

SEAL ROCK WATER DISTRICT  
**Board of Commissioners**  
**Emergency Board Meeting**  
**Thursday, August 31, 2023, @ 4:00 p.m.**  
**Public Meeting by Zoom Video Conference**

SRWD will hold this meeting through Zoom video conferencing. Due to the limited capacity for in-person meetings, the public is invited to attend this meeting electronically. Please E-mail tkarlsen@srwd.org to receive the meeting login information. SRWD encourages the public to submit written comments on items included in the agenda by email to tkarlsen@srwd.org by 2:00 p.m. on the day of the meeting to be included as public testimony. Comments received will be shared with the SRWD Board of Commissioners and included in the permanent record.

- **Call Emergency Meeting to Order:**
- **Discussion and Information Items:**
  - Consider Aerial Application of Herbicides in the South Beaver Creek Watershed Approved by Oregon Department of Forestry NOAP 2023-553-09307  
Presented by: Adam Denlinger, General Manager  
Jeff Hollen, SRWD General Counsel

*Public comment period provides the public with an opportunity to address the Commissioners regarding items on the agenda. Please limit comments to (3) minutes.*

- **Executive Session: according to ORS 192.660(2), Concerning:**  
The SRWD Board may meet in Executive Session, pursuant to ORS 192.660(2)(h); To consult with legal counsel concerning the legal rights and duties of a public body with regard to current litigation or litigation likely to be filed. Representatives of the news media and designated staff shall be allowed to attend the executive session. All other members of the audience are asked to leave the room. Representatives of the news media are specifically directed not to report on any of the deliberations. No final decisions shall be made in Executive Session.
- **Adjournment:** Next Meeting: **September 14, 2023, @ 4:00 p.m.** Regular Board Meeting or establish date.



1037 NW Grebe Street  
 Seal Rock, Oregon 97376  
 Phone: 541.563.3529 – Fax: 541.563.4246  
 www.srwd.org



# Seal Rock Water District

<b>DATE ACTION REQUESTED: August 31, 2023</b>						
<b>Ordinance</b>		<b>Resolution</b>		<b>Motion</b>		<b>Information</b> <b>X</b>
<b>Date Prepared: August 18, 2023</b>				<b>Dept.: Administration</b>		
<b>SUBJECT:</b> Aerial Application of Herbicides in the South Beaver Creek Watershed				<b>Contact Person for this Item:</b> Adam Denlinger, General Manager adenlinger@srwd.org. 541-563-4447		

**RECOMMENDED BOARD ACTION:**

This is an information item only to consider the Aerial Application of Herbicides in the South Beaver Creek Watershed Approved by the Oregon Department of Forestry (ODF), NOAP 2023-553-09307

**BACKGROUND:**

Update: As of August 30, 2023:

SRWD received notification through the FERNS notification process that the subject timberland owner has filed a new NOAP for Ground -Pressurized / Broadcast (Backpack-Spray) of herbicides on the same lots. A copy of NOAP 2023-553-10095 released yesterday on the Ferns website has been made available to the Board and is posted on the district’s website.

Submission of a new NOAP by the timberland owner does not void the existing NOAP scheduled to go into effect on September 2, 2023.

The proposed new NOAP which includes backpack spray does not change the district’s planned approach to managing raw water conditions affected by the application of herbicides.

Earlier this month the district was notified of the potential for aerial application of herbicides on approximately 475 acres of timberland in the South Beaver Creek Watershed. Staff immediately obtained the Notification of Operation and Permit to Operate Power-Driven Machinery NOAP provided to the Board of Commissioners on August 10<sup>th</sup> and is included as a supplemental to this staff report.

On August 7, 2023, district staff reached out to Mr. Tyrol Forfar to discuss the aerial application of herbicides and to notify the consultants, HFI Consultants of the district’s raw water intake downstream of the proposed spray area. The district requested that the consultant please consider attending a meeting with the district to exchange information regarding planned spray activities and the district’s raw water intake operation.

On August 10, 2023, district staff attended a consultation with DEQ, Source Water Protection Experts to consult with the department regarding best management practices to protect the district’s Beaver Creek intake from pollutants.

On August 10, 2023, the district also submitted a public comment to the Oregon Department of Forestry (ODF) regarding the Aerial Application of Herbicides under NOAP 2023-553-09307. A copy of those comments is included with this staff report.

At the direction of the SRWD Board on Monday, August 14, 2023, the district coordinated a public meeting with State Representative, David Gomberg, Lincoln County Commissioner, Casey Miller, and the community to discuss the aerial application of herbicides. This was a large group of over 40 attendees joining in the conversation by Zoom and in person.

On August 15, 2023, the district attended a meeting hosted by Representative Gomberg to discuss the next steps in reaching out to the forestland owner. This meeting included representatives from the Governor's Office and Lincoln County Commissioner, Casey Miller.

On August 16, 2023, staff attended the Lincoln County Board of Commissioners meeting to speak in opposition to aerial application of herbicides.

On August 16, 2023, the district attended a 2<sup>nd</sup> community meeting hosted at the Waldport Community Center and provided an update to the group with regard to the potential for meeting with the forestland owner Mr. Soren Nymark.

On August 16, 2023, the district reached out to the Oregon Health Authority for guidance regarding testing for herbicides/pesticides under state regulations under OAR 333-061 to sample for the following constituents:

(3) Organic chemicals: (a) At community and NTNC water systems, water suppliers must monitor according to this section for the following regulated synthetic organic chemicals (SOC): alachlor, atrazine, benzo(a)pyrene, carbofuran, chlordane, dalapon, dibromochloropropane, dinoseb, dioxin(2,3,7,8-TCDD), diquat, di(2-ethylhexyl)adipate, di(2-ethylhexyl)phthalate, endosulfan, endrin, ethylene dibromide, glyphosate, heptachlor, heptachlor epoxide, hexachlorobenzene, hexachlorocyclopentadiene, lindane(BHC-g), methoxychlor, oxamyl(Vydate), picloram, polychlorinated biphenyls, pentachlorophenol, simazine, toxaphene, 2,4-D and 2,4,5-TP silvex.

The district's most recent SOC samples performed in July of this year were Non-Detect (ND). Results are included with this report.

On August 17, 2023, district staff provided the attached Public Service Announcement (PSA) regarding the district's response to aerial application of herbicides.

On August 17, 2023, the district received an email from the Governor's office which includes:

- So long as the property owner abides by the Oregon Forest Practices Act, ODF does not have regulatory authority to requirement management/spray changes. Current forest practice rules require that applicators follow the label, protect streamside vegetation, and follow minimum spray buffers (75 ft for fish and domestic use streams, 50 ft for non-fish, non-domestic streams with water). The forestry rules and/or laws would need to be changed to require more than the current legal minimum.
- DEQ is also watching the situation closely and making suggestions to ODF. As you're aware, DEQ is advising Seal Rock Water District on how to best adapt to the proposed application to prevent exposure to residents through their drinking water.
- Under current statute, DEQ's role is advisory unless a pesticide exposure is reported to PARC (the Pesticide Analytical Response Center) or there is a verified water pollution from application. DEQ does not have the authority to intervene more directly.

On August 18, 2023, the district met for a 2<sup>nd</sup> time with Representative Gomberg's Office, and Commissioner Miller to discuss the availability of hosting a meeting with Mr. Nymark.

On August 21, 2023, the district hosted a meeting at the request of a small number of SRWD customers to exchange information and discuss the potential of taking legal action to prevent the aerial application of herbicides under the Safe Drinking Water Act. District staff provided this information to the district's legal counsel for review, and we have reached out to the EPA requesting a meeting with the district to discuss our rights under the Safe Drinking Water Act.

Communicating with the Regional Administrator through the local channels is the proper course of action to obtain assistance, which is the most expedient way to prevent dangerous activity from occurring. District staff have attempted to reach the administrator several times, but as of the date of this staff report, we have not received a response to our replies.

On August 21, 2023, the district reached out to our Oregon association partners to include, Special Districts Association of Oregon (SDAO), Oregon Water Utility Counsel (OWUC), and Oregon Association of Water Utilities (OAWU) for guidance and feedback regarding the aerial application of herbicides in watersheds.

On April 23, 2023, the district again reached out to the consultant for ANE Forests of Oregon C/O HFI Consultants, Tyrol Forfar, and left urgent voicemails requesting an informal meeting with the district to include Representative Gomberg and Commissioner Miller. I spoke with Mr. Forfar, and it seems like Mr. Nymark is open to a meeting. On behalf of the district, I expressed the importance of meeting with the timber owner to exchange information regarding the district's operation and risk relative to the proposed aerial application of herbicides. Mr. Forfar did affirm that aerial application of herbicides has not been removed from consideration and reports that the timber owners are well within their rights under the Oregon Forest Practice Act with respect to this issue.

The district has reached out to EPA Department Director Stacey Murphy with a request for consultation concerning this matter. There appears to be no ability for the district or a citizen to enforce the Safe Water Drinking Act under Section 1431, as that authority is limited to the EPA and their Regional Administrator.

The district has also reached out to ODA to provide assistance to the district under the state's Pesticide Management Plan for Water Quality Protection. Specifically, as it relates to: *"The overall plan relies on the formation of a Water Quality Pesticide Management Team (WQPMT) composed of representatives from each of the four agencies (ODA/DEQ/ODF/OHA) responsible for water quality in Oregon. This team will act as a coordinating advisory team between state agencies and key stakeholders.*

On August 25, 2023, the district reached Christina Higby, Citizen Advocate & Tribal Liaison with the Department of Agriculture to discuss pulling together the WQPMT members for a meeting with the district and Representative Gomberg and Commissioner Miller.

On August 31, 2023, district staff attended a radio program in Newport with Lincoln County Commissioner Casey Miller to raise community awareness regarding the Aerial Application of Herbicides in South Beaver Creek.

Staff want to impress upon the Board and the Community that we are doing everything within our power in response to this issue. Staff are working day and night responding to numerous emails, phone calls, and requests for information related to this issue.

### **Going Forward:**

The district will remain in contact with state agencies and the forestland owner's consultant to monitor the proposed application of pesticides while we continue to formalize a management plan in response to this issue. It is the district's intent to take every precaution necessary to protect the water system, to include:

- Shutting the Beaver Creek intake pump station off during the application of herbicides.
- Allow flow in the creek to move through the stream beyond the POD.
- Sample the raw water and if results are non-detect the district will resume operation, as long as it's safe to do so.
- If hazardous chemicals are detected the district will not use the Beaver Creek system, report results to DEQ and PARC, and continue sampling.

The district has a 5-day supply of water depending on the time of year. However, if necessary, the district will suspend the operation of the intake longer, continue sampling, and move to a secondary source of water until it's safe to resume operation on the Beaver Creek system.

On September 6, 2023, the district will meet with representatives from the WQPMT members to discuss the development of a formal Pesticides Management Plan for Water Quality Protection on Beaver Creek.

The district has been quick to respond to customer requests for information related to this issue. District staff have been working around the clock responding to numerous emails, phone calls, and voicemails in an effort to keep up with the demand for information.

District staff is committed to updating the SRWD Board and our customers regarding any new developments with respect to this issue and will update our website as new information becomes available.

Respectfully submitted:

By: *A. Denlinger*  
Adam Denlinger, General Manager



# NOTIFICATION OF OPERATIONS/PERMIT TO OPERATE POWER-DRIVEN MACHINERY (NOAP)



**Notification Number:** 2023-553-09307  
**Operation Name:** ANE - South Beaver Creek Aerial Spray

### This NOAP includes the following for the lands described in the NOAP:

- The notifier has given notice to the State Forester that pesticides will be applied by helicopter.
- The Oregon Department of Forestry or local Forest Protective Association has issued a permit to use fire or operate power-driven machinery.

**Person Submitting the NOAP:** Tyrol Forfar  
**Date NOAP Submitted:** August 2, 2023  
**Report Generated:** August 7, 2023

### Waiting Period

You must wait at least 30 days after submitting this NOAP before spraying (see ORS 527.788(3)). This waiting period cannot be waived.

### 90-Day Application Window

Spray activity may happen only during the 90-day window. You may notify for a new 90-day window using the "I Want To..." menu in your Notification Summary within the E-Notification system.

**Window Start Date:** 9/2/2023  
**Window End Date:** 11/30/2023

### Oregon Department of Forestry Contact Info

Toledo  
763 NW Forestry Rd  
Toledo, Oregon 97391  
Phone: (541) 336-2273  
Stewardship Forester: Rieghly Sitton  
Email: rieghly.k.sitton@odf.oregon.gov

### Operator's Fire Emergency Contact

Contact Name: Tyrol Forfar  
Phone: 360-600-7691

### Landowner(s)

Sorn Nymark  
ANE Forests of Oregon C/O HFI Consultants  
PO Box 1929  
Battle Ground, Washington 98604  
360-600-2342

### Notice to Landowner(s)

The Oregon Department of Forestry may conduct on-site inspections for compliance with forest practice and fire protection laws.

### Written Plans

A Written Plan (in addition to this NOAP) is required before operation activities can begin near the protected resources listed with the Unit information or Site Conditions below or otherwise described to you by the Stewardship Forester ([OAR 629-605-0170](#) (2), (3), and (5)). The Written Plan must describe in detail how the resource(s) will be protected during the operation. There is a waiting period for Written Plans that is separate from the notification waiting period. Contact your Stewardship Forester for more information.

### Site Conditions (reported by the Notifier)

- Stream within 100 feet of area.
- Seep or spring within 100 feet of area.

Domestic water supply within 300 feet of area.

Bald Eagle nesting site within half mile of area.

Home or other dwelling within 300 feet of helicopter application of pesticide.

## Notices

Submitting this Notification of operations on lands described in the NOAP constitutes consent for Department staff to access the property to ensure compliance with state law and rules governing forest practices through on-site inspections. The landowner must notify the stewardship forester to withdraw this consent.

**Permission from Landowner and Timber Owner Required for Operators, purchasers, contractors, general public:**

Submitting this notification does *not* give permission for operators, purchasers, contractors, or the general public to enter someone else's land or remove forest products. Anyone doing so must first obtain permission from the landowner and timber owner.

**Pesticide Use:** Pesticide users must follow all pesticide product label requirements, including any that prohibit applications near or into streams or other water bodies! Pesticide users must be sure the label that comes with the pesticide product allows the planned use! Contact the Oregon Department of Agriculture [here](#) or at 503-986-4635 for information on allowed uses of pesticide products.

**Neighborhood Communication:** Notifier must mark each unit as pending by 7 p.m. the day before spraying.

For pending units, notifier must report the spray as complete or incomplete. Notifier must mark units as complete within 24 hours of spraying. For partially sprayed units with plans to return to finish spraying, notifier must report the unit as incomplete by 11:59 p.m. the day after spraying.

For units that do not get sprayed, no reporting is needed. The notifier must mark the unit as pending again before spraying.

**Using Water for Pesticides or Slash Burning:** If you plan to use on-site water (water from a stream, for example) to mix pesticides or for slash burning, you must provide a copy of this NOAP to the local offices of the Oregon Water Resources Department and the Oregon Department of Fish and Wildlife (see ORS 537.141).

**Registrants & Subscribers:** There may be registrants and/or subscribers who receive this Notification. See the Notification Summary page within the E-Notification system or contact ODF for more details.

**NOAP Changes:** The notifier must inform the Oregon Department of Forestry of any changes in a NOAP before the activity takes place. A new NOAP may be required.

**Unit 1 of 8: Unit240North\_1****No registrants within 1 mile**

8.6 acres

Lincoln County(s)

T12S R11W Sec28

Regulated Use Area: WO-1

**Operator:**

Anthony Ghidossi  
 Pacific AG Services North  
 West LLC  
 PO Box 875  
 Marysville, Washington 98270  
 (775) 225-4212

**Activity:** Herbicide Application (Unit)

**Chemical(s):** Aquaneat, Rotary 2 SL, Oust Extra  
**Chemical Carrier(s):** water  
**Chemical Additive(s):** Super Spread MSO

**Method(s):** Aerial - Helicopter**Resources on or near this Unit**

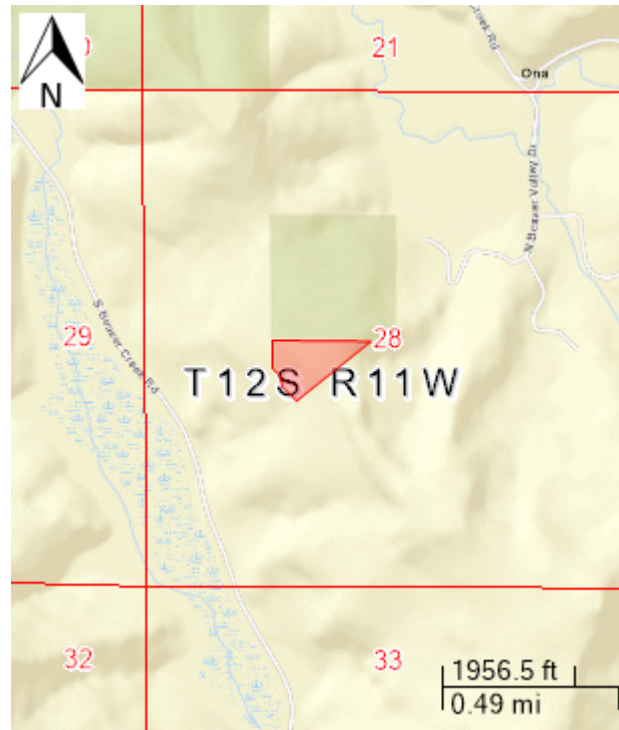
Statutory Written Plan required within 100 feet of

Statutory Written Plan required within 300 feet of

Eagle

**Notes:**

1. A statutory written plan is required for operations within *300 feet* of Estuarine or Marine Wetlands, not 100 feet as may be shown above.
2. Contact your Stewardship Forester about streams not shown on the map.

**Unit Map: Unit240North\_1**



**Unit 2 of 8: Unit240North\_2****No registrants within 1 mile**

89.0 acres Lincoln County(s) T12S R11W Sec28,T12S R11W Sec33 Regulated Use Area: WO-1

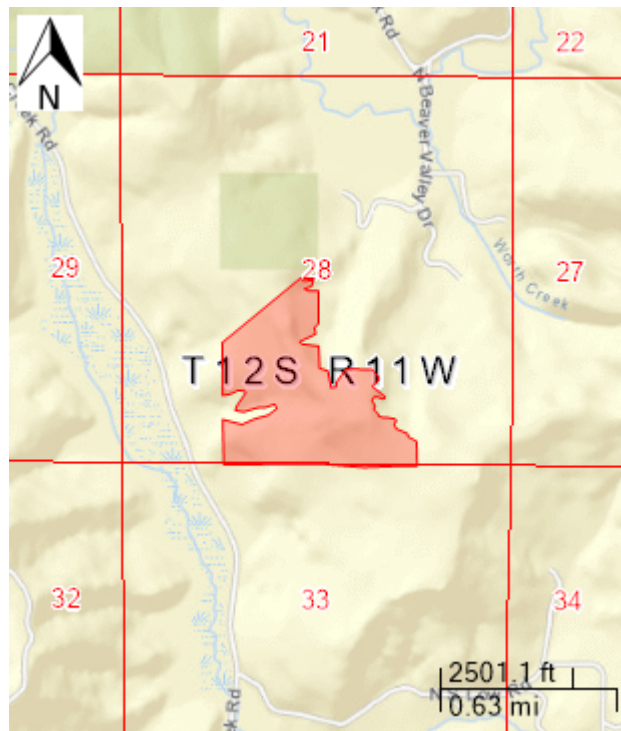
<b>Operator:</b> Anthony Ghidossi Pacific AG Services North West LLC PO Box 875 Marysville, Washington 98270 (775) 225-4212	<b>Activity:</b> Herbicide Application (Unit) <b>Chemical(s):</b> Aquaneat, Rotary 2 SL, Oust Extra <b>Chemical Carrier(s):</b> water <b>Chemical Additive(s):</b> Super Spread MSO	<b>Method(s):</b> Aerial - Helicopter
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**Resources on or near this Unit**

Statutory Written Plan required within 100 feet of	Statutory Written Plan required within 300 feet of
	Eagle

**Notes:**

1. A statutory written plan is required for operations within 300 feet of Estuarine or Marine Wetlands, not 100 feet as may be shown above.
2. Contact your Stewardship Forester about streams not shown on the map.

**Unit Map: Unit240North\_2**

**Unit 3 of 8: Unit240South**

**Registrant(s) within 1 mile**

69.2 acres Lincoln County(s)

T12S R11W Sec33

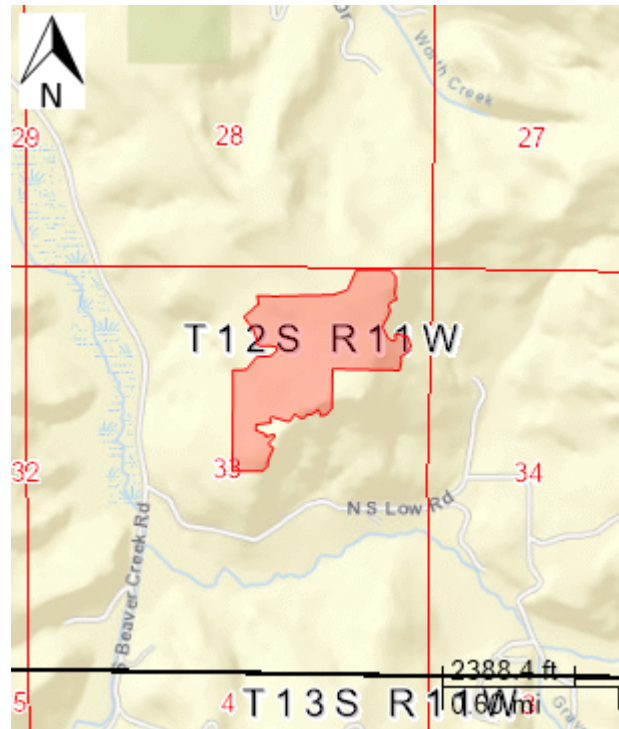
Regulated Use Area: WO-1

**Operator:**  
Anthony Ghidossi  
Pacific AG Services North  
West LLC  
PO Box 875  
Marysville, Washington 98270  
(775) 225-4212

**Activity:** Herbicide Application (Unit)  
**Chemical(s):** Aquaneat, Rotary 2 SL, Oust Extra  
**Chemical Carrier(s):** water  
**Chemical Additive(s):** Super Spread MSO

**Method(s):** Aerial -  
Helicopter

**Unit Map: Unit240South**



**Unit 4 of 8: Christmas Camp East****Registrant(s) within 1 mile**

54.9 acres Lincoln County(s) T12S R11W Sec34,T12S R11W Sec35 Regulated Use Area: WO-1

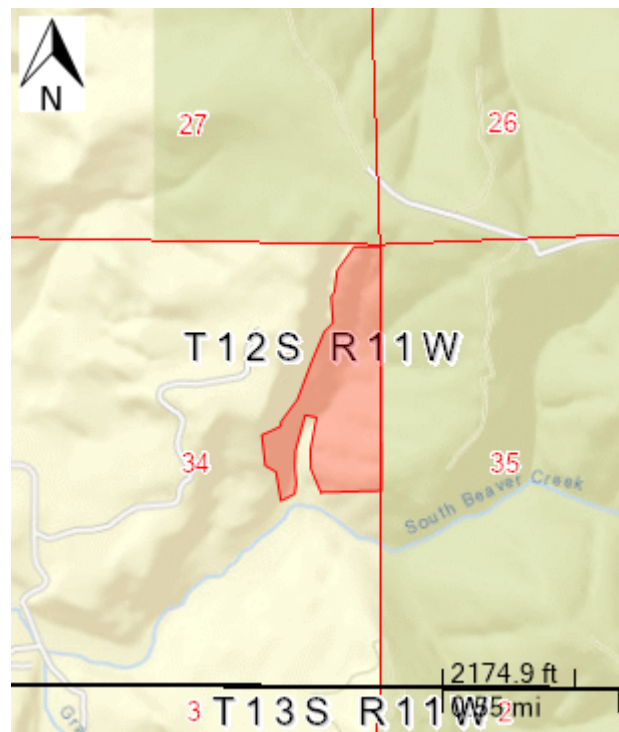
<b>Operator:</b> Anthony Ghidossi Pacific AG Services North West LLC PO Box 875 Marysville, Washington 98270 (775) 225-4212	<b>Activity:</b> Herbicide Application (Unit) <b>Chemical(s):</b> Aquaneat, Rotary 2 SL, Oust Extra <b>Chemical Carrier(s):</b> water <b>Chemical Additive(s):</b> Super Spread MSO	<b>Method(s):</b> Aerial - Helicopter
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**Resources on or near this Unit**

Statutory Written Plan required within 100 feet of	Statutory Written Plan required within 300 feet of
Unknown: Small - Type F Stream	
Unknown: Small - SSBT Stream	

**Notes:**

1. A statutory written plan is required for operations within *300 feet* of Estuarine or Marine Wetlands, not 100 feet as may be shown above.
2. Contact your Stewardship Forester about streams not shown on the map.

**Unit Map: Christmas Camp East**

**Unit 5 of 8: Graves001****Registrant(s) within 1 mile**

108.4 acres Lincoln County(s) T12S R11W Sec33,T13S R11W Sec4 Regulated Use Area: WO-1

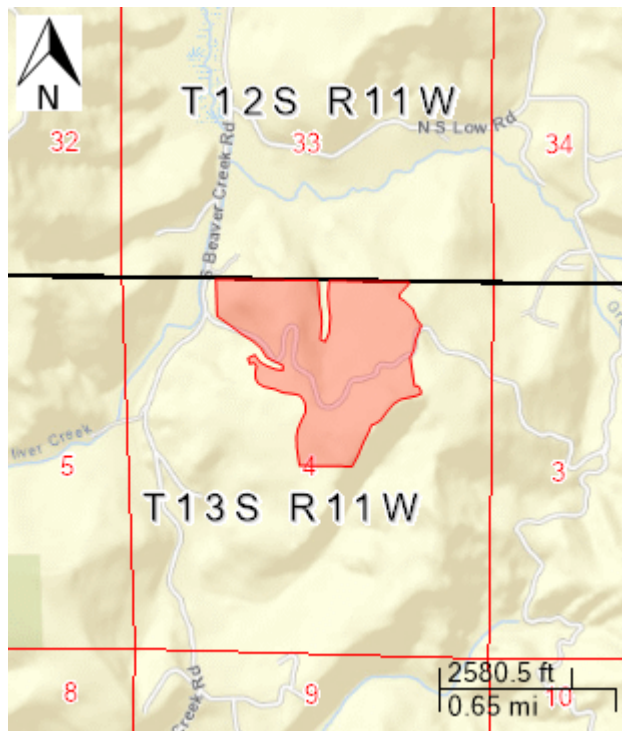
<b>Operator:</b> Anthony Ghidossi Pacific AG Services North West LLC PO Box 875 Marysville, Washington 98270 (775) 225-4212	<b>Activity:</b> Herbicide Application (Unit) <b>Chemical(s):</b> Aquaneat, Rotary 2 SL, Oust Extra <b>Chemical Carrier(s):</b> water <b>Chemical Additive(s):</b> Super Spread MSO	<b>Method(s):</b> Aerial - Helicopter
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**Resources on or near this Unit**

Statutory Written Plan required within 100 feet of	Statutory Written Plan required within 300 feet of
Wetlands: Freshwater Emergent Wetland	

**Notes:**

1. A statutory written plan is required for operations within 300 feet of Estuarine or Marine Wetlands, not 100 feet as may be shown above.
2. Contact your Stewardship Forester about streams not shown on the map.

**Unit Map: Graves001**

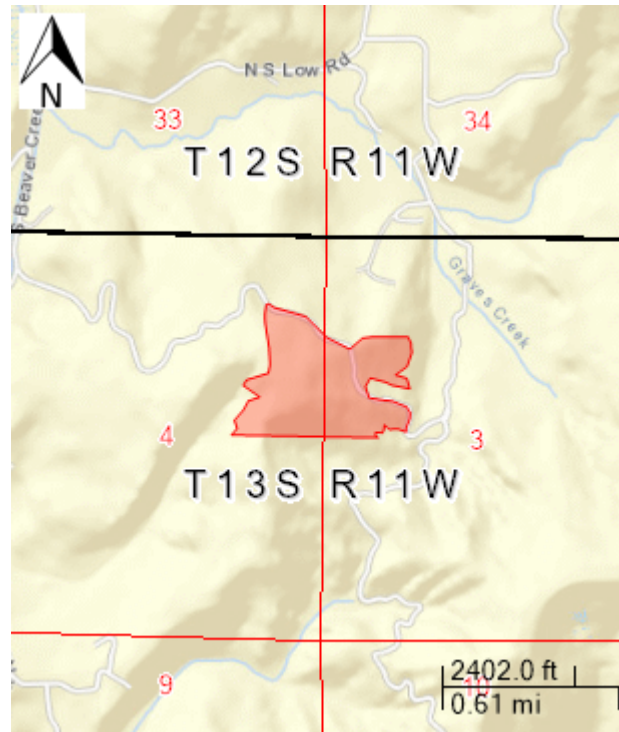
**Unit 6 of 8: Graves002**

**Registrant(s) within 1 mile**

59.9 acres Lincoln County(s) T13S R11W Sec3,T13S R11W Sec4 Regulated Use Area: WO-1

<b>Operator:</b> Anthony Ghidossi Pacific AG Services North West LLC PO Box 875 Marysville, Washington 98270 (775) 225-4212	<b>Activity:</b> Herbicide Application (Unit) <b>Chemical(s):</b> Aquaneat, Rotary 2 SL, Oust Extra <b>Chemical Carrier(s):</b> water <b>Chemical Additive(s):</b> Super Spread MSO	<b>Method(s):</b> Aerial - Helicopter
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**Unit Map: Graves002**



**Unit 7 of 8: Graves003-1****Registrant(s) within 1 mile**

72.7 acres Lincoln County(s)

T13S R11W Sec3

Regulated Use Area: WO-1

**Operator:**

Anthony Ghidossi  
 Pacific AG Services North  
 West LLC  
 PO Box 875  
 Marysville, Washington 98270  
 (775) 225-4212

**Activity:** Herbicide Application (Unit)**Chemical(s):** Aquaneat, Rotary 2 SL, Oust Extra**Chemical Carrier(s):** water**Chemical Additive(s):** Super Spread MSO**Method(s):** Aerial -

Helicopter

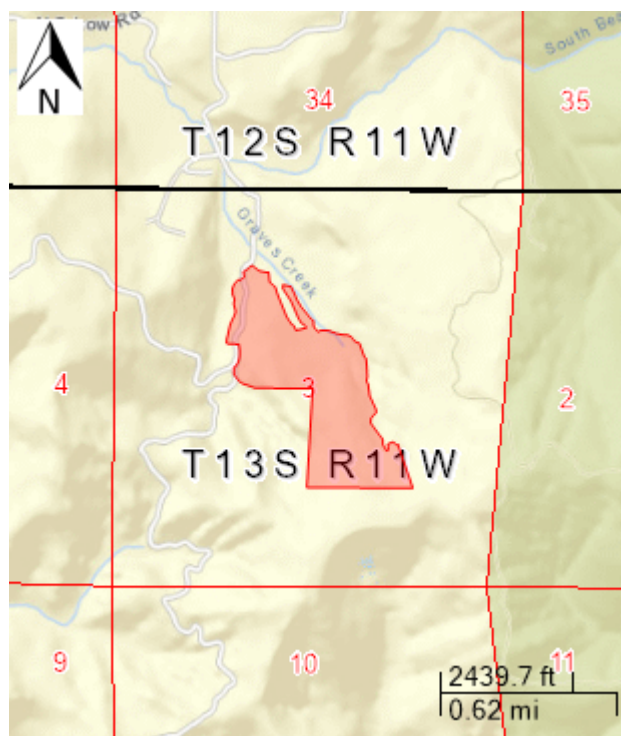
**Resources on or near this Unit****Statutory Written Plan required within 100 feet of**

Graves Creek: Small - Type F Stream

Unknown: Small - Type F Stream

**Statutory Written Plan required within 300 feet of****Notes:**

1. A statutory written plan is required for operations within *300 feet* of Estuarine or Marine Wetlands, not 100 feet as may be shown above.
2. Contact your Stewardship Forester about streams not shown on the map.

**Unit Map: Graves003-1**

**Unit 8 of 8: Graves003-2****Registrant(s) within 1 mile**

10.9 acres Lincoln County(s)

T13S R11W Sec3

Regulated Use Area: WO-1

**Operator:**

Anthony Ghidossi  
 Pacific AG Services North  
 West LLC  
 PO Box 875  
 Marysville, Washington 98270  
 (775) 225-4212

**Activity:** Herbicide Application (Unit)

**Chemical(s):** Aquaneat, Rotary 2 SL, Oust Extra  
**Chemical Carrier(s):** water  
**Chemical Additive(s):** Super Spread MSO

**Method(s):** Aerial -

Helicopter

**Resources on or near this Unit****Statutory Written Plan required within 100 feet of**

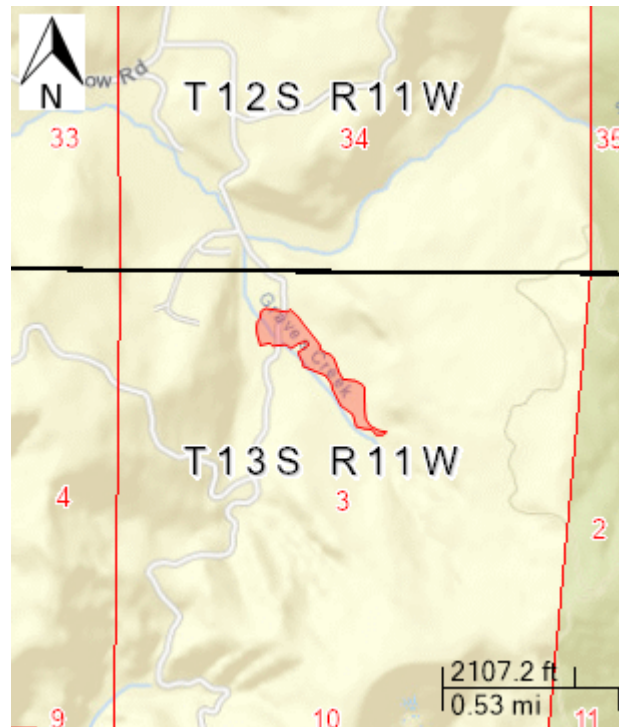
Graves Creek: Small - Type F Stream

Unknown: Medium - Type F Stream

Unknown: Small - Type F Stream

**Statutory Written Plan required within 300 feet of****Notes:**

1. A statutory written plan is required for operations within *300 feet* of Estuarine or Marine Wetlands, not 100 feet as may be shown above.
2. Contact your Stewardship Forester about streams not shown on the map.

**Unit Map: Graves003-2**



# NOTIFICATION OF OPERATIONS/PERMIT TO OPERATE POWER-DRIVEN MACHINERY (NOAP)



Notification Number: 2023-553-10095  
Operation Name: ANE - Fall 2023 Site Prep

### This NOAP includes the following for the lands described in the NOAP:

- The Oregon Department of Forestry or local Forest Protective Association has issued a permit to use fire or operate power-driven machinery.

Person Submitting the NOAP: Tyrol Forfar  
Date NOAP Submitted: August 30, 2023  
Report Generated: August 30, 2023

### Waiting Period

You must wait at least 15 days after successful submittal of this NOAP before starting the activities in the NOAP (see OAR 629-605-0150(1)). You may ask the Stewardship Forester to waive this 15-day waiting period, **but you must wait the full 15 days unless the Stewardship Forester notifies you that you may start sooner.**

### Oregon Department of Forestry Contact Info Operator's Fire Emergency Contact

Toledo  
763 NW Forestry Rd  
Toledo, Oregon 97391  
Phone: (541) 336-2273  
Stewardship Forester: Rieghly Sitton  
Email: rieghly.k.sitton@odf.oregon.gov

Contact Name: Tyrol Forfar  
Phone: 360-723-5523

### Landowner(s) Notice to Landowner(s)

Sorn Nymark  
ANE Forests of Oregon C/O HFI Consultants  
PO Box 1929  
Battle Ground, Washington 98604  
360-600-2342

Reforestation may be required after timber harvesting. The Oregon Department of Forestry may conduct on-site inspections for compliance with forest practice and fire protection laws. Land use conversion to non-forest use is subject to other state and local regulations, which may affect use or development of a site.

### Written Plans

A Written Plan (in addition to this NOAP) is required before operation activities can begin near the protected resources listed with the Unit information or Site Conditions below or otherwise described to you by the Stewardship Forester ([OAR 629-605-0170](#) (2), (3), and (5)). The Written Plan must describe in detail how the resource(s) will be protected during the operation. There is a waiting period for Written Plans that is separate from the notification waiting period. Contact your Stewardship Forester for more information.

### Site Conditions (reported by the Notifier)

- Stream within 100 feet of area.
- Domestic water supply within 300 feet of area.
- Bald Eagle nesting site within half mile of area.

### Notices

Submitting this Notification of operations on lands described in the NOAP constitutes consent for Department staff to access the property to ensure compliance with state law and rules governing forest practices through on-site inspections. The landowner must notify the stewardship forester to withdraw this consent.



**Permission from Landowner and Timber Owner Required for Operators, purchasers, contractors, general public:**

Submitting this notification does *not* give permission for operators, purchasers, contractors, or the general public to enter someone else's land or remove forest products. Anyone doing so must first obtain permission from the landowner and timber owner.

**Pesticide Use:** Pesticide users must follow all pesticide product label requirements, including any that prohibit applications near or into streams or other water bodies! Pesticide users must be sure the label that comes with the pesticide product allows the planned use! Contact the Oregon Department of Agriculture [here](#) or at 503-986-4635 for information on allowed uses of pesticide products.

**Operations Near Utility Lines:** If you are conducting timber harvesting or road construction within 100 feet of overhead utility lines contact the local utility in accordance with ORS 757.805 - Oregon's Overhead Safety Act and OAR 437-007-0230 - Power Line Safeguards. Identification tags are located on each pole.

Call the Oregon Utility Notification Center at 811 at least 2 business days before starting timber harvesting, road construction, or any other activities involving excavation that may affect an underground utility line. The Center will coordinate with the appropriate utility companies to locate underground utility lines that may be affected by your activities.

**Using Water for Pesticides or Slash Burning:** If you plan to use on-site water (water from a stream, for example) to mix pesticides or for slash burning, you must provide a copy of this NOAP to the local offices of the Oregon Water Resources Department and the Oregon Department of Fish and Wildlife (see ORS 537.141).

**Registrants & Subscribers:** There may be registrants and/or subscribers who receive this Notification. See the Notification Summary page within the E-Notification system or contact ODF for more details.

**NOAP Changes:** The notifier must inform the Oregon Department of Forestry of any changes in a NOAP before the activity takes place. A new NOAP may be required.

## Unit 1 of 8: Christmas Camp East - Ground

55.3 acres Lincoln County(s) T12S R11W Sec34,T12S R11W Sec35 Regulated Use Area: WO-1

<b>Operator:</b> Tim Halme HFI Field Services LLC PO Box 1929 Battle Ground, Washington 98604 360-723-5523	<b>Activity:</b> Herbicide Application (Unit) <b>Start:</b> 9/13/2023 <b>End:</b> 11/30/2023 <b>Chemical(s):</b> glyphosate, imazapyr, metsulfuron methyl, sulfometuron methyl <b>Chemical Carrier(s):</b> water <b>Chemical Additive(s):</b> Super Spread MSO, Syl-Tac, Foam Buster	<b>Method(s):</b> Ground - Pressurized / Broadcast
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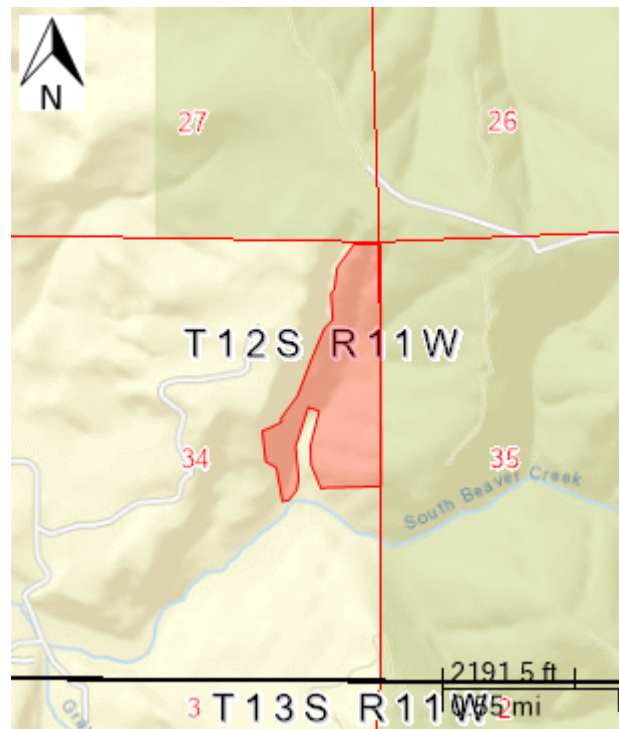
### Resources on or near this Unit

Statutory Written Plan required within 100 feet of	Statutory Written Plan required within 300 feet of
Unknown: Small - Type F Stream	
Unknown: Small - SSBT Stream	

### Notes:

1. A statutory written plan is required for operations within *300 feet* of Estuarine or Marine Wetlands, not 100 feet as may be shown above.
2. Contact your Stewardship Forester about streams not shown on the map.

Unit Map: Christmas Camp East - Ground



**Unit 2 of 8: Unit240North\_1: Ground**

8.6 acres    Lincoln County(s)    T12S R11W Sec28    Regulated Use Area: WO-1

<b>Operator:</b> Tim Halme HFI Field Services LLC PO Box 1929 Battle Ground, Washington 98604 360-723-5523	<b>Activity:</b> Herbicide Application (Unit) <b>Start:</b> 9/13/2023 <b>End:</b> 11/30/2023 <b>Chemical(s):</b> glyphosate, imazapyr, metsulfuron methyl, sulfometuron methyl <b>Chemical Carrier(s):</b> water <b>Chemical Additive(s):</b> Foam Buster, Super Spread MSO, Syl-Tac	<b>Method(s):</b> Ground - Pressurized / Broadcast
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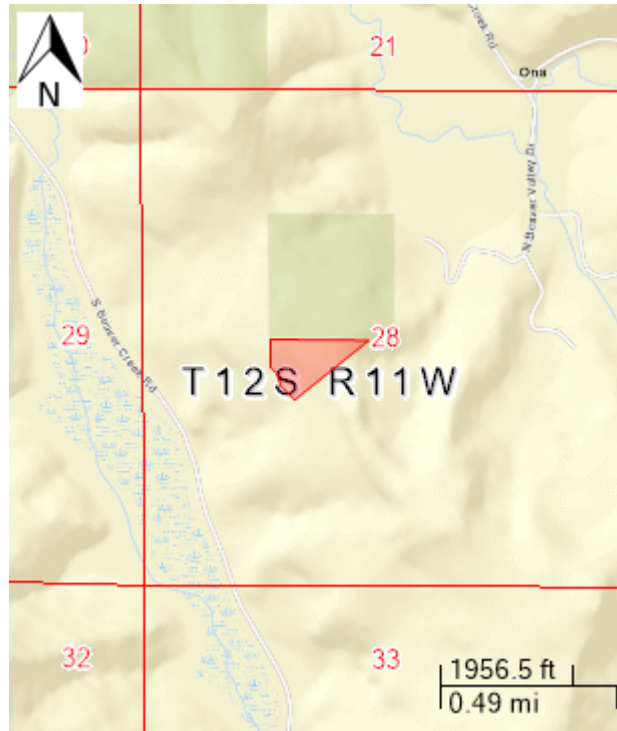
**Resources on or near this Unit**

<b>Statutory Written Plan required within 100 feet of</b>	<b>Statutory Written Plan required within 300 feet of</b>
	Eagle

**Notes:**

- 1. A statutory written plan is required for operations within *300 feet* of Estuarine or Marine Wetlands, not 100 feet as may be shown above.
- 2. Contact your Stewardship Forester about streams not shown on the map.

**Unit Map: Unit240North\_1: Ground**



**Unit 3 of 8: Unit240North\_2: Ground**

89.0 acres Lincoln County(s) T12S R11W Sec28,T12S R11W Regulated Use Area: WO-1 Sec33

<p><b>Operator:</b>                  Tim Halme                  HFI Field Services LLC                  PO Box 1929                  Battle Ground, Washington                  98604                  360-723-5523</p>	<p><b>Activity:</b> Herbicide Application (Unit)  <b>Start:</b> 9/13/2023 <b>End:</b> 11/30/2023  <b>Chemical(s):</b> glyphosate, imazapyr, metsulfuron methyl, sulfometuron methyl  <b>Chemical Carrier(s):</b> water  <b>Chemical Additive(s):</b> Foam Buster, Super Spread MSO, Syl-Tac</p>	<p><b>Method(s):</b> Ground - Pressurized / Broadcast</p>
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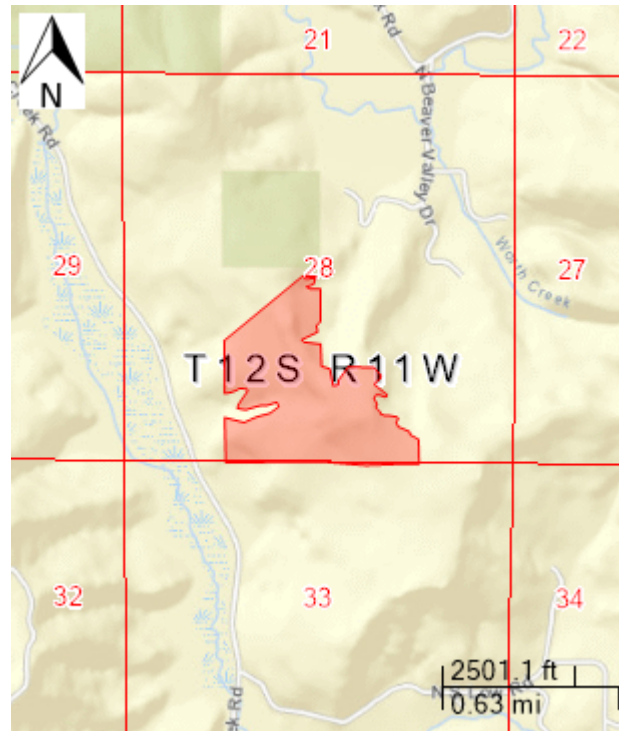
**Resources on or near this Unit**

<p><b>Statutory Written Plan required within 100 feet of</b></p>	<p><b>Statutory Written Plan required within 300 feet of</b></p>
	<p>Eagle</p>

**Notes:**

1. A statutory written plan is required for operations within 300 feet of Estuarine or Marine Wetlands, not 100 feet as may be shown above.
2. Contact your Stewardship Forester about streams not shown on the map.

**Unit Map: Unit240North\_2: Ground**

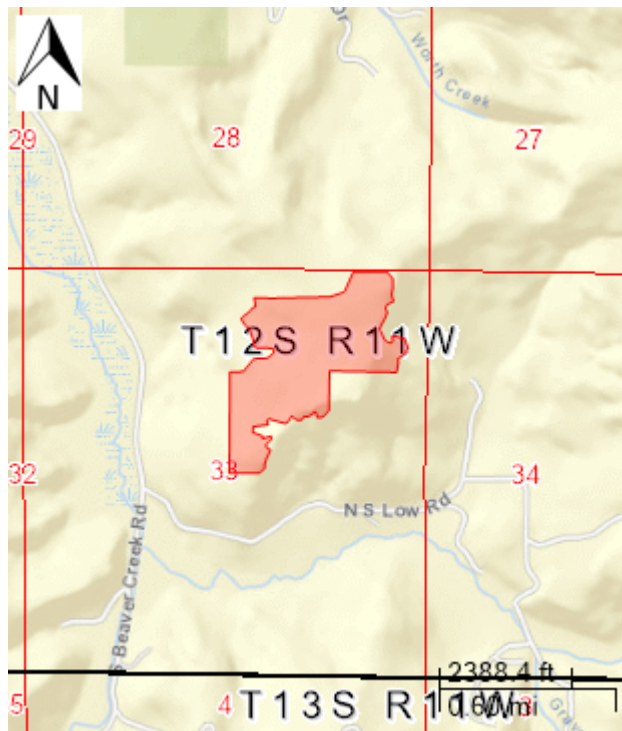


**Unit 4 of 8: Unit240South: Ground**

69.2 acres Lincoln County(s) T12S R11W Sec33 Regulated Use Area: WO-1

<b>Operator:</b> Tim Halme HFI Field Services LLC PO Box 1929 Battle Ground, Washington 98604 360-723-5523	<b>Activity:</b> Herbicide Application (Unit) <b>Start:</b> 9/13/2023 <b>End:</b> 11/30/2023 <b>Chemical(s):</b> glyphosate, imazapyr, metsulfuron methyl, sulfometuron methyl <b>Chemical Carrier(s):</b> water <b>Chemical Additive(s):</b> Foam Buster, Super Spread MSO, Syl-Tac	<b>Method(s):</b> Ground - Pressurized / Broadcast
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**Unit Map: Unit240South: Ground**



**Unit 5 of 8: Graves001: Ground**

108.4 acres Lincoln County(s) T12S R11W Sec33,T13S R11W Sec4 Regulated Use Area: WO-1

<b>Operator:</b> Tim Halme HFI Field Services LLC PO Box 1929 Battle Ground, Washington 98604 360-723-5523	<b>Activity:</b> Herbicide Application (Unit) <b>Start:</b> 9/13/2023 <b>End:</b> 11/30/2023 <b>Chemical(s):</b> glyphosate, imazapyr, metsulfuron methyl, sulfometuron methyl <b>Chemical Carrier(s):</b> water <b>Chemical Additive(s):</b> Super Spread MSO, Syl-Tac, Foam Buster	<b>Method(s):</b> Ground - Pressurized / Broadcast
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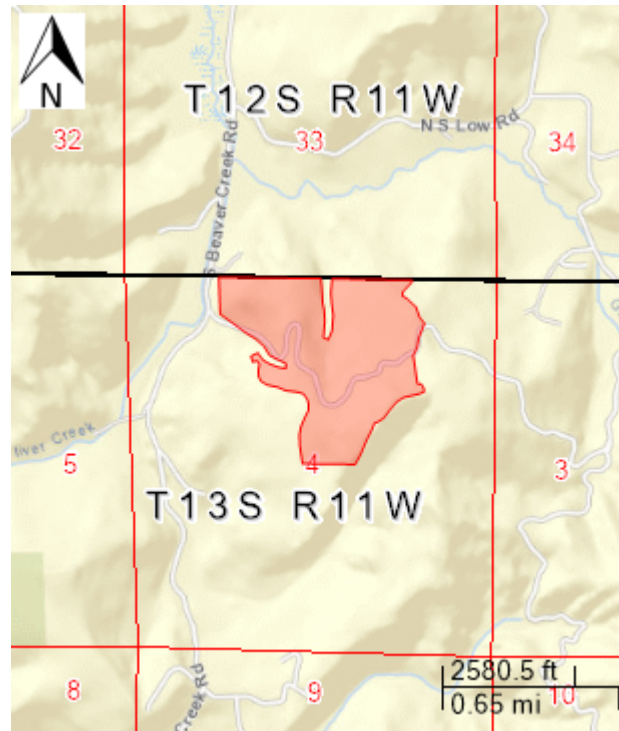
**Resources on or near this Unit**

Statutory Written Plan required within 100 feet of	Statutory Written Plan required within 300 feet of
Wetlands: Freshwater Emergent Wetland	

**Notes:**

- 1. A statutory written plan is required for operations within 300 feet of Estuarine or Marine Wetlands, not 100 feet as may be shown above.
- 2. Contact your Stewardship Forester about streams not shown on the map.

**Unit Map: Graves001: Ground**

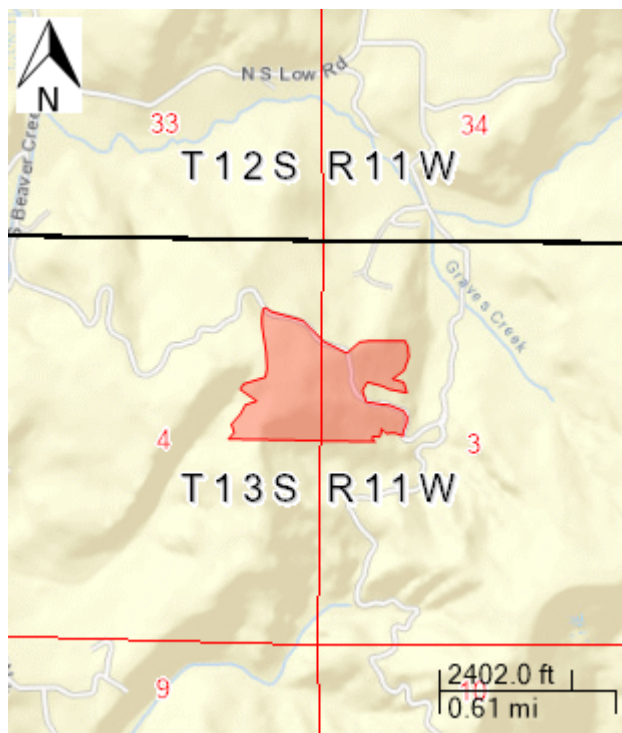


**Unit 6 of 8: Graves002: Ground**

59.9 acres Lincoln County(s) T13S R11W Sec3,T13S R11W Sec4 Regulated Use Area: WO-1

<b>Operator:</b> Tim Halme HFI Field Services LLC PO Box 1929 Battle Ground, Washington 98604 360-723-5523	<b>Activity:</b> Herbicide Application (Unit) <b>Start:</b> 9/13/2023 <b>End:</b> 11/30/2023 <b>Chemical(s):</b> glyphosate, imazapyr, metsulfuron methyl, sulfometuron methyl <b>Chemical Carrier(s):</b> water <b>Chemical Additive(s):</b> Syl-Tac, Super Spread MSO, Foam Buster	<b>Method(s):</b> Ground - Pressurized / Broadcast
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**Unit Map: Graves002: Ground**



**Unit 7 of 8: Graves003-1: Ground**

72.7 acres Lincoln County(s) T13S R11W Sec3 Regulated Use Area: WO-1

<b>Operator:</b> Tim Halme HFI Field Services LLC PO Box 1929 Battle Ground, Washington 98604 360-723-5523	<b>Activity:</b> Herbicide Application (Unit) <b>Start:</b> 9/13/2023 <b>End:</b> 11/30/2023 <b>Chemical(s):</b> glyphosate, imazapyr, metsulfuron methyl, sulfometuron methyl <b>Chemical Carrier(s):</b> water <b>Chemical Additive(s):</b> Syl-Tac, Super Spread MSO, Foam Buster	<b>Method(s):</b> Ground - Pressurized / Broadcast
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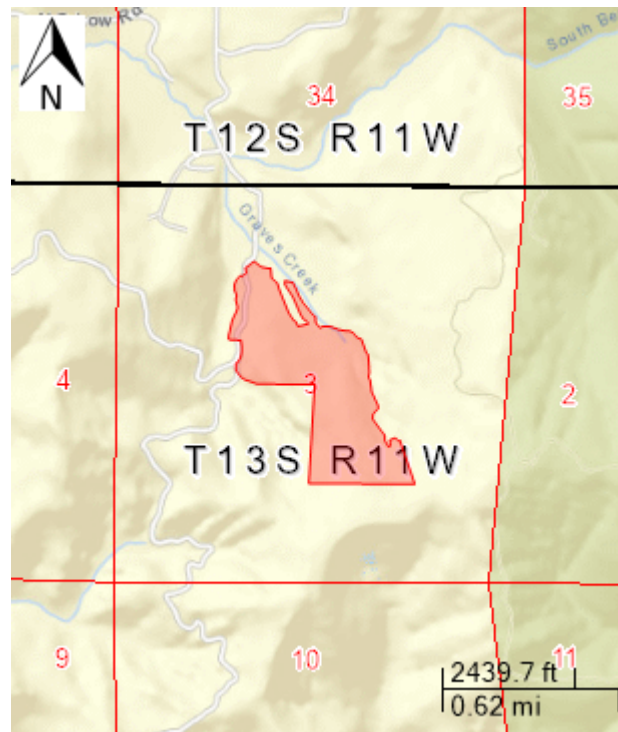
**Resources on or near this Unit**

Statutory Written Plan required within 100 feet of	Statutory Written Plan required within 300 feet of
Graves Creek: Small - Type F Stream	
Unknown: Small - Type F Stream	

**Notes:**

1. A statutory written plan is required for operations within 300 feet of Estuarine or Marine Wetlands, not 100 feet as may be shown above.
2. Contact your Stewardship Forester about streams not shown on the map.

**Unit Map: Graves003-1: Ground**





**Unit 8 of 8: Graves003-2: Ground**

10.9 acres Lincoln County(s) T13S R11W Sec3 Regulated Use Area: WO-1

<b>Operator:</b> Tim Halme HFI Field Services LLC PO Box 1929 Battle Ground, Washington 98604 360-723-5523	<b>Activity:</b> Herbicide Application (Unit) <b>Start:</b> 9/13/2023 <b>End:</b> 11/30/2023 <b>Chemical(s):</b> glyphosate, imazapyr, metsulfuron methyl, sulfometuron methyl <b>Chemical Carrier(s):</b> water <b>Chemical Additive(s):</b> Super Spread MSO, Syl-Tac, Foam Buster	<b>Method(s):</b> Ground - Pressurized / Broadcast
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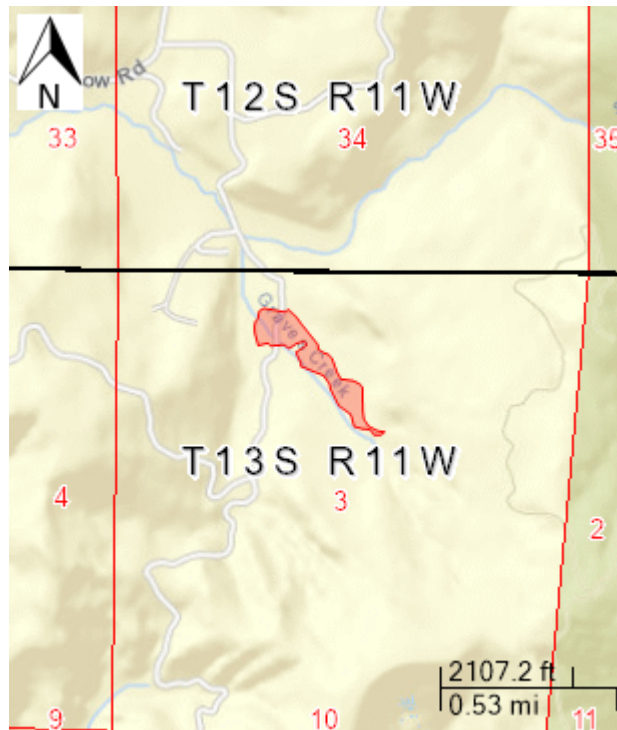
**Resources on or near this Unit**

Statutory Written Plan required within 100 feet of	Statutory Written Plan required within 300 feet of
Graves Creek: Small - Type F Stream	
Unknown: Medium - Type F Stream	
Unknown: Small - Type F Stream	

**Notes:**

1. A statutory written plan is required for operations within 300 feet of Estuarine or Marine Wetlands, not 100 feet as may be shown above.
2. Contact your Stewardship Forester about streams not shown on the map.

**Unit Map: Graves003-2: Ground**



## Adam Denlinger

---

**From:** Adam Denlinger  
**Sent:** Thursday, August 10, 2023 8:18 AM  
**To:** rieghly.k.sitton@odf.oregon.gov; Matt.THOMAS@odf.oregon.gov  
**Cc:** Evan Hayduk; Mike Broili; Paul Engelmeyer; katieryan@wetlandsconservancy.org; Ted & Sharon; Joy King-Cortes; Trish Karlsen; Brendi Hoch; Brad Wynn; Adam Denlinger; Rob Mills  
**Subject:** RE: Concerning "ANE - South Beaver Creek Aerial Spray"

August 10, 2023

Greetings Matt,

Thanks for the phone call yesterday, I wanted to pass along the district's complete public comments as I was unable to provide this detail on the FERNS website. Please pass this information on to the owner/applicant. At your recommendation the district will be following up with ODA today regarding this issue to cover the

Seal Rock Water Districts (SRWD) Point of Diversion (POD) is immediately downstream of the proposed areal application of herbicides. SRWD is concerned that herbicides will be transported by aerosol drift, from the sprayed areas over nearby surface waters, and that herbicides will adversely affect the district's downstream raw-water intake negatively affecting the SRWD community of 5500 customers via the public drinking water system.

The SRWD Board of Commissioners and Customers would like to know what assurances will be provided to ensure that herbicides from the ANE - South Beaver Creek Spray will not enter surface water of South Beaver Creek, its tributaries, or the mainstem of Beaver Creek. The district would like to request that ODF condition the areal application of herbicides to include independent monitoring to sample and measure herbicides in lands and waters adjacent to the sprayed areas, and further downstream in the area of the district's POD.

The district would also like to request that ODF coordinate a conversation between the timberland owners, area stakeholders and the community that uses water and other natural resources in the Beaver Creek Watershed. Participants should include the community in the immediate area to be sprayed. Because there are many of us who are at risk of exposure to these herbicides, directly or indirectly the community should include those that receive their drinking water from Beaver Creek. This would provide the community an opportunity to exchange information and views regarding proposed activity and educate the attendees about ODF's and timberland owner's efforts and responsibility subject to OAR 629-605-0170 to protect the environment and health of the community.

SRWD would be happy to coordinate with ODF/ODA in support of this meeting to include outreach and locating a venue large enough to accommodate the discussion.

Very respectfully

Adam

Adam Denlinger  
General Manager

Seal Rock Water District  
1037 NW Grebe Street | Seal Rock OR. 97376  
O: 541.563.3529 | F: 541.563.4246 | M: 541.270.0183 | adenlinger@srwd.org  
[www.srwd.org](http://www.srwd.org)

**PUBLIC RECORDS LAW DISCLOSURE:** This e-mail is subject to the State Records Retention Schedule and may be made available to the public. **CONFIDENTIALITY NOTICE:** This message is intended solely for the use of the individual and entity to whom it is addressed, and may contain information that is privileged, confidential, and exempt from disclosure under applicable state and federal laws. If you are not the addressee, or are not authorized to receive information for the intended addressee, you are hereby notified that you may not use, copy, distribute, or disclose to anyone this message or the information contained herein. If you have received this message in error, please advise the sender immediately by reply email and expunge this message.

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**From:** Ted & Sharon [REDACTED]  
**Sent:** Tuesday, August 8, 2023 3:56 PM  
**To:** rieghly.k.sitton@odf.oregon.gov  
**Cc:** Evan Hayduk <evan@midcoastwc.org>; Mike Broili <mlbroili42@gmail.com>; Paul Engelmeyer <pengelmeyer@peak.org>; Adam Denlinger <ADenlinger@srwd.org>; katieryan@wetlandsconservancy.org  
**Subject:** Concerning "ANE - South Beaver Creek Aerial Spray"

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Caution! This message was sent from outside your organization.

Dear Mr Reighly,

I am writing to express my concern regarding the aerial application of herbicides on private forest lands adjacent to South Beaver Creek and its tributaries (i.e., ANE-South Beaver Creek Aerial Spray, as described in Notification 2023-553-09307), the practice over which OR Dept of Forestry has permitting authority. I am concerned that the herbicides may be transported (e.g., by aerosol drift, dust, surface water, or groundwater) from the sprayed areas into nearby surface waters, and consequently, that those herbicides could adversely affect wetland and stream plants and animals (including amphibians, insects, fish, birds, and/or mammals) or people via drinking water. Herbicide-caused Impacts to any of those organisms could adversely affect the outstanding natural areas and game resources associated with South Beaver Creek and, downstream, in Beaver Creek. Additionally, the drinking water that I depend on, provided by Seal Rock Water District, is sourced from Beaver Creek. Thus, I am also concerned about potential exposure of my family, myself, my pets, and my garden plants (including an extensive exotic plant collection) to herbicides in drinking water from SRWD that are derived from this spraying activity.

I would like to know what assurances OR Dept. of Forestry can provide that herbicides from the ANE - South Beaver Creek Spray will not enter surface water of South Beaver Creek, its tributaries, or Beaver Creek. Will there be an independent monitoring effort to sample and measure herbicides in lands and waters adjacent to the sprayed areas, and further downstream? A transparent and scientifically sound monitoring effort could go a long way to assure the public that ODF is concerned about avoiding non-target impacts of the spraying and of protecting the community that uses aquatic resources near and downstream of the areas to be sprayed.

Additionally, I would like to know whether ODF suggested manual vegetation control as an effective alternative to using herbicides by the property owner. As I presume you know, Siuslaw National Forest has largely abandoned using herbicides in silviculture (as of 1984, I believe) and consequently found that manual cutting of brush to be cost effective and as productive of timber yield. Given the community's concerns about aerial spraying of herbicides, it would seem highly prudent for the landowners to consider and use this cost-effective alternative.

Lastly, I request that, well in advance of the start of spraying, ODF organize a conversation between the timberland owners and the community that uses water and other natural resources in South Beaver Creek. That community should include more than the immediate neighbors of the areas to be sprayed since there are many of us who are at risk of exposure to these herbicides, directly or indirectly. The purpose of that conversation would be to exchange information and views on the proposed activity and educate the attendees about ODF's and timberland owner's efforts to protect the health of the community and our shared natural resources.

Thank you for your consideration.

Sincerely,

Ted DeWitt  
Seal Rock, OR



cc  
Seal Rock Water District  
MidCoast Watershed Council  
The Wetlands Conservancy



1037 NW Grebe Street  
Seal Rock, Oregon 97376  
Phone: 541.563.3529 – Fax: 541.563.4246  
www.srwd.org



# Seal Rock Water District

## Application of Herbicides in the District's Watershed on South Beaver Creek

The district has received multiple emails, messages, and phone calls from our customers expressing concerns about a proposed aerial herbicide spraying in the South Beaver Creek Watershed. An approved aerial spraying plan is set to be carried out on behalf of ANE Forests of Oregon to reforest their clear-cut timberland. This operation covers a total of 475 acres spread over 8 smaller parcels and is scheduled to begin September 2<sup>nd</sup> through November 30<sup>th</sup>, 2023.

The SRWD Board of Commissioners and staff are very concerned about the effect of herbicide application on our coastal environment, residents, wildlife, and water intake operations at the SRWD's Point of Diversion (POD) downstream of the proposed application sites. The district is working with state agencies to develop protocols for managing potential hazards to prevent them from entering the drinking water system to ensure that the spray operation will not adversely impact our domestic water supply.

Subject to OAR 333-061-0043, SRWD currently performs tests for herbicides and pesticides or Synthetic Organic Compounds (SOCs) on a quarterly basis, as required by the Oregon Health Authority (OHA) Drinking Water Services. If the application of herbicides cannot be prevented, the recommendation from DEQ's Source Water Protection Coordinator is to perform additional testing of the raw water supply on Beaver Creek pre and post-application to ensure that the raw water is free of contaminants. Under current statute, DEQ's role is advisory unless a pesticide exposure is reported to PARC (the Pesticide Analytical Response Center) or there is a verified water pollution from the application.

More frequent sampling is likely to be necessary subject to the type of chemicals used and the frequency of application. If analytical results indicate that harmful chemicals are present in the raw water supply the district will move to a secondary source (City of Newport) until the district's Beaver Creek source water supply is safe.

While we continue to develop a management plan in response to this issue, it is the district's intent to take every precaution necessary to protect the water system. We will perform this by; 1.) Shutting the Beaver Creek intake pump station off during the application of herbicides. 2.) Allow flow in the creek to move through the stream beyond the POD. 3.) Sample the raw water and if results are non-detect the district will resume operation, as long as it's safe to do so. 4.) If hazardous chemicals are detected the district will not use the Beaver Creek system, report results to DEQ and PERC, and continue sampling. The district has a 5-day supply of water depending on the time of year. However, if necessary, the district will suspend the operation of the intake longer, continue sampling, and move to a secondary source of water until it's safe to resume operation on the Beaver Creek system.

Finally, we would like our customers to know that district staff has been in consultation with the Oregon Department of Forestry (ODF), Department of Environmental Quality (DEQ), Lincoln County Board of Commissioners, Representative Gomberg's office, and the Governor's office in support of this issue. The district is working diligently to provide the community and our customers with updates regarding this matter. Please follow the district's website for more information.

Thank you.



ALG ORELAP ID #OR100012  
361 West 5th Ave  
Eugene, OR 97401  
TEL: (541) 485-8404 FAX: (541) 484-5995  
Website:

Bradley Wynn  
Seal Rock Water District  
1037 NW Grebe Street  
Seal Rock, OR 97376  
TEL: (541) 563-7418  
FAX: (541) 563-4246

RE:

Order No.: 2307915

Dear Bradley Wynn:

Analytical Laboratory Group received 2 sample(s) on 7/26/2023 for the analyses presented in the following report.

Kimberly Reeve Morghan  
Quality Manager  
361 West 5th Ave  
Eugene, OR 97401

CC:  
Larry Estes



ALG ORELAP ID #OR100012  
361 West 5th Ave  
Eugene, OR 97401  
TEL: (541) 485-8404 FAX: (541) 484-5995  
Website:

## Case Narrative

WO#: 2307915

Date:

**CLIENT:** Seal Rock Water District

**Project:**

This report presents the results of the analyses of the sample(s) received on the date above and assigned the listed Analytical Laboratory Group Analytical Report numbers. Test results relate only to the parameters tested and to the samples as received by the laboratory.

This report shall not be reproduced, except in full, without written consent of Analytical Laboratory Group, Inc.

ALG recommends that Public Water Systems monitor the Oregon OHA website ([www.yourwater.oregon.gov](http://www.yourwater.oregon.gov)) to verify that all expected compliance testing results have been entered.

All analyses were performed according to the Analytical Laboratory Group, Inc. Quality Assurance Program. All QA/QC requirements were met and test results meet all requirements of TNI except as noted below.

Analytical comments are noted with data flags on the reports and/or below.

Synthetic Organic Chemicals (SOCs) were analyzed by Neilson Research Corporation, Medford OR; ORELAP ID# OR100016. No anomalies associated with the analysis of these sample(s) were reported except as noted in the NRC Case Narrative or qualified with data flags on the NRC report.

Volatile Organic Compounds (VOCs) by EPA 524.2 were analyzed by Neilson Research Corporation, Medford OR; ORELAP ID# OR100016. No anomalies associated with the analysis of these sample(s) were reported except as noted in the NRC Case Narrative or qualified with data flags on the NRC report.

Note: A Preliminary Report was issued on 8/9/2023.

Original



Neilson Research Corporation  
 245 S Grape St  
 Medford, OR 97501  
 TEL: (541) 770-5678 FAX: (541) 770-2901  
 Website: [www.nrclabs.com](http://www.nrclabs.com)

# Analytical Report

WO#: 23071270  
 Date Reported: 8/10/2023

**CLIENT:** Analytical Laboratory Group, Inc.  
**Lab ID:** 23071270-01A  
**Client Sample ID:** 2307915-001A-G  
**Project:** 2307915 Seal Rock Water District  
**Sample Location:** Entry Point Dist  
**Sample Address:**

**Collection Date:** 7/26/2023 9:30:00 AM  
**Received Date:** 7/28/2023 10:55:00 AM  
**Matrix:** DRINKING WATER  
**PWS #:** 41-00798  
**Source ID:** EP-C  
**Sample Collector:**

Analyses	Code	Method	NELAP		Qual		RL Units	Date		Analyst
			Status	Result	DF	MCL		Analyzed		
1,2-Dibromo-3-chloropropane	2931	E504.1	A	ND	1	0.0000201 mg/L	0.000200	08/03/23 16:39	TJW	
1,2-Dibromoethane (EDB)	2946	E504.1	A	ND	1	0.0000201 mg/L	0.0000500	08/03/23 16:39	TJW	
Chlordane	2959	E508	A	ND	1	0.000236 mg/L	0.00200	08/01/23 15:43	TJW	
Endrin	2005	E508	A	ND	1	0.00000943 mg/L	0.00200	08/01/23 15:43	TJW	
gamma-BHC (Lindane)	2010	E508	A	ND	1	0.00000943 mg/L	0.000200	08/01/23 15:43	TJW	
Heptachlor	2065	E508	A	ND	1	0.00000943 mg/L	0.000400	08/01/23 15:43	TJW	
Heptachlor epoxide	2067	E508	A	ND	1	0.00000943 mg/L	0.000200	08/01/23 15:43	TJW	
Methoxychlor	2015	E508	A	ND	1	0.0000189 mg/L	0.0400	08/01/23 15:43	TJW	
Polychlorinated Biphenyls (PCBs)	2383	E508	A	ND	1	0.000236 mg/L	0.0000500	08/01/23 15:43	TJW	
Toxaphene	2020	E508	A	ND	1	0.000283 mg/L	0.00300	08/01/23 15:43	TJW	
2,4,5-TP (Silvex)	2110	E515.3	A	ND	1	0.00500 mg/L	0.0500	08/02/23 3:01	TJW	
2,4-D	2105	E515.3	A	ND	1	0.00200 mg/L	0.0700	08/02/23 3:01	TJW	
Dalapon	2031	E515.3	A	ND	1	0.00500 mg/L	0.200	08/02/23 3:01	TJW	
Dinoseb	2041	E515.3	A	ND	1	0.00100 mg/L	0.00700	08/02/23 3:01	TJW	
Pentachlorophenol	2326	E515.3	A	ND	1	0.000500 mg/L	0.00100	08/02/23 3:01	TJW	
Picloram	2040	E515.3	A	ND	1	0.00500 mg/L	0.500	08/02/23 3:01	TJW	
Alachlor	2051	E525.2	A	ND	1	0.000192 mg/L	0.00200	08/01/23 19:50	TJW	
Atrazine	2050	E525.2	A	ND	1	0.000288 mg/L	0.00300	08/01/23 19:50	TJW	
Benzo(a)pyrene	2306	E525.2	A	ND	1	0.0000962 mg/L	0.000200	08/01/23 19:50	TJW	
Bis(2-ethylhexyl) phthalate	2039	E525.2	A	ND	1	0.00192 mg/L	0.00600	08/01/23 19:50	TJW	
Bis(2-Ethylhexyl)adipate	2035	E525.2	A	ND	1	0.00385 mg/L	0.400	08/01/23 19:50	TJW	
Hexachlorobenzene	2274	E525.2	A	ND	1	0.000385 mg/L	0.00100	08/01/23 19:50	TJW	
Hexachlorocyclopentadiene	2042	E525.2	A	ND	1	0.00481 mg/L	0.0500	08/01/23 19:50	TJW	
Simazine	2037	E525.2	A	ND	1	0.000385 mg/L	0.00400	08/01/23 19:50	TJW	
Carbofuran	2046	E531.2	A	ND	1	0.00400 mg/L	0.0400	08/08/23 15:44	TJW	
Oxamyl (Vydate)	2036	E531.2	A	ND	1	0.00400 mg/L	0.200	08/08/23 15:44	TJW	
Glyphosate	2034	E547	A	ND	1	0.0500 mg/L	0.700	07/28/23 21:15	TJW	
Endothall	2033	E548.1	A	ND	1	0.0100 mg/L	0.100	08/02/23 19:03	TJW	
Diquat	2032	E549.2	A	ND	1	0.00500 mg/L	0.0200	07/31/23 10:12	TJW	

**QUALIFIERS**

C1	Sample container temperature is out of limit as specified at testcode	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	MI	Recovery outside control limits due to Matrix Interference
ND	Not Detected at the Reporting Limit	PL	Permit Limit

Original

**NELAP** A Accredited in accordance with NELAP ORELAP 100016, OR-028





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 TEL: (541) 770-5678 FAX: (541) 770-2901  
 Website: [www.nrclabs.com](http://www.nrclabs.com)

# Analytical Report

WO#: 23071270  
 Date Reported: 8/10/2023

**CLIENT:** Analytical Laboratory Group, Inc.  
**Lab ID:** 23071270-02A  
**Client Sample ID:** 2307915-002A  
**Project:** 2307915 Seal Rock Water District  
**Sample Location:** Entry Point Dist  
**Sample Address:**

**Collection Date:** 7/26/2023 9:30:00 AM  
**Received Date:** 7/28/2023 10:55:00 AM  
**Matrix:** DRINKING WATER  
**PWS #:** 41-00798  
**Source ID:** EP-C  
**Sample Collector:**

Analyses	Code	Method	NELAP		Qual		RL Units	Date		Analyst
			Status	Result	DF	MCL		Analyzed		
1,1,1-Trichloroethane (1,1,1-TCA)	2981	E524.2	A	ND	1	0.000500 mg/L	0.200	08/07/23 9:57	TJW	
1,1,2-Trichloroethane	2985	E524.2	A	ND	1	0.000500 mg/L	0.00500	08/07/23 9:57	TJW	
1,1-Dichloroethylene	2977	E524.2	A	ND	1	0.000500 mg/L	0.00700	08/07/23 9:57	TJW	
1,2,4-Trichlorobenzene	2378	E524.2	A	ND	1	0.000500 mg/L	0.0700	08/07/23 9:57	TJW	
1,2-Dichloroethane (EDC)	2980	E524.2	A	ND	1	0.000500 mg/L	0.00500	08/07/23 9:57	TJW	
1,2-Dichloropropane	2983	E524.2	A	ND	1	0.000500 mg/L	0.00500	08/07/23 9:57	TJW	
Benzene	2990	E524.2	A	ND	1	0.000500 mg/L	0.00500	08/07/23 9:57	TJW	
Carbon tetrachloride	2982	E524.2	A	ND	1	0.000500 mg/L	0.00500	08/07/23 9:57	TJW	
cis-1,2-Dichloroethene	2380	E524.2	A	ND	1	0.000500 mg/L	0.0700	08/07/23 9:57	TJW	
Dichloromethane	2964	E524.2	A	ND	1	0.000500 mg/L	0.00500	08/07/23 9:57	TJW	
Ethylbenzene	2992	E524.2	A	ND	1	0.000500 mg/L	0.700	08/07/23 9:57	TJW	
Monochlorobenzene	2989	E524.2	A	ND	1	0.000500 mg/L	0.100	08/07/23 9:57	TJW	
o-Dichlorobenzene	2968	E524.2	A	ND	1	0.000500 mg/L	0.600	08/07/23 9:57	TJW	
p-Dichlorobenzene	2969	E524.2	A	ND	1	0.000500 mg/L	0.0750	08/07/23 9:57	TJW	
Styrene	2996	E524.2	A	ND	1	0.000500 mg/L	0.100	08/07/23 9:57	TJW	
Tetrachloroethene (PCE)	2987	E524.2	A	ND	1	0.000500 mg/L	0.00500	08/07/23 9:57	TJW	
Toluene	2991	E524.2	A	ND	1	0.000500 mg/L	1.00	08/07/23 9:57	TJW	
trans-1,2-Dichloroethylene	2979	E524.2	A	ND	1	0.000500 mg/L	0.100	08/07/23 9:57	TJW	
Trichloroethene (TCE)	2984	E524.2	A	ND	1	0.000500 mg/L	0.00500	08/07/23 9:57	TJW	
Vinyl chloride	2976	E524.2	A	ND Q	1	0.000500 mg/L	0.00200	08/07/23 9:57	TJW	
Xylenes, Total	2955	E524.2	A	0.00126 CF	1	0.000500 mg/L	10.0	08/07/23 9:57	TJW	

**QUALIFIERS**

C1	Sample container temperature is out of limit as specified at testcode	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	MI	Recovery outside control limits due to Matrix Interference
ND	Not Detected at the Reporting Limit	PL	Permit Limit

Original

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- A Total Alkalinity and Bicarbonate Alkalinity results are to a pH endpoint of 4.5. Carbonate Alkalinity result is to a pH endpoint of 8.3.
- B Analyte detected in the associated method blank.
- C Sample(s) does not meet NELAP/ORELAP sample acceptance criteria. See Case Narrative.
- C1 Sample(s) does not meet NELAP/ORELAP sample acceptance criteria for temperature.
- CF Results confirmed by re-analysis.
- CU Cleanup performed as specified by method.
- E Estimated value.
- ER Elevated reporting limit due to matrix. Report limits (MDLs, MRLs & PQLs) are adjusted based on variations in sample preparation amounts, analytical dilutions, and percent solids, where applicable.
- FC Fecal Coliforms: Sample(s) received past 40 CFR Part 136 specified holding time. Results reported as estimated values.
- HP Sample re-analysis performed outside of method specified holding time.
- HR Sample received outside of method specified holding time.
- HS Sample analyzed for volatile organics contained headspace.
- HT At the client's request, the sample was analyzed outside of method specified holding time.
- H Analysis performed outside of method specified holding time.
- J Analyte detected below the Minimum Reporting Limit (MRL) and above the Method Detection Limit (MDL). The J flag result is an estimated value and the user should be aware that this data is of limited reliability.
- L Dissolved metals were not filtered within 15 minutes of collection per 40 CFR Part 136.
- MI Surrogate, Duplicate Sample (DUP) or Matrix Spikes recoveries are out of control limits due to matrix interference. Sample results may be biased.
- N See Case Narrative on page 2 of report.
- Q Initial calibration verification (ICV), continuing calibration verification (CCV) or laboratory control sample (LCS), and/or matrix spikes exceeded  
high recovery limits, but associated samples are non-detect and the sample results are not affected. Data meets EPA/NELAP requirements.
- R Relative percent difference (RPD) is outside of the accepted recovery limits.
- R3 The relative percent difference (RPD) and/or percent recovery for the duplicate (DUP) or matrix spike (MS)/matrix spike duplicate (MSD) cannot be accurately calculated due to the concentration of analyte already present in the sample.
- R4 The Relative percent difference (RPD) is not within control limits because the concentration of the sample result is too low to represent proper statistical error.
- S Surrogate and/or matrix spike recovery is outside of the accepted recovery limits. Sample results may be biased.
- S1 Surrogate or matrix spike recovery is outside of control limits due to dilution necessary for analysis.
- SC Sub-contracted to another laboratory for analysis.
- SP Sample(s) were not collected per EPA Method 5035A protocols. The results are considered minimum values.
- \* Value exceeds Maximum Contaminant Level or is outside the acceptable range.



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August 10, 2023

Katrina Garcia  
Analytical Laboratory Group, Inc.  
361 West Fifth Avenue  
Eugene, OR 97401  
TEL: (800) 262-5973  
FAX (541) 484-5995

RE: 2307915 Seal Rock Water District

Order No.: 23071270

Dear Katrina Garcia:

Neilson Research Corporation received 3 sample(s) on 7/28/2023 for the analyses presented in the following report.

The results relate only to the parameters tested or to the sample as received by the laboratory. This report shall not be reproduced except in full, without the written approval of Neilson Research Corporation. If you have any questions regarding these test results, please feel free to call.

Sincerely,  
Neilson Research Corporation

Tamra Schmedemann  
Senior Project Manager  
245 S Grape St  
Medford, OR 97501



Original



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## Case Narrative

WO#: 23071270  
Date: 8/10/2023

---

**CLIENT:** Analytical Laboratory Group, Inc.

**Project:** 2307915 Seal Rock Water District

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The analyses were performed according to the guidelines in the Neilson Research Corporation Quality Assurance Program. This report contains analytical results for the sample(s) as received by the laboratory.

Neilson Research Corporation certifies that this report is in compliance with the requirements of NELAP. No unusual difficulties were experienced during analysis of this batch except as noted below or qualified with data flags on the reports.

Analytical Comments for EPA508\_DW, Sample LCS-22004, Batch ID 22004 : The surrogate recovery was below acceptance criteria in the LCS. All analyte recoveries in the LCS and all surrogate recoveries in the test samples are acceptable.

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Page 7 of 34



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# Analytical Report

WO#: 23071270  
 Date Reported: 8/10/2023

**CLIENT:** Analytical Laboratory Group, Inc.  
**Lab ID:** 23071270-01A  
**Client Sample ID:** 2307915-001A-G  
**Project:** 2307915 Seal Rock Water District  
**Sample Location:** Entry Point Dist  
**Sample Address:**

**Collection Date:** 7/26/2023 9:30:00 AM  
**Received Date:** 7/28/2023 10:55:00 AM  
**Matrix:** DRINKING WATER  
**PWS #:** 41-00798  
**Source ID:** EP-C  
**Sample Collector:**

Analyses	Code	Method	NELAP		Qual		RL Units	Date		Analyst
			Status	Result	DF	MCL		Analyzed		
1,2-Dibromo-3-chloropropane	2931	E504.1	A	ND	1	0.0000201 mg/L	0.000200	08/03/23	16:39	TJW
1,2-Dibromoethane (EDB)	2946	E504.1	A	ND	1	0.0000201 mg/L	0.0000500	08/03/23	16:39	TJW
Surr: Tetrachloro-m-xylene		E504.1		96.3	1	70 - 130 %Rec		08/03/23	16:39	TJW
Chlordane	2959	E508	A	ND	1	0.000236 mg/L	0.00200	08/01/23	15:43	TJW
Endrin	2005	E508	A	ND	1	0.00000943 mg/L	0.00200	08/01/23	15:43	TJW
gamma-BHC (Lindane)	2010	E508	A	ND	1	0.00000943 mg/L	0.000200	08/01/23	15:43	TJW
Heptachlor	2065	E508	A	ND	1	0.00000943 mg/L	0.000400	08/01/23	15:43	TJW
Heptachlor epoxide	2067	E508	A	ND	1	0.00000943 mg/L	0.000200	08/01/23	15:43	TJW
Methoxychlor	2015	E508	A	ND	1	0.0000189 mg/L	0.0400	08/01/23	15:43	TJW
Polychlorinated Biphenyls (PCBs)	2383	E508	A	ND	1	0.000236 mg/L	0.000500	08/01/23	15:43	TJW
Toxaphene	2020	E508	A	ND	1	0.000283 mg/L	0.00300	08/01/23	15:43	TJW
Surr: Decachlorobiphenyl		E508		79.5	1	70 - 130 %Rec		08/01/23	15:43	TJW
2,4,5-TP (Silvex)	2110	E515.3	A	ND	1	0.00500 mg/L	0.0500	08/02/23	3:01	TJW
2,4-D	2105	E515.3	A	ND	1	0.00200 mg/L	0.0700	08/02/23	3:01	TJW
Dalapon	2031	E515.3	A	ND	1	0.00500 mg/L	0.200	08/02/23	3:01	TJW
Dinoseb	2041	E515.3	A	ND	1	0.00100 mg/L	0.00700	08/02/23	3:01	TJW
Pentachlorophenol	2326	E515.3	A	ND	1	0.000500 mg/L	0.00100	08/02/23	3:01	TJW
Picloram	2040	E515.3	A	ND	1	0.00500 mg/L	0.500	08/02/23	3:01	TJW
Surr: DCAA		E515.3		103	1	70 - 130 %Rec		08/02/23	3:01	TJW
Alachlor	2051	E525.2	A	ND	1	0.000192 mg/L	0.00200	08/01/23	19:50	TJW
Atrazine	2050	E525.2	A	ND	1	0.000288 mg/L	0.00300	08/01/23	19:50	TJW
Benzo(a)pyrene	2306	E525.2	A	ND	1	0.0000962 mg/L	0.000200	08/01/23	19:50	TJW
Bis(2-ethylhexyl) phthalate	2039	E525.2	A	ND	1	0.00192 mg/L	0.00600	08/01/23	19:50	TJW
Bis(2-Ethylhexyl)adipate	2035	E525.2	A	ND	1	0.00385 mg/L	0.400	08/01/23	19:50	TJW
Hexachlorobenzene	2274	E525.2	A	ND	1	0.000385 mg/L	0.00100	08/01/23	19:50	TJW
Hexachlorocyclopentadiene	2042	E525.2	A	ND	1	0.00481 mg/L	0.0500	08/01/23	19:50	TJW
Simazine	2037	E525.2	A	ND	1	0.000385 mg/L	0.00400	08/01/23	19:50	TJW
Surr: 1,3-Dimethyl-2-nitrobenzene		E525.2		102	1	70 - 130 %Rec		08/01/23	19:50	TJW
Surr: Perylene-d12		E525.2		103	1	70 - 130 %Rec		08/01/23	19:50	TJW
Surr: Pyrene-d10		E525.2		99.0	1	70 - 130 %Rec		08/01/23	19:50	TJW
Surr: Triphenyl phosphate		E525.2		121	1	70 - 130 %Rec		08/01/23	19:50	TJW
Carbofuran	2046	E531.2	A	ND	1	0.00400 mg/L	0.0400	08/08/23	15:44	TJW

**QUALIFIERS**

C1 Sample container temperature is out of limit as specified at testcode  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit  
 E Value above quantitation range  
 MI Recovery outside control limits due to Matrix Interference  
 PL Permit Limit

Original

**NELAP** NELAP A Accredited in accordance with NELAP ORELAP 100016, OR-028



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 Website: www.nrclabs.com

# Analytical Report

WO#: 23071270  
 Date Reported: 8/10/2023

**CLIENT:** Analytical Laboratory Group, Inc.  
**Lab ID:** 23071270-01A  
**Client Sample ID:** 2307915-001A-G  
**Project:** 2307915 Seal Rock Water District  
**Sample Location:** Entry Point Dist  
**Sample Address:**

**Collection Date:** 7/26/2023 9:30:00 AM  
**Received Date:** 7/28/2023 10:55:00 AM  
**Matrix:** DRINKING WATER  
**PWS #:** 41-00798  
**Source ID:** EP-C  
**Sample Collector:**

Analyses	Code	Method	NELAP		Qual		RL Units	Date	
			Status	Result	DF	MCL Analyzed		Analyst	
Oxamyl (Vydate)	2036	E531.2	A	ND	1	0.00400 mg/L	0.200	08/08/23 15:44	TJW
Surr: BDMC		E531.2	A	104	1	70 - 130 %Rec		08/08/23 15:44	TJW
Glyphosate	2034	E547	A	ND	1	0.0500 mg/L	0.700	07/28/23 21:15	TJW
Endothall	2033	E548.1	A	ND	1	0.0100 mg/L	0.100	08/02/23 19:03	TJW
Diquat	2032	E549.2	A	ND	1	0.00500 mg/L	0.0200	07/31/23 10:12	TJW

**QUALIFIERS**

C1	Sample container temperature is out of limit as specified at testcode	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	MI	Recovery outside control limits due to Matrix Interference
ND	Not Detected at the Reporting Limit	PL	Permit Limit

Original

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# Analytical Report

WO#: 23071270  
 Date Reported: 8/10/2023

**CLIENT:** Analytical Laboratory Group, Inc.  
**Lab ID:** 23071270-02A  
**Client Sample ID:** 2307915-002A  
**Project:** 2307915 Seal Rock Water District  
**Sample Location:** Entry Point Dist  
**Sample Address:**

**Collection Date:** 7/26/2023 9:30:00 AM  
**Received Date:** 7/28/2023 10:55:00 AM  
**Matrix:** DRINKING WATER  
**PWS #:** 41-00798  
**Source ID:** EP-C  
**Sample Collector:**

Analyses	Code	Method	NELAP		Qual		RL Units	Date		Analyst
			Status	Result	DF	MCL		Analyzed		
1,1,1-Trichloroethane (1,1,1-TCA)	2981	E524.2	A	ND	1	0.000500 mg/L	0.200	08/07/23 9:57	TJW	
1,1,2-Trichloroethane	2985	E524.2	A	ND	1	0.000500 mg/L	0.00500	08/07/23 9:57	TJW	
1,1-Dichloroethylene	2977	E524.2	A	ND	1	0.000500 mg/L	0.00700	08/07/23 9:57	TJW	
1,2,4-Trichlorobenzene	2378	E524.2	A	ND	1	0.000500 mg/L	0.0700	08/07/23 9:57	TJW	
1,2-Dichloroethane (EDC)	2980	E524.2	A	ND	1	0.000500 mg/L	0.00500	08/07/23 9:57	TJW	
1,2-Dichloropropane	2983	E524.2	A	ND	1	0.000500 mg/L	0.00500	08/07/23 9:57	TJW	
Benzene	2990	E524.2	A	ND	1	0.000500 mg/L	0.00500	08/07/23 9:57	TJW	
Carbon tetrachloride	2982	E524.2	A	ND	1	0.000500 mg/L	0.00500	08/07/23 9:57	TJW	
cis-1,2-Dichloroethene	2380	E524.2	A	ND	1	0.000500 mg/L	0.0700	08/07/23 9:57	TJW	
Dichloromethane	2964	E524.2	A	ND	1	0.000500 mg/L	0.00500	08/07/23 9:57	TJW	
Ethylbenzene	2992	E524.2	A	ND	1	0.000500 mg/L	0.700	08/07/23 9:57	TJW	
Monochlorobenzene	2989	E524.2	A	ND	1	0.000500 mg/L	0.100	08/07/23 9:57	TJW	
o-Dichlorobenzene	2968	E524.2	A	ND	1	0.000500 mg/L	0.600	08/07/23 9:57	TJW	
p-Dichlorobenzene	2969	E524.2	A	ND	1	0.000500 mg/L	0.0750	08/07/23 9:57	TJW	
Styrene	2996	E524.2	A	ND	1	0.000500 mg/L	0.100	08/07/23 9:57	TJW	
Tetrachloroethene (PCE)	2987	E524.2	A	ND	1	0.000500 mg/L	0.00500	08/07/23 9:57	TJW	
Toluene	2991	E524.2	A	ND	1	0.000500 mg/L	1.00	08/07/23 9:57	TJW	
trans-1,2-Dichloroethylene	2979	E524.2	A	ND	1	0.000500 mg/L	0.100	08/07/23 9:57	TJW	
Trichloroethene (TCE)	2984	E524.2	A	ND	1	0.000500 mg/L	0.00500	08/07/23 9:57	TJW	
Vinyl chloride	2976	E524.2	A	ND Q	1	0.000500 mg/L	0.00200	08/07/23 9:57	TJW	
Xylenes, Total	2955	E524.2	A	0.00126	CF	1	0.000500 mg/L	10.0	08/07/23 9:57	TJW
Surr: 1,2-Dichlorobenzene-d4		E524.2		89.4		1	70 - 130 %Rec	08/07/23 9:57	TJW	
Surr: 4-Bromofluorobenzene		E524.2		103		1	70 - 130 %Rec	08/07/23 9:57	TJW	
Surr: Dibromofluoromethane		E524.2		100		1	70 - 130 %Rec	08/07/23 9:57	TJW	
Surr: Toluene-d8		E524.2		103		1	70 - 130 %Rec	08/07/23 9:57	TJW	

**QUALIFIERS**

C1	Sample container temperature is out of limit as specified at testcode	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	MI	Recovery outside control limits due to Matrix Interference
ND	Not Detected at the Reporting Limit	PL	Permit Limit

Original

**NELAP**

NELAP A Accredited in accordance with NELAP ORELAP 100016, OR-028



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# Analytical Report

WO#: 23071270  
 Date Reported: 8/10/2023

**CLIENT:** Analytical Laboratory Group, Inc.  
**Lab ID:** 23071270-03A  
**Client Sample ID** Trip Blank #28071  
**Project:** 2307915 Seal Rock Water District  
**Sample Location:** Lab Water  
**Sample Address:**

**Collection Date:** 7/26/2023 9:30:00 AM  
**Received Date:** 7/28/2023 10:55:00 AM  
**Matrix:** WATER  
**PWS #:** 41-00798  
**Source ID:**  
**Sample Collector:**

Analyses	Code	Method	NELAP		Qual		RL Units	Date		Analyst
			Status	Result	DF	MCL		Analyzed		
1,1,1-Trichloroethane (1,1,1-TCA)	2981	E524.2	A	ND	1	0.000500 mg/L	0.200	08/07/23 15:34	TJW	
1,1,2-Trichloroethane	2985	E524.2	A	ND	1	0.000500 mg/L	0.00500	08/07/23 15:34	TJW	
1,1-Dichloroethylene	2977	E524.2	A	ND	1	0.000500 mg/L	0.00700	08/07/23 15:34	TJW	
1,2,4-Trichlorobenzene	2378	E524.2	A	ND	1	0.000500 mg/L	0.0700	08/07/23 15:34	TJW	
1,2-Dichloroethane (EDC)	2980	E524.2	A	ND	1	0.000500 mg/L	0.00500	08/07/23 15:34	TJW	
1,2-Dichloropropane	2983	E524.2	A	ND	1	0.000500 mg/L	0.00500	08/07/23 15:34	TJW	
Benzene	2990	E524.2	A	ND	1	0.000500 mg/L	0.00500	08/07/23 15:34	TJW	
Carbon tetrachloride	2982	E524.2	A	ND	1	0.000500 mg/L	0.00500	08/07/23 15:34	TJW	
cis-1,2-Dichloroethene	2380	E524.2	A	ND	1	0.000500 mg/L	0.0700	08/07/23 15:34	TJW	
Dichloromethane	2964	E524.2	A	ND	1	0.000500 mg/L	0.00500	08/07/23 15:34	TJW	
Ethylbenzene	2992	E524.2	A	ND	1	0.000500 mg/L	0.700	08/07/23 15:34	TJW	
Monochlorobenzene	2989	E524.2	A	ND	1	0.000500 mg/L	0.100	08/07/23 15:34	TJW	
o-Dichlorobenzene	2968	E524.2	A	ND	1	0.000500 mg/L	0.600	08/07/23 15:34	TJW	
p-Dichlorobenzene	2969	E524.2	A	ND	1	0.000500 mg/L	0.0750	08/07/23 15:34	TJW	
Styrene	2996	E524.2	A	ND	1	0.000500 mg/L	0.100	08/07/23 15:34	TJW	
Tetrachloroethene (PCE)	2987	E524.2	A	ND	1	0.000500 mg/L	0.00500	08/07/23 15:34	TJW	
Toluene	2991	E524.2	A	ND	1	0.000500 mg/L	1.00	08/07/23 15:34	TJW	
trans-1,2-Dichloroethylene	2979	E524.2	A	ND	1	0.000500 mg/L	0.100	08/07/23 15:34	TJW	
Trichloroethene (TCE)	2984	E524.2	A	ND	1	0.000500 mg/L	0.00500	08/07/23 15:34	TJW	
Vinyl chloride	2976	E524.2	A	ND Q	1	0.000500 mg/L	0.00200	08/07/23 15:34	TJW	
Xylenes, Total	2955	E524.2	A	ND	1	0.000500 mg/L	10.0	08/07/23 15:34	TJW	
Surr: 1,2-Dichlorobenzene-d4		E524.2		91.1	1	70 - 130 %Rec		08/07/23 15:34	TJW	
Surr: 4-Bromofluorobenzene		E524.2		103	1	70 - 130 %Rec		08/07/23 15:34	TJW	
Surr: Dibromofluoromethane		E524.2		91.4	1	70 - 130 %Rec		08/07/23 15:34	TJW	
Surr: Toluene-d8		E524.2		93.1	1	70 - 130 %Rec		08/07/23 15:34	TJW	

**QUALIFIERS**

C1	Sample container temperature is out of limit as specified at testcode	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	MI	Recovery outside control limits due to Matrix Interference
ND	Not Detected at the Reporting Limit	PL	Permit Limit

Original

**NELAP**

NELAP A Accredited in accordance with NELAP ORELAP 100016, OR-028





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 Website: www.nrclabs.com

# QC SUMMARY REPORT

WO#: 23071270  
 10-Aug-23

**Client:** Analytical Laboratory Group, Inc.  
**Project:** 2307915 Seal Rock Water District

**TestCode:** EPA504\_DW

Sample ID: <b>MB-22058</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA504_DW</b>	Units: <b>mg/L</b>	Prep Date: <b>8/3/2023</b>	RunNo: <b>41457</b>						
Client ID: <b>PBW</b>	Batch ID: <b>22058</b>	TestNo: <b>E504.1</b>	<b>E504.1</b>	Analysis Date: <b>8/3/2023</b>	SeqNo: <b>688691</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,2-Dibromo-3-chloropropane	ND	0.0000200									
1,2-Dibromoethane (EDB)	ND	0.0000200									
Surr: Tetrachloro-m-xylene	0.00114		0.001000		114	70	130				

Sample ID: <b>LCS-22058</b>	SampType: <b>LCS</b>	TestCode: <b>EPA504_DW</b>	Units: <b>mg/L</b>	Prep Date: <b>8/3/2023</b>	RunNo: <b>41457</b>						
Client ID: <b>LCSW</b>	Batch ID: <b>22058</b>	TestNo: <b>E504.1</b>	<b>E504.1</b>	Analysis Date: <b>8/3/2023</b>	SeqNo: <b>688692</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,2-Dibromo-3-chloropropane	0.000491	0.0000200	0.0005000	0	98.2	70	130				
1,2-Dibromoethane (EDB)	0.000548	0.0000200	0.0005000	0	110	70	130				
Surr: Tetrachloro-m-xylene	0.00101		0.001000		101	70	130				

Sample ID: <b>23071273-02AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA504_DW</b>	Units: <b>mg/L</b>	Prep Date: <b>8/3/2023</b>	RunNo: <b>41457</b>						
Client ID: <b>BatchQC</b>	Batch ID: <b>22058</b>	TestNo: <b>E504.1</b>	<b>E504.1</b>	Analysis Date: <b>8/3/2023</b>	SeqNo: <b>688703</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,2-Dibromo-3-chloropropane	0.000426	0.0000199	0.0004972	0	85.6	70	130				
1,2-Dibromoethane (EDB)	0.000490	0.0000199	0.0004972	0	98.6	70	130				
Surr: Tetrachloro-m-xylene	0.000889		0.0009945		89.4	70	130				

**Qualifiers:** CI Sample container temperature is out of limit as specified at testcode E Value above quantitation range H Holding times for preparation or analysis exceeds  
 MI Recovery outside control limits due to Matrix Interference ND Not Detected at the Reporting Limit PL Permit Limit  
 RL Reporting Detection Limit



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# QC SUMMARY REPORT

WO#: 23071270  
 10-Aug-23

**Client:** Analytical Laboratory Group, Inc.  
**Project:** 2307915 Seal Rock Water District

**TestCode:** EPA504\_DW

Sample ID: <b>23071273-02AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA504_DW</b>	Units: <b>mg/L</b>	Prep Date: <b>8/3/2023</b>	RunNo: <b>41457</b>						
Client ID: <b>BatchQC</b>	Batch ID: <b>22058</b>	TestNo: <b>E504.1</b>	<b>E504.1</b>	Analysis Date: <b>8/3/2023</b>	SeqNo: <b>688704</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	0.000436	0.0000199	0.0004965	0	87.8	70	130	0.0004256	2.38	20	
1,2-Dibromoethane (EDB)	0.000502	0.0000199	0.0004965	0	101	70	130	0.0004903	2.45	20	
Surr: Tetrachloro-m-xylene	0.000722		0.0009930		72.7	70	130		0		

**Qualifiers:** CI Sample container temperature is out of limit as specified at testcode E Value above quantitation range H Holding times for preparation or analysis exceeds  
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# QC SUMMARY REPORT

WO#: 23071270  
 10-Aug-23

**Client:** Analytical Laboratory Group, Inc.  
**Project:** 2307915 Seal Rock Water District

**TestCode:** EPA508\_DW

Sample ID: <b>MB-22004</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA508_DW</b>	Units: <b>mg/L</b>	Prep Date: <b>7/31/2023</b>	RunNo: <b>41480</b>						
Client ID: <b>PBW</b>	Batch ID: <b>22004</b>	TestNo: <b>E508</b>	<b>E508</b>	Analysis Date: <b>8/1/2023</b>	SeqNo: <b>688305</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chlordane	ND	0.000250									
Endrin	ND	0.0000100									
gamma-BHC (Lindane)	ND	0.0000100									
Heptachlor	ND	0.0000100									
Heptachlor epoxide	ND	0.0000100									
Methoxychlor	ND	0.0000200									
Polychlorinated Biphenyls (PCBs)	ND	0.000250									
Toxaphene	ND	0.000300									
Surr: Decachlorobiphenyl	0.000194		0.0002500		77.7	70	130				

Sample ID: <b>LCS-22004</b>	SampType: <b>LCS</b>	TestCode: <b>EPA508_DW</b>	Units: <b>mg/L</b>	Prep Date: <b>7/31/2023</b>	RunNo: <b>41480</b>						
Client ID: <b>LCSW</b>	Batch ID: <b>22004</b>	TestNo: <b>E508</b>	<b>E508</b>	Analysis Date: <b>8/1/2023</b>	SeqNo: <b>688306</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Endrin	0.000185	0.0000100	0.0002000	0	92.5	70	130				
gamma-BHC (Lindane)	0.000158	0.0000100	0.0002000	0	78.8	70	130				
Heptachlor	0.000149	0.0000100	0.0002000	0	74.6	70	130				
Heptachlor epoxide	0.000148	0.0000100	0.0002000	0	73.8	70	130				
Methoxychlor	0.000191	0.0000200	0.0002000	0	95.6	70	130				
Surr: Decachlorobiphenyl	0.000170		0.0002500		68.2	70	130				SN

**Qualifiers:** CI Sample container temperature is out of limit as specified at testcode E Value above quantitation range H Holding times for preparation or analysis exceeded  
 MI Recovery outside control limits due to Matrix Interference ND Not Detected at the Reporting Limit PL Permit Limit  
 RL Reporting Detection Limit



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# QC SUMMARY REPORT

WO#: 23071270

10-Aug-23

**Client:** Analytical Laboratory Group, Inc.

**Project:** 2307915 Seal Rock Water District

**TestCode:** EPA508\_DW

Sample ID: <b>LCS-22004-TOX</b>	SampType: <b>LCS3</b>	TestCode: <b>EPA508_DW</b>	Units: <b>mg/L</b>	Prep Date: <b>7/31/2023</b>	RunNo: <b>41480</b>						
Client ID: <b>BatchQC</b>	Batch ID: <b>22004</b>	TestNo: <b>E508</b>	<b>E508</b>	Analysis Date: <b>8/1/2023</b>	SeqNo: <b>688307</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Toxaphene	0.00215	0.000300	0.002500	0	86.2	70	130				
Surr: Decachlorobiphenyl	0.000188		0.0002500		75.3	70	130				

Sample ID: <b>23071120-01AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA508_DW</b>	Units: <b>mg/L</b>	Prep Date: <b>7/31/2023</b>	RunNo: <b>41480</b>						
Client ID: <b>BatchQC</b>	Batch ID: <b>22004</b>	TestNo: <b>E508</b>	<b>E508</b>	Analysis Date: <b>8/1/2023</b>	SeqNo: <b>688310</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Endrin	0.000171	0.00000962	0.0001923	0	88.7	65	135				
gamma-BHC (Lindane)	0.000145	0.00000962	0.0001923	0	75.2	65	135				
Heptachlor	0.000148	0.00000962	0.0001923	0	76.8	65	135				
Heptachlor epoxide	0.000138	0.00000962	0.0001923	0	71.5	65	135				
Methoxychlor	0.000170	0.0000192	0.0001923	0	88.4	65	135				
Surr: Decachlorobiphenyl	0.000180		0.0002404		75.1	70	130				

Sample ID: <b>23071120-01AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA508_DW</b>	Units: <b>mg/L</b>	Prep Date: <b>7/31/2023</b>	RunNo: <b>41480</b>						
Client ID: <b>BatchQC</b>	Batch ID: <b>22004</b>	TestNo: <b>E508</b>	<b>E508</b>	Analysis Date: <b>8/1/2023</b>	SeqNo: <b>688311</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Endrin	0.000174	0.00000971	0.0001942	0	89.6	65	135	0.0001706	1.93	20	
gamma-BHC (Lindane)	0.000146	0.00000971	0.0001942	0	75.3	65	135	0.0001447	1.10	20	
Heptachlor	0.000154	0.00000971	0.0001942	0	79.4	65	135	0.0001477	4.31	20	
Heptachlor epoxide	0.000140	0.00000971	0.0001942	0	72.1	65	135	0.0001376	1.70	20	
Methoxychlor	0.000175	0.0000194	0.0001942	0	90.2	65	135	0.0001700	2.91	20	

**Qualifiers:** CI Sample container temperature is out of limit as specified at testcode E Value above quantitation range H Holding times for preparation or analysis exceeded  
 MI Recovery outside control limits due to Matrix Interference ND Not Detected at the Reporting Limit PL Permit Limit  
 RL Reporting Detection Limit



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# QC SUMMARY REPORT

WO#: 23071270  
 10-Aug-23

**Client:** Analytical Laboratory Group, Inc.

**Project:** 2307915 Seal Rock Water District

**TestCode:** EPA508\_DW

Sample ID: <b>23071120-01AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA508_DW</b>	Units: <b>mg/L</b>	Prep Date: <b>7/31/2023</b>	RunNo: <b>41480</b>						
Client ID: <b>BatchQC</b>	Batch ID: <b>22004</b>	TestNo: <b>E508</b>	<b>E508</b>	Analysis Date: <b>8/1/2023</b>	SeqNo: <b>688311</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Surr: Decachlorobiphenyl	0.000184		0.0002427		76.0	70	130		0		
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**Qualifiers:** CI Sample container temperature is out of limit as specified at testcode  
 MI Recovery outside control limits due to Matrix Interference  
 RL Reporting Detection Limit  
 E Value above quantitation range  
 ND Not Detected at the Reporting Limit  
 H Holding times for preparation or analysis exceeds  
 PL Permit Limit



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# QC SUMMARY REPORT

WO#: 23071270  
 10-Aug-23

**Client:** Analytical Laboratory Group, Inc.  
**Project:** 2307915 Seal Rock Water District

**TestCode:** EPA515.3\_DW

Sample ID: <b>MB-22021</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA515.3_D</b>	Units: <b>mg/L</b>	Prep Date: <b>8/1/2023</b>	RunNo: <b>41433</b>						
Client ID: <b>PBW</b>	Batch ID: <b>22021</b>	TestNo: <b>E515.3</b>	<b>E515.3</b>	Analysis Date: <b>8/1/2023</b>	SeqNo: <b>687516</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4,5-TP (Silvex)	ND	0.00500									
2,4-D	ND	0.00200									
Dalapon	ND	0.00500									
Dinoseb	ND	0.00100									
Pentachlorophenol	ND	0.000500									
Picloram	ND	0.00500									
Surr: DCAA	0.0260		0.02500		104	70	130				

Sample ID: <b>LCS-22021</b>	SampType: <b>LCS</b>	TestCode: <b>EPA515.3_D</b>	Units: <b>mg/L</b>	Prep Date: <b>8/1/2023</b>	RunNo: <b>41433</b>						
Client ID: <b>LCSW</b>	Batch ID: <b>22021</b>	TestNo: <b>E515.3</b>	<b>E515.3</b>	Analysis Date: <b>8/2/2023</b>	SeqNo: <b>687517</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4,5-TP (Silvex)	0.00914	0.00500	0.01000	0	91.4	70	130				
2,4-D	0.0105	0.00200	0.01000	0	105	70	130				
Dalapon	0.00995	0.00500	0.01000	0	99.5	70	130				
Dinoseb	0.00950	0.00100	0.01000	0	95.0	70	130				
Pentachlorophenol	0.00955	0.000500	0.01000	0	95.5	70	130				
Picloram	0.00945	0.00500	0.01000	0	94.5	70	130				
Surr: DCAA	0.0254		0.02500		102	70	130				

**Qualifiers:** CI Sample container temperature is out of limit as specified at testcode E Value above quantitation range H Holding times for preparation or analysis exceeded  
 MI Recovery outside control limits due to Matrix Interference ND Not Detected at the Reporting Limit PL Permit Limit  
 RL Reporting Detection Limit



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# QC SUMMARY REPORT

WO#: 23071270  
 10-Aug-23

**Client:** Analytical Laboratory Group, Inc.  
**Project:** 2307915 Seal Rock Water District

**TestCode:** EPA515.3\_DW

Sample ID: <b>23070778-01AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA515.3_D</b>	Units: <b>mg/L</b>	Prep Date: <b>8/1/2023</b>	RunNo: <b>41433</b>						
Client ID: <b>BatchQC</b>	Batch ID: <b>22021</b>	TestNo: <b>E515.3</b>	<b>E515.3</b>	Analysis Date: <b>8/2/2023</b>	SeqNo: <b>687521</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4,5-TP (Silvex)	0.00934	0.00500	0.01000	0	93.4	70	130				
2,4-D	0.00979	0.00200	0.01000	0	97.9	70	130				
Dalapon	0.0102	0.00500	0.01000	0	102	70	130				
Dinoseb	0.0101	0.00100	0.01000	0	101	70	130				
Pentachlorophenol	0.00977	0.000500	0.01000	0	97.7	70	130				
Picloram	0.00963	0.00500	0.01000	0	96.3	70	130				
Surr: DCAA	0.0260		0.02500		104	70	130				

Sample ID: <b>23070778-01AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA515.3_D</b>	Units: <b>mg/L</b>	Prep Date: <b>8/1/2023</b>	RunNo: <b>41433</b>						
Client ID: <b>BatchQC</b>	Batch ID: <b>22021</b>	TestNo: <b>E515.3</b>	<b>E515.3</b>	Analysis Date: <b>8/2/2023</b>	SeqNo: <b>687522</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4,5-TP (Silvex)	0.00913	0.00500	0.01000	0	91.3	70	130	0.009344	2.31	20	
2,4-D	0.0108	0.00200	0.01000	0	108	70	130	0.009789	9.78	20	
Dalapon	0.00992	0.00500	0.01000	0	99.2	70	130	0.01022	3.03	20	
Dinoseb	0.00971	0.00100	0.01000	0	97.1	70	130	0.01006	3.56	20	
Pentachlorophenol	0.00959	0.000500	0.01000	0	95.9	70	130	0.009768	1.86	20	
Picloram	0.00947	0.00500	0.01000	0	94.7	70	130	0.009630	1.66	20	
Surr: DCAA	0.0254		0.02500		102	70	130		0		

**Qualifiers:** CI Sample container temperature is out of limit as specified at testcode E Value above quantitation range H Holding times for preparation or analysis exceeded  
 MI Recovery outside control limits due to Matrix Interference ND Not Detected at the Reporting Limit PL Permit Limit  
 RL Reporting Detection Limit



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# QC SUMMARY REPORT

WO#: 23071270  
 10-Aug-23

**Client:** Analytical Laboratory Group, Inc.  
**Project:** 2307915 Seal Rock Water District

**TestCode:** EPA524.2\_DW

Sample ID: LCS	SampType: LCS	TestCode: EPA524.2_D	Units: mg/L	Prep Date: 8/7/2023	RunNo: 41495						
Client ID: LCSW	Batch ID: R41495	TestNo: E524.2		Analysis Date: 8/7/2023	SeqNo: 688634						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane (1,1,1-TCA)	0.0218	0.000500	0.02000	0	109	70	130				
1,1,2-Trichloroethane	0.0210	0.000500	0.02000	0	105	70	130				
1,1-Dichloroethylene	0.0216	0.000500	0.02000	0	108	70	130				
1,2,4-Trichlorobenzene	0.0163	0.000500	0.02000	0	81.6	70	130				
1,2-Dichloroethane (EDC)	0.0205	0.000500	0.02000	0	103	70	130				
1,2-Dichloropropane	0.0209	0.000500	0.02000	0	105	70	130				
Benzene	0.0198	0.000500	0.02000	0	98.8	70	130				
Carbon tetrachloride	0.0210	0.000500	0.02000	0	105	70	130				
cis-1,2-Dichloroethene	0.0216	0.000500	0.02000	0	108	70	130				
Dichloromethane	0.0219	0.000500	0.02000	0	110	70	130				
Ethylbenzene	0.0194	0.000500	0.02000	0	96.9	70	130				
Monochlorobenzene	0.0192	0.000500	0.02000	0	96.0	70	130				
o-Dichlorobenzene	0.0183	0.000500	0.02000	0	91.5	70	130				
p-Dichlorobenzene	0.0177	0.000500	0.02000	0	88.4	70	130				
Styrene	0.0200	0.000500	0.02000	0	99.8	70	130				
Tetrachloroethene (PCE)	0.0186	0.000500	0.02000	0	92.8	70	130				
Toluene	0.0200	0.000500	0.02000	0	100	70	130				
trans-1,2-Dichloroethylene	0.0208	0.000500	0.02000	0	104	70	130				
Trichloroethene (TCE)	0.0198	0.000500	0.02000	0	98.9	70	130				
Vinyl chloride	0.0257	0.000500	0.02000	0	129	70	130				
Xylenes, Total	0.0585	0.000500	0.06000	0	97.5	70	130				
Surr: 1,2-Dichlorobenzene-d4	0.0386		0.04000		96.6	70	130				
Surr: 4-Bromofluorobenzene	0.0420		0.04000		105	70	130				
Surr: Dibromofluoromethane	0.0402		0.04000		100	70	130				
Surr: Toluene-d8	0.0423		0.04000		106	70	130				

**Qualifiers:** CI Sample container temperature is out of limit as specified at testcode E Value above quantitation range H Holding times for preparation or analysis exceeds  
 MI Recovery outside control limits due to Matrix Interference ND Not Detected at the Reporting Limit PL Permit Limit  
 RL Reporting Detection Limit





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# QC SUMMARY REPORT

WO#: 23071270  
 10-Aug-23

**Client:** Analytical Laboratory Group, Inc.  
**Project:** 2307915 Seal Rock Water District

**TestCode:** EPA524.2\_DW

Sample ID: <b>MB</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA524.2_D</b>	Units: <b>mg/L</b>	Prep Date: <b>8/7/2023</b>	RunNo: <b>41495</b>						
Client ID: <b>PBW</b>	Batch ID: <b>R41495</b>	TestNo: <b>E524.2</b>		Analysis Date: <b>8/7/2023</b>	SeqNo: <b>688636</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane (1,1,1-TCA)	ND	0.000500									
1,1,2-Trichloroethane	ND	0.000500									
1,1-Dichloroethylene	ND	0.000500									
1,2,4-Trichlorobenzene	ND	0.000500									
1,2-Dichloroethane (EDC)	ND	0.000500									
1,2-Dichloropropane	ND	0.000500									
Benzene	ND	0.000500									
Carbon tetrachloride	ND	0.000500									
cis-1,2-Dichloroethene	ND	0.000500									
Dichloromethane	ND	0.000500									
Ethylbenzene	ND	0.000500									
Monochlorobenzene	ND	0.000500									
o-Dichlorobenzene	ND	0.000500									
p-Dichlorobenzene	ND	0.000500									
Styrene	ND	0.000500									
Tetrachloroethene (PCE)	ND	0.000500									
Toluene	ND	0.000500									
trans-1,2-Dichloroethylene	ND	0.000500									
Trichloroethene (TCE)	ND	0.000500									
Vinyl chloride	ND	0.000500									
Xylenes, Total	ND	0.000500									
Surr: 1,2-Dichlorobenzene-d4	0.0355		0.04000		88.8	70	130				
Surr: 4-Bromofluorobenzene	0.0399		0.04000		99.8	70	130				
Surr: Dibromofluoromethane	0.0345		0.04000		86.2	70	130				
Surr: Toluene-d8	0.0406		0.04000		102	70	130				

**Qualifiers:** CI Sample container temperature is out of limit as specified at testcode E Value above quantitation range H Holding times for preparation or analysis exceeds  
 MI Recovery outside control limits due to Matrix Interference ND Not Detected at the Reporting Limit PL Permit Limit  
 RL Reporting Detection Limit



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# QC SUMMARY REPORT

WO#: 23071270  
 10-Aug-23

**Client:** Analytical Laboratory Group, Inc.  
**Project:** 2307915 Seal Rock Water District

**TestCode:** EPA524.2\_DW

Sample ID: 23071270-02AMS	SampType: MS	TestCode: EPA524.2_D	Units: mg/L	Prep Date: 8/7/2023	RunNo: 41495						
Client ID: 2307915-002A	Batch ID: R41495	TestNo: E524.2		Analysis Date: 8/7/2023	SeqNo: 688638						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane (1,1,1-TCA)	0.0224	0.000500	0.02000	0	112	70	130				
1,1,2-Trichloroethane	0.0218	0.000500	0.02000	0	109	70	130				
1,1-Dichloroethylene	0.0222	0.000500	0.02000	0	111	70	130				
1,2,4-Trichlorobenzene	0.0164	0.000500	0.02000	0	81.8	70	130				
1,2-Dichloroethane (EDC)	0.0211	0.000500	0.02000	0	105	70	130				
1,2-Dichloropropane	0.0213	0.000500	0.02000	0	106	70	130				
Benzene	0.0200	0.000500	0.02000	0	100	70	130				
Carbon tetrachloride	0.0214	0.000500	0.02000	0	107	70	130				
cis-1,2-Dichloroethene	0.0218	0.000500	0.02000	0	109	70	130				
Dichloromethane	0.0224	0.000500	0.02000	0	112	70	130				
Ethylbenzene	0.0195	0.000500	0.02000	0	97.4	70	130				
Monochlorobenzene	0.0190	0.000500	0.02000	0	95.0	70	130				
o-Dichlorobenzene	0.0177	0.000500	0.02000	0	88.4	70	130				
p-Dichlorobenzene	0.0175	0.000500	0.02000	0	87.4	70	130				
Styrene	0.0202	0.000500	0.02000	0	101	70	130				
Tetrachloroethene (PCE)	0.0179	0.000500	0.02000	0	89.7	70	130				
Toluene	0.0205	0.000500	0.02000	0	103	70	130				
trans-1,2-Dichloroethylene	0.0215	0.000500	0.02000	0	107	70	130				
Trichloroethene (TCE)	0.0195	0.000500	0.02000	0	97.3	70	130				
Vinyl chloride	0.0270	0.000500	0.02000	0	135	70	130				S
Xylenes, Total	0.0604	0.000500	0.06000	0.001260	98.5	70	130				
Surr: 1,2-Dichlorobenzene-d4	0.0377		0.04000		94.2	70	130				
Surr: 4-Bromofluorobenzene	0.0412		0.04000		103	70	130				
Surr: Dibromofluoromethane	0.0404		0.04000		101	70	130				
Surr: Toluene-d8	0.0424		0.04000		106	70	130				

**Qualifiers:** CI Sample container temperature is out of limit as specified at testcode E Value above quantitation range H Holding times for preparation or analysis exceeds  
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# QC SUMMARY REPORT

WO#: 23071270  
 10-Aug-23

**Client:** Analytical Laboratory Group, Inc.  
**Project:** 2307915 Seal Rock Water District

**TestCode:** EPA524.2\_DW

Sample ID: 23071270-02AMSD	SampType: MSD	TestCode: EPA524.2_D	Units: mg/L	Prep Date: 8/7/2023	RunNo: 41495						
Client ID: 2307915-002A	Batch ID: R41495	TestNo: E524.2		Analysis Date: 8/7/2023	SeqNo: 688639						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane (1,1,1-TCA)	0.0216	0.000500	0.02000	0	108	70	130	0.02235	3.41	20	
1,1,2-Trichloroethane	0.0218	0.000500	0.02000	0	109	70	130	0.02175	0.275	20	
1,1-Dichloroethylene	0.0216	0.000500	0.02000	0	108	70	130	0.02216	2.51	20	
1,2,4-Trichlorobenzene	0.0163	0.000500	0.02000	0	81.3	70	130	0.01636	0.613	20	
1,2-Dichloroethane (EDC)	0.0207	0.000500	0.02000	0	103	70	130	0.02105	1.87	20	
1,2-Dichloropropane	0.0216	0.000500	0.02000	0	108	70	130	0.02128	1.72	20	
Benzene	0.0198	0.000500	0.02000	0	98.8	70	130	0.02001	1.26	20	
Carbon tetrachloride	0.0210	0.000500	0.02000	0	105	70	130	0.02144	2.17	20	
cis-1,2-Dichloroethene	0.0212	0.000500	0.02000	0	106	70	130	0.02182	2.74	20	
Dichloromethane	0.0218	0.000500	0.02000	0	109	70	130	0.02238	2.72	20	
Ethylbenzene	0.0195	0.000500	0.02000	0	97.6	70	130	0.01948	0.205	20	
Monochlorobenzene	0.0190	0.000500	0.02000	0	95.1	70	130	0.01899	0.105	20	
o-Dichlorobenzene	0.0175	0.000500	0.02000	0	87.4	70	130	0.01768	1.19	20	
p-Dichlorobenzene	0.0174	0.000500	0.02000	0	87.2	70	130	0.01748	0.172	20	
Styrene	0.0200	0.000500	0.02000	0	99.8	70	130	0.02015	0.998	20	
Tetrachloroethene (PCE)	0.0184	0.000500	0.02000	0	91.9	70	130	0.01794	2.42	20	
Toluene	0.0202	0.000500	0.02000	0	101	70	130	0.02051	1.47	20	
trans-1,2-Dichloroethylene	0.0209	0.000500	0.02000	0	104	70	130	0.02149	2.78	20	
Trichloroethene (TCE)	0.0199	0.000500	0.02000	0	99.4	70	130	0.01946	2.14	20	
Vinyl chloride	0.0256	0.000500	0.02000	0	128	70	130	0.02705	5.39	20	
Xylenes, Total	0.0595	0.000500	0.06000	0.001260	97.1	70	130	0.06036	1.38	20	
Surr: 1,2-Dichlorobenzene-d4	0.0361		0.04000		90.2	70	130		0		
Surr: 4-Bromofluorobenzene	0.0396		0.04000		99.1	70	130		0		
Surr: Dibromofluoromethane	0.0401		0.04000		100	70	130		0		
Surr: Toluene-d8	0.0419		0.04000		105	70	130		0		

**Qualifiers:** CI Sample container temperature is out of limit as specified at testcode E Value above quantitation range H Holding times for preparation or analysis exceeded  
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# QC SUMMARY REPORT

WO#: 23071270  
 10-Aug-23

**Client:** Analytical Laboratory Group, Inc.  
**Project:** 2307915 Seal Rock Water District

**TestCode:** EPA525.2\_DW

Sample ID: <b>MB-22015</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA525.2_D</b>	Units: <b>mg/L</b>	Prep Date: <b>8/1/2023</b>	RunNo: <b>41432</b>						
Client ID: <b>PBW</b>	Batch ID: <b>22015</b>	TestNo: <b>E525.2</b>	<b>E525.2</b>	Analysis Date: <b>8/1/2023</b>	SeqNo: <b>687484</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alachlor	ND	0.000200									
Atrazine	ND	0.000300									
Benzo(a)pyrene	ND	0.000100									
Bis(2-ethylhexyl) phthalate	ND	0.00200									
Bis(2-Ethylhexyl)adipate	ND	0.00400									
Hexachlorobenzene	ND	0.000400									
Hexachlorocyclopentadiene	ND	0.00500									
Simazine	ND	0.000400									
Surr: 1,3-Dimethyl-2-nitrobenzene	0.00491		0.005000		98.2	70	130				
Surr: Perylene-d12	0.00514		0.005000		103	70	130				
Surr: Pyrene-d10	0.00496		0.005000		99.2	70	130				
Surr: Triphenyl phosphate	0.00588		0.005000		118	70	130				

Sample ID: <b>23070943-01AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA525.2_D</b>	Units: <b>mg/L</b>	Prep Date: <b>8/1/2023</b>	RunNo: <b>41432</b>						
Client ID: <b>BatchQC</b>	Batch ID: <b>22015</b>	TestNo: <b>E525.2</b>	<b>E525.2</b>	Analysis Date: <b>8/1/2023</b>	SeqNo: <b>687492</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alachlor	0.00580	0.000192	0.004808	0	121	70	130				
Atrazine	0.00604	0.000288	0.004808	0	126	70	130				
Benzo(a)pyrene	0.00550	0.0000962	0.004808	0	114	70	130				
Bis(2-ethylhexyl) phthalate	0.00559	0.00192	0.004808	0	116	70	130				
Bis(2-Ethylhexyl)adipate	0.00605	0.00385	0.004808	0	126	70	130				
Hexachlorobenzene	0.0116	0.000385	0.009615	0	121	70	130				
Hexachlorocyclopentadiene	0.0103	0.00481	0.009615	0	107	70	130				

**Qualifiers:** CI Sample container temperature is out of limit as specified at testcode E Value above quantitation range H Holding times for preparation or analysis exceeded  
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 RL Reporting Detection Limit



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# QC SUMMARY REPORT

WO#: 23071270  
 10-Aug-23

**Client:** Analytical Laboratory Group, Inc.  
**Project:** 2307915 Seal Rock Water District

**TestCode:** EPA525.2\_DW

Sample ID: <b>23070943-01AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA525.2_D</b>	Units: <b>mg/L</b>	Prep Date: <b>8/1/2023</b>	RunNo: <b>41432</b>						
Client ID: <b>BatchQC</b>	Batch ID: <b>22015</b>	TestNo: <b>E525.2</b>	<b>E525.2</b>	Analysis Date: <b>8/1/2023</b>	SeqNo: <b>687492</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Simazine	0.00571	0.000385	0.004808	0	119	70	130				
Surr: 1,3-Dimethyl-2-nitrobenzene	0.00503		0.004808		105	70	130				
Surr: Perylene-d12	0.00478		0.004808		99.4	70	130				
Surr: Pyrene-d10	0.00492		0.004808		102	70	130				
Surr: Triphenyl phosphate	0.00562		0.004808		117	70	130				

Sample ID: <b>23070943-01AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA525.2_D</b>	Units: <b>mg/L</b>	Prep Date: <b>8/1/2023</b>	RunNo: <b>41432</b>						
Client ID: <b>BatchQC</b>	Batch ID: <b>22015</b>	TestNo: <b>E525.2</b>	<b>E525.2</b>	Analysis Date: <b>8/1/2023</b>	SeqNo: <b>687493</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alachlor	0.00555	0.000192	0.004808	0	115	70	130	0.005798	4.41	20	
Atrazine	0.00581	0.000288	0.004808	0	121	70	130	0.006038	3.90	20	
Benzo(a)pyrene	0.00516	0.0000962	0.004808	0	107	70	130	0.005500	6.31	20	
Bis(2-ethylhexyl) phthalate	0.00516	0.00192	0.004808	0	107	70	130	0.005587	7.87	20	
Bis(2-Ethylhexyl)adipate	0.00555	0.00385	0.004808	0	115	70	130	0.006048	8.62	20	
Hexachlorobenzene	0.0106	0.000385	0.009615	0	111	70	130	0.01162	8.82	20	
Hexachlorocyclopentadiene	0.00914	0.00481	0.009615	0	95.1	70	130	0.01033	12.1	20	
Simazine	0.00525	0.000385	0.004808	0	109	70	130	0.005712	8.42	20	
Surr: 1,3-Dimethyl-2-nitrobenzene	0.00488		0.004808		101	70	130		0		
Surr: Perylene-d12	0.00489		0.004808		102	70	130		0		
Surr: Pyrene-d10	0.00497		0.004808		103	70	130		0		
Surr: Triphenyl phosphate	0.00547		0.004808		114	70	130		0		

**Qualifiers:** CI Sample container temperature is out of limit as specified at testcode E Value above quantitation range H Holding times for preparation or analysis exceeded  
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 RL Reporting Detection Limit



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# QC SUMMARY REPORT

WO#: 23071270  
 10-Aug-23

**Client:** Analytical Laboratory Group, Inc.  
**Project:** 2307915 Seal Rock Water District

**TestCode:** EPA525.2\_DW

Sample ID: <b>LCS-22015</b>	SampType: <b>LCS</b>	TestCode: <b>EPA525.2_D</b>	Units: <b>mg/L</b>	Prep Date: <b>8/1/2023</b>	RunNo: <b>41432</b>						
Client ID: <b>LCSW</b>	Batch ID: <b>22015</b>	TestNo: <b>E525.2</b>	<b>E525.2</b>	Analysis Date: <b>8/1/2023</b>	SeqNo: <b>687500</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alachlor	0.00542	0.000200	0.005000	0	108	70	130				
Atrazine	0.00558	0.000300	0.005000	0	112	70	130				
Benzo(a)pyrene	0.00478	0.000100	0.005000	0	95.6	70	130				
Bis(2-ethylhexyl) phthalate	0.00509	0.00200	0.005000	0	102	70	130				
Bis(2-Ethylhexyl)adipate	0.00572	0.00400	0.005000	0	114	70	130				
Hexachlorobenzene	0.0105	0.000400	0.01000	0	105	70	130				
Hexachlorocyclopentadiene	0.00929	0.00500	0.01000	0	92.9	70	130				
Simazine	0.00503	0.000400	0.005000	0	101	70	130				
Surr: 1,3-Dimethyl-2-nitrobenzene	0.00510		0.005000		102	70	130				
Surr: Perylene-d12	0.00494		0.005000		98.8	70	130				
Surr: Pyrene-d10	0.00503		0.005000		101	70	130				
Surr: Triphenyl phosphate	0.00560		0.005000		112	70	130				

**Qualifiers:** CI Sample container temperature is out of limit as specified at testcode E Value above quantitation range H Holding times for preparation or analysis exceeds  
 MI Recovery outside control limits due to Matrix Interference ND Not Detected at the Reporting Limit PL Permit Limit  
 RL Reporting Detection Limit



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# QC SUMMARY REPORT

WO#: 23071270  
 10-Aug-23

**Client:** Analytical Laboratory Group, Inc.  
**Project:** 2307915 Seal Rock Water District

**TestCode:** EPA531.2\_DW

Sample ID: <b>LCS - 40</b>	SampType: <b>LCS</b>	TestCode: <b>EPA531.2_D</b>	Units: <b>mg/L</b>	Prep Date: <b>8/8/2023</b>	RunNo: <b>41537</b>						
Client ID: <b>LCSW</b>	Batch ID: <b>R41537</b>	TestNo: <b>E531.2</b>		Analysis Date: <b>8/8/2023</b>	SeqNo: <b>689386</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Carbofuran	0.0376	0.00400	0.04000	0	93.9	70	130				
Oxamyl (Vydate)	0.0362	0.00400	0.04000	0	90.4	70	130				
Surr: BDMC	0.0109		0.01000		109	70	130				

Sample ID: <b>MB</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA531.2_D</b>	Units: <b>mg/L</b>	Prep Date: <b>8/8/2023</b>	RunNo: <b>41537</b>						
Client ID: <b>PBW</b>	Batch ID: <b>R41537</b>	TestNo: <b>E531.2</b>		Analysis Date: <b>8/8/2023</b>	SeqNo: <b>689387</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Carbofuran	ND	0.00400									
Oxamyl (Vydate)	ND	0.00400									
Surr: BDMC	0.0101		0.01000		101	70	130				

Sample ID: <b>23070943-01AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA531.2_D</b>	Units: <b>mg/L</b>	Prep Date: <b>8/8/2023</b>	RunNo: <b>41537</b>						
Client ID: <b>BatchQC</b>	Batch ID: <b>R41537</b>	TestNo: <b>E531.2</b>		Analysis Date: <b>8/8/2023</b>	SeqNo: <b>689390</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Carbofuran	0.0389	0.00400	0.04000	0	97.3	70	130				
Oxamyl (Vydate)	0.0384	0.00400	0.04000	0	96.0	70	130				
Surr: BDMC	0.0121		0.01000		121	70	130				

**Qualifiers:** CI Sample container temperature is out of limit as specified at testcode E Value above quantitation range H Holding times for preparation or analysis exceeded  
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 RL Reporting Detection Limit



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# QC SUMMARY REPORT

WO#: 23071270  
 10-Aug-23

**Client:** Analytical Laboratory Group, Inc.  
**Project:** 2307915 Seal Rock Water District

**TestCode:** EPA531.2\_DW

Sample ID: <b>23070943-01AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA531.2_D</b>	Units: <b>mg/L</b>	Prep Date: <b>8/8/2023</b>	RunNo: <b>41537</b>						
Client ID: <b>BatchQC</b>	Batch ID: <b>R41537</b>	TestNo: <b>E531.2</b>	Analysis Date: <b>8/8/2023</b>	SeqNo: <b>689391</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Carbofuran	0.0401	0.00400	0.04000	0	100	70	130	0.03894	2.85	20	
Oxamyl (Vydate)	0.0386	0.00400	0.04000	0	96.5	70	130	0.03841	0.519	20	
Surr: BDMC	0.0120		0.01000		120	70	130		0		

**Qualifiers:** CI Sample container temperature is out of limit as specified at testcode E Value above quantitation range H Holding times for preparation or analysis exceeds  
 MI Recovery outside control limits due to Matrix Interference ND Not Detected at the Reporting Limit PL Permit Limit  
 RL Reporting Detection Limit





Neilson Research Corporation  
 245 S Grape St  
 Medford, OR 97501  
 TEL: (541) 770-5678 FAX: (541) 770-2901  
 Website: www.nrclabs.com

# QC SUMMARY REPORT

WO#: 23071270  
 10-Aug-23

**Client:** Analytical Laboratory Group, Inc.  
**Project:** 2307915 Seal Rock Water District

**TestCode:** EPA547\_DW

Sample ID: <b>LCS 500</b>	SampType: <b>LCS</b>	TestCode: <b>EPA547_DW</b>	Units: <b>mg/L</b>	Prep Date: <b>7/28/2023</b>	RunNo: <b>41329</b>						
Client ID: <b>LCSW</b>	Batch ID: <b>R41329</b>	TestNo: <b>E547</b>		Analysis Date: <b>7/28/2023</b>	SeqNo: <b>685649</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Glyphosate	0.526	0.0500	0.5000	0	105	80	120				

Sample ID: <b>MB</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA547_DW</b>	Units: <b>mg/L</b>	Prep Date: <b>7/28/2023</b>	RunNo: <b>41329</b>						
Client ID: <b>PBW</b>	Batch ID: <b>R41329</b>	TestNo: <b>E547</b>		Analysis Date: <b>7/28/2023</b>	SeqNo: <b>685650</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Glyphosate	ND	0.0500									

Sample ID: <b>23070778-01AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA547_DW</b>	Units: <b>mg/L</b>	Prep Date: <b>7/28/2023</b>	RunNo: <b>41329</b>						
Client ID: <b>BatchQC</b>	Batch ID: <b>R41329</b>	TestNo: <b>E547</b>		Analysis Date: <b>7/28/2023</b>	SeqNo: <b>685653</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Glyphosate	0.461	0.0500	0.5000	0	92.3	70	130				

Sample ID: <b>23070778-01AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA547_DW</b>	Units: <b>mg/L</b>	Prep Date: <b>7/28/2023</b>	RunNo: <b>41329</b>						
Client ID: <b>BatchQC</b>	Batch ID: <b>R41329</b>	TestNo: <b>E547</b>		Analysis Date: <b>7/28/2023</b>	SeqNo: <b>685654</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Glyphosate	0.458	0.0500	0.5000	0	91.5	70	130	0.4613	0.816	20	

**Qualifiers:** CI Sample container temperature is out of limit as specified at testcode E Value above quantitation range H Holding times for preparation or analysis exceeded  
 MI Recovery outside control limits due to Matrix Interference ND Not Detected at the Reporting Limit PL Permit Limit  
 RL Reporting Detection Limit



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 Website: www.nrclabs.com

# QC SUMMARY REPORT

WO#: 23071270  
 10-Aug-23

**Client:** Analytical Laboratory Group, Inc.  
**Project:** 2307915 Seal Rock Water District

**TestCode:** EPA548.1\_DW

Sample ID: <b>MB-22010</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA548.1_D</b>	Units: <b>mg/L</b>	Prep Date: <b>7/31/2023</b>	RunNo: <b>41428</b>
Client ID: <b>PBW</b>	Batch ID: <b>22010</b>	TestNo: <b>E548.1</b>	<b>E548.1</b>	Analysis Date: <b>8/2/2023</b>	SeqNo: <b>688768</b>
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Endothall	ND	0.0100			

Sample ID: <b>LCS-22010</b>	SampType: <b>LCS</b>	TestCode: <b>EPA548.1_D</b>	Units: <b>mg/L</b>	Prep Date: <b>7/31/2023</b>	RunNo: <b>41428</b>
Client ID: <b>LCSW</b>	Batch ID: <b>22010</b>	TestNo: <b>E548.1</b>	<b>E548.1</b>	Analysis Date: <b>8/2/2023</b>	SeqNo: <b>688769</b>
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Endothall	0.0793	0.0100	0.1000	0	79.3 70 130

Sample ID: <b>23071120-01AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA548.1_D</b>	Units: <b>mg/L</b>	Prep Date: <b>7/31/2023</b>	RunNo: <b>41428</b>
Client ID: <b>BatchQC</b>	Batch ID: <b>22010</b>	TestNo: <b>E548.1</b>	<b>E548.1</b>	Analysis Date: <b>8/2/2023</b>	SeqNo: <b>688771</b>
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Endothall	0.0453	0.0100	0.1000	0	45.3 70 130 MI

Sample ID: <b>23071120-01AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA548.1_D</b>	Units: <b>mg/L</b>	Prep Date: <b>7/31/2023</b>	RunNo: <b>41428</b>
Client ID: <b>BatchQC</b>	Batch ID: <b>22010</b>	TestNo: <b>E548.1</b>	<b>E548.1</b>	Analysis Date: <b>8/2/2023</b>	SeqNo: <b>688772</b>
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Endothall	0.0478	0.0100	0.1000	0	47.8 70 130 0.04532 5.41 20 MI

**Qualifiers:** CI Sample container temperature is out of limit as specified at testcode E Value above quantitation range H Holding times for preparation or analysis exceeded  
 MI Recovery outside control limits due to Matrix Interference ND Not Detected at the Reporting Limit PL Permit Limit  
 RL Reporting Detection Limit



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 Website: www.nrclabs.com

# QC SUMMARY REPORT

WO#: 23071270  
 10-Aug-23

**Client:** Analytical Laboratory Group, Inc.  
**Project:** 2307915 Seal Rock Water District

**TestCode:** EPA549.2\_DW

Sample ID: <b>MB-21983</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA549.2_D</b>	Units: <b>mg/L</b>	Prep Date: <b>7/28/2023</b>	RunNo: <b>41493</b>
Client ID: <b>PBW</b>	Batch ID: <b>21983</b>	TestNo: <b>E549.2</b>	<b>E549.2</b>	Analysis Date: <b>7/31/2023</b>	SeqNo: <b>688619</b>
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Diquat	ND	0.00500			

Sample ID: <b>LCS-21983</b>	SampType: <b>LCS</b>	TestCode: <b>EPA549.2_D</b>	Units: <b>mg/L</b>	Prep Date: <b>7/28/2023</b>	RunNo: <b>41493</b>
Client ID: <b>LCSW</b>	Batch ID: <b>21983</b>	TestNo: <b>E549.2</b>	<b>E549.2</b>	Analysis Date: <b>7/31/2023</b>	SeqNo: <b>688620</b>
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Diquat	0.0371	0.00500	0.05000	0	74.1 70 130




Sample ID: <b>23071120-01AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA549.2_D</b>	Units: <b>mg/L</b>	Prep Date: <b>7/28/2023</b>	RunNo: <b>41493</b>
Client ID: <b>BatchQC</b>	Batch ID: <b>21983</b>	TestNo: <b>E549.2</b>	<b>E549.2</b>	Analysis Date: <b>7/31/2023</b>	SeqNo: <b>688622</b>
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Diquat	0.0379	0.00500	0.05000	0	75.7 70 130

Sample ID: <b>23071120-01AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA549.2_D</b>	Units: <b>mg/L</b>	Prep Date: <b>7/28/2023</b>	RunNo: <b>41493</b>
Client ID: <b>BatchQC</b>	Batch ID: <b>21983</b>	TestNo: <b>E549.2</b>	<b>E549.2</b>	Analysis Date: <b>7/31/2023</b>	SeqNo: <b>688623</b>
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Diquat	0.0383	0.00500	0.05000	0	76.7 70 130 0.03786 1.26 20

**Qualifiers:** CI Sample container temperature is out of limit as specified at testcode E Value above quantitation range H Holding times for preparation or analysis exceeded  
 MI Recovery outside control limits due to Matrix Interference ND Not Detected at the Reporting Limit PL Permit Limit  
 RL Reporting Detection Limit

# Sample Log-In Check List

Client Name: **AnalyticalLab** Work Order Number: **23071270** RcptNo: **1**

Logged by:	<b>Denise Neal</b>	<b>7/28/2023 10:55:00 AM</b>	
Completed By:	<b>Jordan Diemer</b>	<b>7/31/2023 8:58:41 AM</b>	
Reviewed By:	<b>Tamra Schmedemann</b>	<b>8/8/2023 12:44:44 PM</b>	

**Chain of Custody**

1. Is Chain of Custody complete? Yes  No  Not Present   
 2. How was the sample delivered? UPS

**Log In**

3. Coolers are present? Yes  No  NA   
 4. Shipping container/cooler in good condition? Yes  No   
 Custody seals intact on shipping container/cooler? Yes  No  Not Present   
 No. Seal Date: Signed By:  
 5. Was an attempt made to cool the samples? Yes  No  NA   
 6. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA   
 7. Sample(s) in proper container(s)? Yes  No   
 8. Sufficient sample volume for indicated test(s)? Yes  No   
 9. Are samples (except VOA and ONG) properly preserved? Yes  No   
 10. Was preservative added to bottles? Yes  No  NA   
 H2SO4 pH<2  
 No VOA Vials   
 11. Is the headspace in the VOA vials less than 1/4 inch or 6 mm? Yes  No   
 12. Were any sample containers received broken? Yes  No   
 13. Does paperwork match bottle labels? Yes  No   
 (Note discrepancies on chain of custody)  
 14. Are matrices correctly identified on Chain of Custody? Yes  No   
 15. Is it clear what analyses were requested? Yes  No   
 16. Were all holding times able to be met? Yes  No   
 (If no, notify customer for authorization.)

**Special Handling (if applicable)**

17. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

18. Additional remarks:

**Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.0	Good				DLN

# Analytical Laboratory Group, Inc.

361 WEST FIFTH AVENUE  
 EUGENE, OREGON 97401  
 800-262-5973/541-485-8404 Fax 541-484-5995  
 Email: [alglabs@alglabsinc.com](mailto:alglabs@alglabsinc.com)



Delivering more than just test results

## CHAIN OF CUSTODY

Attention: Katrina Garcia	Client: Analytical Laboratory Group, Inc
Phone: 541-485-8404	Address: 361 West 5th Avenue Eugene Oregon 97401
Fax: 541-484-5995	Lab: Neilson Research
Client Project: 2307915 Seal Rock Water District	SOURCE: Drinking Water ALG PO# 230727-04

Lab ID	ALG Sample ID	ALG Sample Point	Sample Matrix & Description	Collection		Bottles	Analysis Requested
			Grab/Comp	Date	Time		
01	2307915-001A-G	Entry Point Dist	DW/Grab	7/26/23	9:30	SOC	SOC
02	2307915-002A	Entry Point Dist	DW/Grab	7/26/23	9:30	(4) 524 + TB	VOCs by EPA 524.2

**Notes:**  
 Please Return Shipper  
 Include: MDL

PWS Name: Seal Rock Water District  
 PWS #: OR41 00798  
 Source ID: EP- C  
 Sample Type: Routine

Turn Around Time Requested: **NORMAL** Shipped Via: UPS Refrigerated YES 4.0°C

COC and PO made by: <i>J. DiCarlo</i>	Date: 7/27/23	Time: 11:59	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by Laboratory: <i>J. Meier</i>	Date: 7/28/23	Time: 10:55 am

- A Total Alkalinity and Bicarbonate Alkalinity results are to a pH endpoint of 4.5. Carbonate Alkalinity result is to a pH endpoint of 8.3.
- B Analyte detected in the associated method blank.
- C Sample(s) does not meet NELAP/ORELAP sample acceptance criteria. See Case Narrative.
- C1 Sample(s) does not meet NELAP/ORELAP sample acceptance criteria for temperature.
- CF Results confirmed by re-analysis.
- CU Cleanup performed as specified by method.
- E Estimated value.
- ER Elevated reporting limit due to matrix. Report limits (MDLs, MRLs & PQLs) are adjusted based on variations in sample preparation amounts, analytical dilutions, and percent solids, where applicable.
- FC Fecal Coliforms: Sample(s) received past 40 CFR Part 136 specified holding time. Results reported as estimated values.
- HP Sample re-analysis performed outside of method specified holding time.
- HR Sample received outside of method specified holding time.
- HS Sample analyzed for volatile organics contained headspace.
- HT At the client's request, the sample was analyzed outside of method specified holding time.
- H Analysis performed outside of method specified holding time.
- J Analyte detected below the Minimum Reporting Limit (MRL) and above the Method Detection Limit (MDL). The J flag result is an estimated value and the user should be aware that this data is of limited reliability.
- L Dissolved metals were not filtered within 15 minutes of collection per 40 CFR Part 136.
- MI Surrogate, Duplicate Sample (DUP) or Matrix Spikes recoveries are out of control limits due to matrix interference. Sample results may be biased.
- N See Case Narrative on page 2 of report.
- Q Initial calibration verification (ICV), continuing calibration verification (CCV) or laboratory control sample (LCS), and/or matrix spikes exceeded  
high recovery limits, but associated samples are non-detect and the sample results are not affected. Data meets EPA/NELAP requirements.
- R Relative percent difference (RPD) is outside of the accepted recovery limits.
- R3 The relative percent difference (RPD) and/or percent recovery for the duplicate (DUP) or matrix spike (MS)/matrix spike duplicate (MSD) cannot be accurately calculated due to the concentration of analyte already present in the sample.
- R4 The Relative percent difference (RPD) is not within control limits because the concentration of the sample result is too low to represent proper statistical error.
- S Surrogate and/or matrix spike recovery is outside of the accepted recovery limits. Sample results may be biased.
- S1 Surrogate or matrix spike recovery is outside of control limits due to dilution necessary for analysis.
- SC Sub-contracted to another laboratory for analysis.
- SP Sample(s) were not collected per EPA Method 5035A protocols. The results are considered minimum values.
- \* Value exceeds Maximum Contaminant Level or is outside the acceptable range.

LIMS NT Checked BP



Delivering more than just test results

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 Email: alglabs@alglabsinc.com

## CHAIN OF CUSTODY PUBLIC WATER SUPPLY 'CHEMICALS'

◆ ICE SAMPLES AND DELIVER WITHIN 24 HOURS OF COLLECTION TIME ◆  
 ◆ PLEASE SEE SAMPLING INSTRUCTIONS ◆

<b>System Name:</b> Seal Rock Water District	PWS ID: OR4100798
<b>Attention:</b> Bradley Wynn	Source ID: EP-C
<b>Mailing Address:</b> 1037 Grebe Street	Sample Type: Circle <u>Routine</u> or <u>Special</u>
Seal Rock, OR 97376	Sample Point: <u>Entry Point Dist.</u>
<b>Phone:</b> 541-563-7418	Collected by: <u>Chris Sutherland</u>
<b>Email:</b> bwynn@srwd.org	Date & Time Collected: Enter Below * <u>09:30 7/26/23</u>
<b>Notes:</b> <u>to Per Bottles, MT 7/26/23</u>	If Sample Type is 'Routine' do you want the lab to send a copy to DHS DWP? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

Lab ID	Bottles	Temp °C	Analysis
001A	3 '504.1' +TB	14.3	<input checked="" type="checkbox"/> Synthetic Organics (SOCs) (Subcontracted to another laboratory)
001B	3 '508'	14.3	
001C	515.3 / 548.1	14.3	
001D	3 '525.2' (HCl dropper/s)	14.3	
001E	531.1	14.3	
001F	547	14.3	
001G	549.2	14.3	
002A	4 '524.2' + TB (HCl dropper)	14.3	

Turn Around Time Requested (Rush incurs a Surcharge): <input checked="" type="checkbox"/> <b>NORMAL</b> <input type="checkbox"/> <b>RUSH</b>	Shipped Via: <u>ALG</u>	Refrigerated <input checked="" type="checkbox"/> <b>Ice</b> <input type="checkbox"/> <b>None</b>
Relinquished by: <u>[Signature]</u> Date: <u>7/25/23</u> Time: <u>10:00 am</u>	Received by: <u>[Signature]</u>	Date: <u>07/26/23</u> Time: <u>1315</u>
Relinquished by: <u>[Signature]</u> Date:      Time:	Received by:	Date:      Time:
Relinquished by: <u>[Signature]</u> Date: <u>07/26/23</u> Time: <u>1520</u>	Received by Laboratory: <u>[Signature]</u>	Date: <u>7/26/23</u> Time: <u>15:20</u>



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF  
ENFORCEMENT AND  
COMPLIANCE ASSURANCE

**MAY 30 2018**

**MEMORANDUM**

**SUBJECT:** Updated Guidance on Emergency Authority under Section 1431 of the Safe Drinking Water Act

**FROM:** Rosemarie Kelley, Director  
Office of Civil Enforcement  
Office of Enforcement and  
Compliance Assurance

A handwritten signature in blue ink that reads "Rosemarie Kelley".

Karin Leff, Acting Director  
Federal Facilities Enforcement Office  
Office of Enforcement and  
Compliance Assurance

A handwritten signature in black ink that reads "Karin Leff".

**TO:** Enforcement Directors  
Regions 1 - 10

Regional Counsels  
Regions 1 - 10

This memorandum transmits the Office of Enforcement and Compliance Assurance's (OECA) updated guidance on invoking EPA's emergency authority, granted under Section 1431 of the Safe Drinking Water Act (SDWA), 42 U.S.C. § 300i. This guidance has been reviewed by the Office of General Counsel (OGC) and the Office of Groundwater and Drinking Water (OGWDW). This guidance replaces EPA's December 28, 1976 guidance entitled "Regional Guidance - Emergency Action on Water Supply Hazards" and September 27, 1991 guidance (Water Supply Guidance No. 68) entitled "Final Guidance on Emergency Authority under Section 1431 of the Safe Drinking Water Act."

If you have any questions, please contact OECA's Office of Civil Enforcement's Water Enforcement Division. If the matter involves a federal facility specifically, please contact OECA's



Federal Facilities Enforcement Office.

cc: OGC  
OGWDW  
Regional Drinking Water Enforcement and Program Branch Chiefs

# UPDATED GUIDANCE ON INVOKING EMERGENCY AUTHORITY UNDER SECTION 1431 OF THE SAFE DRINKING WATER ACT

## Purpose of Guidance

Section 1431 has broad application and provides EPA with an effective tool to address public health endangerments concerning public water systems (PWSs) and underground sources of drinking water (USDWs). One of the purposes of this guidance is to encourage a more widespread use of EPA's Section 1431 authority by more fully explaining situations where this authority may be applied. In addition, this guidance discusses EPA's internal procedures for taking action under Section 1431 and provides information on how to support and prepare an order. The Office of Enforcement and Compliance Assurance (OECA) is issuing this 2018 guidance update in response to the Office of Inspector General's (OIG) October 20, 2016 Management Alert entitled "Drinking Water Contamination in Flint, Michigan, Demonstrates a Need to Clarify EPA Authority to Issue Emergency Orders to Protect the Public" (Report No. 17-P-0004).

## Contents

This guidance is organized as follows:

- Overview
- Elements of 1431 Authority
- Role of State and Local Authorities<sup>1</sup>
- Remedial Actions that May Be Ordered
- Relationship between Section 1431 and Other EPA Emergency Authorities
- Parties Over Whom Section 1431 Grants EPA Authority
- Taking Action Under Section 1431
- Attachment 1 - Section 1431
- Attachment 2 - House Report 93-1185 (1974)
- Attachment 3 - OIG's 2016 Management Alert
- Attachment 4 – Examples of Information to Support a SDWA Section 1431 Action

## Disclaimer

This guidance document on the application of EPA's emergency powers under Section 1431 of the SDWA is a statement of Agency policies and principles. It does not establish or affect legal rights or obligations. This guidance document does not establish a binding norm and is not finally determinative of the issues addressed. Agency decisions in any particular case will be made by

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<sup>1</sup> For purposes of the SDWA, federally-recognized Indian tribes are considered "States" under Section 1401 and Section 1451. Similarly, when interpreting and applying Section 1431, EPA includes tribes, territories, and the District of Columbia under the "State and local authorities" element.

applying the law to the specific facts of the case. The Agency may take action at variance with this guidance.

## Overview

### Introduction

Drinking water sources can be contaminated by both naturally occurring contaminants or by activities in the watershed such as agriculture or industry. PWSs use treatment and monitoring to identify and protect consumers from such contaminants. Contaminants may be present in or released into the environment as a result of inadequate treatment of drinking water by a PWS, or potentially impact USDWs from sources like a leaking underground storage tank, or failure of an underground injection control (UIC) well, to name a few. These incidents may result in contamination in or near a PWS or USDW that may pose an “imminent and substantial” endangerment to human health.

Authority granted under SDWA Section 1431, 42 U.S.C. Section 300(i), gives the Administrator broad powers to take appropriate enforcement action<sup>2</sup> if he or she receives information that:

- A contaminant is present in or likely to enter a PWS or USDW, or that there is a threatened or potential terrorist attack (or other intentional act designed to disrupt the provision of safe drinking water or to impact adversely the safety of drinking water supplied to communities and individuals), and
- The contaminant or attack may present an “imminent and substantial endangerment” to human health, and
- The appropriate state and local authorities have not acted to protect public health.

The purposes of a Section 1431 action are to prevent an impending dangerous condition from materializing, or to reduce or eliminate a dangerous situation once it has been discovered. Section 1431 focuses on “imminent and substantial endangerment,” which is a broadly defined concept (see discussion below). For example, one major function of Section 1431 is its use as a preventative enforcement measure.<sup>3</sup>

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<sup>2</sup> The legislative history of Section 1431 reflects the intent of Congress to confer broad power to the Administrator in Section 1431 actions. *See* 120 Cong. Rec. 37591 (1974) (stating the authority under Section 1431 is “broad in scope and provides a necessary enforcement tool for the Administrator”).

<sup>3</sup> The preventative intent of Section 1431 is apparent in the legislative history, which states: “the Committee intends that this language be construed by the courts and the Administrator so as to give paramount importance to the objective of protection of the public health. Administrative and judicial implementation of this authority must occur early enough to prevent the potential hazard from materializing.” H.R. Rep. No. 1185, 93rd Cong., 2d Sess. 35-36, *reprinted in*, 1974 U.S. Code Cong. & Ad. News 6454, 6488 (H.R. 93-1185). The discussion of Section 1431 in this 1974 House Report is shown in Attachment 2 of this Guidance.

As an “emergency” provision, however, Section 1431 should not be used as a substitute for other SDWA provisions, where such other provisions are adequate to protect public health.<sup>4</sup> For example, under the Public Water System Supervision (PWSS) Program, violations of monitoring requirements or even of a maximum contaminant level (MCL) should generally be addressed through use of the enforcement authorities (including administrative order authority) in Section 1414. But if the MCL exceedance may present an imminent and substantial endangerment, then an emergency action under Section 1431 may be appropriate in addition to or in place of any SDWA Section 1414 enforcement action. Examples under the UIC program would include a Class II well injection pressure exceedance that causes movement of fluid into an USDW, or a Class V UIC well operator who is injecting contaminants that may be causing or contributing to an MCL exceedance or otherwise endangering an USDW. Although these generally would be enforced as a violation under Section 1423, a Section 1431 action also may be appropriate if an imminent and substantial endangerment may be present.

### **1986, 1996 and 2002 Amendments to Section 1431**

The 1986 SDWA amendments clarified EPA’s existing authority to order the provision of an alternative water supply by persons who caused or contributed to the endangerment. In addition, the 1986 amendments strengthened EPA’s authority to enforce Section 1431. Previously, Section 1431 provided that EPA could enforce against any person who “willfully” violated or failed or refused to comply with a Section 1431 order. The 1986 amendments removed the term “willfully,” enabling EPA to enforce against any persons, whether or not their actions were willful. Also, the 1986 amendments clarified EPA’s authority to protect USDWs, as discussed on page 7.

Additionally, in 1996, Congress changed the maximum civil penalty from \$5,000 to \$15,000 per day.<sup>5</sup> The 2002 SDWA amendments inserted language regarding terrorist attacks or other intentional acts designed to disrupt or adversely impact the safety of drinking water.

### **Delegation of Authority**

In January 2017, the Administrator revised Delegation No. 9-17, which delegates the authority to take administrative action under Section 1431 to the Regional Administrators (RAs) and the Assistant Administrator (AA) for OECA. The January 2017 version of Delegation No. 9-17 supersedes

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<sup>4</sup> H.R. 93-1185, at 36, states that “Section 1431 reflects the Committee’s determination to confer completely adequate authority to deal promptly and effectively with emergency situations which jeopardize the health of persons.” The Report further states that the authority of Section 1431 should “not be used when the system of regulatory authority provided elsewhere in the bill could be used adequately to protect the public health.” *Id.*

<sup>5</sup> The penalty numbers in SDWA Section 1431 (and other statutes) are annually updated for inflation in accordance with the Federal Civil Penalties Inflation Adjustment Act Improvements Act of 2015. 28 U.S.C. Section 2461 note. *See* 40 C.F.R. Section 19.4 for the most up-to-date numbers.

the May 11, 1994 and July 25, 1984 SDWA Section 1431 related delegations. Among other things, the January 2017 revision added a requirement for Regions to consult with OECA before issuing orders under Section 1431. Further, Delegation No. 9-16 was also updated in January 2017. Delegation No. 9-16A requires Regions to notify OECA before commencing a judicial action under SDWA. Under the limited circumstances of a temporary restraining order issued under SDWA Section 1431, Delegation No. 9-16D applies and requires notification to OECA before Regions exercise this authority. While Delegation No. 9-16 specifies notification, Regions are expected to consult with OECA in these instances, as discussed below.

Within OECA, the Office of Civil Enforcement's (OCE) Water Enforcement Division (WED) has been designated to consult with the Regions on SDWA Section 1431 actions, and the Federal Facilities Enforcement Office (FFEO) has been designated for actions involving federal agencies. OECA is committed to providing feedback to the Regions as soon as possible, which typically is within 24 to 48 hours, and has responded even earlier where the endangerment is acute. In some Regions, the authority to issue Section 1431 orders has been redelegated below the RA level.

Under OECA's February 1, 2017 "Revised Consolidated Procedures for Regional and Headquarters Coordination on Regulatory Enforcement Cases Involving Nationally Significantly Issues (NSIs)" List B, "any enforcement action invoking the imminent and substantial endangerment authority under SDWA Section 1431" requires consultation with OECA.<sup>6</sup>

If the order involves a federally recognized Indian tribe or Indian country entity, the Region should consult OECA's January 17, 2001 "Final Guidance on the Enforcement Principles Outlined in the 1984 Indian Policy." Where EPA issues an emergency order in Indian country, such actions are generally considered "exigent circumstances" that would not need the concurrence of OECA's Assistance Administrator as provided for in the "Final Guidance on the Enforcement Principles Outlined in the 1984 Indian Policy." However, consultation with OECA is still required before the Region takes a Section 1431 action.

### **Elements of Section 1431 Authority**

To apply the authority granted under Section 1431, two conditions must be met. First, the Administrator must have received "information that a contaminant which is present in or likely to enter a public water system or an underground source of drinking water, or that there is a threatened or potential terrorist attack (or other intentional act designed to disrupt the provision of safe drinking water or to impact adversely the safety of drinking water supplied to communities and individuals), which may present an imminent and substantial endangerment to the health of persons."<sup>7</sup> Second, the Administrator

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<sup>6</sup> For federal facility matters, see the June 10, 2015 David J. Kling memorandum, "Revised Procedures for Determining Level of Federal Facility Enforcement Office Involvement in Formal Regulatory Enforcement Cases."

<sup>7</sup> It should be noted that unlike several of the imminent and substantial endangerment provisions in other statutes, SDWA Section 1431 uses the term "information" instead of "evidence."

must have received information that “appropriate State and local authorities have not acted to protect the health of such persons.” To realize the full potential of Section 1431, the key elements of these conditions must be understood. Each element is discussed in greater detail below.

### **Contaminant**

Section 1401(6) of the SDWA defines “contaminant” very broadly to include “any physical, chemical, biological, or radiological substance or matter in water.” Under this broad definition, EPA may take action under Section 1431 even when the contaminant in question is not regulated by a National Primary Drinking Water Regulation (NPDWR) or listed in a National Secondary Drinking Water Regulation (NSDWR) under the SDWA (e.g., EPA has not issued a NPDWR for the contaminant or the regulation has been promulgated, but is not yet effective). This authority is supported by the SDWA legislative history.<sup>8</sup> Moreover, listing on EPA’s Contaminant Candidate List, under the Unregulated Contaminant Monitoring Rule, or establishment of a health advisory, are similarly not required for a substance to be considered a contaminant, and are not prerequisites for use of Section 1431 authority.

### **Likely to Enter**

Application of the Section 1431 authority is not limited to existing contamination of a PWS or USDW, but also may be used to prevent the introduction of contaminants that are “likely to enter” drinking water. Thus, Section 1431 orders should ideally be issued early enough to prevent the potential hazard from materializing.<sup>9</sup>

### **Underground Sources of Drinking Water**

EPA’s Section 1431 authority is not limited to the protection of PWSs. It also extends to the protection of all USDWs, whether or not the USDW currently supplies a PWS. The 1986 amendments clarified EPA’s existing authority to protect USDWs by making this authority explicit in the statute.

The Agency has defined “underground sources of drinking water” in 40 C.F.R. Section 144.3. Under this definition, “USDW” includes both aquifers that currently supply a PWS and those that simply have the potential to supply a PWS (according to the criteria in Section 144.3). The ability to address the

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<sup>8</sup> H.R. 93-1185, at 35, states, “The authority to take emergency action is intended to be applicable not only to potential hazards presented by contaminants which are subject to primary drinking water regulations, but also to those presented by unregulated contaminants.”

<sup>9</sup> “Administrative and judicial implementation of this authority must occur early enough to prevent the potential hazard from materializing. This means that ‘imminence’ must be considered in light of the time it may take to prepare administrative orders or moving papers, to commence and complete litigation, and to permit issuance, notification, implementation, and enforcement of administrative or court orders to protect the public health.” H.R. 93-1185, at 35–36.

contamination of USDWs (rather than only PWSs) broadens EPA's authority in two ways. First, it allows EPA to act under Section 1431 where the groundwater source in question is only a potential supplier of a PWS. Second, it allows the Agency to protect water supplies that do not meet the threshold of 25 persons served or 15 service connections in the definition of "public water system" (for example, many private wells) that are at risk because of the contamination or threatened contamination of an USDW.

### **Imminent and Substantial Endangerment**

Assuming EPA can show that a contaminant is "present in or likely to enter" the drinking water supply (either PWS or USDW), EPA also must show that a contaminant "may present" an "endangerment" and that the endangerment is both "imminent" and "substantial."

### **Imminent Endangerment**

Section 1431 authorizes EPA to address "endangerments" that are "imminent." The case law that has developed on these terms (as used in the SDWA or in analogous provisions of other statutes), together with the SDWA legislative history, suggests the following guidance.

An "endangerment" may include not only actual harm, but also a threatened or potential harm.<sup>10</sup> No actual injury need ever occur.<sup>11</sup> Therefore, while the threat or risk of harm must be "imminent" for EPA to act, the harm itself need not be.<sup>12</sup> Public health may be endangered imminently and substantially "both by a lesser risk of a greater harm and by a greater risk of a lesser harm;" this will ultimately depend on the facts of each case.<sup>13</sup>

An endangerment is "imminent" if conditions which give rise to it are present, even though the actual harm may not be realized for years.<sup>14</sup> Courts have stated that an "imminent hazard" may be declared at any point in a chain of events that may ultimately result in harm to the public.<sup>15</sup> For

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<sup>10</sup> U.S. v. Conservation Chemical Co., 619 F. Supp. 162, 192 (W.D. Mo. 1985) (interpreting the term "endangerment" in CERCLA), citing Ethyl Corp. v. EPA, 541 F.2d 1 (D.C. Cir. 1976), (en banc), cert. denied, E.I. Du Pont de Nemours & Co. v. EPA, 426 U.S. 941 (1976) (interpreting the language "will endanger" in the Clean Air Act).

<sup>11</sup> See Ethyl Corp. v. EPA, 541 F.2d at 13.

<sup>12</sup> See U.S. v. Reilly Tar and Chemical Corp., 546 F. Supp. 1100, 1109-10 (D. Minn. 1982) (quoting H.R. 93-1185); U.S. v. Conservation Chemical Co., 619 F. Supp. at 193-94. The Conservation Chemical Co. court, construing similar language in CERCLA, stated that the standard is especially lenient since it authorizes action "when there *may* be risk of harm, not just when there *is* a risk of harm." Id. at 193 (emphasis in original).

<sup>13</sup> See Ethyl Corp. v. EPA, 541 F.2d at 18.

<sup>14</sup> See U.S. v. Conservation Chemical Co., 619 F. Supp. at 193-94; B.F. Goodrich v. Murtha, 697 F. Supp. 89, 96 (D. Conn. 1988) (CERCLA action).

<sup>15</sup> Trinity Am. Corp. v. EPA, 150 F.3d 389, 399 (4th Cir. 1998) ("EPA need not demonstrate that individuals are drinking contaminated water to justify issuing an emergency order."); Dague v. City of Burlington, 935 F.2d 1343, 1356 (2nd Cir. 1991); U.S. v. Ottati & Goss, Inc., 630 F. Supp. 1361, 1394 (D.N.H. 1985).

example, in U.S. v. Midway Heights County Water District,<sup>16</sup> individuals were exposed to microbiological and turbidity exceedances, but actual illnesses had not yet been reported. The court found that the presence of organisms that were accepted indicators of the potential for the spread of serious disease presented an imminent (and substantial) endangerment.<sup>17</sup>

Endangerments can more readily be determined to be imminent where they involve contaminants that pose acute human health threats. Examples include (but are not limited to):

- A nitrate MCL violation when a sensitive population is exposed (e.g., infants less than six months of age).
- A waterborne disease outbreak with or without MCL violations.
- A microbiological MCL or turbidity treatment technique violation with or without a waterborne disease outbreak.
- Migration of untreated sewage directly into or near an USDW.
- A release of surficial contamination that may ultimately migrate to a usable aquifer.
- A reduction or loss of pressure in a distribution system (e.g., due to broken water mains or power outages) that increases the risk of contaminants entering water.
- A sanitary problem such as dead birds or rodents in finished water storage tanks.

However, acute contaminants are not the only ones that might pose an imminent endangerment. Because an endangerment is created by the risk of harm, not necessarily actual harm, EPA should determine whether a risk of harm is imminent. Therefore, contaminants that lead to chronic health effects, such as carcinogens, also may be considered to cause “imminent endangerment”<sup>18</sup> even though there is a period of latency before those contaminants, if introduced into a drinking water supply, might cause adverse health effects. A factor that a Region may consider is the length of time a population has been or could be exposed to a contaminant. In the SDWA legislative history, the House Report specifically states that an imminent endangerment may result from exposure to a carcinogenic agent.<sup>19</sup>

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<sup>16</sup> 695 F. Supp. 1072, 1076 (E.D. Cal. 1988).

<sup>17</sup> Id.

<sup>18</sup> See Conservation Chemical Co., 619 F. Supp. at 194 (citing legislative history of RCRA Section 7003).

<sup>19</sup> See H.R. 93-1185, at 36. This view is underscored by the numerous other references in the legislative history to the discovery of carcinogens and potential carcinogens in an ever increasing number of water supplies. 1974 House Report, *supra*, at 6, 10-11, 35; 120 Cong. Rec. 36372, 36374-75, 36398-99, 36401 (1974). This concern was reiterated and strengthened in subsequent Congressional reviews of the SDWA program. House Comm. on Interstate and Foreign



Examples could include (but are not limited to):

- An exposure, or threat of exposure, to chronic contaminants at levels exceeding their MCLs or health advisory levels (e.g., PFOA).
- Exposures to chronic-type contaminants, such as lead, that are present at high enough concentrations to cause not only immediate, but also long-term health effects.

Section 1431 should not be used in cases where the risk of harm is remote in time or completely speculative in nature.<sup>20</sup> However, in determining the imminence of a hazardous condition, EPA may consider the time it may require to prepare orders, to commence and complete litigation, to implement and enforce administrative or judicial orders to protect public health, and to implement corrective action under Section 1431.<sup>21</sup> For example, even where a contaminant is not likely to enter a ground water supply for several months or longer (as can be the case with a ground water plume moving toward a well), EPA may consider this hazard to be “imminent” in light of the time required to implement the actions described above. Further, even where a hazardous condition has been present for some time (even years), case law supports the view that EPA is not prevented from finding that the conditions present an imminent endangerment.<sup>22</sup>

In addition, Section 1431 may be used to address threats to health from exposure pathways other than direct ingestion of drinking water. For example, in U.S. v. Midway Heights County Water District,<sup>23</sup> individuals were exposed to bacteriological and turbidity contamination through uses such as bathing, showering, cooking, dishwashing, and oral hygiene. The court determined that, although the water primarily was not used for drinking water, an imminent and substantial endangerment existed from “human consumption.” EPA has defined human consumption broadly to include these various uses.<sup>24</sup> Section 1431 may be invoked in situations where, for instance, the risks involve exposure to contaminants like *Legionella* or disinfection byproducts in water vapor from a shower.

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Commerce, H.R. Rep. No. 96-186, 96th Cong., 1st sess. 4-6 (1979), and Senate Comm. on Environment and Public Works, S. Rep. No. 96-161, 96th Cong., 1st Sess. 3 (1979).

<sup>20</sup> This interpretation is supported by H. Rep. 93-1185. *See also* W.R. Grace & Co. v. United States EPA, 261 F.3d 330, 339 (3d Cir. 2001).

<sup>21</sup> *See* H. Rep. 93-1185, at 36; B.F. Goodrich v. Murtha, 697 F. Supp. at 96 (quoting H. Rep. 93-1185).

<sup>22</sup> *See* In re FCX, Inc., 96 B.R. 49, 55 (Bankr. E.D.N.C. 1989) (“even when there is an inordinate delay [by EPA], the court must find an immediate danger to public health if in fact one exists”).

<sup>23</sup> 695 F. Supp. at 1076.

<sup>24</sup> *See* 40 C.F.R. Section 141.801.

## Substantial Endangerment

The term “substantial endangerment” can apply to a range of existing or threatened hazards and should not be limited to extreme circumstances. Actual reports of human illness are not required to establish the presence of a “substantial” endangerment to water consumers.<sup>25</sup> One court, interpreting “substantial endangerment” as used in the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), has stated that “the word ‘substantial’ does not require quantification of the endangerment (e.g., proof that a certain number of persons will be exposed, that ‘excess deaths’ will occur, or that a water supply will be contaminated to a specific degree).”<sup>26</sup> Instead, the court found, an endangerment is substantial if there is a reasonable cause for concern that someone may be exposed to a risk of harm. The court stated that a number of factors (e.g., the quantities of CERCLA hazardous substances involved, the nature and degree of their hazards, or the potential for human exposure) may be considered in determining whether there is a reasonable cause for concern, but in any given case, one or two factors may be so predominant as to be determinative of the issue.<sup>27</sup> Of course, the emergency authority of Section 1431 should not be used in cases where the risk of harm is completely speculative in nature or is *de minimis* in degree.<sup>28</sup>

House Report 93-1185 gives the following examples of what may be considered a “substantial” endangerment:

- “a substantial likelihood that contaminants capable of causing adverse health effects will be ingested by consumers if preventative action is not taken.”
- “a substantial statistical probability exists that disease will result from the presence of contaminants in drinking water.”
- “the threat of substantial or serious harm (such as exposure to carcinogenic agents or other hazardous contaminants).”<sup>29</sup>

There is no bright line test for when Regions and OECA should consider emergency action; it is always a case specific decision based on the facts in a particular matter. It is important to remember that EPA may consider various types of “information” when determining whether a contaminant “may present an imminent and substantial endangerment to the health of persons.” As part of the required consultation with OECA, a Region can discuss with OECA whether the information available is sufficiently credible and warrants the use of Section 1431’s emergency powers. For a nonexhaustive list of appropriate, potential types of supporting information, see Attachment 4.

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<sup>25</sup> United States v. North Adams, 777 F. Supp. 61, 84 (D. Mass. 1991).

<sup>26</sup> Conservation Chemical Co., 619 F. Supp. at 194.

<sup>27</sup> Id.

<sup>28</sup> *See* H.R. 93-1185, at 35.

<sup>29</sup> Id. at 36.

## Role of State and Local Authorities

One of the crucial requirements of a Section 1431 enforcement action is that “appropriate State and local authorities have not acted to protect the health of such persons.”<sup>30</sup> Generally, EPA considers the lack of sufficient actions of State and local officials to be a finding the Agency must make, supported by a record, when taking an action under Section 1431.<sup>31</sup> Accordingly, Section 1431 should not be used to deal with problems that are being handled effectively by state (including tribes or territories) or local governments in a timely fashion.<sup>32</sup> Effective and timely State and local actions could include the issuance of an administrative order containing enforceable compliance deadlines and, if necessary, the provision of alternative drinking water. In other situations, for instance where E. coli was detected at a child care facility, an example of a timely State action was the development of an action plan, approved by the Region, that included: discontinued use of the contaminated well; installation of a new, deeper well; provision of interim bottled water to employees; and delay of school start date until a new, safe well was online.

OECA recognizes there are sensitivities associated with determining whether a State or local authority has not acted to protect the health of persons. Section 1431 does not require any finding that a State or local authority has “failed” to act.<sup>33</sup> When assessing State and local actions, it is not a black and white test. Instead, there is often a range of potential responses to a specific situation. For example, State and local authorities intentionally may defer action to, or request action by, EPA because the Section 1431 authority may be more powerful or expeditious. In addition, the State or local authorities may not have acted due to lack of jurisdiction. In other cases, a State may have made a good faith effort to address an emergency, but EPA may determine the State actions have not been effective, or are no longer effective, to protect public health, and, thus, that additional actions are needed.<sup>34</sup> These additional actions may help fill a gap and could be included in an EPA Section 1431 action (e.g., State agency has only provided alternative water to a portion of an impacted area, but information indicates other people are at risk so EPA addresses the rest in a federal order). Further, State or local authorities may decide to act jointly with EPA. In such cases, EPA would determine that State and local authorities have not acted (on their own) to sufficiently protect the health of persons. Therefore, EPA may proceed with Section 1431 actions when State and local authorities are working jointly with EPA.

Section 1431 also provides that before taking action and to the extent practicable in light of the imminent endangerment, EPA shall consult with the State and local authorities to confirm the information on which EPA is basing the proposed action and to determine what action the State and local

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<sup>30</sup> See Footnote 1.

<sup>31</sup> It should be noted one court has held that the receipt of such information is a jurisdictional prerequisite to action under this section. United States v. Occidental Petroleum Corp., No. 79-989 (E.D. Cal. 1980).

<sup>32</sup> See H.R. Rep. 93-1185, at 35. This implements legislative intent expressed in House Report 93-1185 to “direct the Administrator to refrain from precipitous preemption of effective State or local emergency abatement efforts.”

<sup>33</sup> Reading the SDWA to say that any action by the state (even if minor or ineffective) deprives EPA of authority to act would strip EPA of its statutory emergency powers and be at odds with the clear purpose of the statute to preserve and protect the public health. Trinity Am. Corp. v. EPA, 150 F.3d at 397.

<sup>34</sup> Id. at 398-399.

governments are taking or will take. Under Section 1431, then, it is not mandatory to consult with the State and local authorities (i.e., they should be contacted “to the extent practicable”).<sup>35</sup> Nevertheless, the Regions should be aware that EPA will need a basis in the record for the finding. This written basis could be simply a log of a telephone conversation or correspondence between EPA and the State and local authorities.

If EPA has information that State/local agencies are going to act, then EPA must decide whether the action is timely and protective of public health.<sup>36</sup> If EPA determines that the action is insufficient and State and local agencies do not plan to take additional actions to ensure public health protection, in a timely way, then EPA should proceed with an action under Section 1431.<sup>37</sup>

Unlike under Sections 1414 or 1423, a notice of violation (NOV) need not be issued prior to taking a Section 1431 action. No violation of any requirement is needed for a Section 1431 order. An NOV, even if issued, would not be a means of consulting with the State and local authorities to determine whether they have acted in a timely and appropriate manner to protect the health of persons. Rather, an NOV serves as a prerequisite under Sections 1414 or 1423 for the EPA to take certain enforcement actions in primacy states.

The Regions should note that they need to determine that neither State nor local authorities acted adequately to protect public health before bringing a Section 1431 action. The State can be of assistance to EPA in making this determination because the State should be able to identify the appropriate local authorities and may be aware of whether these authorities have taken any actions.

It is important to remember EPA is authorized to act under Section 1431 regardless of whether a State, territory or tribe has primary enforcement authority. EPA has invoked Section 1431 in cases where it is not the primacy agency, but is instead exercising its oversight authority and taking independent, federal action to address an emergency.

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<sup>35</sup> This language was added from an amendment offered during a House debate on November 19, 1974: “To the extent [the EPA Administrator] determines it to be practicable in light of such imminent endangerment, he shall consult with the State and local authorities in order to confirm the correctness of the information on which action proposed to be taken under this subsection is based and to ascertain the action which such authorities are or will be taking.” In explaining the amendment, Representative Murphy of Illinois stated that it “requires [] the Federal Administrator [to] consult with State and local authorities as to the emergency, what information it is based on, and what action he proposes to take, so that [EPA] can work hand in glove with the local and State authorities.” See 120 Cong. Rec. 36400 (1974).

<sup>36</sup> “State health authorities, therefore, must not only have acted, but acted in a way adequate to protect the public health; and EPA, the agency with expertise in this area, determines if the state efforts were adequate.” Trinity Am. Corp., 150 F.3d at 398.

<sup>37</sup> Congressional reports and floor debates support the view that Congress inserted this language in Section 1431 (and added certain procedural prerequisites before allowing federal enforcement in a primacy state) simply to avoid duplication between the federal and state enforcement and to preserve the primary responsibility for protecting the public at the state and local levels. H.R. Rep. 93-1185, at 22-34, 35; S. Rep. No. 93-231, 93rd Cong., 1st Sess. 9, 10 (1973); 120 Cong. Rec. 36372, 36374-75, 37591-92 (1974).

## Remedial Actions That May Be Ordered

Once EPA determines that action under Section 1431 is needed, a very broad range of options is available. The statute provides that EPA may take actions as may be necessary to protect the health of persons. Moreover, EPA may take such actions notwithstanding any exemption, variances, permit, license, regulation, order, or other requirement that would otherwise apply.<sup>38</sup>

The actions that EPA may take may include (but are not limited to):<sup>39</sup>

- issuing orders as necessary to protect the health of persons who are or may be users of such system (including travelers), including orders that require:
  - the provision of alternative water supplies, at no cost to the consumer, by persons who caused or contributed to the endangerment (e.g., provision of bottled water, installing and maintaining treatment, drilling of new well(s), connecting to an existing PWS).
  - information about actual or impending emergencies (e.g., if standard information gathering tools like SDWA Section 1445 would not result in an expeditious response or may not apply in a certain case).
  - public notification of hazards (e.g., door-to-door, posting, newspapers, electronic media).
  - an investigation to determine the nature and extent of the contamination in the environment.
  - a survey to identify PWSs, private supply wells or ground water monitoring wells near potentially contaminated areas.<sup>40</sup>
  - monitoring of regulated or unregulated potential or identified contaminants.
  - development of a feasibility study to assess potential remedial actions to abate an endangerment.
  - an engineering study proposing a remedy to eliminate the endangerment and a timetable for its implementation.

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<sup>38</sup> The legislative history supports this view. *See* H.R. Rep. 93-1185, at 35.

<sup>39</sup> The House Report specifically mentions several of these listed actions as among those EPA may take.

<sup>40</sup> Portion of the emergency order mandating that Trinity identify all potential users of the contaminated wells in the three-quarter-mile area is not a “‘limitless’ or unduly burdensome task.” *Trinity Am. Corp.*, 150 F.3d at 401.

- control of the source of contaminants that may be contributing to the endangerment, including by halting disposal.
- cleanup of contaminated soils endangering an USDW.
- commencing a civil action for appropriate relief including a restraining order, or a temporary or permanent injunction. The injunction may require the PWS owner or operator, UIC well owner or operator, or the responsible party to take steps to abate the hazard.

### **Use of Judicial vs. Administrative Orders**

Except where the responsible party is a federal agency, the Region may issue a Section 1431 administrative order and/or ask the Department of Justice to file a civil judicial action.<sup>41</sup> A civil referral may be preferable to a Section 1431 administrative order if the Region believes the responsible party will be uncooperative or recalcitrant or if the necessary relief is long-term or otherwise appropriate for supervision by a U.S. District Court (e.g., expected cost of relief is high).

A Section 1431 administrative order offers EPA some unique powers. EPA may issue unilateral Section 1431 orders or enter into administrative orders on consent. Unlike compliance orders (e.g., issued under Sections 1414 or 1423), Section 1431 orders enable the Agency (versus the courts) to order actual injunctive-type relief. This relief is limited only by the usual constraints of the Administrative Procedure Act (APA). The APA requires all Agency actions be reasonable and not “arbitrary or capricious.”<sup>42</sup> Thus, by issuing an administrative order instead of filing a civil judicial action, the Agency rather than the District Court determines the scope and timing of appropriate relief in the first instance.

The recipients of an administrative order may challenge its terms. Under the judicial review provisions of SDWA Section 1448, the petition must be filed within 45 days in the appropriate Court of Appeals (a District Court does not have jurisdiction to hear challenges to a Section 1431 administrative order). If the recipient fails to meet this condition, he or she loses the right to contest the terms of the order.

Section 1431 administrative orders have long been considered final agency action subject to review under Section 1448. Following the Supreme Court’s 2012 decision in *Sackett*,<sup>43</sup> on March 21, 2013, OECA issued guidance to the Regions about “Language Regarding Judicial Review of Certain Administrative Enforcement Orders Following the Supreme Court Decision in *Sackett v. EPA*.” In

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<sup>41</sup> In the case of a federal agency recipient, the action will be a Section 1431 administrative order.

<sup>42</sup> 5 U.S.C. Section 706(2).

<sup>43</sup> *Sackett v. EPA*, 132 S. Ct. 1367 (2012).

the March 2013 guidance, OECA provided specific language to be included in unilateral orders, such as Section 1431 orders (i.e., respondent may seek federal judicial review) and administrative orders on consent (i.e., respondent waives any and all remedies, claims for relief and otherwise available rights to judicial or administrative review). Regions should include the appropriate *Sackett* language in their administrative actions (whether unilateral or on consent).

Except where the responsible party is a federal agency, any enforcement actions to require compliance with an administrative order or to seek civil penalties for its violation must be in District Court. Where the recipient is a federal agency, EPA may issue an administrative penalty order under Section 1447(b) of the SDWA for the federal agency's failure to comply with a Section 1431 administrative order.<sup>44</sup> A recipient who violates or fails or refuses to comply with the terms of the administrative order, may be subject to a civil penalty pursuant to Section 1431(b); a federal agency recipient may be subject to a penalty pursuant to Section 1447(b).<sup>45</sup>

### **Relationship between Section 1431 and Other EPA Emergency Authorities**

A Section 1431 order can be taken in conjunction with emergency orders under other statutes. Emergency provisions include:

- Resource Conservation and Recovery Act (RCRA) - Section 7003
- CERCLA - Section 106<sup>46</sup>
- Clean Water Act (CWA) – Sections 504(a) and 311
- Toxic Substances Control Act - Section 7
- Clean Air Act (CAA) - Sections 112(r)(9) or 303

Although similar in general terms, each of the emergency provisions of these statutes is somewhat different. Guidance on EPA's authority to address imminent and substantial endangerment under CERCLA, RCRA, CWA and CAA have been issued by the Agency.<sup>47</sup> For example, Section

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<sup>44</sup> For more information about EPA's federal facility penalty authority under the SDWA, see "Guidance on Federal Facility Penalty Order Authority Under the Safe Drinking Water Act, as amended in 1996," signed on May 29, 1998 by Steven A. Herman, Assistant Administrator, Office of Enforcement and Compliance Assurance (Steven A. Herman memorandum).

<sup>45</sup> See Footnote 5 above regarding annual adjustments for inflation. Also note that for federal agency recipients, "As a matter of practice, EPA will seek penalties against a Federal agency which violates or fails or refuses to comply with a § 1431 order not to exceed [the maximum penalty for non-federal parties] for each day in which such violation occurs or failure to comply continues." Steven A. Herman memorandum, Footnote 5.

<sup>46</sup> CERCLA Section 106 orders against Executive Branch agencies require the concurrence of the Attorney General.

<sup>47</sup> "Guidance on CERCLA Section 106(a) Unilateral Administrative Orders for Remedial Designs and Remedial

7003 of RCRA is very broad in that it allows for protection of the “environment.”<sup>48</sup> However, it is somewhat limited in that the threat must be caused by a “solid waste.” Section 1431, on the other hand, is limited to the protection of a PWS or an USDW, but covers a broad universe of “contaminants.” Regions may consider issuing joint orders under more than one of these statutory authorities, or separate orders that complement each other. When issuing orders under more than one authority, Regions should be sure to coordinate with each appropriate office. However, if the order is being unduly delayed by coordination difficulties, the Region should proceed with the Section 1431 order, followed by an order under the other statute or statutes.

### **Parties over Whom Section 1431 Grants EPA Authority**

Section 1431 by its terms gives EPA broad discretion to issue any orders necessary to protect the health of persons. EPA may issue Section 1431 orders not only to an owner or operator of a PWS, but also, for example, to federal, state, tribal, territorial or local governments; owners or operators of underground injection wells; area or point source polluters; or to any other person whose action or inaction requires prompt regulatory intervention to protect public health.<sup>49</sup>

In cases where the responsible party is not clearly known, one option is to issue the order to the most likely contributor(s) based on the type of contaminant(s) found in the PWS and/or USDW compared to current and past land practices in the area. As part of the order, EPA can require that a study be performed to more clearly determine the responsible parties. In such a case, additional orders may be issued as knowledge accumulates. Thus, an initial Section 1431 order may merely request records, samples, or other existing data/documents to help clarify what or who caused the endangerment before ordering other actions be taken, and a subsequent order(s) would

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Actions,” U.S. EPA, OSWER Directive No. 9833.0-1a, March 7, 1990. “Guidance on CERCLA Section 106 Judicial Actions,” U.S. EPA, OSWER Directive No. 9835.7, February 24, 1989. “Issuance of Administrative Orders for Immediate Removal Actions,” U.S. EPA, OSWER Directive No. 9833.1, February 21, 1984. “Use of CERCLA § 106 to Address Endangerments That May Also be Addressed Under Other Environmental Statutes,” U.S. EPA, January 18, 2001. “Endangerment Assessment Guidance,” U.S. EPA, OSWER Directive 9850.0-1, November 22, 1985. “Guidelines for Using the Imminent Hazard, Enforcement and Emergency Response Authorities of Superfund and Other Statutes,” U.S. EPA, May 11, 1982. “Guidance on the Use of Section 7003 of RCRA,” U.S. EPA, October 20, 1997. “Guidance on Using Order Authority under Section 112(r)(9) of the Clean Air Act, as Amended, and on Coordinated Use with Other Order and Enforcement Authorities,” U.S. EPA, April 17, 1991. “Guidance on Use of Section 303 of the Clean Air Act,” U.S. EPA, September 15, 1983. “Guidance on Use of Section 504, the Emergency Powers Provision of the Clean Water Act,” U.S. EPA, July 30, 1993. “Final Guidance on the Issuance of Administrative Orders Under Section 311(c) and (e) of the Clean Water Act,” U.S. EPA, July 1, 1997. “Toxic Substances Control Act: Compliance/Enforcement Guidance Manual,” U.S. EPA, August 1984.

<sup>48</sup> Under Section 7003 of RCRA, EPA may “authorize[] the cleanup of a site, even a dormant one, if that action is necessary to abate a present threat to the public health or the environment[,]” but that it ‘could not order the cleanup of a waste disposal site which posed no threat to health or the environment.’ Because the ‘authority conferred . . . by section 1431 of SDWA is quite as broad as that conferred by RCRA,’ we believe the limitations under the latter provision are equally applicable to the former. As is the case with RCRA, EPA cannot order cleanup under section 1431 of SDWA when there is no threat to the public’s health.” W.R. Grace & Co., 261 F.3d at 340 (citing United States v. Price, 688 F.2d 204, 214 (3d Cir. 1982)).

<sup>49</sup> See H.R. 93-1185, at 35.



address the potential harm. For example, if a PWS is contaminated with benzene, toluene, and xylene, and there are five gasoline service stations located near the PWS, an initial order could require each of the service stations to test for leaks in their underground storage tanks. However, Regions should keep in mind that the delay involved with such an approach (e.g., a series of orders) must be weighed against the danger posed by the contaminant(s) in the water, the need to protect public health as soon as possible and concerns with issuing a broader initial order with additional requirements. For instance, in an area with karst geology and more than one source of nitrate contamination, the Agency, to protect public health, has the authority to issue multiple formal administrative orders containing enforceable milestones (e.g., control discharges) and, if necessary, requirements for the provision of alternative drinking water until compliance is achieved. Issues like this should be discussed during the required consultation with OECA before taking Section 1431 action.

EPA may even use Section 1431 authority to reach parties that are not responsible for the endangerment. Orders to a non-responsible party ordinarily should be limited to those instances where no responsible party exists or is suspected and the issuance of an order to a non-responsible party is the most appropriate means to protect or mitigate the endangerment. For example, an order may require a PWS, contaminated by unknown polluters, to filter or relocate its water source.

## **Taking Action Under Section 1431**

### **Components of an Administrative Order**

The recommended basic components of a Section 1431 order are:

- EPA's Statutory Authority
- Findings of Fact
- Conclusions of Law
- Conditions or Actions Required by the Emergency Order - Should also contain a statement that requires the respondent to advise the Agency of his or her intentions to comply with the terms of the order in a specified short time frame (e.g., 24 hours)
- General provisions to address issues such as modification, termination and judicial review (e.g., the *Sackett* language described above)
- Name and Address of EPA Contact

- Opportunity to Confer for Orders Against Federal Agencies<sup>50</sup>

## **Civil Judicial Action**

If a judicial order is sought, the Agency must still determine that an “imminent and substantial endangerment” exists. If proceeding judicially, the Region, OECA and DOJ will draft and discuss the appropriate court filings.

### **Degree of Support**

#### **Development of a Record**

The issuance of a Section 1431 order as an administrative action must be supported by an adequate written record. Therefore, the Regions should ensure that the findings of fact in the order are adequately supported by documents in the record showing the basis for EPA’s technical determinations. Similarly, before bringing a judicial action under Section 1431, Regions should ensure that sufficient information has been compiled and can be presented to a court to support the action. This information would take the form of technical documents (e.g., such as statements from a toxicologist), other background materials, such as records of correspondence indicating the State and local authorities are not acting sufficiently to protect public health or have requested that EPA act on their behalf, and memoranda to the file. Regions should refer to OECA’s May 16, 2013 “Guidance on Developing Administrative Records for Unilateral Administrative Enforcement Orders.” Additionally, EPA issued general guidance on administrative records (“EPA’s Action Development Process: Administrative Records Guidance,” September 2011).

#### **Absolute Proof Not Required**

Even though EPA should strive to create a record basis to support its Section 1431 actions, the Regions should recognize that EPA does not need uncontroverted proof that contaminants are present in or likely to enter the water supply or that an imminent and substantial endangerment may be present before acting under Section 1431.<sup>51</sup> Similarly, EPA does not need uncontroverted proof that the recipient of the order is the person responsible for the contamination or threatened contamination. Courts generally will give deference to EPA’s technical findings of imminent and substantial endangerment. The purpose of Section 1431 actions is to prevent harm from occurring. Extensive efforts to document the available information should be avoided, where the delay in obtaining such information or proof could impair attempts to prevent or reduce the hazardous situation. The Region may use, for example, sampling data from public and/or private wells, the exceedance of the unreasonable risk to health level, data from toxicological studies, and/or the opinion of a

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<sup>50</sup> See Steven A. Herman memorandum.

<sup>51</sup> See U.S. v. Conservation Chemical Co., 619 F. Supp. at 193 (because of scientific and medical uncertainties, proof with certainty is impossible).

toxicologist or other expert as evidence that an “imminent and substantial endangerment” may exist.<sup>52</sup>

### **State and Local Authorities Have Not Acted**

As stated previously, before taking an action under Section 1431, EPA must explain and document, as necessary, why the ordered action is needed even if state or local governments may have taken or are taking actions to protect public health. As highlighted above, EPA makes this determination in each specific case and, significantly, when assessing the actions of a State, tribal, territory or local authority, potential responses may vary based on particular factual circumstances. This is another important issue to discuss with OECA during the consultation process when contemplating a Section 1431 action in a particular matter. The Region should have a written basis for its finding that federal action is necessary notwithstanding action by a State, tribal, territorial or local authority; that state or local authorities requested assistance; or that EPA is working with the State or local authority. This may consist of a telephone log or written communications (e.g., emails or letters), that serves to document contact between EPA and State and local authorities.

### **Headquarters Contact**

The Region must consult with OECA before issuing an administrative Section 1431 order or referring a Section 1431 matter to DOJ. OECA will coordinate with other Headquarters offices as appropriate (e.g., OW, OGC). OECA is committed to providing feedback to the Regions as soon as possible, which typically is within 24 to 48 hours, and has responded even earlier where the endangerment is acute. Consulting with OECA staff in advance may protect against subsequent adverse judicial determinations.

Regardless of whether the Region prepares an administrative order or requests that a court issue a judicial order, OECA requests that the Region submit copies of all final orders for its central files. The Region’s emergency action should also be reflected in the Agency’s Integrated Compliance Information System (ICIS). ICIS is the database of record for all federal enforcement actions.

### **No Citizen’s Suits To Compel EPA Action Under Section 1431**

SDWA Section 1449 authorizes citizen’s suits against EPA when the Agency has failed to take actions that are mandatory under the statute. Because EPA’s authority to act under Section 1431 is discretionary, citizen’s suits to compel EPA to act under Section 1431 are not authorized.<sup>53</sup>

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<sup>52</sup> See Attachment 4.

<sup>53</sup> See U.S. v. Hooker Chemicals & Plastics Corp., 101 F.R.D. 451, 455 (W.D.N.Y. 1984).

## ATTACHMENT 1

### Citation from 42 U.S.C. Section 300i (SDWA Section 1431)

SEC. 1431. (a) Actions authorized against imminent and substantial endangerment to health. Notwithstanding any other provision of this title, the Administrator, upon receipt of information that a contaminant which is present in or is likely to enter a public water system or an underground source of drinking water, or that there is a threatened or potential terrorist attack (or other intentional act designed to disrupt the provision of safe drinking water or to impact adversely the safety of drinking water supplied to communities and individuals), which may present an imminent and substantial endangerment to the health of persons, and that appropriate State and local authorities have not acted to protect the health of such persons, may take such actions as he may deem necessary in order to protect the health of such persons. To the extent he determines it to be practicable in light of such imminent endangerment, he shall consult with the State and local authorities in order to confirm the correctness of the information on which action proposed to be taken under this subsection is based and to ascertain the action which such authorities are or will be taking. The action which the Administrator may take may include (but shall not be limited to) (1) issuing such orders as may be necessary to protect the health of persons who are or may be users of such system (including travelers), including orders requiring the provision of alternative water supplies by persons who caused or contributed to the endangerment, and (2) commencing a civil action for appropriate relief, including a restraining order or permanent or temporary injunction.

(b) Penalties for violations; separate offenses. Any person who violates or fails or refuses to comply with any order issued by the Administrator under subsection (a)(1) may, in an action brought in the appropriate United States district court to enforce such order, be subject to a civil penalty of not to exceed \$ 15,000 for each day in which such violation occurs or failure to comply continues.

## ATTACHMENT 2

### Citation from H.R. Rep. No. 1185, 93rd Cong., 2d Sess.

Section 1431 reflects the Committee's determination to confer completely adequate authority to deal promptly and effectively with emergency situations which jeopardize the health of persons.

The authority conferred by this section is intended to override any limitations upon the Administrator's authority found elsewhere in the bill. Thus, the section authorizes the Administrator to issue such orders as may be necessary (including reporting, monitoring, entry and inspection orders) to protect the health of persons, as well as to commence civil actions for injunctive relief for the same purpose.

The authority to take emergency action is intended to be applicable not only to potential hazards presented by contaminants which are subject to primary drinking water regulations, but also to those presented by unregulated contaminants.

The authority conferred hereby is intended to be broad enough to permit the Administrator to issue orders to owners or operators of public water systems, to State or local governmental units, to State or local officials, owners or operators of underground injection wells, to area or point source polluters, and to any other person whose action or inaction requires prompt regulation to protect public health. Such orders may be issued and enforced notwithstanding the existence of any exemption, variance, permit, license, regulation, order, or other requirement. Such orders may be issued to obtain relevant information about impending or actual emergencies, to require the issuance of notice so as to alert the public to a hazard, to prevent a hazardous condition from materializing, to treat or reduce hazardous situations once they have arisen, or to provide alternative safe water supply sources in the event any drinking water source which is relied upon becomes hazardous or unusable.

Willful violation of the Administrator's order is made punishable by a fine of up to \$5,000 per day of violation.

In using the words "that appropriate State or local authorities have not acted to protect the health of persons," the Committee intends to direct the Administrator to refrain from precipitous preemption of effective State and local emergency abatement efforts. However, if State or local efforts are not forthcoming in timely fashion or are not effective to prevent or treat the hazardous condition, this provision should not bar prompt enforcement by the Administrator.

In using the words "imminent and substantial endangerment to the health of persons," the Committee intends that this broad administrative authority not be used when the system of regulatory authority provided elsewhere in the bill could be used adequately to protect the public health. Nor is the emergency authority to be used in cases when the risk of harm is remote in time, completely speculative in nature, or *de minimis* in degree. However, as in the case of U.S. v. United States Steel, Civ. Act. No. 71-1041 (N.D. Ala. 1971), under the Clean Air Act, the Committee intends that this language be

construed by the court and the Administrator so as to give paramount importance to the objective of protection of the public health. Administrative and judicial implementation of this authority must occur early enough to prevent the potential hazard from materializing. This means that “imminence” must be considered in light of the time it may take to prepare administrative orders or moving papers, to commence and complete litigation, and to permit issuance, notification, implementation, and enforcement of administrative or court orders to protect the public health.

Furthermore, while the risk of harm must be “imminent” for the Administrator to act, the harm itself need not be. Thus, for example, the Administrator may invoke this section when there is an imminent likelihood of the introduction into the drinking water of contaminants that may cause health damage after a period of latency.

Among those situations in which the endangerment may be regarded as “substantial” are the following: (1) a substantial likelihood that contaminants capable of causing adverse health effects will be ingested by consumers if preventive action is not taken; (2) a substantial statistical probability that disease will result from the presence of contaminants in drinking water; or (3) the threat of substantial or serious harm (such as exposure to carcinogenic agents or other hazardous contaminants).

## **ATTACHMENT 3**

**Office of Inspector General, Management Alert, Report No. 17-P-0004, “Drinking Water Contamination in Flint, Michigan, Demonstrates a Need to Clarify EPA Authority to Issue Emergency Orders to Protect the Public” (October 20, 2016).**



U.S. ENVIRONMENTAL PROTECTION AGENCY

OFFICE OF INSPECTOR GENERAL

*Protecting America's Waters*

**Management Alert:**  
**Drinking Water Contamination  
in Flint, Michigan, Demonstrates  
a Need to Clarify EPA Authority  
to Issue Emergency Orders to  
Protect the Public**

Project No. 17-P-0004

October 20, 2016





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## Abbreviations

EPA	U.S. Environmental Protection Agency
MDEQ	Michigan Department of Environmental Quality
OECA	Office of Enforcement and Compliance Assurance
OIG	Office of Inspector General
SDWA	Safe Drinking Water Act

**Cover photo:** Flint Water Plant, Flint, Michigan. (EPA OIG photo)

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# At a Glance

## Why We Did This Review

The U.S. Environmental Protection Agency (EPA) Office of Inspector General (OIG) is reviewing the circumstances of, and the EPA's response to, the contamination in the city of Flint, Michigan's, community water system, including the EPA's exercise of its oversight authority. We are issuing this report to alert the EPA about factors that delayed its intervention using emergency authority under Section 1431 of the Safe Drinking Water Act (SDWA). When our review is completed, we plan to issue a subsequent report.

After Flint switched its drinking water supply in April 2014, inadequate treatment exposed many of the residents to lead. Emergency authority was available to EPA to take actions to protect the public from contamination.

### This report addresses the following EPA goals or cross-agency strategies:

- *Protecting America's waters.*
- *Protecting human health and the environment by enforcing laws and assuring compliance.*
- *Working to make a visible difference in communities.*

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Listing of [OIG reports](#).

## **Management Alert: Drinking Water Contamination in Flint, Michigan, Demonstrates a Need to Clarify EPA Authority to Issue Emergency Orders to Protect the Public**

### What We Found

EPA Region 5 had the authority and sufficient information to issue a SDWA Section 1431 emergency order to protect Flint residents from lead-contaminated water as early as June 2015. Region 5 had information that systems designed to protect Flint drinking water from lead contamination were not in place, residents had reported multiple abnormalities in the water, and test results from some homes showed lead levels above the federal action level.

To avoid future public health harm through drinking water contamination, the EPA needs to clarify for its employees how its emergency authority can and should be used to intervene in a public health threat.

EPA Region 5 did not issue an emergency order because the region concluded the state's actions were a jurisdictional bar preventing the EPA from issuing a SDWA Section 1431 emergency order. However, the EPA's 1991 guidance on SDWA Section 1431 orders states that if state actions are deemed insufficient, the EPA can and should proceed with a SDWA Section 1431 order, and the EPA may use its emergency authority if state action is not protecting the public in a timely manner. However, EPA Region 5 did not intervene under SDWA Section 1431, the conditions in Flint persisted, and the state continued to delay taking action to require corrosion control or provide alternative drinking water supplies.

In September 2015, EPA Region 5 first briefed the EPA headquarters' Office of Enforcement and Compliance Assurance (OECA) about Flint's water crisis. OECA recommended the region take SDWA Section 1431 action. During the fall, the state began to take actions to correct the problems in Flint. EPA Region 5 maintained that the state was acting, but the contamination continued. The EPA Administrator subsequently directed OECA to issue an emergency order on January 21, 2016. The emergency order stated the EPA had determined that Flint's and Michigan's responses to the drinking water crisis were inadequate, and the EPA ordered specific actions to address a public health threat.

These situations should generate a greater sense of urgency. We are issuing a management alert report on this matter to promote awareness and facilitate immediate EPA action. The OIG's evaluation of the Flint drinking water crisis is ongoing, and we expect to issue an additional report when our work concludes.

### Recommendations

We recommend that OECA update the EPA's 1991 guidance on SDWA Section 1431 emergency authority. We also recommend that OECA require all relevant EPA drinking water and water enforcement program management and staff to attend training on SDWA Section 1431 authority.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

THE INSPECTOR GENERAL

October 20, 2016

**MEMORANDUM**

**SUBJECT:** Management Alert: Drinking Water Contamination in Flint, Michigan,  
Demonstrates a Need to Clarify EPA Authority to Issue Emergency Orders  
to Protect the Public  
Report No. 17-P-0004

**FROM:** Arthur A. Elkins Jr.

A handwritten signature in black ink, appearing to read "Arthur A. Elkins Jr.", is written over the printed name.

**TO:** Cynthia Giles, Assistant Administrator  
Office of Enforcement and Compliance Assurance

During our evaluation to examine the circumstances of contamination in the city of Flint, Michigan's, community water system, including the U.S. Environmental Protection Agency's (EPA's) response to the situation, we became aware of significant factors that delayed EPA intervention in Flint using its emergency authority granted under the Safe Drinking Water Act. We identified the need for the EPA to update and clarify how and when it should act in response to drinking water contamination. As a result, we are providing you with this management alert. We plan to issue a subsequent report when our evaluation concludes.

This report represents the opinion of the Office of Inspector General (OIG) and does not necessarily represent the final EPA position. Final determinations on matters in this report will be made by EPA managers in accordance with established audit resolution procedures. Accordingly, the findings described in the report are not binding upon the EPA in any enforcement proceeding brought by the EPA or the U.S. Department of Justice.

**Action Required**

Prior to issuing this report, we met with agency officials to discuss our report, and the officials agreed with our recommendations, with revisions. Please provide a formal written response to this report within 30 calendar days that includes planned corrective actions and projected completion dates for the recommendations. Your response will be posted on the OIG's public website, along with our memorandum commenting on your response. Your response should be provided as an Adobe PDF file that complies with the accessibility requirements of Section 508 of the Rehabilitation Act of 1973, as amended. The final response should not contain data that you do not want to be released to the public; if your response contains such data, you should identify the data for redaction or removal along with corresponding justification.

This report will be available at [www.epa.gov/oig](http://www.epa.gov/oig).

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## **Appendix**

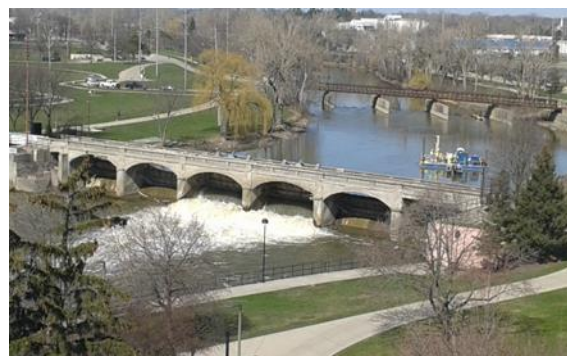
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## Purpose

The U.S. Environmental Protection Agency's (EPA's) Office of Inspector General (OIG) has an ongoing review to examine the circumstances of, and the EPA's response to, the contamination in the city of Flint, Michigan's, community water system, including the EPA's exercise of its oversight authority. The purpose of our issuing this initial report is to alert the EPA of key factors that delayed its intervention in Flint using its emergency authority granted under the Safe Drinking Water Act (SDWA), and to recommend that the EPA update and clarify how and when it should intervene. When our review is complete, we plan to issue a subsequent report.

## Background

Inadequate drinking water treatment exposed many of the nearly 100,000 residents who were customers of the city of Flint community water system to lead. Flint switched from purchasing treated water from Detroit Water and Sewerage to sourcing and treating its water supply from the Flint River in April 2014. Treated water from Detroit Water and Sewerage included a corrosion-inhibiting additive, which lined pipes and connections to minimize the level of lead leaching into drinking water. Flint's treatment of the new drinking water source did not include a process for reducing the corrosion of lead-containing pipes and connections, which allowed lead to begin leaching into drinking water.



Flint River in Flint, Michigan. (EPA OIG photo)

### Potential Health Effects From Lead in Drinking Water

High levels of *lead* may cause liver or kidney damage. Long-term lead exposure in adults can lead to nervous system problems and reproductive, brain and kidney damage, and can ultimately cause death. Children under the age of 6 are especially vulnerable to lead poisoning, which can severely affect mental and physical development.

After the source switch, residents began reporting to the EPA that there were color and odor problems with the water. In February 2015, the public health risk escalated as indications of lead were identified in the drinking water supply. In April 2015, the EPA discovered that the necessary corrosion control had not been added in the community water system since the source switch. In August and September 2015, private researchers identified numerous homes with lead contamination, and also identified an increase in the blood lead levels of children living in Flint.

In October 2015, Flint switched back to purchasing treated water from Detroit Water and Sewerage. In January 2016, the EPA Administrator directed the headquarters' Office of Enforcement and Compliance Assurance (OECA) to issue an emergency administrative order under Section 1431 of the SDWA. This order required the city to, among other things: continue to add corrosion inhibitors; demonstrate it has the technical, managerial and financial capacity to operate the system presently and before it switches to a new water source; and sample water quality and make data publicly available.

On the day the EPA issued the emergency order, the EPA Administrator established the agency's *Policy on Elevation of Critical Public Health Issues*. This policy, which supports the EPA's mission to protect human health and the environment, calls for EPA leaders to encourage staff to elevate issues that have the following characteristics:

- “There appears to be a substantial threat to public health;
- “EPA is or can reasonably be expected to be a focus of the need for action; and/or
- “Other authorities appear to be unable to address or are unsuccessful in effectively addressing such a threat;
- “Recourse to normal enforcement and compliance tools is not appropriate or unlikely to succeed in the near term;
- “High and sustained public attention is possible.”

After the emergency order was issued, OECA provided SDWA enforcement training to some headquarters and regional managers and staff. In addition, the EPA Region 5 acting Regional Administrator stated he is taking steps to implement the Administrator's new policy.

### ***What SDWA and EPA Guidance Provides***

Congress enacted the SDWA in 1974 to protect the quality of drinking water in the United States. Public water systems are required to comply with SDWA. States, territories and tribes (collectively referred to as “states” herein) have primary implementation and enforcement authority.<sup>1</sup> The EPA retains national oversight responsibility for state administration and enforcement of SDWA.

Section 1431 provides the EPA with emergency authority to address imminent and substantial endangerment to human health from drinking water contamination. The EPA can use this discretionary authority whenever:

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<sup>1</sup> Nearly all states, including Michigan, have primacy to implement the SDWA. Primacy is granted to states that adopt regulations at least as stringent as national requirements, develop adequate procedures for enforcement (including conducting monitoring and inspections), adopt authority for administrative penalties, and maintain records and make reports as the EPA may require.

- (1) contamination is in or likely to enter a drinking water source which may present an imminent and substantial endangerment to the health of persons; and
- (2) the appropriate state and local authorities have not acted to protect human health.

The EPA's authorized actions include issuing administrative orders requiring specific actions that are necessary to protect human health or commencing a civil judicial action.

In 1994, the EPA Administrator delegated the authority to issue administrative emergency orders under Section 1431 to EPA Regional Administrators and, in multi-regional cases or cases of national significance, to the Assistant Administrator for OECA. The authority to make a Section 1431 judicial referral remains with headquarters.

The EPA's *Final Guidance on Emergency Authority under Section 1431 of the Safe Drinking Water Act (1991)* is designed, in part, to encourage more widespread use of the EPA's Section 1431 authority by more fully explaining situations where this authority may be applied. This guidance clarifies that the EPA may use its emergency authority even when a state is acting or is going to act. Regarding whether the state action is in fact protecting the public from the contaminants in a timely fashion:

If EPA has information that State/local agencies are going to act, EPA must decide whether the action is timely and protective of public health. If EPA determines that the action is insufficient and State and local agencies do not plan to take stronger or additional actions to ensure public health protection, in a timely way, EPA should proceed with an action under Section 1431.

## **Scope and Methodology**

We began our evaluation in February 2016, and our work is ongoing. We are conducting this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform our work to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. Our ongoing work may provide supplemental findings to this report. We believe that the evidence obtained provides a reasonable basis for the findings and conclusions in this report based on our audit objectives.

We reviewed the laws, regulations, policies, procedures and guidance related to the SDWA program. At EPA headquarters, we interviewed the EPA Administrator, and staff and officials from the Office of General Counsel, Office

of Water and OECA. We also interviewed staff and officials in EPA Region 5, including the former EPA Region 5 Regional Administrator and the Region 5 acting Regional Administrator. Further, we interviewed staff from the Michigan Department of Environmental Quality (MDEQ), former and current employees of the city of Flint, and Flint residents. In addition, we reviewed criteria documents provided to us by the EPA and MDEQ.

## Results of Review

Based on information we obtained, EPA Region 5 had the information it needed about the drinking water issues in Flint in June 2015 to exercise its discretionary authority to issue an emergency order under SDWA Section 1431. The information EPA Region 5 had in June 2015 met the two requirements necessary for an emergency order under SDWA Section 1431, as shown in Table 1:

**Table 1: SDWA Section 1431 Emergency Order Requirements and EPA's Information about Flint Events in June 2015**

Emergency order requirement	EPA's information about Flint events by June 2015
1. The contamination may present imminent and substantial endangerment to human health.	<ul style="list-style-type: none"> <li>• EPA Region 5 received the first Flint drinking water distribution system lead sampling test result, indicating a requirement for corrosion control (February 2015).<sup>2</sup></li> <li>• State informed EPA Region 5 that no corrosion control was in place (April 2015).</li> <li>• EPA Region 5 had information that at least four homes had lead in drinking water in concentrations above the action level (June 2015).<sup>3</sup></li> </ul>
2. Appropriate state and local authorities have not acted to protect the health of persons.	<ul style="list-style-type: none"> <li>• State informed EPA that no corrosion control was in place (April 2015).</li> <li>• State and city had not disclosed risk of potential lead exposure to the public.</li> </ul>

Source: SDWA Section 1431 and OIG analysis of EPA Region 5 documents.

<sup>2</sup> Under SDWA, the Lead and Copper Rule requires optimized corrosion control for systems servicing populations over 50,000. The rule also deems a drinking water system to have optimized corrosion control when lead sampling results fall at 5 parts per billion or less at test sites throughout the system. The city's lead sampling results were 6 parts per billion.

<sup>3</sup> The Lead and Copper Rule requires that drinking water utilities take action when lead exceeds 15 parts per billion in a sample of homes. An action level exceedance is not a violation, but it triggers other required actions to minimize exposure to lead and copper in drinking water. Those other actions include water quality parameter monitoring, corrosion control treatment, source water monitoring/treatment, public education, and lead service line replacement.



## ***EPA Region 5 Had Sufficient Information and the Authority to Issue an Emergency Order in June 2015, but Did Not***

By June 2015, EPA Region 5 had information that the city of Flint exceeded the lead level at which corrosion control is required, and that Flint was not using a corrosion inhibitor. EPA Region 5 also had information that at least four homes had concentrations of lead in household drinking water above the action level of 15 parts per billion. These factors and others indicated that some residents were being exposed to lead-contaminated water, and that exposure to lead-contaminated drinking water was likely to increase as corrosion continued within the distribution system.

Additional information from the public provided further evidence of Flint drinking water abnormalities. Between April 2014 (month of the water source switch) and June 2015, EPA Region 5 received many documented complaints from Flint residents.<sup>4</sup>

By June 2015, EPA Region 5 also knew that the state and local authorities were not acting quickly to protect human health. In February 2015, the state initially told the EPA that Flint had an optimized corrosion control program in place. Subsequently, in April 2015, the state admitted that Flint was not using corrosion control, but the state also said none was required. Neither state nor local authorities disclosed the risks of potential lead contamination to residents.

EPA Region 5 began discussing the issue with the state and offered the state technical assistance in February 2015. However, instead of acting immediately to protect human health, the state delayed action by awaiting the results of the second round of lead sampling (not anticipated until August 2015). The state argued Flint had as many as 5 years from the date of the source switch to optimize corrosion control. The city of Flint also did not take action.

On June 24, 2015, an EPA Region 5 regulations manager produced an interim report about lead contamination identified in Flint homes and described major public health concerns in the city of Flint. However, on July 9, 2015, the then Flint mayor held a press conference assuring Flint residents that the water was safe to drink. Despite these conditions, the region did not issue an emergency order because the region concluded the state's ongoing activities were a jurisdictional bar preventing the EPA from issuing a SDWA Section 1431 emergency order.

The EPA's 1991 guidance on taking emergency action under Section 1431 describes how and when the EPA can use its emergency authority even if a state or local agency acts:

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<sup>4</sup> These complaints were submitted to EPA Region 5 directly or forwarded to Region 5 from the EPA OIG or the White House.

The Regions should not view this standard - whether a State or local authority has acted to protect the health of persons - as an issue of whether these authorities have “failed” to protect public health. Instead, these authorities intentionally may defer action to EPA because the Section 1431 authority may be more powerful or expeditious.... Further, State or local authorities may decide to take action jointly with EPA. In such cases, EPA would determine that State and local authorities have not acted (on their own) to protect the health of persons. Therefore, EPA may proceed with Section 1431 actions when State and local authorities are working jointly with EPA.

Our analysis of the publicly available data on SDWA Section 1431 actions taken by EPA regions prior to the Flint incident shows that it is rare for a region to issue an emergency order to a municipality in a state with primacy. OIG analysis showed that the vast majority of the SDWA Section 1431 emergency orders taken by EPA occurred in Wyoming and in Indian country, where the EPA regions directly implement SDWA and there is no “state” entity to consider. Based on the publicly available data, the majority of Section 1431 emergency orders issued by the EPA were to businesses and federal facilities.<sup>5</sup>

Emergency action by EPA Region 5 could have required the city and state to provide alternative water supplies to affected residents, study the extent and severity of lead contamination within the water system, or immediately begin corrective actions to reduce and eliminate lead contamination in the drinking water system. However, EPA Region 5 did not intervene under SDWA Section 1431 to require immediate actions to protect human health, and the conditions in Flint continued.

In the absence of EPA intervention in Flint, the state continued to delay taking action to require corrosion control or provide alternative drinking water supplies. Additional data in August and September 2015 demonstrated lead contamination was widespread, and also demonstrated an increase in the blood lead levels of children living in Flint. It was not until December 2015 that Flint began adding a corrosion inhibitor to optimize corrosion control in the water system.



EPA emergency response vehicle in Flint. (EPA OIG photo)

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<sup>5</sup> OIG analyzed information from the EPA’s public Enforcement and Compliance History Online database. The EPA informed the OIG that this public database does not reflect all EPA Section 1431 actions taken.

Region 5 did not formally brief OECA about Flint’s water issues until September, 2015. Staff and managers in OECA viewed the Flint situation as one in which it was appropriate for the region to take Section 1431 action, and recommended that the region take such action. However, Region 5 declined to take emergency action, on the basis that the ongoing state actions constituted a jurisdictional bar.

Table 2 provides examples of federal, state and local events occurring in Flint during the fall and early winter.

**Table 2: Examples of Federal, State and Local Actions in Flint—September 2015 through January 2016**

Month	Event
September	<ul style="list-style-type: none"> <li>• External researchers inform the EPA about broader scope of lead contamination and elevated blood lead levels in Flint children.</li> <li>• Flint mayor announces that corrosion control will be initiated; invites EPA experts to Flint.</li> <li>• City of Flint and Genesee County issue formal health advisory.</li> </ul>
October	<ul style="list-style-type: none"> <li>• Region 5 establishes Flint task force to provide technical expertise.</li> <li>• Michigan develops a 10-point action plan.</li> <li>• Flint returns to purchasing treated water from Detroit Water and Sewerage.</li> </ul>
November	<ul style="list-style-type: none"> <li>• EPA Office of Water issues memo verifying that the Lead and Copper Rule requires that large drinking water systems, such as Flint, have optimized corrosion control technologies in place.</li> <li>• Region 5 Flint task force concludes that contamination in Flint is still not controlled, because the city did not comply with a request for information that would give this assurance.</li> </ul>
December	<ul style="list-style-type: none"> <li>• Flint begins to implement supplemental corrosion control.</li> <li>• Flint mayor declares state of emergency.</li> </ul>
January	<ul style="list-style-type: none"> <li>• Michigan governor declares state of emergency.</li> <li>• President declares federal state of emergency for Flint.</li> <li>• EPA issues emergency order to MDEQ and Flint.</li> </ul>

Source: OIG

According to OECA staff and management, as these events unfolded, OECA continued to discuss a Section 1431 action with EPA Region 5 leadership, stressing that this would formalize the state’s planned actions. This would also have federalized the response. However, OECA and the EPA Administrator’s office did not initiate SDWA 1431 action from the EPA headquarters level, and continued to rely on EPA Region 5’s determination that the state was acting. However, the contamination continued.

The Administrator, in delegating to OECA the authority for SDWA Section 1431 emergency action, limited OECA to taking these actions in “multi-regional cases or cases of national significance.” However, the Administrator retains the authority to act in all cases. Only in January 2016 did it become clear to OECA that even though the contamination continued to be unresolved by months of ongoing activity, the EPA Region 5 Regional Administrator did not adequately recognize the available authority under Section 1431 to take an emergency action.

The EPA Administrator directed OECA to issue an emergency order to the state of Michigan, MDEQ and the city of Flint on January 21, 2016.

While the 1991 guidance provides that the EPA may proceed if state actions do not serve to protect public health, the guidance does not provide examples of state actions that would and would not be deemed timely and protective. The guidance also does not provide a checklist or other tools for determining when the Regional Administrators and OECA Assistant Administrator should consider emergency action under SDWA Section 1431.

We are issuing a management alert report on this matter to promote awareness and facilitate EPA action to clarify and update its guidance and scenarios under which a SDWA Section 1431 emergency order should be considered. The OIG's evaluation of the Flint drinking water crisis is ongoing, and we expect to issue an additional report when our work concludes.

## **Conclusion**

EPA Region 5 had sufficient information to issue an emergency order to Flint as early as June 2015, but did not. Issuing an emergency order to a state or local entity is a rare occurrence at the EPA. The former EPA Region 5 Regional Administrator believed that the state of Michigan's actions to address the Flint situation barred formal federal action. While events were complicated, given what we know about the consequences of the Flint drinking water contamination, it is clear that EPA intervention was delayed. These situations should generate a greater sense of urgency. The EPA must be better prepared and able to timely intercede in public health emergencies like that which occurred in Flint.

To that end, the EPA has since taken some responsive steps by issuing the policy on elevation of critical public health issues and conducting SDWA enforcement trainings. However, the EPA can do more to emphasize that SDWA Section 1431 is a tool that should be used in cases where responding with urgency will protect human health. This management alert identifies initial actions we believe the EPA must take to clarify regions' authorities to use this tool, and to clarify OECA's role in recommending and taking emergency action to immediately address urgent drinking water issues.

Specifically, the EPA should update its 1991 SDWA Section 1431 guidance to include relevant examples of how and when Section 1431 orders have been issued, and examples of timely and protective state action. The updated guidance should include the current delegation of authority for issuing Section 1431 orders, and should establish a guide to give employees direction about when Section 1431 emergency action could be taken. Further, the EPA should require all relevant EPA drinking water and water enforcement management and staff to attend training on the use of the authorities provided in SDWA Section 1431. As the

OIG completes its work, it will examine the management and program controls in place at the EPA and make further recommendations as warranted.

## Recommendations

We recommend that the Assistant Administrator for Enforcement and Compliance Assurance:

1. Update the EPA's *Final Guidance on Emergency Authority under Section 1431 of the Safe Drinking Water Act (1991)* to:
  - a. Include the most relevant examples of Safe Drinking Water Act Section 1431 orders nationwide and examples of state actions that would be considered timely and protective.
  - b. Reflect the current delegations of authority to both the Regional Administrators and the Assistant Administrator for Enforcement and Compliance Assurance.
  - c. Establish checklists for when both the Regional Administrators and the Assistant Administrator for Enforcement and Compliance Assurance should consider emergency action under the Safe Drinking Water Act Section 1431.
2. Train, in cooperation with the Assistant Administrator for Water, all relevant EPA drinking water and water enforcement program management and staff on the Safe Drinking Water Act Section 1431 authority and updated guidance.

# **Status of Recommendations and Potential Monetary Benefits**

## RECOMMENDATIONS

Rec. No.	Page No.	Subject	Status <sup>1</sup>	Action Official	Planned Completion Date	Potential Monetary Benefits (in \$000s)
1	9	<p>Update the EPA's <i>Final Guidance on Emergency Authority under Section 1431 of the Safe Drinking Water Act (1991)</i> to:</p> <ul style="list-style-type: none"> <li>a. Include the most relevant examples of Safe Drinking Water Act Section 1431 orders nationwide and examples of state actions that would be considered timely and protective.</li> <li>b. Reflect the current delegations of authority to both the Regional Administrators and the Assistant Administrator for Enforcement and Compliance Assurance.</li> <li>c. Establish checklists for when both the Regional Administrators and the Assistant Administrator for Enforcement and Compliance Assurance should consider emergency action under the Safe Drinking Water Act Section 1431.</li> </ul>		Assistant Administrator for Enforcement and Compliance Assurance		
2	9	Train, in cooperation with the Assistant Administrator for Water, all relevant EPA drinking water and water enforcement program management and staff on the Safe Drinking Water Act Section 1431 authority and updated guidance.		Assistant Administrator for Enforcement and Compliance Assurance		

<sup>1</sup> O = Recommendation is open with agreed-to corrective actions pending.  
 C = Recommendation is closed with all agreed-to actions completed.  
 U = Recommendation is unresolved with resolution efforts in progress.

## ***Distribution***

Office of the Administrator  
Assistant Administrator for Enforcement and Compliance Assurance  
Regional Administrator, Region 5  
Agency Follow-Up Official (the CFO)  
Agency Follow-Up Coordinator  
General Counsel  
Associate Administrator for Congressional and Intergovernmental Relations  
Associate Administrator for Public Affairs  
Principal Deputy Assistant Administrator, Office of Enforcement and Compliance Assurance  
Deputy Assistant Administrator, Office of Enforcement and Compliance Assurance  
Deputy Regional Administrator, Region 5  
Audit Follow-Up Coordinator, Office of Enforcement and Compliance Assurance  
Audit Follow-Up Coordinator, Region 5

## ATTACHMENT 4

### Examples of Information to Support a SDWA Section 1431 Action

The following is a nonexhaustive list of the types of information that could be included or considered as part of an administrative record when issuing a SDWA Section 1431 order. Note that not all the following information needs to be obtained, especially if some of the information is not available or time consuming or expensive to attain. As noted in the guidance document, extensive efforts to document the available information should be avoided where the delay in obtaining such information or proof could impair attempts to prevent or reduce the hazardous situation. Additionally, as stressed above, SDWA Section 1431 applies to regulated and unregulated contaminants, and thus any information related to unregulated contaminants can and should be considered.

For example, the following circumstances, accompanied by appropriate supporting information, may lead EPA to consider utilizing Section 1431 authority:

- **Data generated by:**
  - EPA or other federal agencies
  - State, tribal or territorial agency
  - Local authorities
  - Independent organizations (e.g., universities or local citizen groups)
  - Potentially responsible parties
  
- **Contamination:**
  - Was there a recent or historic release, spill, discharge, or emission?
  - What contaminants are being detected? Is there more than one contaminant of concern?
  - What media (e.g., surface water, ground water, soil, air) has been impacted?
  - When did the release, spill, discharge, or emission occur?
  - What are the current levels and concentrations?
  - What is the toxicity?
  - What is the mobility of the contaminant(s)?
  - What are the techniques for mitigation (e.g., bottled water, point of use/point of entry treatment)?
  
- **Exposure information:**
  - What are the exposure pathways (e.g., ingestion, inhalation, dermal risks)?
  - Have persons using (or that may use) the water been alerted not to consume it? Have any other precautions or warnings been issued?
  - Are sensitive populations consuming the water? For example: pregnant women and women of childbearing age; children, including those fed mixed (powdered) formula; or individuals with compromised immune systems?
  - What is the amount of time the population may have been exposed?
  - Is the water coming from a PWS or private wells?



- What are potential future exposures?
- What is the proximity of release to exposure points?
- Fate/transport modeling to exposure points? Hydrology?
  
- **Health information from:**
  - CDC and other federal agencies (e.g., studies and reports, email and/or phone communications)
  - State, tribal, territorial and local health or environmental agencies (e.g., hospital reports of illnesses/symptoms, blood levels)
  - Residents or other members of the public
  - Peer reviewed journals and other credible sources
  
- **Citizen complaints or petitions received by:**
  - EPA
  - State, tribal or territorial agencies
  - Local authorities
  - PWSs
  - Congress
  
- **Additional possible considerations:**
  - History of water supply and treatment processes
  - Data that results from the water supply and treatment process decisions
  - EPA, State, tribal or territorial enforcement actions

**From:** [Adam Denlinger](#)  
**To:** [kathy redwine](#)  
**Cc:** [Trish Karlsen](#); [Joy King-Cortes](#); [Rob Mills](#); [Adam Denlinger](#)  
**Subject:** RE: Letter submission for public record for today's 4pm Board meeting  
**Date:** Thursday, August 31, 2023 3:02:40 PM

---

Greetings Kathy, thank you for your email

The district is working with state agencies, local elected officials, and the community, doing everything possible to prevent the application of herbicides in the Beaver Creek Watershed. The district's Board of Commissioners and legal counsel is also taking what steps are available to the district with respect to legal action.

We will pass your information along to the SRWD Board of Commissioners

Respectfully

Adam

Adam Denlinger  
General Manager  
Seal Rock Water District  
1037 NW Grebe Street | Seal Rock OR. 97376  
O: 541.563.3529 | F: 541.563.4246 | M: [541.270.0183](tel:541.270.0183) | [adenlinger@srwd.org](mailto:adenlinger@srwd.org)  
[www.srwd.org](http://www.srwd.org)

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**From:** Trish Karlsen <[TKarlsen@srwd.org](mailto:TKarlsen@srwd.org)>  
**Sent:** Thursday, August 31, 2023 2:27 PM  
**To:** Adam Denlinger <[ADenlinger@srwd.org](mailto:ADenlinger@srwd.org)>  
**Subject:** FW: Letter submission for public record for today's 4pm Board meeting

See email below.

---

**From:** kathy redwine [REDACTED]  
**Sent:** Thursday, August 31, 2023 1:59 PM  
**To:** Trish Karlsen <[TKarlsen@srwd.org](mailto:TKarlsen@srwd.org)>  
**Subject:** Letter submission for public record for today's 4pm Board meeting

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Caution! This message was sent from outside your organization.

Dear Adam and SRWD Board,

My name is Kathy Redwine and I am a member of the South Beach community. My home is located within a few miles of Beaver Creek, and we get our water from Seal Rock Water District. I have lived here for 5 years now and used to be happy and proud to live in this beautiful part of the country, and specifically Oregon. Since finding out about Nymark and his plans to spray and poison our lands and water, I have been to a couple of meetings regarding what is to happen to our community and water supply. To say I am frustrated, angered, sad, disheartened, heartbroken, and fired up, is an understatement. I am not a lawyer, nor do I know much about legal matters, nor am I a politician, nor anything else fancy or high-profiled. I am a hard-working single mom, of now an older teenager, working hard in life and trying to enjoy it a little along the way. My daughter, partner, and 3 cats live at home with me. To think that as of Saturday, Sept. 2, 2023 I won't have access to clean, healthy water is absurd. It's something out of a movie, literally. It's something that shouldn't happen anymore in this community, state, or country- and yet, here we are FIGHTING FOR OUR RIGHT TO CLEAN WATER AND TO NOT BE POISONED! It's 2023 and we all know what the chemicals in the aerial spray are and what they do to wildlife, nature, and humans. Do you really want that in your community? Just for a profit!? These laws that protect landowners and timber in Oregon need to go, and I know that's not what we are here today to resolve, but in the meantime, doesn't SRWD have a duty to do EVERYTHING in their power to protect the community and the water supply? Why haven't you put the money you have, and are willing to spend on getting another city's water (soon to also be poisoned), to another use like getting a lawyer to stop this? The cost of getting water from somewhere else and all the testing that will have to happen after said poisoning is ridiculous and makes no sense. Also, who is going to be paying for all that? Please re-read your mission below and answer to the community now. Thank you for your time and attention to this matter before Sept. 2, 2023.

**Seal Rock Water District strives to be a high performance organization that provides exceptional customer service, promoting healthy lifestyles, enriching Seal Rocks unique character at**

responsible rates.

Sincerely, with hope,  
Kathy Marie Redwine ♥

she/her

██████████

"Where words fail, music speaks."

**From:** [Adam Denlinger](#)  
**To:** [REDACTED]  
**Cc:** [Trish Karlsen](#); [Joy King-Cortes](#); [Rob Mills](#); [Adam Denlinger](#)  
**Subject:** RE: Aerial Application of Herbicides in the South Beaver Creek Watershed Approved by Oregon Department of Forestry  
**Date:** Thursday, August 31, 2023 2:55:27 PM

---

Greetings Mr. Davis

The district is working with state agencies, local elected officials, and the community, doing everything possible to prevent the application of herbicides in the Beaver Creek Watershed. The district's Board of Commissioners and legal counsel is also taking what steps are available to the district with respect to legal action.

We will pass your information along to the SRWD Board of Commissioners

Respectfully

Adam

Adam Denlinger  
General Manager  
Seal Rock Water District  
1037 NW Grebe Street | Seal Rock OR. 97376  
O: 541.563.3529 | F: 541.563.4246 | M: [541.270.0183](tel:541.270.0183) | [adenlinger@srwd.org](mailto:adenlinger@srwd.org)  
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**From:** Trish Karlsen <[TKarlsen@srwd.org](mailto:TKarlsen@srwd.org)>  
**Sent:** Thursday, August 31, 2023 2:27 PM  
**To:** Adam Denlinger <[ADenlinger@srwd.org](mailto:ADenlinger@srwd.org)>  
**Subject:** FW: Aerial Application of Herbicides in the South Beaver Creek Watershed Approved by Oregon Department of Forestry

See email below.

---

**From:** Robb Davis [REDACTED]  
**Sent:** Thursday, August 31, 2023 1:52 PM  
**To:** Trish Karlsen <[TKarlsen@srwd.org](mailto:TKarlsen@srwd.org)>  
**Subject:** Aerial Application of Herbicides in the South Beaver Creek Watershed Approved by Oregon Department of Forestry

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Caution! This message was sent from outside your organization.

To the Seal Rock Water District Board of Directors:

It seems that SRWD has sought counsel regarding how pragmatic and potentially effective filing a suit to stop the spraying from ever happening would be.

It also seems that the legal advice was to wait and see what happens.

I don't think we should have to wait for damage to occur: something bad should have to happen to me or my loved ones before predictably dangerous choices are made?! That's absurd.

Maybe

-- instead of waiting until the spray has already happened and the drift is documented and the water is tainted and people's farm productivity plummets and our families are affected, perhaps permanently and irreversibly --

there is a way to stop the spraying, aerial or backpack, based on existing case law pertaining to past sprays and their resulting harm.

The case law may be from Oregon, it may not.

But it is worth trying **before** damage is done to those of us who live in the water district.

If that is not feasible, what is the SRWD willing to do to ensure that residents of the district are not negatively impacted, physically and financially,

by harmful drift **after** spraying with glyphosate has occurred?

It is certainly not fair for the residents of the water district to shoulder the

financial burden of \$40,000.00 per month for water from elsewhere

(It has become expensive enough to work in this area and be able to live in it)

when the SRWD could enlist partners to stop the spraying from ever happening.

As it's been suggested, that \$40,000.00 per month figure is to get water from the next water district over,

a district which quite likely will **also** be sprayed with similar

harmful chemicals during a similar window of time.

**Then** where will we get our water? And at what further expense??

The residents' few resources, in my opinion, would be better used in a class action suit against the land managers for Sorn Nymark as well as government agencies, including the Seal Rock Water District, that refuse to work as hard as they should to ensure we all have clean water to drink and clean water with which to wash, to farm and ranch, to **live**.

Yours,

Robb Davis

South Beach, OR

Sent from [Mail](#) for Windows