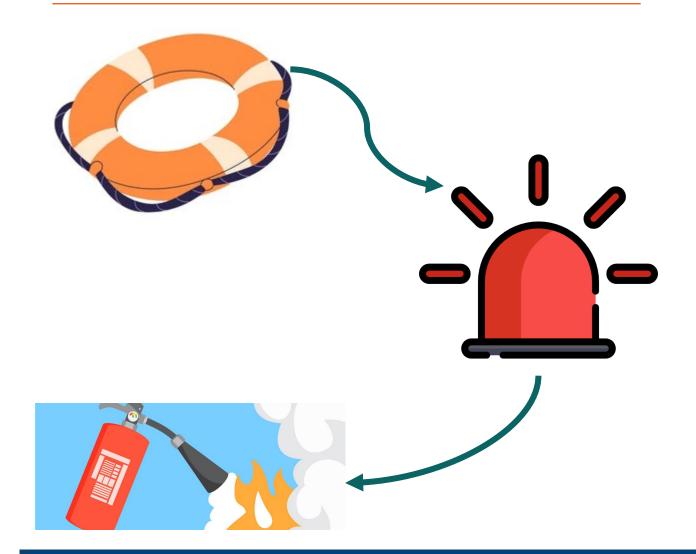


# Water Quality Alerts: Tips & Best Practices

Nicole Alfafara

Drinking Water Services

## **ALERT 101**





### What is a Water Quality Alert?

- A report generated by the SDWIS data system when a PWS:
  - Reports a positive coliform detection
  - Exceeds the MCL for DBPs, RADs, & IOCs
  - Exceeds ½ the MCL for Nitrate
  - Detects of VOCs or SOCs
  - Exceeds the AL for L&C
  - Reports a WQP excursion

#### Water Quality ALERT: LCRE



i You forwarded this message on 4/7/2025 2:05 PM.

Water Quality Compliance Alert

.....

County : Agency : System Type: C

Contact : .

Phone : .

Address :

City/State :

URL: https://yourwater.oregon.gov/inventory.php

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Alert ID : LCRE36761 Contaminant : LCR Excursion

Number of Excursions: 1
Sample Period: 3/1/2025
Data Received: 4/4/2025
Sample Point: EP-A

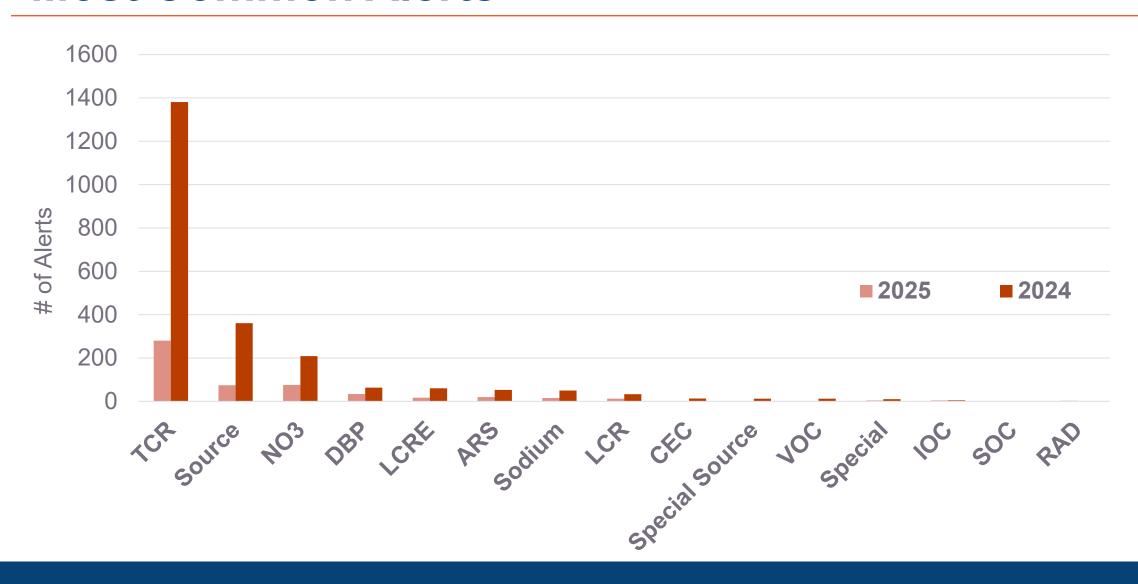


Mon 4/7/2025 1:55 PM

### **Types of Alerts**

- Coliform (Total Coliform and <u>E. coli</u>)
- Lead & Copper
- LCR Excursion (i.e., WQP Minimum)
- DBPs
- RADs
- IOCs (e.g.: Arsenic, Nitrate, Fluoride, Sodium, etc.)
- VOCs
- SOCs

#### **Most Common Alerts**



### What do I NEED to do when I get an Alert?

- Investigate all Alerts for regulated contaminants PE 50-4(b)(5).
- Acute MCL alerts (E. coli, Nitrate, Arsenic):
  - Immediately consult w/ PWS operators.
  - Ensure follow-up sampling, public notices, & corrective actions.
  - Submit Contact Report within 2 business days.

#### All other alerts:

- Promptly consult w/ PWS operators.
- Ensure follow-up sampling, public notices, & corrective actions.
- Submit Contact Report within 6 business days.
- Alert response is a performance measure via PE50-(18)(b).



#### Water Quality ALERT: LCRE



My System

i You forwarded this message on 4/7/2025 2:05 PM.

Water Quality Compliance Alert

\_\_\_\_\_

County : Agency : System Type: C

Contact : .

Phone : !

Address :

City/State :

URL: https://yourwater.oregon.gov/inventory.php

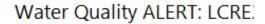
\_\_\_\_\_

Alert ID : LCRE36761 Contaminant : LCR Excursion

Number of Excursions: 1
Sample Period: 3/1/2025
Data Received: 4/4/2025
Sample Point: EP-A



Mon 4/7/2025 1:55 PM





To O Alfafara Nicole H

My System

=========

System Type: C

Contact :: Phone ::

Address : City/State :

Alert ID Contaminant

Number of Excursion

Sample Period

Data Received Sample Point

County Agency

i You forwarded this message on 4/7/2025 2:05 PM.

Water Quality Compliance Alert

: https://

FW: Water Quality ALERT:



Alfafara Nicole H

To ○ Justin Kanoff; ○ districtoperat

My System

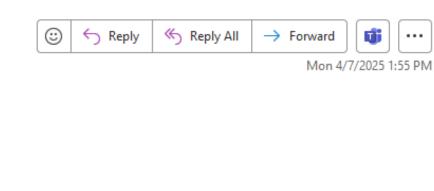
Hi Dave and Justin,

The system had 2 LCR excursions for not meeting the minimum entry point pH level of 7.4 at EP-A in March of 2025. As of now the system has 3 excursion in the current 6 month monitoring period (January 1, 2025-June 30, 2025). Please note the system is allowed up to 9 excursions in a 6-month monitoring period, so no further action is needed at this time.

Associated Contact Report

Please let me know if you have any other questions.

Cheers, Nicole





Mon 4/7/2025 2:06 PM

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## Responding to an Alert

Review & learn the alert yourself.



Then contact & notify the system.

Thoughtful, informed

communication is more

communication is more

powerful than quick reaction

Know your material before picking up the phone.

#### **Review the Alert Yourself**

- Learn the context = prepare to assist.
  - System Info. Type (CWS, NTNC, etc.) & source (GW/SW).
  - Compliance Status Recent system alerts, violations, & advisories.
  - Alert Info. contaminant, level reported, & sampling location.
  - <u>Contaminant Info.</u> Current monitoring schedule, MCL, public health impacts, & applicable regulations/rules.
  - Next Steps Required sampling, PN requirements, corrective actions, & RTC criteria.
  - Resources Templates, Website Links, Certified/Accredited Labs List, etc.

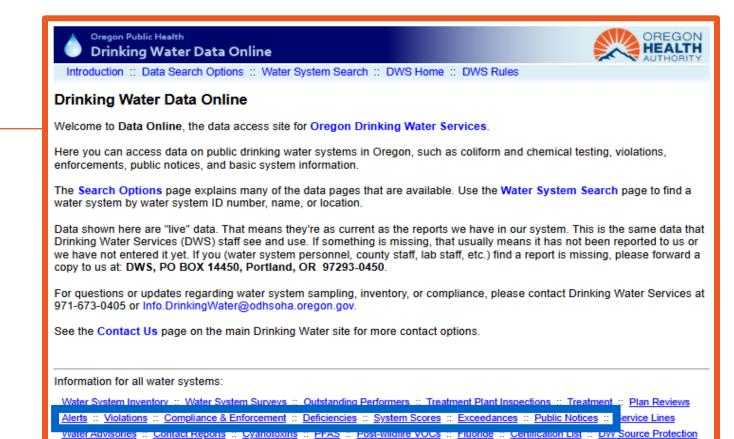
#### **Other Resources**

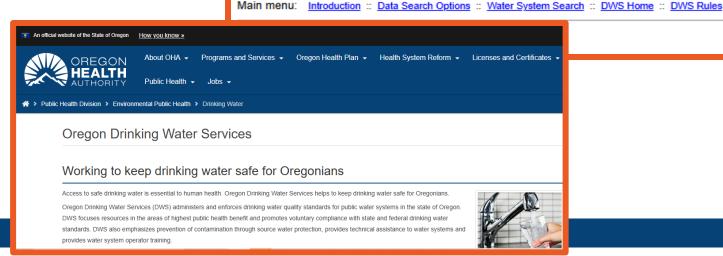
Public Notice Templates



Certified Labs Information



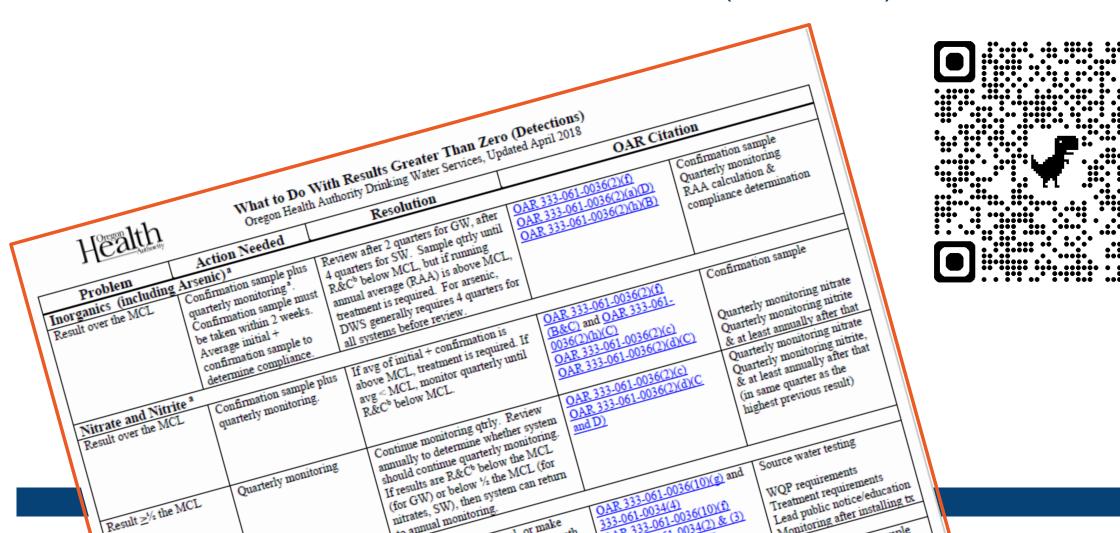




Staff/Partner Login

## Responding to Chemical Detection Handout

"What to Do With Results Greater Than Zero (Detections)"



### Contact the System about the Alert

- Notify
  - Outline Next Steps

Advisory / Sampling Required / Monitoring Schedule A / PN

- Reveal RTC Criteria
- Document
  - Provide Resources
  - Write Contact Report
- Follow-up (as needed)

#### <u>Tips</u>

- Lead w/ clarity & break down the "reg speak".
- 2. Frame guidance around shared goal.
- 3. Set clear expectations: clarify the "must" vs. the "should".
- 4. Set them up for success.



### **Guess that ALERT: Category**

- Contaminant Hint
- Regulatory Hint
- Alert Response Hint



What type of ALERT does this describe?

#### 1. Guess that ALERT: Food & Drink

- Contaminant can naturally occur in soil/rock or be introduced during water treatment—and it may be welcomed on french fries.
- There is no MCL but EPA has an Advisory Level of 20 mg/L.
- Can affect taste & raise a few eyebrows for folks on special/restricted diets.

What type of ALERT does this describe?



### Responding to a Sodium ALERT

Hi Dan,

Just an FYI: Sodium level for Well #5 was at 26 mg/L from the sample collected in September (20 mg/L is the advisory level and sodium does not have a MCL). Associated Contact Report

Let me know if you have any other questions.

Cheers, Nicole **Email System** 

DWS emailed system contact to inform them of recent sodium results. Sodium was 26 mg/L in the ASR well sample collected on 9/25/2023 (20 mg/L is the advisory level and sodium does not have a MCL). DWS staff notified Washington County contacts of the sodium results as well.

**Contact Report** 

Subject: FW:

Sodium Alert

Hi Washington County Partners!

A well had an alert for sodium.

This is merely an FYI.

OAR 333-061-0036 (2)(e)(B) mentions notification of the public health department.

Cheers,

Nicole

#### **Email Health Department**

(B) The water supplier shall report to the Authority the results of the analyses for sodium as prescribed in OAR 333-061-0040. The Authority shall notify local health officials of the test results.

### 2. Guess that ALERT: Pop Culture

Alert ID : LCRE35785

Contaminant : LCR Excursion

Number of Excursions: 25 Sample Period: 9/1/2024 Data Received: 10/8/2024

Sample Point : EP-A

- Not necessarily a specific contaminant.
- If a system fails to meet minimum WQP levels more than 9 times in a 6-month monitoring period, the regulator could start singing these tunes:
  - Look What You Made DMCE Do... Issue a Treatment Technique Violation.
  - You Are Never Ever Getting Back to Compliance (at least during this 6-month monitoring period).
  - Blank Space, Baby... And You can Write Your Tier 2 PN Every 3 Months.
  - You can NOT shake it off—you've got to do two rounds of 6-month tap L&C sampling.
- What type of ALERT does this describe?

### Responding to a LCR Excursion ALERT

- Verify understanding of WQP minimums & their role in effective CCTX.
- Remind that no more than 9 excursions are permitted per each 6-month monitoring period.
- Inform a TT violation will be issued.
- Explain the Tier 2 PN requirement & provide template.
- Notify that tap LCR monitoring will revert to the original number of samples every 6 months (i.e., two 6-month rounds).
- Document communications in Contact Report.

### 3. Guess that ALERT: History

- Gained attention in the 1940's for causing infant methemoglobinemia—aka
   "blue baby syndrome."
- Crossing the Delaware was bold—but exceeding the 10 mg/L MCL; that's a
  health risk we must declare with a confirmation sample within 24 hours..
- This one's no tea party—exceed the MCL and a violation is served, hot and steeped w/ a Tier 1 PN & quarterly sampling.
- When levels march past 5 mg/L (1/2 the MCL), it is quarterly sampling & the town crier/journalist must warn everyone in the annual CCR.

What type of ALERT does this describe?

#### Responding to a Nitrate ALERT (>10 mg/L)

- Highlight health concerns
  - Infants < 6 months susceptibility</li>
- Direct collection of confirmation sample
- Inform a MCL violation will be issued
- Explain the Tier 1 PN requirement & provide template.
- Notify of quarterly sampling schedule.
- Document communications in Contact Report.





#### Responding to a Nitrate ALERT (>5 mg/L)

Highlight health concerns.

 Notify of quarterly sampling schedule.

Info. Statement in CCR

 Document communications in Contact Report. From: Alfafara Nicole H < Nicole.H.Alfafara@oha.oregon.gov >

Sent: Friday, February 14, 2025 10:21 AM

 $\textbf{To:} \ \, \text{Jon Kawaguchi} \, < \underline{\text{Jon Kawaguchi@washingtoncountyor.gov}} \\ \text{; Larry Fenster} \, < \underline{\text{Larry Fenster@washingtoncountyor.gov}} \\ \text{; Larry Fenster@washingtoncountyor.gov}} \\ \text{; Larry Fenster@washingtoncountyor.gov} \\ \text{; Larry Fenster@washingtoncountyor.gov}} \\ \text{;$ 

Ashley Davis <a href="mailto:Ashley-Davis@washingtoncountyor.gov">Ashley Davis@washingtoncountyor.gov</a>; Dawn Wair@washingtoncountyor.gov

Subject: [EXTERNAL] RE: Water Quality CHEM ALERT - PWS

Just a friendly "Nitrate above alert level but below the MCL" refresher:

Nicole's Next Steps Breakdown:

- Submit a request to DMC to place the system on a quarterly nitrate monitoring schedule and notify the system accordingly.
- · Conduct an annual review to assess whether quarterly monitoring should continue.
- If results are reliably and consistently below the MCL for groundwater or below ½ the MCL for surface water nitrates, the system may transition back to annual monitoring.

Rule Ref: OAR 333-061-0036(2)(c)

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Contact Report Example: The water system is now on quarterly nitrate monitoring due to elevated nitrate. The sample collected on XXX tested at XXX mg/L. This is under the MCL of 10ppm.

-Nicole

consistently below the MCL.

(C) At TNC and state regulated water systems, water suppliers must monitor nitrate annually at each point in the distribution system representative of each source after treatment or at entry points to the distribution system after any application of treatment. At TNC water systems, water suppliers must monitor quarterly for at least one year following any one sample in which the concentration of nitrate is 50 percent of the MCL or greater. Monitoring may return to annual after four consecutive quarterly samples are found to be reliably and consistently below the MCL.

### 4. Guess that ALERT: Geography/Travel

- No passport needed—just TOC & free chlorine! Born in Treatment Plant Republic, these contaminants roam the Distribution Empire
- MCLs: 0.08 mg/L, 0.06 mg/L, 0.01 mg/L and 1.0 mg/L—coordinates to trouble.
- Follow the LRAA Trail—a scenic, four-quarter Stage 2 calculated journey. If you find
  yourself above the MCL, pull over for a Tier 2 PN pitstop—violation ahead and time to
  draft a written corrective action plan!
- OEL: = "Outta Expected Levels"—X marks the spot... and it smells a bit too treated to be treasure.
- OEL > MCL = no time for pretty postcards, time to report on chlorine, organics, & treatment tweaks within 90 days.
- What type of ALERT does this describe?

#### Responding to a DBP ALERT (>MCL)

- Review LRAA
- Inform a MCL violation will be issued.
- Explain the Tier 2 PN requirement & provide template.
- Explain Written Corrective Action Report requirement.
- Notify of quarterly sampling schedule.
- Document communications in Contact Report.



#### Responding to a DBP ALERT (>MCL)

#### OHA Drinking Water Services Contact Report Details

PWS ID:

PWS Name:

Who Was Contacted:

Contact Phone:

Contact Date: 09/27/2024

Contacted By: ALFAFARA, NICOLE (DWP)

Contact Method/Location: Phone

Assistance Type: WATER QUALITY ALERT RESPONSE

Reasons: Disinfection Byproducts

**Details:** In August of 2024 the systems DBP quarterly sample taken on August 13th

resulted in the system TTHM exceeding both the OEL and the LRAA MCL of

0.08 mg/L (TTHM LRAA = 0.088 mg/L and TTHM OEL = 0.090 mg/L).

The system was encouraged to reach out to the Circuit Rider to address the ongoing DBP level and was notified of the need to take the following steps:
-Email DWS with a written plan within 90 days outlining how they will lower

TTHM levels below the MCL that includes a projected timeline.

-Issue a public notice (PN Template) within 30 days to customer and submit a

copy to DWS.

Associated Alerts: DBP-86 - 08/19/2024 - TTHM

#### Responding to a DBP ALERT (>OEL)

Review OEL

Explain OEL report

requirement.



 Document communications in Contact Report.

#### OHA Drinking Water Services Contact Report Details

PWS ID:

PWS Name:

Who Was Contacted:

Contact Phone:

Contact Date: 11/21/2023

Contacted By: HOFELD, EVAN (DWP)

Contact Method/Location: Email

Assistance Type: WATER QUALITY ALERT RESPONSE

Reasons: Disinfection Byproducts

Details: On 11/20/23 I received an alert for a TTHM result of 0.0925 mg/l from sampling

completed 11/14/23 resulting in an OEL level of 0.083 mg/l and requiring an OEL report (no LRAA MCL was exceeded). I e-mailed David Nordman about the exceedance, the need to complete an OEL report, and included a link to information about OELs and the OEL report template we have on our website (the system had also exceeded the TTHM OEL and completed an OEL report

in 3rd quarter 2023).

Update: The OEL report received on January 31, 2024, highlighted elevated levels of soluble organics, improper PASS-C dosage, and overdue cleaning of storage tanks may have attributed to the OEL exceedance. To address these concerns, the system intends to clean the tanks in February 2024 and increase coagulant dose in attempt to decrease soluble organics.

#### **BONUS ROUND**

Each of the 4 rounds in "Guess That Alert!" focused on a different type of water quality alert.

What 4-letter acronym below represents those 4 alert types?

- A. SNLC
- B. NELD
- C. SLND
- D. I have no idea.



#### **BONUS ROUND: S.L.N.D.**

S.L.N.D. – Sodium. L&CExcurison. Nitrate. DBP.



S.L.N.D. – Signal. Learn. Notify. Document.



### **Breakout Session Activity**

- Signal: You received an alert email that Timbers Island, a groundwater system in Goalpost County serving 2,025 had a routine coliform sample come back TC+/EC- at Site Diego #21.
- As a group discuss the ideal response:
  - What do you need to learn?
  - What do you need to notify the system's operator of?
  - Which documentation or resources, if any, must be submitted or posted, or would be helpful to share?
  - Draft a sample contact report or share your ALERT response tips.

## **Breakout Session Recap**



## **Final Take Home Messages**

- SLND
- Responding to alerts isn't just about reacting—it's about assisting & directing with clarity, consistency, & confidence.
- Effectively navigating your responsibilities requires:
  - Proactive mindset.
  - Solid understanding of regulatory requirements.
  - Clear & timely communication.



#### **Questions & Contact Information**



#### **My Contact Information**:

Phone: 503-278-1531

Nicole.H.Alfafara@oha.oregon.gov



#### **General DWS Program Contact Information**

Email: info.drinkingwater@odhsoha.oregon.gov

Phone: 971-673-0405

Fax: 971-673-0694







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