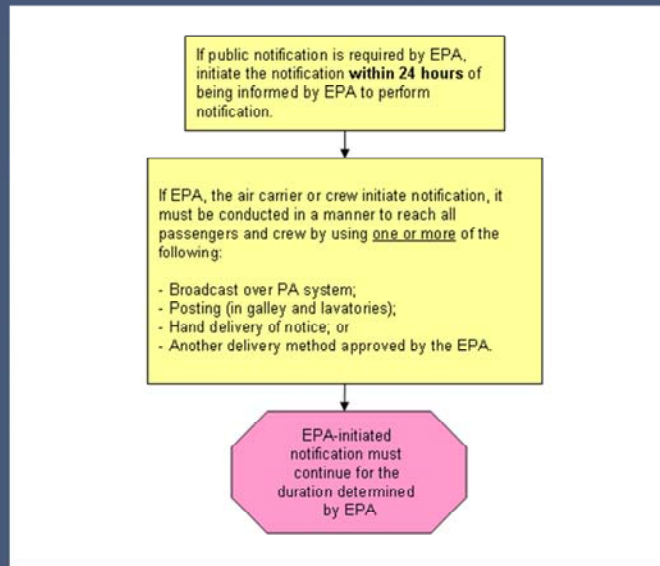
- Timeline
 - PN required **within 24 hours**
- Duration
 - Post notice until a set of follow-up samples are TC-
- Types of EC+ events
 - Failure to collect follow-up samples in response to EC+
 - EC+ event resulting from boarding water that does not meet FDA regulations, EPA standards, or is otherwise unsafe

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Public notification must be issued to the passengers and crew and restriction of public access implemented **within 24 hours**.

Air carriers must provide public notice if they fail to collect required follow-up samples in response to a sample result that is *E. coli*-positive. In addition, notice is required when an air carrier becomes aware of an *E. coli*-positive event resulting from water that has been boarded from a watering point not in accordance with FDA regulations, that does not meet EPA requirements for TNCWSs, or that has been otherwise determined to be unsafe due to non-compliance with the procedures for boarding water as described in the aircraft water system O&M plan.

Exhibit 6.4, page 81 -- PN When Deemed Necessary to Protect Public Health



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EPA, Air Carrier, or Crew Determine PN is Necessary to Protect Public Health

- Timeline
 - PN **within 24 hours** if required by EPA
- Notice must reach all passengers and crew
- Delivery Methods (use one or more):
 - Broadcast over PA system;
 - Posting (in galley and lavatories);
 - Hand delivery of notice; or
 - Another delivery method approved by EPA.

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Aircraft PWSs must also give notice for other situations that could cause serious health effects as a result of short-term exposure. EPA, the air carrier, or the crew may determine specific conditions exist that create a public health risk for which public notice is warranted.

With regard to the crew, prior to issuing a notice, they should first go through the proper chain of command/authority to determine whether a notice should be issued and, if so, the type of notice that should be provided.

If EPA determines that public notification is necessary, air carriers must provide notification to passengers and crew within 24 hours of being informed by EPA to issue notification and must continue notification for the duration determined by EPA.

Notification must be reasonably calculated to reach all passengers and crew that are onboard the aircraft at the time the notification is made with one or more of the following forms of delivery:

- Broadcast over a public announcement (PA) system on aircraft;
- Posting of the notice in conspicuous locations (such as all the galleys and lavatories in the affected aircraft);
- Hand delivery of the notice to passengers and crew; or
- Another delivery method approved in writing by EPA.

EPA, Air Carrier, or Crew Determine PN is Necessary to Protect Public Health, cont.

◉ Content

- No specific content requirements
- Content requirements for other violations or situations can be used as a guideline, when applicable

◉ Duration

- Determined by EPA for EPA-initiated notices

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While there are general requirements regarding the content of all public notices in the ADWR, there are no specific content requirements for this situation. However, the content requirements specific to other violations or situations requiring notification may be used as a guideline, when applicable.

EPA-initiated notice must continue for the duration determined by EPA.

Public Notification: Reporting to ARCS

- Report to EPA any event requiring public notice within 10 days of the event
 - Such as the air carrier being informed of the sample results by the laboratory
- Reporting indicates to EPA whether notification was provided to passengers and crew, or just crew
- A copy of the notice is not sent to EPA
 - But a copy must be made available to EPA as part of a compliance audit.

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All events requiring notification to passengers and crew must also be reported to EPA within 10 days of the event triggering the notification, such as the air carrier being informed of sample results by the laboratory. This reporting must include an indication of whether the required notification was provided to passengers or crew or both [40 CFR 141.806(b)(4)]. This does not require that a copy of a notification be provided to EPA. However, a copy must be available for EPA review as part of an audit.

If passenger access to the water system is physically prevented through disconnecting or shutting off the water, or the flow of water prevented through the tap(s), or if water is supplied only to lavatory toilets and not to any lavatory or galley taps, then notice to passengers is not required, only to the crew. If passenger access to the water system cannot be physically prevented through disconnecting or shutting off the water, or the flow of water cannot be prevented through the tap(s), then public notice to the passengers is required.