Advisories, the Web Form, and You

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Drinking Water Services

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PUBLIC HEALTH DIVISION Drinking Water Services

Overview of Presentation

- 1. Types of Boil Water / Do Not Drink Notices
- 2. Advisory WebForm Refresher
- 3. Regulator Responsibilities
- 4. Public Notices
- 5. Level 2 investigations and Lifting
- 6. Zero pressure boil Advisories
- 7. Localized Advisories
- 8. Questions and Answers?



Types of Advisories – Boil Water



- E. coli MCL in distribution
- Loss of Positive Pressure
- *E. coli* confirmed in groundwater source without 4-log inactivation of viruses
 - Or loss of chlorination as above



More extreme advisories

Do not Drink:

- Nitrate or other Chemical contaminant > MCL
- Harmful algae bloom / Cyanotoxins
- Others?

No Contact:

Serious chemical contamination





Reasons for Advisory WebForm

- Information is entered directly into database –no delay or double work
- Check status of advisories
- Historical record
- System's data on-line page indicates system is on a boil water notice with link for details at top
- Ensure notices are lifted
- Hopefully more WebForms coming soon(ish)!



Boil Water Notice Advisory WebForm

Replaces contact reports for any advisory





WATER ADVISORY: BOIL WATER - Loss of Pressure - See details



How to Enter a New Advisory

- DWS County Contracts May 5, 2017 email
- Log in required: https://yourwater.oregon.gov/webforms/
- Data Online home page Staff/Partner Login at bottom





Introduction :: Data Search Options :: WS Name Look Up :: WS ID Look Up :: DWS Home

Inventory List for all Oregon Drinking Water Systems in Excel or printable screen format

Tools for Laboratories :: Staff/Partner Login



Advisory WebForm Login

- <u>User name</u>: First letter of first name followed by last name
 no spaces or symbols, all lowercase
- <u>Temporary password</u>: Same password for Partners website & related documents
- Change your password: Must do this Passwords must be at least 8 characters long (not more than 16) and contain at least one uppercase letter, number, and symbol
- If you forgot your password –
 DWS.Countycontracts@state.or.us

Drinking V	Vater Services V	Veb Forms
Username:	jnusrala	
Password:	•••••	
Log In		



Advisory Tracking

NEW ADVISORY / SEARCH

Choose a water system to enter a new advisory or find an existing advisory:

PWS Number: OR	41
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or Search by PWS Name:	You can enter pa
'	return Sea Lion (
	will be returned a

YOUR ADVISORIES

PWS	PWS Name	Begin Date	Date Lifted	Туре	Reason
00524	LOCUST MOBILE VILLAGE	May 12, 2016	Open	Boil Water	E. coli, Cor Source Wit
05998	WESTRIDGE SUBDIVISION	Apr 29, 2016	Open	Boil Water	E. coli, Cor Source Wit
00784	PIONEER PARK CO-OP INC	Jan 20, 2016	Open	Boil Water	E. coli, Cor Source Wit



Appears on Data On-Line: Contacts & Advisories WORD for WORD

Lift Advisory

BOIL WATER - E. coli, Confirmed in Distribution Regulator. BYRD, MICHELLE P (DWP)

Person Contacted: David Ortega, 541-298-4496

Begin Date: 03/24/2017

Area Affected: System-wide

Details - Begin: Spoke with David about three E. coli positive repeat samples collected in the distribution system - Cramer Camp - on Thursday, March 23rd,

following an E. coli positive routine collected on Tuesday, March 21st. A triggered sample collected at the well on the 23rd was coliform absent. We discussed the boil water notice, investigating the source of contamination, disinfection protocols and follow-up sampling. Emailed David the boil water notice template and disinfection instructions. He will contact the county health department on Monday to discuss steps to lift the boil water notice. Corrective action is needed, followed by sampling to verify absence of coliform in the distribution system.

Consultation with county regulator.

Updates: 04/03/2017: David called. He shocked the system last week and collected a sample today.

Date Advisory Lifted: 4/6/2017

Advisory Lift Details:*

A sample collected on April 3rd was coliform absent and

the boil water notice has been lifted.

*Choose words carefully and check for typos. Full text will appear online when the "Submit Data" button is clicked.

SUBMIT DATA

Cancel Changes



Simple tips for Live data

- Avoid or explain acronyms
- Write only what you would feel comfortable being quoted in a newspaper
- Stick to the facts of the matter
- Be clear but concise

Details: A ten inch water main broke and they were not a will distribution door-hangers and repair the line t morning of 6/8, with results expected 6/9. if all ne

Lifted 06/09/2017: As of this morning the four sa Linn have come back negative and WS will be lif by the loss of pressure.



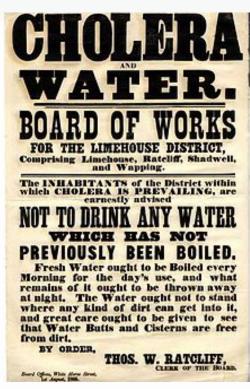
Regulator Responsibilities

- Assess whether advisory is necessary
- Ensure system uses appropriate notification content
- Discuss plan / process / methods to notify all customers within 24 hours
- Review corrective action steps (shock, flush)
- Provide support as water system resolves situation and advisory is lifted
- Document in webform



Tier 1 Public Notice Templates

- Direct operators to templates
 - Explain what happened,
 - What to do
 - Mandatory health effects language
 - Importance of notifying others
 - Water system contact information
- Ensure DWS (<u>compliance.dw@state.or.us</u>) receives a copy of notice within 10 days of water system issuance
- Other resources: Shock chlorination procedures and calculation tools



Delivery Methods / Options

- All persons served must be notified within 24 hours
- One or more of the following forms of delivery must be used:
 - Broadcast media, such as radio or television;
 - Posting of notices throughout area served; or
 - Hand delivery; or
- Consider sensitive populations
- Addressed in ERP?



Location of Templates Online

Main Drinking Water Services Page
 (www.healthoregon.org/dwp) – Water System
 Operations – Public Notice Resources & Templates

on > Environmental Public Health > Drinking Water > Water System Operations

Resources for Oregon Water System Operators

Drinking Water Services

Water System Operations

Surface Water Treatment

Capacity Development

Public Notice Resources & Templates

Fact Sheets & Best Management Practices

Water System Surveys & Outstanding Performance

Circuit Rider Program

Pineline Newsletter

Surface Water Treatment

Water systems that treat surface water sources have to deal with complex regulatory requirements, constantly changing raw water quality, and costly management of various assets. The Surface Water Treatment site provides information and tools needed to optimize water treatment processes and maximize public health protection without costly capital improvements.

Capacity Development

Water system capacity is the technical, managerial and financial capability of a water system to achieve and maintain compliance with drinking water standards and consistently provide safe drinking water. The Capacity Development site provides information and resources for drinking water systems to help build their capacity.

Public Notice Resources & Templates



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Follow-up of Boil Advisory

- If source issue, verify adequate treatment
- If distribution issue and Ecoli MCL exceeded, Level 2 investigation needed
 - Do not lift advisory until investigation completed and defects corrected
 - OR if operator inspects, identifies a problem, fixes, other corrective measures, provides photo documentation, OK to lift first



Lifting the notice

- Review sample number, location, and results
 - Chlorine residual returned to normal
 - Marked Special
- Water systems to notify all customers when notice is lifted explaining:
 - Need to flush internal plumbing to remove any bad water
 - OK to drink water without boiling
- Update WebForm with Lift info



Note about Localized Zero Pressure Boil

Advisories

- Best Management Practices
- Template language available
- Door hangers with simple language also acceptable









Pressure loss and contamination

- Leaky pipes can allow contamination to enter pipes during pressure changes
- Study: Microbial contamination found in 56% of soil and water surrounding pipes

Table 1. Determination of the Intrusion Volume (in gallons)
During a 30 Second Negative Pressure Event

	uring a 5	o second	1108411	e i i e soca		
Orifice						
Diameter						
(in.)	Power Loss		Main	Break	Fire	Flow
	1 ft	10 ft	1 ft	10 ft	1 ft	10 ft
1/32	0.01	0.08	0.04	0.12	0.04	0.12
1/8	0.2	1.2	0.6	1.8	0.6	1.8
1/2	3	18	8	27	8	26
1	8	58	23	96	24	87
2	13	185	55	335	46	244
					·	·

From Kirmeyer et al. 2001.

1ft and 10 ft refers to the height of the external water table above the pipe.





Location of Service Outage BMP

 DWS home page – Water System Operations – Fact Sheets & BMPs - BMPs

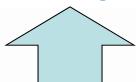
n > Environmental Public Health > Drinking Water > Water System Operations > Fact Sheets & Best Management Practices

Fact Sheets & Best Management Practices

Best Management Practices (BMPs)

Developed and prepared by the Drinking Water Advisory Committee (DWAC), these and water suppliers. Systems and suppliers are encouraged to incorporate these Bi

- Qutting Into or Repairing Existing Water Mains (pdf)
- Service Outages Due to Reduced Pressure Events (pdf)

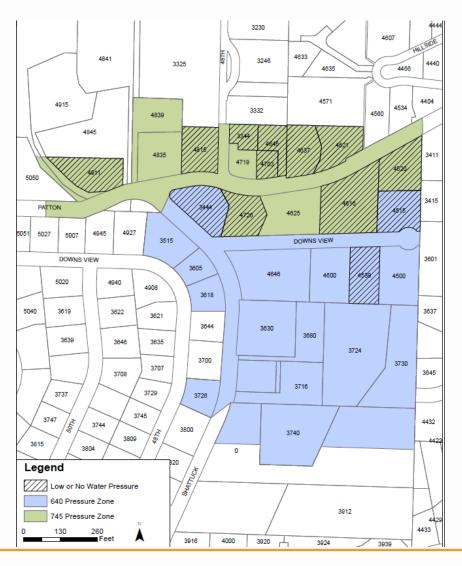




Localized versus System-Wide Boil Water Notices

- OAR 333-061-0042(1)(b) requires:
 - "Violation in a portion of the distribution system that is physically or hydraulically isolated from other parts of the distribution system"
- No possible way for water with E. coli to physically travel to section to be exempt from boil water notice for E. coli
- Need positive pressure readings or continuous water service in a section to be exempt
- Consider hydraulics of system: reservoir, pumps, pressure zones
- Master plan or other existing documentation required to limit the extent of a system wide boil water notice

Documentation for Localized Boil Water Notice due to Loss in Positive Pressure

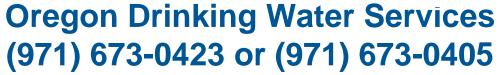






Questions?

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www.healthoregon.org/dwp





