

# Welcome to the Spring 2024 Meeting

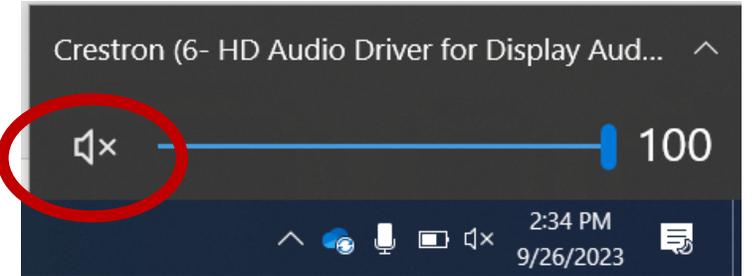


8 May 2024  
Day 1

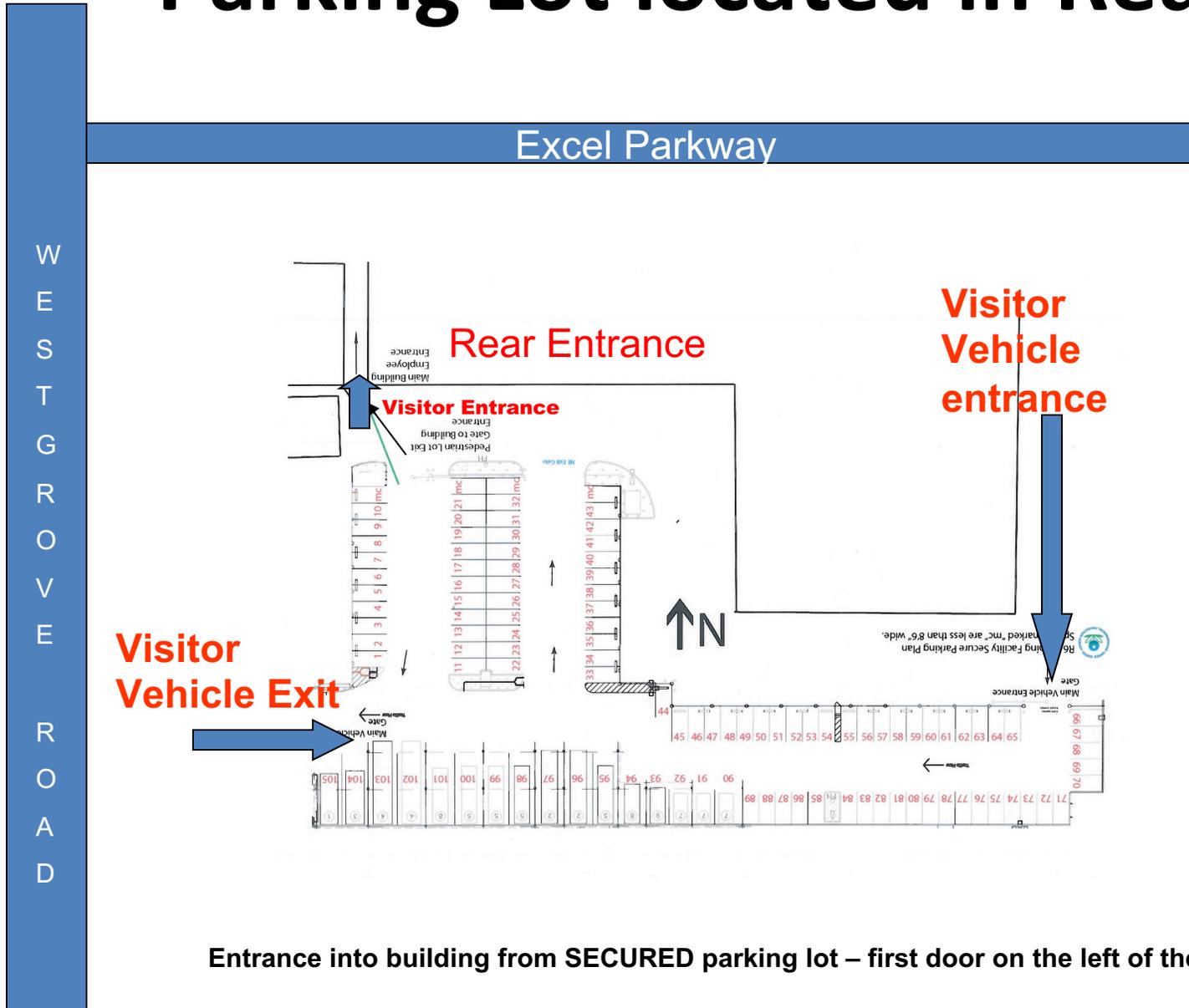
Meeting Call-in Number: (210) 469-3886 Passcode: 478 595 417#

# Meeting Admin: In-person Attendees

- Silence all Cell Phones
- Turn PC Speakers OFF
- Please Use Microphones and Identify Yourself
- Limit Sidebar Talking Conversations/Noise
- Avoid Acronyms
- Breaks/Lunch
- Sign in sheets

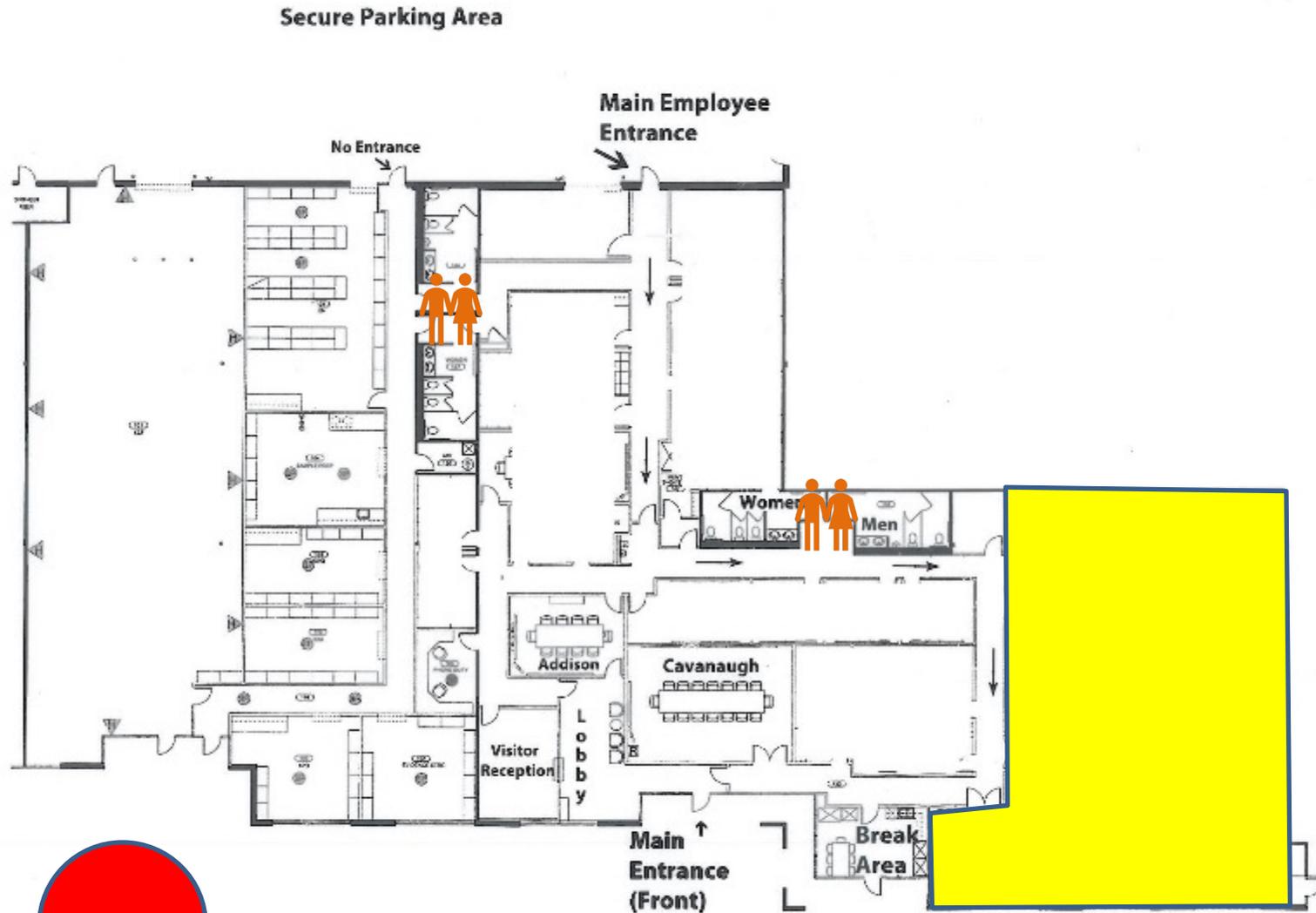


# Parking Lot located in Rear



Entrance into building from SECURED parking lot – first door on the left of the facility.

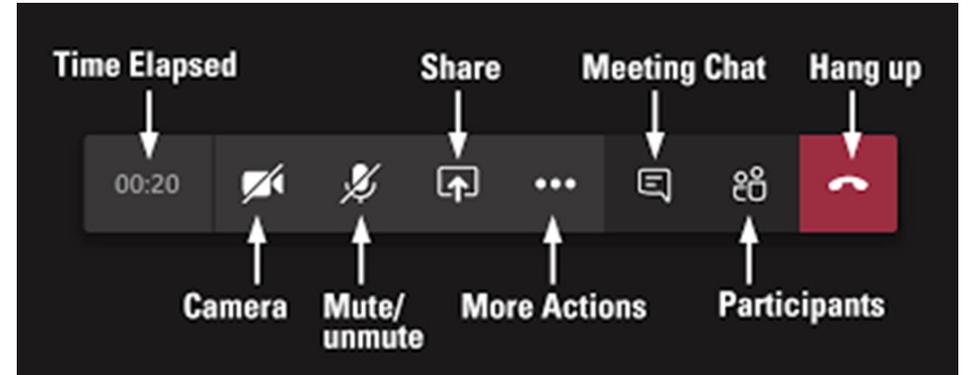
# Rest Rooms



# Meeting Admin: Remote Attendees

- Turn off Cameras and Mute Mics
- Do not put your phones on hold
- \*6 to mute/unmute
- Identify yourself when speaking
- Raise Hand and/or Use Meeting Chat
- Roll Call Process:

If you called in and you do not see your name displayed in Teams, please type your name in the meeting chat so we can add you to the meeting summary or [Fisher.Kelsey@epa.gov](mailto:Fisher.Kelsey@epa.gov)



# Day 1

## 2024 Regional Response Team (RRT) 6 Spring Meeting Agenda

[Register Here](#)

<b>Co-Chairs:</b> Craig Carroll, USEPA Michael Sams, USCG	<b>Coordinators:</b> Bray Fisher, USEPA Todd Peterson, USCG
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**Microsoft Teams Meeting**  
[Click here to join the meeting](#)  
**Meeting Call-in Number:** (210) 469-3886    **Passcode:** 478 595 417#

Day 1		Wednesday, May 8, 2024	
0830 – 0900	Welcome, Introduction, & Review of Minutes	Co-Chairs & Coordinators	
0900 – 0930	Review Priority List	Michael Sams, USCG	
0930 – 1000	Develop Air Monitoring Best Practices Priority Update	Alejandro Lara, USEPA	
1000 – 1020	RRT-6 RCP Vol 4 Cleanup and Website Improvements	Coordinators	
20-Minutes	<b>Break</b>		
1040 – 1055	Open Forum	All	
1055 – 1130	<b>RRT-6 Co-Chair Report Outs:</b> 1. U.S. Coast Guard (USCG) 2. U.S. Environmental Protection Agency (USEPA)	Michael Sams, USCG Craig Carroll, USEPA	
90-Minutes	<b>Lunch</b>		
1300 – 1445	<b>State Agency Reports:</b>		
1. <b>Louisiana:</b> a. Louisiana State Police (LSP) b. Louisiana Department of Environmental Quality (LDEQ) c. Louisiana Oil Spill Coordinator's Office (LOSCO)		3. <b>Arkansas:</b> a. Arkansas Department of Energy and Environment (ADEE) b. Arkansas Division of Emergency Management (ADEM)	
2. <b>Texas:</b> a. Texas Commission on Environmental Quality (TCEQ) b. Railroad Commission of Texas (TRRC) c. Texas General Land Office (TGLO)		4. <b>New Mexico:</b> a. New Mexico Homeland Security and Emergency Management (NMHSEM)	
		5. <b>Oklahoma:</b> a. Oklahoma Department of Environmental Quality (ODEQ)	
20-Minutes	<b>Break</b>		
1505 – 1635	<b>Federal Agency/Tribal Reports:</b>		
1. Region 6 Tribes 2. Dept. of Transportation (DOT) 3. Dept. of Health and Human Services (DHHS) 4. General Services Administration (GSA) 5. Dept. of Agriculture (USDA) 6. Dept. of Energy (DOE) 7. Dept. of Justice (DOJ) 8. Dept. of State (DOS) 9. Dept. of Defense (DoD) a. U.S. Navy b. U.S. Army Corps of Engineers (USACE) c. Defense Coordinating Element (DCE)		10. Nuclear Regulatory Commission (NRC) 11. Dept. of Homeland Security (DHS): a. Federal Emergency Management Agency (FEMA) b. Cybersecurity and Infrastructure Security Agency (CISA) 12. Dept. of Commerce (DOC) 13. Dept. of Labor (DOL) a. Occupational Safety and Health Administration (OSHA) 14. Dept. of the Interior (DOI)	
1635 – 1640	Review Action Items	Coordinators	
1640 – 1650	Closing Remarks	Co-Chairs	
1650	<b>Adjourn</b>		

# Day 2

## 2024 Regional Response Team (RRT) 6 Spring Meeting Agenda

Day 2		Thursday, May 9, 2024	
0830 – 0835	Welcome	Co-Chairs & Coordinators	
0835 – 0905	HAZSUB Final Rule Overview	Rebecca Broussard, USEPA HQ	
0905 – 0935	Surface Dispersant Monitoring with Autonomous Underwater Surface Vehicle (AUSV)	James Hanzalik, Clean Gulf Associates	
0935 – 1005	EPA Case Study – Sherwin Williams Emergency Response	Nabil Mzee, USEPA	
20-Minutes	<b>Break</b>		
1025 – 1055	EPA Case Study – Sawtooth Emergency Response	Anish Patel, USEPA	
1055 – 1155	<b>USCG FOOSC Reports (unit reps from each of the below will present ~10 min):</b>  1. Sector Lower Mississippi River 2. Marine Safety Unit Port Arthur 3. Marine Safety Unit Houma 4. Sector Corpus Christi 5. Sector Houston-Galveston 6. Sector New Orleans		
		LT John Krueger CWO-2 Andrew Christopherson LT Michael Civay LT Alexis Williams MSTC Ronnie Lucas LTJG Craig Feeny	
1155 – 1210	Open Forum	All/Co-Chairs	
1210 – 1220	Review Action Items & Future Meeting Dates	Coordinators	
1220 – 1230	Closing Remarks	All/Co-Chairs	
1230	<b>Adjourn</b>		

Dates for future RRT-6 Meetings		
Semiannual Meetings	Location	Dates
Fall 2024	Addison, TX	13-14 Nov 2024
Spring 2025 Joint RRT-6/7 mtg	Lenexa, KS	2-3 Apr 2025
Fall 2025	Addison, TX	5-6 Nov 2025
Spring 2026	Addison, TX	6-7 May 2026

# Approve Fall 2023 Meeting Summary

	<b>Region 6 RRT Fall Meeting</b> <b>Nov 2-3, 2023</b>
	<i>Presentations are available online: <a href="#">2023 -- Fall Meeting Presentations</a></i>

## Executive Committee Meeting (Nov 1, 2023)

**In-Person / Remote Attendance:** Craig Carroll (USEPA), Michael Sams (USCG D8), Kelsey “Bray” Fisher (USEPA), Todd Peterson (USCG D8), Steve Mason (USEPA), Gary Moore (USEPA), Lyndsey Nguyen (USEPA), Adam Tyndale (USCG D8), Dr. Paige Doelling, (NOAA), Dr. Karolien Debusschere (LOSCO), and Brent Koza (TGLO). Guest: Gina Saizan (LOSCO).

### 1. Reviewed / Revised RRT-6 Priority List

Priority List – In Progress or Continuing			
	Priority	Assigned	Status
1.	Monthly EC Teleconferences	Executive Committee	Ongoing
2.	Conduct Incident-Specific RRT (ISRRT) Teleconferences ( <i>Document Results</i> )	RRT Function	Ongoing
3.	Develop Region 6 RRT Evaluation Job-Aids for Alternative Response Technologies	Preparedness Committee	On Hold
4.	Develop Non-Synthetic Loose Sorbent Guidance	Executive Committee	In Progress
5.	Develop Air Monitoring Best Practices	Executive Committee	In Progress
6.	Refine Fish and Wildlife and Sensitive Environments Plan (FWSEP)	Executive Committee	In Progress
7.	Update Inland Specific Area Contingency Plan (ACP)	Executive Committee	In Progress
8.	Sharing Emergency Response Air Monitoring Data Management Practices	Executive Committee	Newly Adopted

# Fall 2023 Meeting Action Items

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No	Items	Assigned To	Status
1	Review NCP Subpart J Final Rule and provide guidance	Executive Committee	Ongoing
2	Establish an ad-hoc workgroup to address Abandoned Pipelines and Orphaned Oil and Gas Wells – Purpose is to form a group through RRT-6 of federal and state agencies that are receiving Bill money to perform plugging work. We want this group to influence the priorities of which wells are getting picked to get plugged. It has been brought to our attention that environmental impacts are not necessarily one of the top priorities across the region for allocating this money and picking wells to get plugged. We believe the money needs to go to plugging wells that primarily impact the Waters of the U.S. and maximize the net environmental benefit.	Executive Committee	Pending

# Opening Remarks

## Co-Chairs



Craig Carroll, U.S. EPA



Michael Sams, USCG

# Introductions

- Name
- Agency / Entity

# Priority List

## In Progress or Continuing

	Priority	Assigned	Status
1.	Monthly EC Teleconferences	Executive Committee	Ongoing
2.	Conduct Incident-Specific RRT (ISRRT) Teleconferences <i>(Document Results)</i>	RRT Function	Ongoing
3.	Develop Region 6 RRT Evaluation Job-Aids for Alternative Response Technologies	Preparedness Committee	On Hold
4.	Develop Non-Synthetic Loose Sorbent Guidance	Executive Committee	In Progress
5.	Develop Air Monitoring Best Practices	Executive Committee	In Progress
6.	Develop Fish and Wildlife and Sensitive Environments Plan (FWSEP)	Executive Committee	In Progress
7.	Update Inland Specific Area Contingency Plan (ACP)	Executive Committee	In Progress
8.	Sharing Emergency Response Air Monitoring Data Management Practices	Executive Committee	In Progress
9.	Establish Subpart J Workgroup	Executive Committee	Pending

# Develop Air Monitoring Best Practices Priority Update

Alejandro Lara, USEPA



# RRT6 Air Monitoring Initiative Website Guide

## Priority 5

# Develop Air Monitoring Best Practices

EPA OSC Alejandro Lara Jr



# Objectives

- This website is meant to be a resource tool for quick guidance and reference before and during an emergency response for EPA OSC, EPA contractors, other federal agencies, State agencies, and Local agencies.
- It will assist with consistency for air monitoring events at an emergency response.
- A “one-stop shop” for air monitoring, instead of researching several different websites for air monitoring guidance.

# Background

Total of 91 target  
compounds

Most common  
compounds within  
Region 6

Surveyed OSCs for  
compounds they have  
encounter in Emergency  
Response incidents

Emerging hazardous  
substances



# General notes

- If a document does not open directly, try downloading it
- Take time to familiarize yourself with what is available on the site before you need to use it
- AEGL-1 values consistent across exposure times for a target reflects that the onset of transient and reversible effects for the general population does not significantly change across given time intervals at a given concentration



# RRT6 Air Monitoring Initiative



**Site Contact:**

Alejandro Lara Jr.  
OSC  
(Lara.Alejandro@epa.gov)

**Site Location:**

Dallas, TX 75212  
[response.epa.gov/airmonitoringinitiative](https://response.epa.gov/airmonitoringinitiative)

[Edit Site Info](#) [Edit Contaminants](#)

[Edit Site Abstract](#)

The primary goal of the Air Monitoring Initiative is to develop emergency response community air monitoring plans that support local officials in their decisions to issue and end shelter-in-place or evacuation orders during significant incidences.

[Delete Site](#)

## Resources

Documents

- Ethylene Oxide...
- Ethylene Glycol...
- Ethylene Dichloride...
- Zinc Zinc Oxide...
- All Documents

Contacts

- 6SF-EO
- Kelsey Fisher  
(fisher.kelsey@epa.gov)
- RRT Co-Chair
- Craig Carroll  
(carroll.craig@epa.gov)
- All Contacts





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- [Ethylene Dichloride...](#)
- [Zinc Zinc Oxide...](#)
- [All Documents](#)

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(fisher.kelsey@epa.gov)
- [RRT Co-Chair](#)
- [Craig Carroll](#)  
(carroll.craig@epa.gov)
- [All Contacts](#)





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[Craig Carroll](#)

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[All Contacts](#)



# RRT6 Air Monitoring Initiative

## Documents

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[All Documents](#)

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### Categories

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**Air Monitoring**

[Air Sampling Methods...](#)

[Air Sampling Methods...](#)

[Air Sampling Methods...](#)

[Chemical Data Sheets](#)

[EPA ER Air Monitorin...](#)

File Name	Description	Category	Uploaded	Size	Download	Security	Seq	Select
<a href="#">Ethylene Oxide.pdf</a>	Ethylene Oxide	Chemical Data Sheets	4/9/2024	358 KB	<a href="#">Download</a>	Private	0	<input type="checkbox"/>
<a href="#">Ethylene Glycol.pdf</a>	Ethylene Glycol	Chemical Data Sheets	4/9/2024	246 KB	<a href="#">Download</a>	Private	0	<input type="checkbox"/>
<a href="#">Ethylene Dichloride.pdf</a>	Ethylene Dichloride	Chemical Data Sheets	4/9/2024	362 KB	<a href="#">Download</a>	Private	0	<input type="checkbox"/>
<a href="#">Zinc Zinc Oxide Air Monitoring.pdf</a>	Zinc Zinc Oxide	Air Monitoring	4/9/2024	445 KB	<a href="#">Download</a>	Private	0	<input type="checkbox"/>
<a href="#">Xylene p-Xylene Air Monitoring.pdf</a>	Xylene: p-Xylene	Air Monitoring	4/9/2024	406 KB	<a href="#">Download</a>	Private	0	<input type="checkbox"/>
<a href="#">Xylene o-Xylene Air Monitoring.pdf</a>	Xylene: o-Xylene	Air Monitoring	4/9/2024	406 KB	<a href="#">Download</a>	Private	0	<input type="checkbox"/>



# RRT6 Air Monitoring Initiative

## Documents

All Documents

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### Categories

All Documents

Air Monitoring

Air Sampling Methods...

Air Sampling Methods...

Air Sampling Methods...

Chemical Data Sheets

EPA ER Air Monitorin...

File Name	Description	Category	Uploaded	Size	Download	Security	Seq	Select
Ethylene Oxide.pdf	Ethylene Oxide	Chemical Data Sheets	4/9/2024	358 KB	Download	Private	0	<input type="checkbox"/>
Ethylene Glycol.pdf	Ethylene Glycol	Chemical Data Sheets	4/9/2024	246 KB	Download	Private	0	<input type="checkbox"/>
Ethylene Dichloride.pdf	Ethylene Dichloride	Chemical Data Sheets	4/9/2024	362 KB	Download	Private	0	<input type="checkbox"/>
Zinc Zinc Oxide Air Monitoring.pdf	Zinc Zinc Oxide	Air Monitoring	4/9/2024	445 KB	Download	Private	0	<input type="checkbox"/>
Xylene p-Xylene Air Monitoring.pdf	Xylene: p-Xylene	Air Monitoring	4/9/2024	406 KB	Download	Private	0	<input type="checkbox"/>
Xylene o-Xylene Air Monitoring.pdf	Xylene: o-Xylene	Air Monitoring	4/9/2024	406 KB	Download	Private	0	<input type="checkbox"/>



# Air Sampling – EPA, NIOSH, and OSHA

## Documents

[Air Sampling Methods- EPA](#) [6]

### Categories

All Documents

Air Monitoring

**Air Sampling Methods...**

Air Sampling Methods...

Air Sampling Methods...

Chemical Data Sheets

## Documents

[Air Sampling Methods- NIOSH](#) [61]

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Air Monitoring

Air Sampling Methods...

**Air Sampling Methods...**

Air Sampling Methods...

Chemical Data Sheets

ERAMG

## Documents

[Air Sampling Methods- OSHA](#) [19]

### Categories

All Documents

Air Monitoring

Air Sampling Methods...

Air Sampling Methods...

**Air Sampling Methods...**

Chemical Data Sheets

### File Name

Volatile Organic Compounds in Air PV2120.pdf

Phosphoric Acid in Workplace Atmospheres 111.pdf

Phosgene 61.pdf

Particulate Mercury in Workplace Atmospheres 145.pdf

Methyl Isocyanate MIC 54.pdf

- Useful for quick planning of sampling at an incident.
- Divided into EPA, NIOSH, then OSHA alphabetically
  - NIOSH – National Institute for Occupational Safety and Health
  - OSHA – Occupational Safety and Health Administration

# Air Sampling – EPA, NIOSH, and OSHA

## Documents

[Air Sampling Methods- EPA \[6\]](#)

### Categories

[All Documents](#)

[Air Monitoring](#)

**[Air Sampling Methods...](#)**

[Air Sampling Methods...](#)

[Air Sampling Methods...](#)

[Air Sampling Methods...](#)

[Air Sampling Methods...](#)

[Chemical Data Sheets](#)

- Total of 6 EPA Methods

File Name	Description
VOCs using Active Sampling onto Sorbent Tubes TO-17.pdf	VOCs using Active Sampling onto Sorbent Tubes TO-17
VOCs Collected in Specially-Prepared Canisters using GC-MS TO-15.pdf	VOCs Collected in Specially-Prepared Canisters using (GC-MS) TO-15
Polycyclic Aromatic Hydrocarbons PAHs using GC-MS TO-13A.pdf	Polycyclic Aromatic Hydrocarbons (PAHs) using (GC-MS) TO-13A
Polychlorinated Polybrominated and Brominated-	Polychlorinated, Polybrominated and Brominated-Chlorinated

# Air Sampling – NIOSH

## Documents

[Air Sampling](#)

[Methods- NIOSH](#)

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## Categories

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[Air Monitoring](#)

[Air Sampling](#)

[Methods...](#)

**[Air Sampling](#)**

**[Methods...](#)**

[Air Sampling](#)

[Methods...](#)

[Chemical Data](#)

[Sheets](#)

[ERAMG](#)

File Name	Description	Category	Update							
<a href="#">Sulfur Dioxide 6004.pdf</a>	Sulfur Dioxide 6004	Air Sampling Methods-NIOSH	1/26/2024	28 KB	Download	Private	<input type="checkbox"/>	<input type="checkbox"/>		
<a href="#">Polynuclear Aromatic Hydrocarbons by HPLC 5506.pdf</a>	Polynuclear Aromatic Hydrocarbons by HPLC 5506	Air Sampling Methods-NIOSH	1/26/2024	49 KB	Download	Private	<input type="checkbox"/>	<input type="checkbox"/>		
<a href="#">Polychlorobiphenyls 5503.pdf</a>	Polychlorobiphenyls 5503	Air Sampling Methods-NIOSH	1/26/2024	25 KB	Download	Private	<input type="checkbox"/>	<input type="checkbox"/>		
<a href="#">Phosphorus 7905.pdf</a>	Phosphorus 7905	Air Sampling Methods-NIOSH	1/26/2024	19 KB	Download	Private	<input type="checkbox"/>	<input type="checkbox"/>		
<a href="#">Phosphine 6002.pdf</a>	Phosphine 6002	Air Sampling Methods-NIOSH	1/26/2024	25 KB	Download	Private	<input type="checkbox"/>	<input type="checkbox"/>		
<a href="#">Pentachlorophenol 5512.pdf</a>	Pentachlorophenol 5512	Air Sampling Methods-NIOSH	1/26/2024	20 KB	Download	Private	<input type="checkbox"/>	<input type="checkbox"/>		
<a href="#">Particulates Not Otherwise Regulated Total 0500.pdf</a>	Particulates Not Otherwise Regulated Total 0500	Air Sampling Methods-NIOSH	1/26/2024	190 KB	Download	Private	<input type="checkbox"/>	<input type="checkbox"/>		
<a href="#">Particulate Fluorides and Hydrofluoric Acid by Ion Chromatography 7906.pdf</a>	Particulate Fluorides and Hydrofluoric Acid by Ion Chromatography 7906	Air Sampling Methods-NIOSH	1/26/2024	147 KB	Download	Private	<input type="checkbox"/>	<input type="checkbox"/>		
<a href="#">Non-Volatile Acids Sulfuric Acid and Phosphoric Acid 7908.pdf</a>	Non-Volatile Acids Sulfuric Acid and Phosphoric Acid 7908	Air Sampling Methods-NIOSH	1/26/2024	141 KB	Download	Private	<input type="checkbox"/>	<input type="checkbox"/>		
<a href="#">Nitrous Oxide 6600.pdf</a>	Nitrous Oxide 6600	Air Sampling Methods-NIOSH	1/26/2024	24 KB	Download	Private	<input type="checkbox"/>	<input type="checkbox"/>		
<a href="#">Organic and Inorganic gases by Extractive FTIR spectrometry 3800.pdf</a>	Organic and Inorganic gases by extractive FTIR spectrometry 3800	Air Sampling Methods-NIOSH	2/14/2022							
<a href="#">Halogenated Hydrocarbons 1003.pdf</a>	Halogenated Hydrocarbons 1003	Air Sampling Methods-NIOSH	2/14/2022							
<a href="#">Glucols 5523.pdf</a>	Glycols 5523	Air Sampling Methods-NIOSH	2/14/2022							
<a href="#">Ethylene oxide 1614.pdf</a>	Ethylene Oxide 1614	Air Sampling Methods-NIOSH	2/14/2022							
<a href="#">Volatile Acids by Chromatography 7907.pdf</a>	Volatile Acids by Chromatography 7907	Air Sampling Methods-NIOSH	1/26/2022							
<a href="#">Vinyl Chloride 1007.pdf</a>	Vinyl Chloride 1007	Air Sampling Methods-NIOSH	1/26/2022							
<a href="#">Trichloroethylene 1022.pdf</a>	Trichloroethylene 1022	Air Sampling Methods-NIOSH	1/26/2022							
<a href="#">Trichloro and Trifluoroethane 1020.pdf</a>	Trichloro and Trifluoroethane 1020	Air Sampling Methods-NIOSH	1/26/2022							
<a href="#">Tetrachloro and Difluoroethane 1016.pdf</a>	Tetrachloro and Difluoroethane 1016	Air Sampling Methods-NIOSH	1/26/2022							

- Total of 61 National Institute for Occupational Safety and Health (NIOSH) Methods

# Air Sampling – OSHA

## Documents

[Air Sampling](#)

[Methods- OSHA](#)

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**Categories**

[All Documents](#)

[Air Monitoring](#)

[Air Sampling Methods...](#)

[Air Sampling Methods...](#)

**Air Sampling Methods...**

[Chemical Data Sheets](#)

File Name	Description	Category	Uplo
Volatile Organic Compounds in Air PV2120.pdf	Volatile Organic Compounds in Air PV 2120	Air Sampling Methods-OSHA	2/8/2
Phosphoric Acid in Workplace Atmospheres 111.pdf	Phosphoric Acid in Workplace Atmospheres 111	Air Sampling Methods-OSHA	2/8/2
Phosgene 61.pdf	Phosgene 61	Air Sampling Methods-OSHA	2/8/2
Particulate Mercury in Workplace Atmospheres 145.pdf	Particulate Mercury in Workplace Atmospheres 145	Air Sampling Methods-OSHA	2/8/2
Methyl Isocyanate MIC 54.pdf	Methyl Isocyanate MIC 54	Air Sampling Methods-OSHA	2/8/2
Methyl Bromide PV2040.pdf	Methyl Bromide PV2040	Air Sampling Methods-OSHA	2/8/2
Metal Metalloid Particulates in Workplace Atmospheres Atomic Absorption 121.pdf	Metal Metalloid Particulates in Workplace Atmospheres Atomic Absorption 121	Air Sampling Methods-OSHA	2/8/2
Iodine in Workplace Atmospheres Impregnated Activated Beaded Carbon 212.pdf	Iodine in Workplace Atmospheres Impregnated Activated Beaded Carbon 212	Air Sampling Methods-OSHA	2/8/2

Hydrogen Sulfide 1008.pdf	Hydrogen Sulfide 1008	Air Sampling Methods-OSHA	2/8/2024	416 KB	Download	Private	<input type="text" value="0"/>	<input type="checkbox"/>	Edit
<a href="#">Hydrogen Peroxide 1019.pdf</a>	Hydrogen Peroxide 1019	Air Sampling Methods-OSHA	2/8/2024	272 KB	Download	Private	<input type="text" value="0"/>	<input type="checkbox"/>	Edit
Divinylbenzene Ethylvinylbenzene Styrene 89.pdf	Divinylbenzene Ethylvinylbenzene Styrene 89	Air Sampling Methods-OSHA	2/8/2024	265 KB	Download	Private	<input type="text" value="0"/>	<input type="checkbox"/>	Edit
Dimethylamine 34.pdf	Dimethylamine 34	Air Sampling Methods-OSHA	2/8/2024	184 KB	Download	Private	<input type="text" value="0"/>	<input type="checkbox"/>	Edit
Chloroform 05.pdf	Chloroform 05	Air Sampling Methods-OSHA	2/8/2024	288 KB	Download	Private	<input type="text" value="0"/>	<input type="checkbox"/>	Edit
Carbon Monoxide in Workplace Atmospheres Direct Reading Monitor 209.pdf	Carbon Monoxide in Workplace Atmospheres Direct Reading Monitor 209	Air Sampling Methods-OSHA	2/8/2024	691 KB	Download	Private	<input type="text" value="0"/>	<input type="checkbox"/>	Edit
Butane PV2010.pdf	Butane PV2010	Air Sampling Methods-OSHA	2/8/2024	184 KB	Download	Private	<input type="text" value="0"/>	<input type="checkbox"/>	Edit
Butadiene 56.pdf	Butadiene 56	Air Sampling Methods-OSHA	2/8/2024	571 KB	Download	Private	<input type="text" value="0"/>	<input type="checkbox"/>	Edit
Benzene 1005.pdf	Benzene 1005	Air Sampling Methods-OSHA	2/8/2024	408 KB	Download	Private	<input type="text" value="0"/>	<input type="checkbox"/>	Edit
Ammonia in Workplace Atmospheres - Solid Sorbent 188.pdf	Ammonia in Workplace Atmospheres - Solid Sorbent 188	Air Sampling Methods-OSHA	2/8/2024	134 KB	Download	Private	<input type="text" value="0"/>	<input type="checkbox"/>	Edit

- Total of 16 Occupational Safety and Health Administration (OSHA) Methods

# Chemical Data Sheets (CDS)

## Documents

[Chemical Data Sheets \[64\]](#)

### Categories

All Documents

Air Monitoring

Air Sampling Methods...

Air Sampling Methods...

Air Sampling Methods...

**Chemical Data Sheets**

EPA ER Air Monitorin...

HazCat

Louisiana

Other

Documents

Page Size

<a href="#">Hydrogen Sulfide.pdf</a>	Hydrogen Sulfide	Chemical Data Sheets	2/8/2024	79 KB	<a href="#">Download</a>	Private	<input type="text" value="0"/>	<input type="checkbox"/>
<a href="#">Hydrogen Fluoride.pdf</a>	Hydrogen Fluoride	Chemical Data Sheets	2/8/2024	75 KB	<a href="#">Download</a>	Private	<input type="text" value="0"/>	<input type="checkbox"/>
<a href="#">Hydrogen Cyanide.pdf</a>	Hydrogen Cyanide	Chemical Data Sheets	2/8/2024	72 KB	<a href="#">Download</a>	Private	<input type="text" value="0"/>	<input type="checkbox"/>
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<a href="#">Hydrogen Bromide.pdf</a>	Hydrogen Bromide	Chemical Data Sheets	2/8/2024	72 KB	<a href="#">Download</a>	Private	<input type="text" value="0"/>	<input type="checkbox"/>
<a href="#">Hydrazine.pdf</a>	Hydrazine	Chemical Data Sheets	2/8/2024	77 KB	<a href="#">Download</a>	Private	<input type="text" value="0"/>	<input type="checkbox"/>

- Contains additional information on the target compounds.
  - Synonyms & trade names, physical description, incompatibilities and reactivities, first aid, etc.
- Total of 93 target compounds.

# Chemical Data Sheets (CDS)

## Documents

Page Size

Document Name	Chemical Name	Category	Date	Size	Action	Privacy	Count	Check
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## The National Institute for Occupational Safety and Health (NIOSH)



# Hydrogen sulfide

### Synonyms & Trade Names

Hydrosulfuric acid, Sewer gas, Sulfuretted hydrogen

### CAS No.

7783-06-4

### RTECS No.

MX1225000

### DOT ID & Guide

1053 117

### Formula

H<sub>2</sub>S

### Conversion

1 ppm = 1.40 mg/m<sup>3</sup>

### IDLH

100 ppm  
See: 7783064

### Exposure Limits

**NIOSH REL**  
 C 10 ppm (15 mg/m<sup>3</sup>) [10-minute]  
**OSHA PEL**  
 C 20 ppm 50 ppm [10-minute maximum peak] See  
[Appendix G](#)

### Measurement Methods

**NIOSH 6013;**  
**OSHA ID141**  
 See: [NMAM](#) or [OSHA Methods](#)

### Physical Description

Colorless gas with a strong odor of rotten eggs. [Note: Sense of smell becomes rapidly fatigued & can NOT be relied upon to warn of the continuous presence of H<sub>2</sub>S. Shipped as a liquefied compressed gas.]

Molecular Weight	Boiling Point	Freezing Point	Solubility	Vapor Pressure	Ionization Potential
34.1	-77°F	-122°F	0.4%	17.6 atm	10.46 eV
	Flash Point			Relative Gas Density	

	NA (Gas)	Upper Explosive Limit	Lower Explosive Limit	1.19	
		44.0%	4.0%		

Flammable Gas

### Incompatibilities & Reactivities

Strong oxidizers, strong nitric acid, metals

### Exposure Routes

Inhalation, skin and/or eye contact

### Symptoms

irritation eyes, respiratory system; apnea, coma, convulsions; conjunctivitis, eye pain, lacrimation (discharge of tears), photophobia (abnormal visual intolerance to light), corneal vesiculation; dizziness, headache, lassitude (weakness, exhaustion), irritability, insomnia; gastrointestinal disturbance; liquid: frostbite

### Target Organs

Eyes, respiratory system, central nervous system

### Personal Protection/Sanitation

[\(See protection codes\)](#)  
**Skin:**Frostbite  
**Eyes:**Frostbite  
**Wash skin:**No recommendation  
**Remove:**When wet (flammable)  
**Change:**No recommendation  
**Provide:**Frostbite wash

### First Aid

[\(See procedures\)](#)  
**Eye:**Frostbite  
**Skin:**Frostbite  
**Breathing:**Respiratory support

### Respirator Recommendations

NIOSH

Up to 100 ppm:

(APF = 25) Any powered, air-purifying respirator with cartridge(s) providing protection against the compound of concern  
 (APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted canister providing protection against the compound of concern  
 (APF = 10) Any supplied-air respirator\*  
 (APF = 50) Any self-contained breathing apparatus with a full facepiece

### Emergency or planned entry into unknown concentrations or IDLH conditions:

(APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode  
 (APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus

### Escape:

(APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted canister providing protection against the compound of concern  
 Any appropriate escape-type, self-contained breathing apparatus

[Important additional information about respirator selection](#)

### See also

[INTRODUCTION](#) [ICSC CARD: 0165](#)



## The National Institute for Occupational Safety and Health (NIOSH)

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Flammable Gas

#### Incompatibilities & Reactivities

Strong oxidizers, strong nitric acid, metals

#### Exposure Routes

Inhalation, skin and/or eye contact

#### Symptoms

Irritation eyes, respiratory system; apnea, coma, convulsions; conjunctivitis, eye pain, lacrimation (discharge of tears), photophobia (abnormal visual intolerance to light), corneal vesiculation; dizziness, headache, lassitude (weakness, exhaustion), irritability, insomnia; gastrointestinal disturbance; liquid: frostbite

#### Target Organs

Eyes, respiratory system, central nervous system

#### Personal Protection/Sanitation

(See protection codes)

**Skin:**Frostbite

**Eyes:**Frostbite

**Wash skin:**No recommendation

**Remove:**When wet (flammable)

**Change:**No recommendation

**Provide:**Frostbite wash

#### First Aid

(See procedures)

**Eye:**Frostbite

**Skin:**Frostbite

**Breathing:**Respiratory support

#### Respirator Recommendations

##### NIOSH

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- Provides target compounds for different incident scenarios.

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# EPA Emergency Response Air Monitoring Guidance Tables



2020  
DRAFT

Revision 1



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Executive Summary ..... ii  
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Response Tables (as listed below)

<u>Table Number</u>	<u>Response Type</u>	
1.....	Acid.....	Spill or Release
2.....	Ammonia.....	Spill or Release
3.....	Chemical Plant.....	Fire
4.....	Chlorine.....	Spill or Release
5.....	Electroplating Facility.....	Spill, Release, or Fire
6.....	General Industrial.....	Fire
7.....	Landfill.....	Release or Fire
8.....	Magnesium.....	Fire
9.....	Mercury.....	Spill or Release
10.....	Oil.....	Spill, Release, or Fire
11.....	Pesticide or Fertilizer.....	Fire
12.....	Phosphorus.....	Spill, Release, or Fire
13.....	Tire Fire.....	Fire
14.....	Wood-Treating Facility.....	Spill or Release
15.....	Volcano.....	Natural Disaster
16.....	Ethanol Release.....	Spill, Release, or Fire
17.....	Spacecraft Debris.....	Spill, Release, or Fire
18.....	Special Event.....	Riot
19.....	Clandestine Lab.....	Fire
20.....	Plastics Fire.....	Fire
21.....	Water Quality Monitoring.....	Release
22.....	Battery Site.....	Release or Fire

Auto Fluff (Auto Recycling Waste).....see Tire Fire Table  
Fireworks.....see General Industrial Fire Table

Attachment A – Hazard Evaluation Flow Chart for Unknowns



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2020  
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Attachment A – Hazard Evaluation Flow Chart for Unknowns





**Table 5 - Electroplating Facility (Spill, Release, or Fire)**

Target Compound <sup>1</sup>	Instrument	Detection Level	Intrinsically Safe (Y/N)	IP	PID CF (ISO)	Conversion	Regulatory Guidance					Reference				
							Occupational Action Levels		AEGL-1			PAC-1	ERPG-1	Air Sampling		
							TWA	IDLH	1-hr	4-hr	8-hr	15-min TWA	1-hr	Media	Method	Flow Rate/ Total Volume
<b>VOCs and Gases</b>																
Carbon Monoxide	MultiRAE/AreaRAE CO Sensor	0-500 ppm, 0-2000 ppm ext range	Y	14.01 eV	NA	1 ppm = 1.15 mg/m <sup>3</sup>	Occupational Action Levels: PEL = 50 ppm, REL = 35 ppm, C 200 ppm, TLV = 25 ppm	1200 ppm	83 ppm*	33 ppm*	27 ppm*	75 ppm	200 ppm	Five-layer aluminized gas sampling bag, 262-01	OSHA ID 210	1 L/min, 2-5 L
	Dräger Tube	5- 150 ppm, 100-700 ppm	Y													
	Dräger Chip	5-150 ppm	Y													
Hydrogen Sulfide	MultiRAE/AreaRAE H <sub>2</sub> S Sensor	0-100 ppm, 0-1000 ppm ext. range	Y	10.46 eV	NA	1 ppm = 1.4 mg/m <sup>3</sup>	Occupational Action Levels: PEL = C 20 ppm, 50 ppm (10 mins), REL = C 10 ppm (10 mins), TLV = 1 ppm, ST 5 ppm	100 ppm	0.51 ppm	0.36 ppm	0.33 ppm	0.51 ppm	0.1 ppm	Sorbert Tube, Silica Gel, For Hydrogen Sulfide, Sulfur Dioxide, 266-177	OSHA 1008 NIOSH 6013	0.05 L/min; 12 L, 0.1 to 1.5 L/min (0.2 L/min rec); 1.2 40 L
	Dräger Tube	≥0.2-6 ppm	Y													
	Dräger Chip	≥0.2-5 ppm	Y													
	SPM Flex	0.001-9.999 ppm	Y													
	MultiRAE/AreaRAE PID**	0-2000 ppm	Y		10.6 lamp, 3.3											
Nitric Oxide	UltraRAE PGM-7360**	0.05-10000 ppm	Y	9.27 eV	9.8 lamp, 6	1 ppm = 1.23 mg/m <sup>3</sup>	Occupational Action Levels: PEL = 25 ppm, REL = 25 ppm, TLV = 25 ppm	100 ppm	NA	NA	NA	0.5 ppm	NA	Sorbert Tube, Molecular Sieve, 226-40	NIOSH 6014	0.025 L/min; 1.5-6 L
	MultiRAE/AreaRAE NO Sensor	0-250 ppm	Y		NA											
Nitrogen Dioxide	MultiRAE/AreaRAE NO <sub>2</sub> Sensor	0-20 ppm	Y	9.75 eV	NA	1 ppm = 1.88 mg/m <sup>3</sup>	Occupational Action Levels: PEL = C 5 ppm, REL = ST 1 ppm, TLV = 3 ppm, ST 5 ppm	20 ppm	0.5 ppm	0.5 ppm	0.5 ppm	0.5 ppm	1 ppm	Sorbert Tube, Molecular Sieve, 226-40-02	NIOSH 6014	0.025-0.2 L/min; 1.5-6 L
	Dräger Tube	0.1-5 ppm, 5-30 ppm	Y													
	Dräger Chip	0.5-25 ppm	Y													
	SPM Flex	0.3-10 ppm	Y													
	MultiRAE/AreaRAE PID**	0-2000 ppm	Y		10.6 lamp, 16											
Sulfur Dioxide	MultiRAE/AreaRAE SO <sub>2</sub> Sensor	0-20 ppm	Y	12.3 eV	NA	1 ppm = 2.62 mg/m <sup>3</sup>	Occupational Action Levels: PEL = 5 ppm, REL = 2 ppm, ST 5 ppm, TLV = ST 0.25 ppm	100 ppm	0.2 ppm	0.2 ppm	0.2 ppm	0.2 ppm	0.3 ppm	Preloaded Cassette, MCE, Coated, Sodium Carbonate, 225-9005	NIOSH 6004	0.5-1.5 L/min; 4-200 L
	Dräger Tube	≥0.1-3 ppm	Y													
	Dräger Chip	≥0.4-10 ppm	Y													
	SPM Flex	0.01-2.5 ppm	Y													





**Table 5 - Electroplating Facility (Spill, Release, or Fire)**

Target Compound <sup>1</sup>	Instrument Guidance						Regulatory Guidance						Reference			
	Instrument	Detection Level	Intrinsically Safe (Y/N)	IP	PID CF (ISO)	Conversion	Occupational Action Levels		AEGL-1			PAC-1	ERPG-1	Air Sampling		
							TWA	IDLH	1-hr	4-hr	8-hr	15-min TWA	1-hr	Media	Method	Flow Rate/ Total Volume
<b>VOCs and Gases (continued)</b>																
TCE	Dräger Tube	2-50 ppm, 20-250 ppm	Y	9.45 eV	NA	1 ppm = 5.37 mg/m <sup>3</sup>	PEL = 100 ppm, C 200 ppm, 300 ppm (5 mins) REL = Ca TLV = 10 ppm, ST 25 ppm	1000 ppm Ca	130 ppm	84 ppm	77 ppm	130 ppm	100 ppm	Sorbent Tube, Anasorb CSC, 226-01/Summa canister/Tedlar Bag	NIOSH 1022/ TO 15	0.01-0.2 L/min; 1-30L; <200mL/min
	Dräger Chip	≥5-100 ppm	Y													
	MultiRAE/AreaRAE PID**	0-2000 ppm	Y		10.6 lamp, 0.54											
PCE	MultiRAE/AreaRAE PID**	0-2000 ppm	Y	9.32 eV	10.6 lamp, 0.57	1 ppm = 6.78 mg/m <sup>3</sup>	PEL = 100 ppm, C 200 ppm, 300 ppm REL = Ca TLV = 25, ST 100 ppm	150 ppm Ca	35 ppm	35 ppm	35 ppm	35 ppm	100 ppm	Sorbent Tube, Anasorb CSC, 226-01/Summa Canister/Tedlar bag	NIOSH 1003/ TO 15	0.01-0.2 L/min; 1-40 L; <200mL/min
Vinyl Chloride	MultiRAE/AreaRAE PID**	0-2000 ppm	Y	9.99 eV	10.6 lamp, 2	1 ppm = 2.56 mg/m <sup>3</sup>	PEL = 1 ppm, C 5 ppm (15 mins) REL = Ca TLV = 1 ppm	NA	250 ppm	140 ppm	70 ppm	250 ppm	500 ppm	Sorbent Tube, Anasorb CSC, 226-01/Summa Canister/Tedlar bag	NIOSH 1007/TO 15	0.05 L/min; <200mL/min (6L Summa); 0.7-5 L
	Dräger Tube	0.5-5 ppm, 5-30 ppm	Y		NA											
	Dräger Chip	≥0.3-10 ppm	Y		10.6 lamp 1.281 (10 ppm) - 1.234 (1000 ppm)											
	TVA 2020**	0.5-2,000 ppm (PID)	Y													
Phosgene	Dräger Tube	0.02-1 ppm	Y	11.55 eV	NA	1 ppm = 4.05 mg/m <sup>3</sup>	PEL = 0.1 ppm REL = 0.1 ppm, C 0.2 ppm (15 mins) TLV = 0.1 ppm	2 ppm	0.3 ppm*	0.08 ppm*	0.04ppm*	0.027 ppm	NA	Sorbent Tube, XAD-2, 226-117	OSHA 61	1 L/min; 240 L
	Dräger Chip	0.05-2 ppm	Y													
	MultiRAE/AreaRAE PID**	0-2000 ppm	Y		11.7 lamp, 8.5											
Sulfuric Acid	Dräger Tube	1-5 mg/m <sup>3</sup>	Y	12.4 eV	NA	NA	PEL = 1 mg/m <sup>3</sup> REL = 1 mg/m <sup>3</sup> TLV = 0.2 mg/m <sup>3</sup>	15 mg/m <sup>3</sup>	0.2 mg/m <sup>3</sup>	0.2 mg/m <sup>3</sup>	0.2 mg/m <sup>3</sup>	0.2 mg/m <sup>3</sup>	2 mg/m <sup>3</sup>	Filter, 37-mm diameter quartz fiber 225-1827	NIOSH 7908	1-5 L/min; 15-2000 L
	pH Paper	0-14	Y													
	SPM Flex	0.005-0.75 ppm	Y													
Hydrochloric Acid (Hydrogen Chloride)	AreaRAE HCl Sensor	0-15 ppm	Y	12.74 eV	NA	1 ppm = 1.49 mg/m <sup>3</sup>	PEL = C 5 ppm REL = C 5 ppm TLV = C 2 ppm	50 ppm	1.8 ppm	1.8 ppm	1.8 ppm	1.8 ppm	3 ppm	Cartridge – two 37-mm diameter cellulose nitrate, one filter impregnated with Na <sub>2</sub> CO <sub>3</sub> 225-9032	NIOSH 7907	2 L/min; 30-600 L
	Dräger Tube	0.2-3 ppm, 3-20 ppm	Y													
	Dräger Chip	≥1-25 ppm	Y													
	pH Paper	0-14	Y													
	SPM Flex	0.02-20 ppm	Y													





**Table 5 - Electroplating Facility (Spill, Release, or Fire)**

Target Compound <sup>1</sup>	Instrument Guidance						Regulatory Guidance						Reference			
	Instrument	Detection Level	Intrinsically Safe (Y/N)	IP	PID CF (ISO)	Conversion	Occupational Action Levels			AELG-1		PAC-1	ERPG-1	Air Sampling		
							TWA	IDLH	1-hr	4-hr	8-hr	15-min TWA	1-hr	Media	Method	Flow Rate/ Total Volume
<b>VOCs and Gases (continued)</b>																
Nitric Acid	Dräger Tube	1-15 ppm, 15-50 ppm	Y	11.95 eV	NA	1 ppm = 2.58 mg/m <sup>3</sup>	PEL = 2 ppm REL = 2 ppm, ST 4 ppm TLV = 2 ppm, ST 4 ppm	25 ppm	0.16 ppm	0.16 ppm	0.16 ppm	0.16 ppm	1 ppm	Cartridge – two 37-mm diameter cellulose nitrate, one filter impregnated with Na <sub>2</sub> CO <sub>3</sub> 225-9032	NIOSH 7907	2 L/min; 30-600 L
	pH Paper	0-14	Y													
	SPM Flex	0.02-20 ppm	Y													
Hydrocyanic Acid (Hydrogen Cyanide)	MultRAE/AreaRAE HCN Sensor	0-50 ppm	Y	13.6 eV	NA	1 ppm = 1.1 mg/m <sup>3</sup>	PEL = 10 ppm S REL = ST 4.7 ppm S TLV = 4.7 ppm S	50 ppm	2.0 ppm	1.3 ppm	1 ppm	2 ppm	NA	Sorbent Tube – soda lime and glass fiber filter 226-28	NIOSH 6017	0.05-0.2 L/min; 2-90 L
	Dräger Tube	0.5-50 ppm, 5-50 ppm	Y													
	Dräger Chp	2-50 ppm	Y													
	pH Paper	0-14	Y													
SPM	0.2-30 ppm	Y														
<b>Metals - as particulates</b>																
Cadmium	TSI DustTrak II***	0.001-400 mg/m <sup>3</sup>	N	NA	NA	NA	PEL = 0.1 mg/m <sup>3</sup> REL = Ca TLV = 0.01 mg/m <sup>3</sup> (dust), 0.002 mg/m <sup>3</sup> (respirable)	9 mg/m <sup>3</sup> Ca	0.10 mg/m <sup>3</sup>	0.063 mg/m <sup>3</sup>	0.041 mg/m <sup>3</sup>	0.1 mg/m <sup>3</sup>	NA	Preloaded Cassette, MCE, 0.8um, 37mm, 3 Piece, PRE-BANDED, 225-3-01	NIOSH 7048	1-3 L/min; 25-1500 L
	TSI DustTrak DRX***	0.001-150 mg/m <sup>3</sup>	N													
	Pocket Pump TOUCH	NA	Y													
	Aircon-2	NA	N													
Copper	TSI DustTrak II***	0.001-400 mg/m <sup>3</sup>	N	NA	NA	NA	PEL = 0.1 mg/m <sup>3</sup> (ume), 1 mg/m <sup>3</sup> (dust) REL = 0.1 mg/m <sup>3</sup> (ume), 1 mg/m <sup>3</sup> (dust) TLV = 0.2 mg/m <sup>3</sup> (ume), 1 mg/m <sup>3</sup> (dust, mist)	100 mg/m <sup>3</sup>	NA	NA	NA	3 mg/m <sup>3</sup>	NA	Preloaded Cassette, MCE, 0.8um, 37mm, 3 Piece, PRE-BANDED, 225-3-01	NIOSH 7029	1-3 L/min; 50-1500 L
	TSI DustTrak DRX***	0.001-150 mg/m <sup>3</sup>	N													
	Pocket Pump TOUCH	NA	Y													
	Aircon-2	NA	N													
Chromium (VI)	TSI DustTrak II***	0.001-400 mg/m <sup>3</sup>	N	NA	NA	NA	PEL = 0.005 mg/m <sup>3</sup> REL = 0.001 mg/m <sup>3</sup> TLV = 0.05 mg/m <sup>3</sup>	15 mg/m <sup>3</sup>	NA	NA	NA	NA	NA	Preloaded Cassette, PVC, GLA-5000, 5.0um, 37mm, 2 Piece, 225-802	NIOSH 7600	1-4 L/min; 8-400 L
	TSI DustTrak DRX***	0.001-150 mg/m <sup>3</sup>	N													
	Pocket Pump TOUCH	NA	Y													
	Aircon-2	NA	N													



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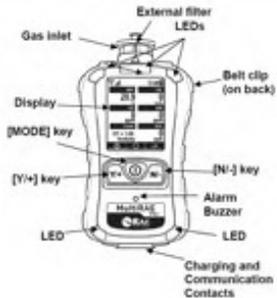
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GENERAL INFORMATION	
<b>Equipment Name:</b>	MultiRAE Pro
<b>Model:</b>	PGM-6248
<b>Manufacturer:</b>	Honeywell.
<b>National Manufacturer Contact:</b>	Telephone: 408-952-8200 Support: <a href="https://sps-support.honeywell.com/s/">https://sps-support.honeywell.com/s/</a> Website: <a href="https://sps.honeywell.com/us/en">https://sps.honeywell.com/us/en</a>



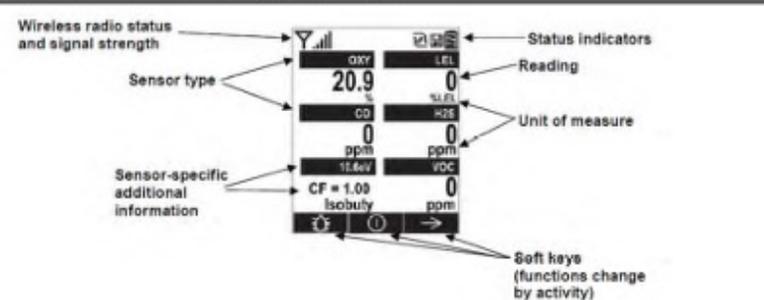
NOTE: Guides are to be used by trained personnel only and DO NOT replace the manufacturer's operations or technical manuals. These guides were developed by field personnel for utilization by EPA and their contractors and are helpful in quick start-up and operations. Various limitations have been identified through the experience of the development group. Different makes, models, and updates to this equipment may change the limitations. It is recommended that calibration, maintenance, and use be recorded in a logbook. Additional product information may be found in the accompanying Equipment Operating Guides.

SPECIFICATIONS	
<b>Uses:</b>	The MultiRAE Pro uses standard gas detection sensors for detection of O <sub>2</sub> , CO, combustible gas (LEL), VOC; interchangeable specialty gas detection sensors including H <sub>2</sub> S, NH <sub>3</sub> , Cl <sub>2</sub> , HCN; and a gamma radiation-specific sensor. The integrated Photo Ionization Detector (PID) is used for broad-range toxic organic gas detection.
<b>Limitations:</b>	<ol style="list-style-type: none"> <li>Gas concentrations exceeding the upper limit of detection of the instrument (refer to table in manual pages 48-49) will not be properly detected. Any up-scale reading followed by a declining or erratic reading may indicate a gas concentration beyond the upper scale limit which may be hazardous.</li> <li>The MultiRAE Pro can operate reliably in ambient conditions of -20° to 50°C (-4° to 122°F) and 0-95% relative humidity (non-condensing).</li> <li>The internal and external filters should be inspected and replaced as necessary.</li> <li>Some sensors are cross-sensitive to many chemicals. Be aware that the LEL sensor can be "poisoned" by the following: silicone compounds, lead compounds, halogenated hydrocarbons, and reduced sulfur compounds. See Technical Notes TN-114 and TN-144 for more information.</li> <li>The PID sensor is calibrated to isobutylene. The sensor is not compound-specific (it cannot distinguish which VOC is present), so total VOCs are reported. VOCs other than isobutylene will have different response and calibration factors. See Technical Note TN-106 for Correction Factors and Ionization Energies.</li> <li>If the ionization potential of a compound is higher than that of the PID lamp energy, the compound will not be detected (see TN-106).</li> <li>The PID lamp requires periodic cleaning, depending on operating conditions.</li> <li>The instrument should be up to date with the latest firmware (v.1.14 as of Nov. 2012; sensor firmware v.1.04 as of Nov 2012).</li> <li>O<sub>2</sub> and VOC sensor drift has been observed with these models. Periodic fresh air calibration may be required.</li> </ol>

<b>Alarm Level and Response Range:</b>	<p>If the specified limits were exceeded, a 95 dB buzzer will sound, and five red LEDs will flash</p> <p><b>3 Beeps:</b> HIGH level alarm <b>2 Beeps:</b> LOW level alarm <b>1 BEEP per second:</b> STEL and TWA</p> <p>Alarm latching with manual override or automatic reset. Additional diagnostic alarm and display message for low battery and pump stall.</p>																												
<b>ALARM LEVEL AND RESPONSE RANGE</b>																													
<table border="1"> <thead> <tr> <th>Compound</th> <th>Low Alarm</th> <th>High Alarm</th> <th>Response Range</th> </tr> </thead> <tbody> <tr> <td>O<sub>2</sub></td> <td>19.5%</td> <td>23.5%</td> <td>0 - 30% (volume)</td> </tr> <tr> <td>LEL</td> <td>10%</td> <td>20%</td> <td>0 - 100%</td> </tr> <tr> <td>CO</td> <td>35 ppm</td> <td>200 ppm</td> <td>0 - 500 ppm</td> </tr> <tr> <td>H<sub>2</sub>S</td> <td>10 ppm</td> <td>20 ppm</td> <td>0 - 200 ppm</td> </tr> <tr> <td>VOC</td> <td>50 ppm</td> <td>100 ppm</td> <td>10 ppb - 2,000 ppm</td> </tr> <tr> <td>Gamma</td> <td>50 µrem</td> <td>250 µrem</td> <td>0 - 20,000 µrem</td> </tr> </tbody> </table>		Compound	Low Alarm	High Alarm	Response Range	O <sub>2</sub>	19.5%	23.5%	0 - 30% (volume)	LEL	10%	20%	0 - 100%	CO	35 ppm	200 ppm	0 - 500 ppm	H <sub>2</sub> S	10 ppm	20 ppm	0 - 200 ppm	VOC	50 ppm	100 ppm	10 ppb - 2,000 ppm	Gamma	50 µrem	250 µrem	0 - 20,000 µrem
Compound	Low Alarm	High Alarm	Response Range																										
O <sub>2</sub>	19.5%	23.5%	0 - 30% (volume)																										
LEL	10%	20%	0 - 100%																										
CO	35 ppm	200 ppm	0 - 500 ppm																										
H <sub>2</sub> S	10 ppm	20 ppm	0 - 200 ppm																										
VOC	50 ppm	100 ppm	10 ppb - 2,000 ppm																										
Gamma	50 µrem	250 µrem	0 - 20,000 µrem																										
<b>Product Safety:</b>	UL® Classified as Intrinsically Safe for use in Class 1, Division 1, Group A, B, C, D, & T4 Hazardous Locations																												
<b>Battery:</b>	The MultiRAE Pro operates by use of a lithium ion (Li-ion) battery pack, or 4 "AA" alkaline batteries via an optional removable adapter. To charge the instrument, connect the AC adapter to the DC jack on the MultiRAE Pro charging cradle or travel adapter with the instrument attached. The instrument should remain in charging status until ready for field use. While charging, the display will indicate the charging status, battery voltage, and the instrument's LED will appear red until fully charged when it will change to green. The factory-supplied rechargeable Li-ion battery is designed to last for 12 hours of normal operation (no backlight, no alarms) under best conditions. As the battery lifespan increases, and/or under cold ambient temperatures, battery capacity may be noticeably reduced. Fresh alkaline batteries will provide approximately 6 hours of operation under ideal conditions.																												
<b>Calibration and Maintenance:</b>	<p>Two-point field calibration for zero and span gas.</p> <p>Four-gas calibration: CO (50 ppm), H<sub>2</sub>S (10 ppm), LEL (methane, 50%), and O<sub>2</sub> (18%), with balance N<sub>2</sub>.</p> <p>Three-point VOC calibration: Zero Air, Isobutylene (10 ppm), and Isobutylene (100 ppm).</p> <p>If a bump test is performed and a given sensor fails to alarm, recalibration is then required.</p>																												
<b>Critical Operational Information:</b>	Any rapid up-scale reading followed by a declining or erratic reading may indicate a gas concentration beyond upper scale limit, which may be hazardous.																												

QUICK START GUIDE	
<b>Prior to Starting:</b>	1. Check batteries by unplugging the MultiRAE Pro unit from the charger and noting battery level on the display. The battery life will also be indicated in the top right of the screen during monitoring.
<b>Start-up:</b>	1. Press and hold <b>[Mode]</b> key until monitor beeps once. The monitor will go through a 90-second warm-up sequence. Note the <b>[Mode]</b> key does not say "Mode" on it, but rather has the power button symbol on it.



	2.	The display screen will show sensor installation dates and warranty expiration dates; alarm limits; last calibration date; and user mode. These should be observed by personnel to insure accuracy. The monitor should normally be calibrated prior to the first use on any site, or weekly.
	3.	After the warm-up period, the unit will enter into monitoring mode, displaying real-time readings (response time for different compounds can vary).
	4.	 <p>In a non-hazardous environment the sensor readings should be similar to the following: OXY = 20.9%; LEL = 0%; CO = 0 ppm; TOX1 (H2S) = 0 ppm; VOC = 0-30 ppb; and GAMMA = 5-20 uR/h.</p> <p>When an alarm condition occurs (sensor reading is over the low alarm limit, high alarm limit, STEL, or TWA value), the monitor will provide audible and visual alarms to alert users of unsafe conditions.</p>
	5.	The instruments response time for different gases varies from 15 to 150 seconds. Allow sufficient time for the value to stabilize before recording a reading.
Calibration:  Calibration Required Symbol  	1.	Hold down <b>[Mode]</b> and <b>[N/-]</b> keys simultaneously for 5 seconds to enter Programming Mode. A prompt may appear asking for the password to access this screen. Enter the password (default password is 0000), and press <b>[Mode]</b> enter Programming mode.
	2.	The Calibration icon will be highlighted. Press <b>[Y/+]</b> to enter the calibration menu or <b>[Mode]</b> to return to monitoring mode.
	3.	A list of calibration options will displayed. Press <b>[Y/+]</b> to select the highlighted option, <b>[Mode]</b> to return to Programming mode, or <b>[N/-]</b> to cycle down through the list of options. A description of the primary.
	4.	<p><b>Fresh Air</b></p> <p>-“Zero Air” can be from a cylinder, clean ambient air, or ambient air purified through a charcoal filter. This procedure should <b>always</b> be performed prior to any sensor calibration.</p> <p>-When the display shows “Fresh Air Calibration?” during the startup process, press <b>[Y/+]</b> key. When successful, the display should show a reading of “20.9” for oxygen sensor and “0.0”, or a low value for all other gas sensors.</p>
	5.	<p><b>Multi Sensor Span</b></p> <p>If you are using a multiple gas cylinder, press “Y/+” at “Multiple Sensor Span”. If all sensors in the display window are to be calibrated, attach calibration gas to the unit using a regulator and calibration adaptor. Press the <b>[Y/+]</b> key to start the calibration process, and follow instructions on screen. Disconnect regulator from gas cylinder when calibration is complete. Multiple Sensor Bump calibration also follows this procedure.</p>

	6.	<p><b>Single Sensor Zero</b></p> <p>This option allows for zero calibration of individual sensors, rather than the all-or-nothing option of the Fresh Air option.</p>
	7.	<p><b>Single Sensor Span</b></p> <p>If you are calibrating a single sensor, press <b>[Y/+]</b> at “Single Sensor Span”, then press <b>[Mode]</b> in the menu to toggle to the desired sensor. Attach the calibration gas cylinder to the unit using a regulator and calibration adaptor. Press <b>[Y/+]</b> and follow instructions on screen. Disconnect the regulator from the gas cylinder when calibration is complete. Single Sensor Bump calibration also follows this procedure.</p>
<b>Turn Off:</b>	1.	Press the <b>[Mode]</b> key for 5 seconds to power down the instrument. A countdown sequence on-screen will verify when the unit is off.





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Target Compound	Hydrogen Sulfide		
CAS #	7783-06-4		
Conversion	1 ppm = 1.4 mg/m <sup>3</sup>	IP (eV)	
<b>Worker Safety</b>		<b>Public Safety</b>	
PEL(OSHA)	C 20 ppm	AEGL-1 10 min	0.75 ppm
REL (NIOSH)	C 10 ppm	AEGL-1 30 min	0.6 ppm
TLV(ACGIH)	1 ppm	AEGL-1 60 min	0.51 ppm
IDLH	100 ppm	AEGL-1 4 hr	0.36 ppm
STEL***	5 ppm (TLV-STEL)	AEGL-1 8 hr	0.33 ppm
<b>Sampling</b>			
Air Sampling Method	OSHA Method ID 1008	AEGL-2 (Irreversible health effects)	27 ppm (AEGL-2, 60-min)
Holding Time	at least 17 days @ ambient temperatures	AEGL-3 (Life threatening health effects)	50 ppm (AEGL-3, 60-min)
Air Sampling Media	Sorbent tube specific to hydrogen sulfide determination, (SKC part # 226-177)	PAL-1	1.2 ppm
Flow Rate	0.05-0.5 L/min	PAC-1	0.51 ppm
Sample Volume	5-12 L	ERPG-1	0.1 ppm
		TX AMCV(ppm)	-
		ATSDR MRL (1-14 days)	0.07 ppm (Acute Inhalation)
		Odor Threshold Values (ppm)	0.1
<b>Abbreviations:</b>			
PEL: Permissible Exposure Limit	PAL-1: Professional Advisory Level		
REL: Recommended Exposure Limit	PAC-1: Protective Action Criteria		
TLV: Threshold Limit Value	ERPG-1: Emergency Response Planning Guide		
IDLH: Immediately Dangerous to Life and Health	TX AMCV: TCEQ's Air Monitoring Comparison Values		
STEL: Short Term Exposure Limit	ATSDR MRL: Agency for Toxic Substances and Disease Registry Minimal Risk Levels		
AEGL: Acute Exposure Guideline Levels			
<ul style="list-style-type: none"> <li>- AEGL-1: General population could experience notable discomfort, irritation, or certain asymptomatic nonsensory effects. However, the effects are not disabling and are transient and reversible upon cessation of exposure</li> <li>- AEGL-2: General population could experience irreversible or other serious, long-lasting adverse health effects or an impaired ability to escape.</li> <li>- AEGL-3: General population could experience life-threatening health effects or death.</li> </ul>			
* Indicates that odor should be detectable near ERPG-1 and the ERPG-1 value was used.			

Target Compound Hydrogen Sulfide										
Instrument	DTX START	HTX START	BLA START	EPA Warehouse (Addison)	Resolution Detection Limit (ppm)	Detection Range	PID Lamp	PID Lamp CF	Intrinsically Safe	
MultIRAE Pro** (CS Sensor)	N	N	N	Y	1	1 - 2,000 ppm	PID: 10.6 eV lamp	3.3	Y	
MultIRAE Pro**	Y	Y	Y	Y	0.1	0-2,000 ppm range (total voc)	PID: 10.6 eV lamp	3.3	Y	
ToxiRAE PRO (CS Sensor)	N	N	Y	Y	0	0 - 100 ppm	N/A	N/A	Y	
TVA 2020**	N	N	N	Y	0.5 - 1.0	0.5-2,000 ppm (PID)1.0-50,000 ppm (FID)	PID: 10.6 eV lamp	3.2	Y	
Dräger Chip	N	N	N	Y	0.2-100	0.2-5ppm, 2-50ppm, 20-500ppm, 100-2500ppm	N/A	N/A	N	
Dräger Accuro (Tubes) (CS, AT)	N	N	N	Y	1	1 - 200 ppm, Detects presence of acid	N/A	N/A	Y	
AreaRAE Pro** (CS Sensor)	N	N	N	Y	1	1 - 2,000 ppm	PID: 10.6 eV lamp	3.3	Y	
Dräger X-ACT 5000 (Tubes) (CS, AT)	N	N	N	Y	1	1 - 200 ppm, Detects presence of acid	N/A	N/A	N	
SPM Flex with Flex CC XP (CS) ChemCassette	N	N	N	N	0.001	0.001-9.999ppm	N/A	N/A	N	

Notes:  
 \*\*PIDs such as MultIRAE Pro, AreaRAE Pro, TVA 2020, FIDs such as TVA 2020, and particulate monitors such as the PDR 1500, TSI DustTrak, or instruments do not speculate between specific compounds.  
 CS: Compound Specific instrument sensors or tubes  
 PH: Petroleum Hydrocarbons instrument sensors or tubes

Last Updated: 3/22/2024

Phased Air Monitoring Tiers (PATS)		
Name of Substance: Hydrogen Sulfide		
CAS ID #: 7783-06-4		
0.51 ppm	1hr TW	MAXIMUM 1 HR. EXPOSURE WITH TRANSIENT AND REVERSIBLE HEALTH EFFECTS [TEEL-1]
0.1 ppm	1hr TW	MAXIMUM 1 HR. EXPOSURE WITH MILD AND TRANSIENT HEALTH EFFECTS [ERPG-1]
0.33 ppm	8hr TW	MAXIMUM AIRBORNE EXPOSURE WITH TRANSIENT AND REVERSIBLE HEALTH EFFECTS [AEGL-1]
		LOCAL GOVERNMENT ACTION LEVEL (IF APPLICABLE)
		UC ACTION LEVEL CONFIRM NOTIFY LOCAL GOVERNMENT
N/A ppm		TX INSTANTANEOUS COMPARISON VALUE (BX THE AMCV IS AN INSTANTANEOUS READING, IF READINGS ARE ABOVE THE INSTANTANEOUS READING CONDUCT AN 1HR TWA)
0.2 ppm		EQUIPMENT DETECTION LIMIT Lowest level per detection equipment Equipment: Dräger Chip
0.1 ppm		Odor Threshold (ppm)

Last Updated: 3/21/2024  
 \* Indicates the chemical is a possible carcinogen.  
 \*\* PIDs such as MultIRAE Pro, AreaRAE Pro, TVA 2020, FIDs such as TVA 2020, and particulate monitors such as the PDR 1500, TSI DustTrak, or instruments do not speculate between specific compounds.  
 NOTE: For the 10-min, 1-hr, 4-hr AGELS refer to the Emergency Response Air Monitoring Guide Table.  
 NOTE: The values above are compiled from various sources which update at varying frequencies. This plan should be reviewed annually, and its associated values will be updated accordingly. Users of this plan should always verify the values listed in the plan are the most current valued listed in the originating source.



Target Compound: Hydrogen Sulfide

CAS #: 7783-06-4

Conversion: 1 ppm = 1.4 mg/m<sup>3</sup> IP (eV): 10.46



Worker Safety		Public Safety	
PEL(OSHA)	C 20 ppm	AEGL -1 10 min	0.75 ppm
REL (NIOSH)	C 10 ppm	AEGL-1 30 min	0.6 ppm
TLV(ACGIH)	1 ppm	AEGL-1 60 min	0.51 ppm
IDLH	100 ppm	AEGL-1 4 hr	0.36 ppm
STEL***	5 ppm (TLV-STEL)	AEGL-1 8 hr	0.33 ppm
<b>Sampling</b>		AEGL-2 (Irreversible health effects)	27 ppm (AEGL-2, 60-min)
Air Sampling Method	OSHA Method ID 1008	AEGL-3 (Life threatening health effects)	50 ppm (AEGL-3, 60-min)
Holding Time	at least 17 days @ ambient temperatures	PAL-1	1.2 ppm
Air Sampling Media	Sorbent tube specific to hydrogen sulfide determination, (SKC part # 226-177)	PAC-1	0.51 ppm
Flow Rate	0.05-0.5 L/min	ERPG-1	0.1 ppm
Sample Volume	5-12 L	TX AMCV(ppm)	-
		ATSDR MRL (1-14 days)	0.07 ppm (Acute Inhalation)
		Odor Threshold Values (ppm)	0.1

**Abbreviations:**

PEL: Permissible Exposure Limit	PAL-1: Professional Advisory Level
REL: Recommended Exposure Level	PAC-1: Protective Action Criteria
TLV: Threshold Limit Value	ERPG-1: Emergency Response Planning Guide
IDLH: Immediately Dangerous to Life and Health	TX AMCV: TCEQ's Air Monitoring Comparison Values
STEL: Short Term Exposure Limit	ATSDR MRL: Agency for Toxic Substances and Disease Registry Minimal Risk Levels
AEGL: Acute Exposure Guideline Levels	

- AEGL-1: General population could experience notable discomfort, irritation, or certain asymptomatic nonsensory effects. However, the effects are not disabling and are transient and reversible upon cessation of exposure

- AEGL-2: General population could experience irreversible or other serious, long-lasting adverse health effects or an impaired ability to escape.

- AEGL-3: General population could experience life-threatening health effects or death.

‡ Indicates that odor should be detectable near ERPG-1 and the ERPG-1 value was used.

# Compound page – Hydrogen Sulfide

- If a box is empty that could mean different things; it could mean “there is no safe exposure” or “we don’t have a clear limit on safe exposure”
- Broken into sections
  - Introduction information
  - Worker Safety
  - Public Safety
  - Sampling
  - Abbreviations and notes

# Worker safety

- PEL – Permissible Exposure Limit
  - Legally enforceable
- REL – Recommended Exposure Level
- TLV – Threshold Limit Value
- IDLH – Immediately Dangerous to Life and Health
- STEL – Short Term Exposure Limit

## Worker Safety

PEL(OSHA)	C 20 ppm
REL (NIOSH)	C 10 ppm
TLV(ACGIH)	1 ppm
IDLH	100 ppm
STEL***	5 ppm (TLV-STEL)

# Public Safety - AEGLs

## Public Safety

AEGL -1 10 min	0.75 ppm
AEGL-1 30 min	0.6 ppm
AEGL-1 60 min	0.51 ppm
AEGL-1 4 hr	0.36 ppm
AEGL-1 8 hr	0.33 ppm
AEGL-2 (Irreversible health effects)	27 ppm (AEGL-2, 60-min)
AEGL-3 (Life threatening health effects)	50 ppm (AEGL-3, 60-min)

- AEGL: Acute Exposure Guideline Levels; Time Weighted Average
  - AEGL-1: Public could experience certain effects that are transient and reversible
  - AEGL-2: Public could experience irreversible adverse health effects or an impaired ability to escape
  - AEGL-3: General population could experience life threatening health effects or death

Target Compound	Toluene		
CAS #	108-88-3		
Conversion	1 ppm = 3.77 mg/m <sup>3</sup>	IP (eV)	8.82

# Example AEGLs

- AEGL-1 values consistent across exposure times for a target reflects that the onset of transient and reversible effects for the general population does not significantly change across given time intervals at a given concentration

**Public Safety**

AEGL -1 10 min	67 ppm
AEGL-1 30 min	67 ppm
AEGL-1 60 min	67 ppm
AEGL-1 4 hr	67 ppm
AEGL-1 8 hr	67 ppm
AEGL-2 (Irreversible health effects)	560 ppm (AEGL-2, 60-min)
AEGL-3 (Life threatening health effects)	3,700 ppm (AEGL-3, 60-min)

# Public Safety - Others

- PAL-1: Professional Advisory Level
- PAC-1: Protective Action Criteria
- ERPG-1: Emergency Response Planning Guide
- TX AMCV: TCEQ's Air Monitoring Comparison Values
- ATSDR MRL: Agency for Toxic Substances and Disease Registry Minimal Risk Levels
- Odor Threshold: When an odor can be noticed
  - Can be below action levels or instrument detection limits

PAL-1	1.2 ppm
PAC-1	0.51 ppm
ERPG-1	0.1 ppm
TX AMCV(ppm)	-
ATSDR MRL (1-14 days)	0.07 ppm (Acute Inhalation)
Odor Threshold Values (ppm)	0.1

# Sampling

- Air Sampling Method details in appropriate tab on response.gov

**Sampling**

Air Sampling Method	OSHA Method ID 1008
Holding Time	at least 17 days @ ambient temperatures
Air Sampling Media	Sorbent tube specific to hydrogen sulfide determination, (SKC part # 226-177)
Flow Rate	0.05-0.5 L/min
Sample Volume	5-12 L

<b>Documents</b>	<b>Documents</b>	<b>Documents</b>
<a href="#">Air Sampling Methods- EPA [6]</a>	<a href="#">Air Sampling Methods- NIOSH [61]</a>	<a href="#">Air Sampling Methods- OSHA [19]</a>
<b>Categories</b>	<b>Categories</b>	<b>Categories</b>
All Documents	All Documents	All Documents
Air Monitoring	Air Monitoring	Air Monitoring
<b>Air Sampling Methods...</b>	Air Sampling Methods...	Air Sampling Methods...
Air Sampling Methods...	<b>Air Sampling Methods...</b>	Air Sampling Methods...
Air Sampling Methods...	Air Sampling Methods...	<b>Air Sampling Methods...</b>
Chemical Data Sheets	Chemical Data Sheets	Chemical Data Sheets
	ERAMG	

File Name
Volatile Organic Compounds in Air PV2120.pdf
Phosphoric Acid in Workplace Atmospheres 111.pdf
Phosgene 61.pdf
Particulate Mercury in Workplace Atmospheres 145.pdf
Methyl Isocyanate MIC 54.pdf

# Abbreviations

- Defines all the acronyms and symbols

## Abbreviations:

PEL: Permissible Exposure Limit

REL: Recommended Exposure Level

TLV: Threshold Limit Value

IDLH: Immediately Dangerous to Life and Health

STEL: Short Term Exposure Limit

AEGL: Acute Exposure Guideline Levels

PAL-1: Professional Advisory Level

PAC-1: Protective Action Criteria

ERPG-1: Emergency Response Planning Guide

TX AMCV: TCEQ's Air Monitoring Comparison Values

ATSDR MRL: Agency for Toxic Substances and Disease

Registry Minimal Risk Levels

- AEGL-1: General population could experience notable discomfort, irritation, or certain asymptomatic nonsensory effects. However, the effects are not disabling and are transient and reversible upon cessation of exposure

- AEGL-2: General population could experience irreversible or other serious, long-lasting adverse health effects or an impaired ability to escape.

- AEGL-3: General population could experience life-threatening health effects or death.

‡ Indicates that odor should be detectable near ERPG-1 and the ERPG-1 value was used.



Target Compound

CAS #

Conversion  IP (eV)



**Worker Safety**

PEL(OSHA)	C 20 ppm
REL (NIOSH)	C 10 ppm
TLV(ACGIH)	1 ppm
IDLH	100 ppm
STEL***	5 ppm (TLV-STEL)

**Public Safety**

AEGL -1 10 min	0.75 ppm
AEGL-1 30 min	0.6 ppm
AEGL-1 60 min	0.51 ppm
AEGL-1 4 hr	0.36 ppm
AEGL-1 8 hr	0.33 ppm
AEGL-2 (Irreversible health effects)	27 ppm (AEGL-2, 60-min)
AEGL-3 (Life threatening health effects)	50 ppm (AEGL-3, 60-min)
PAL-1	1.2 ppm
PAC-1	0.51 ppm
ERPG-1	0.1 ppm
TX AMCV(ppm)	-
ATSDR MRL (1-14 days)	0.07 ppm (Acute Inhalation)
Odor Threshold Values (ppm)	0.1

**Sampling**

Air Sampling Method	OSHA Method ID 1008
Holding Time	at least 17 days @ ambient temperatures
Air Sampling Media	Sorbent tube specific to hydrogen sulfide determination, (SKC part # 226-177)
Flow Rate	0.05-0.5 L/min
Sample Volume	5-12 L

**Abbreviations:**

PEL: Permissible Exposure Limit REL: Recommended Exposure Level TLV: Threshold Limit Value IDLH: Immediately Dangerous to Life and Health STEL: Short Term Exposure Limit AEGL: Acute Exposure Guideline Levels  - AEGL-1: General population could experience notable discomfort, irritation, or certain asymptomatic nonsensory effects. However, the effects are not disabling and are transient and reversible upon cessation of exposure - AEGL-2: General population could experience irreversible or other serious, long-lasting adverse health effects or an impaired ability to escape. - AEGL-3: General population could experience life-threatening health effects or death. † Indicates that odor should be detectable near ERPG-1 and the ERPG-1 value was used.	PAL-1: Professional Advisory Level PAC-1: Protective Action Criteria ERPG-1: Emergency Response Planning Guide TX AMCV: TCEQ's Air Monitoring Comparison Values ATSDR MRL: Agency for Toxic Substances and Disease Registry Minimal Risk Levels
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Target Compound: Hydrogen Sulfide

CAS #: 7783-06-4

Conversion: 1 ppm = 1.4 mg/m<sup>3</sup> IP (eV): 10.46

Worker Safety		Public Safety	
PEL(OSHA)	C 20 ppm	AEGL-1	0.75 ppm
		10 min	
REL (NIOSH)	C 10 ppm	AEGL-1	0.6 ppm
		30 min	
TLV(ACGIH)	1 ppm	AEGL-1	0.51 ppm
		60 min	
IDLH	100 ppm	AEGL-1	0.36 ppm
		4 hr	
STEL***	5 ppm (TLV-STEL)	AEGL-1	0.33 ppm
		8 hr	
		AEGL-2 (Irreversible health effects)	27 ppm (AEGL-2, 60-min)
		AEGL-3 (Life threatening health effects)	50 ppm (AEGL-3, 60-min)
		PAL-1	1.2 ppm
		PAC-1	0.51 ppm
		ERPG-1	0.1 ppm
		TX AMCV(ppm)	-
		ATSDR MRL (1-14 days)	0.07 ppm (Acute Inhalation)
		Odor Threshold Values (ppm)	0.1

**Sampling**

Air Sampling Method: OSHA Method ID 1008

Holding Time: at least 17 days @ ambient temperatures

Air Sampling Media: Sorbent tube specific to hydrogen sulfide determination, (SKC part # 226-177)

Flow Rate: 0.05-0.5 L/min

Sample Volume: 5-12 L

**Abbreviations:**

PEL: Permissible Exposure Limit  
REL: Recommended Exposure Level  
TLV: Threshold Limit Value  
IDLH: Immediately Dangerous to Life and Health  
STEL: Short Term Exposure Limit  
AEGL: Acute Exposure Guideline Levels

PAL-1: Professional Advisory Level  
PAC-1: Protective Action Criteria  
ERPG-1: Emergency Response Planning Guide  
TX AMCV: TCEQ's Air Monitoring Comparison Values  
ATSDR MRL: Agency for Toxic Substances and Disease Registry Minimal Risk Levels

- AEGL-1: General population could experience notable discomfort, irritation, or certain asymptomatic nonsensory effects. However, the effects are not disabling and are transient and reversible upon cessation of exposure  
- AEGL-2: General population could experience irreversible or other serious, long-lasting adverse health effects or an impaired ability to escape.  
- AEGL-3: General population could experience life-threatening health effects or death.

‡ Indicates that odor should be detectable near ERPG-1 and the ERPG-1 value was used.

Target Compound: Hydrogen Sulfide

Instrument	DTX START	HTX START	BLA START	EPA Warehouse (Addison)	Resolution Detection Limit (ppm)	Detection Range	PID Lamp	PID Lamp CF	Intrinsically Safe
MultIRAE Pro** (CS Sensor)	N	N	N	Y	1	1 - 2,000 ppm	PID: 10.6 eV lamp	3.3	Y
MultIRAE Pro**	Y	Y	Y	Y	0.1	0-2,000 ppm range (total voc)	PID: 10.6 eV lamp	3.3	Y
ToxIRAE PRO (CS Sensor)	N	N	Y	Y	0	0 - 100 ppm	N/A	N/A	Y
TVA 2020**	N	N	N	Y	0.5 - 1.0	0.5-2,000 ppm (PID) 1.0-50,000 ppm (FID)	PID: 10.6 eV lamp	3.2	Y
Dräger Chip	N	N	N	Y	0.2-100	0.2-5ppm, 2-50ppm, 20-500ppm, 100-2500ppm	N/A	N/A	N
Dräger Accuro (Tubes) (CS, AT)	N	N	N	Y	1	1 - 200 ppm, Detects presence of acid	N/A	N/A	Y
AreaRAE Pro** (CS Sensor)	N	N	N	Y	1	1 - 2,000 ppm	PID: 10.6 eV lamp	3.3	Y
Dräger X-ACT 5000 (Tubes) (CS, AT)	N	N	N	Y	1	1 - 200 ppm, Detects presence of acid	N/A	N/A	N
SPM Flex with Flex CC XP (CS) ChemCassette	N	N	N	N	0.001	0.001-9.999ppm	N/A	N/A	N

Notes:  
\*\*PIDs such as MultIRAE Pro, AreaRAE Pro, TVA 2020, FIDs such as TVA 2020, and particulate monitors such as the PDR 1500, TSI DustTrak, or instruments do not speciate between specific compounds.  
CS: Compound Specific instrument sensors or tubes  
PH: Petroleum Hydrocarbons instrument sensors or tubes

Last Updated: 3/22/2024

Phased Air Monitoring Tiers (PATs)

Name of Substance: Hydrogen Sulfide  
CAS ID #: 7783-06-4

0.51 ppm	1hr TW	MAXIMUM 1 HR. EXPOSURE WITH TRANSIENT AND REVERSIBLE HEALTH EFFECTS [TEEL-1]
0.1 ppm	1hr TW	MAXIMUM 1 HR. EXPOSURE WITH MILD AND TRANSIENT HEALTH EFFECTS [ERPG-1]
0.33 ppm	8hr TW	MAXIMUM AIRBORNE EXPOSURE WITH TRANSIENT AND REVERSIBLE HEALTH EFFECTS [AEGL-1]
		LOCAL GOVERNMENT ACTION LEVEL (IF APPLICABLE)
		UC ACTION LEVEL CONFIRM NOTIFY LOCAL GOVERNMENT
N/A ppm		TX INSTANTANEOUS COMPARISON VALUE (3X THE AMCV IS AN INSTANTANEOUS READING, IF READINGS ARE ABOVE THE INSTANTANEOUS READING CONDUCT AN 1HR TWA)
0.2 ppm		EQUIPMENT DETECTION LIMIT Lowest level per detection equipment Equipment: Dräger Chip
0.1 ppm		Odor Threshold (ppm)

Last Updated: 3/21/2024  
\* Indicates the chemical is a possible carcinogen.  
\*\* PIDs such as MultIRAE Pro, AreaRAE Pro, TVA 2020, FIDs such as TVA 2020, and particulate monitors such as the PDR 1500, TSI DustTrak, or instruments do not speciate between specific compounds.  
NOTE: For the 10-min, 1-hr, 4-hr AGLs refer to the Emergency Response Air Monitoring Guide Table.  
NOTE: The values above are compiled from various sources which update at varying frequencies. This plan should be reviewed annually, and its associated values will be updated accordingly. Users of this plan should always verify the values listed in the plan are the most current valued listed in the originating source.

# Instrument page

- Instruments available for target compound
- Instrument Location
- Instrument Detection Limits
- Instrument Limits
  
- Blank instrument pages are intentional

Target Compound Hydrogen Sulfide



Instrument	DTX START	HTX START	BLA START	EPA Warehouse (Addison)	Resolution Detection Limit (ppm)	Detection Range	PID Lamp	PID Lamp CF	Intrinsically Safe
MultiRAE Pro** (CS Sensor)	N	N	N	Y	1	1 - 2,000 ppm	PID: 10.6 eV lamp	3.3	Y
MultiRAE Pro**	Y	Y	Y	Y	0.1	0-2,000 ppm range (total voc)	PID: 10.6 eV lamp	3.3	Y
ToxiRAE PRO (CS Sensor)	N	N	Y	Y	0	0 - 100 ppm	N/A	N/A	Y
TVA 2020**	N	N	N	Y	0.5 - 1.0	0.5-2,000 ppm (PID)1.0-50,000 ppm (FID)	PID: 10.6 eV lamp	3.2	Y
Dräger Chip	N	N	N	Y	0.2 -100	0.2-5ppm, 2-50ppm, 20-500ppm, 100-2500ppm	N/A	N/A	N
Dräger Accuro (Tubes) (CS, AT)	N	N	N	Y	1	1 - 200 ppm, Detects presence of acid	N/A	N/A	Y
AreaRAE Pro** (CS Sensor)	N	N	N	Y	1	1 - 2,000 ppm	PID: 10.6 eV lamp	3.3	Y
Dräger X-ACT 5000 (Tubes) (CS, AT)	N	N	N	Y	1	1 - 200 ppm, Detects presence of acid	N/A	N/A	N
SPM Flex with Flex CC XP (CS) ChemCassette	N	N	N	N	0.001	0.001-9.999ppm	N/A	N/A	N

Notes:  
 \*\*PIDs such as MultiRAE Pro, AreaRAE Pro, TVA 2020, FIDs such as TVA 2020, and particulate monitors such as the PDR 1500, TSI DustTrak, or instruments do not speciate between specific compounds.  
 CS: Compound Specific instrument sensors or tubes  
 PH: Petroleum Hydrocarbons instrument sensors or tubes

# Instrument page – EPA Equipment Location

- Equipment availability based on target compound
- Equipment availability based on location

Target Compound Hydrogen Sulfide



Instrument	DTX START	HTX START	BLA START	EPA Warehouse (Addison)	Resolution Detection Limit (ppm)	Detection Range	PID Lamp	PID Lamp CF	Intrinsically Safe
MultiRAE Pro** (CS Sensor)	N	N	N	Y	1	1 - 2,000 ppm	PID: 10.6 eV lamp	3.3	Y
MultiRAE Pro**	Y	Y	Y	Y	0.1	0-2,000 ppm range (total voc)	PID: 10.6 eV lamp	3.3	Y
ToxiRAE PRO (CS Sensor)	N	N	Y	Y	0	0 - 100 ppm	N/A	N/A	Y
TVA 2020**	N	N	N	Y	0.5 - 1.0	0.5-2,000 ppm (PID)1.0-50,000 ppm (FID)	PID: 10.6 eV lamp	3.2	Y
Dräger Chip	N	N	N	Y	0.2 -100	0.2-5ppm, 2-50ppm, 20-500ppm, 100-2500ppm	N/A	N/A	N
Dräger Accuro (Tubes) (CS, AT)	N	N	N	Y	1	1 - 200 ppm, Detects presence of acid	N/A	N/A	Y
AreaRAE Pro** (CS Sensor)	N	N	N	Y	1	1 - 2,000 ppm	PID: 10.6 eV lamp	3.3	Y
Dräger X-ACT 5000 (Tubes) (CS, AT)	N	N	N	Y	1	1 - 200 ppm, Detects presence of acid	N/A	N/A	N
SPM Flex with Flex CC XP (CS) ChemCassette	N	N	N	N	0.001	0.001-9.999ppm	N/A	N/A	N

Notes:  
 \*\*PIDs such as MultiRAE Pro, AreaRAE Pro, TVA 2020, FIDs such as TVA 2020, and particulate monitors such as the PDR 1500, TSI DustTrak, or instruments do not speciate between specific compounds.  
 CS: Compound Specific instrument sensors or tubes  
 PH: Petroleum Hydrocarbons instrument sensors or tubes

# Equipment Detection

- Compare to worker and public health levels

## Worker Safety

PEL(OSHA)	C 20 ppm
IDLH	100 ppm

## Public Safety

AEGL -1 10 min	0.75 ppm
Odor Threshold Values (ppm)	0.1

## Target Compound Hydrogen Sulfide



Instrument	DTX START	HTX START	BLA START	EPA Warehouse (Addison)	Resolution Detection Limit (ppm)	Detection Range	PID Lamp	PID Lamp CF	Intrinsically Safe
MultiRAE Pro** (CS Sensor)	N	N	N	Y	1	1 - 2,000 ppm	PID: 10.6 eV lamp	3.3	Y
MultiRAE Pro**	Y	Y	Y	Y	0.1	0-2,000 ppm range (total voc)	PID: 10.6 eV lamp	3.3	Y
ToxiRAE PRO (CS Sensor)	N	N	Y	Y	0	0 - 100 ppm	N/A	N/A	Y
TVA 2020**	N	N	N	Y	0.5 - 1.0	0.5-2,000 ppm (PID)1.0-50,000 ppm (FID)	PID: 10.6 eV lamp	3.2	Y
Dräger Chip	N	N	N	Y	0.2 -100	0.2-5ppm, 2-50ppm, 20-500ppm, 100-2500ppm	N/A	N/A	N
Dräger Accuro (Tubes) (CS, AT)	N	N	N	Y	1	1 - 200 ppm, Detects presence of acid	N/A	N/A	Y
AreaRAE Pro** (CS Sensor)	N	N	N	Y	1	1 - 2,000 ppm	PID: 10.6 eV lamp	3.3	Y
Dräger X-ACT 5000 (Tubes) (CS, AT)	N	N	N	Y	1	1 - 200 ppm, Detects presence of acid	N/A	N/A	N
SPM Flex with Flex CC XP (CS) ChemCassette	N	N	N	N	0.001	0.001-9.999ppm	N/A	N/A	N

### Notes:

\*\*PIDs such as MultiRAE Pro, AreaRAE Pro, TVA 2020, FIDs such as TVA 2020, and particulate monitors such as the PDR 1500, TSI DustTrak, or instruments do not speciate between specific compounds.

CS: Compound Specific instrument sensors or tubes

PH: Petroleum Hydrocarbons instrument sensors or tubes

# PID lamp and intrinsically safe

- Check if chemical will coat PID lamp over time
- Compare IP for target and instrument lamp
- Always use CF
- Intrinsically safe – check CDS

IP (eV)



**Target Compound Hydrogen Sulfide**

Instrument	DTX START	HTX START	BLA START	EPA Warehouse (Addison)	Resolution Detection Limit (ppm)	Detection Range	PID Lamp	PID Lamp CF	Intrinsically Safe
MultiRAE Pro** (CS Sensor)	N	N	N	Y	1	1 - 2,000 ppm	PID: 10.6 eV lamp	3.3	Y
MultiRAE Pro**	Y	Y	Y	Y	0.1	0-2,000 ppm range (total voc)	PID: 10.6 eV lamp	3.3	Y
ToxiRAE PRO (CS Sensor)	N	N	Y	Y	0	0 - 100 ppm	N/A	N/A	Y
TVA 2020**	N	N	N	Y	0.5 - 1.0	0.5-2,000 ppm (PID)1.0-50,000 ppm (FID)	PID: 10.6 eV lamp	3.2	Y
Dräger Chip	N	N	N	Y	0.2 -100	0.2-5ppm, 2-50ppm, 20-500ppm, 100-2500ppm	N/A	N/A	N
Dräger Accuro (Tubes) (CS, AT)	N	N	N	Y	1	1 - 200 ppm, Detects presence of acid	N/A	N/A	Y
AreaRAE Pro** (CS Sensor)	N	N	N	Y	1	1 - 2,000 ppm	PID: 10.6 eV lamp	3.3	Y
Dräger X-ACT 5000 (Tubes) (CS, AT)	N	N	N	Y	1	1 - 200 ppm, Detects presence of acid	N/A	N/A	N
SPM Flex with Flex CC XP (CS) ChemCassette	N	N	N	N	0.001	0.001-9.999ppm	N/A	N/A	N

**Notes:**  
 \*\*PIDs such as MultiRAE Pro, AreaRAE Pro, TVA 2020, FIDs such as TVA 2020, and particulate monitors such as the PDR 1500, TSI DustTrak, or instruments do not speciate between specific compounds.  
 CS: Compound Specific instrument sensors or tubes  
 PH: Petroleum Hydrocarbons instrument sensors or tubes



Target Compound	Hydrogen Sulfide		
CAS #	7783-06-4		
Conversion	1 ppm = 1.4 mg/m <sup>3</sup>	IP (eV)	10.46
<b>Worker Safety</b>		<b>Public Safety</b>	
PEL(OSHA)	C 20 ppm	AEGL-1	0.75 ppm
		10 min	
REL (NIOSH)	C 10 ppm	AEGL-1	0.6 ppm
		30 min	
TLV(ACGIH)	1 ppm	AEGL-1	0.51 ppm
		60 min	
IDLH	100 ppm	AEGL-1	0.36 ppm
		4 hr	
STEL***	5 ppm (TLV-STEL)	AEGL-1	0.33 ppm
		8 hr	
<b>Sampling</b>		AEGL-2 (Irreversible health effects)	27 ppm (AEGL-2, 60-min)
Air Sampling Method	OSHA Method ID 1008	AEGL-3 (Life threatening health effects)	50 ppm (AEGL-3, 60-min)
Holding Time	at least 17 days @ ambient temperatures	PAL-1	1.2 ppm
Air Sampling Media	Sorbent tube specific to hydrogen sulfide determination, (SKC part # 226-177)	PAC-1	0.51 ppm
Flow Rate	0.05-0.5 L/min	ERPG-1	0.1 ppm
Sample Volume	5-12 L	TX AMCV(ppm)	-
		ATSDR MRL (1-14 days)	0.07 ppm (Acute Inhalation)
		Odor Threshold Values (ppm)	0.1

**Abbreviations:**

PEL: Permissible Exposure Limit	PAL-1: Professional Advisory Level
REL: Recommended Exposure Level	PAC-1: Protective Action Criteria
TLV: Threshold Limit Value	ERPG-1: Emergency Response Planning Guide
IDLH: Immediately Dangerous to Life and Health	TX AMCV: TCEQ's Air Monitoring Comparison Values
STEL: Short Term Exposure Limit	ATSDR MRL: Agency for Toxic Substances and Disease Registry Minimal Risk Levels
AEGL: Acute Exposure Guideline Levels	

- AEGL-1: General population could experience notable discomfort, irritation, or certain asymptomatic nonsensory effects. However, the effects are not disabling and are transient and reversible upon cessation of exposure
- AEGL-2: General population could experience irreversible or other serious, long-lasting adverse health effects or an impaired ability to escape.
- AEGL-3: General population could experience life-threatening health effects or death.

‡ Indicates that odor should be detectable near ERPG-1 and the ERPG-1 value was used.

Instrument	DTX START	HTX START	BLA START	EPA Warehouse (Addison)	Resolution Detection Limit (ppm)	Detection Range	PID Lamp	PID Lamp CF	Intrinsically Safe
MultIRAE Pro** (CS Sensor)	N	N	N	Y	1	1 - 2,000 ppm	PID: 10.6 eV lamp	3.3	Y
MultIRAE Pro**	Y	Y	Y	Y	0.1	0-2,000 ppm range (total voc)	PID: 10.6 eV lamp	3.3	Y
ToxIRAE PRO (CS Sensor)	N	N	Y	Y	0	0 - 100 ppm	N/A	N/A	Y
TVA 2020**	N	N	N	Y	0.5 - 1.0	0.5-2,000 ppm (PID) 1.0-50,000 ppm (FID)	PID: 10.6 eV lamp	3.2	Y
Dräger Chip	N	N	N	Y	0.2-100	0.2-5ppm, 2-50ppm, 20-500ppm, 100-2500ppm	N/A	N/A	N
Dräger Accuro (Tubes) (CS, AT)	N	N	N	Y	1	1 - 200 ppm, Detects presence of acid	N/A	N/A	Y
AreaRAE Pro** (CS Sensor)	N	N	N	Y	1	1 - 2,000 ppm	PID: 10.6 eV lamp	3.3	Y
Dräger X-ACT 5000 (Tubes) (CS, AT)	N	N	N	Y	1	1 - 200 ppm, Detects presence of acid	N/A	N/A	N
SPM Flex with Flex CC XP (CS) ChemCassette	N	N	N	N	0.001	0.001-9.999ppm	N/A	N/A	N

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Last Updated: 3/22/2024

Phased Air Monitoring Tiers (PATs)		
Name of Substance: <b>Hydrogen Sulfide</b>		
CAS ID #: <b>7783-06-4</b>		
0.51 ppm	1hr TW	MAXIMUM 1 HR. EXPOSURE WITH TRANSIENT AND REVERSIBLE HEALTH EFFECTS [TEEL-1]
0.1 ppm	1hr TW	MAXIMUM 1 HR. EXPOSURE WITH MILD AND TRANSIENT HEALTH EFFECTS [ERP-1]
0.33 ppm	8hr TW	MAXIMUM AIRBORNE EXPOSURE WITH TRANSIENT AND REVERSIBLE HEALTH EFFECTS [AEGL-1]
		LOCAL GOVERNMENT ACTION LEVEL (IF APPLICABLE)
		UC ACTION LEVEL CONFIRM NOTIFY LOCAL GOVERNMENT
N/A ppm		TX INSTANTANEOUS COMPARISON VALUE (3X THE AMCV IS AN INSTANTANEOUS READING, IF READINGS ARE ABOVE THE INSTANTANEOUS READING CONDUCT AN 1HR TWA)
0.2 ppm		EQUIPMENT DETECTION LIMIT Lowest level per detection equipment Equipment: <b>Dräger Chip</b>
0.1 ppm		Odor Threshold (ppm)

Last Updated: 3/21/2024  
 \* Indicates the chemical is a possible carcinogen.  
 \*\* PIDs such as MultIRAE Pro, AreaRAE Pro, TVA 2020, FIDs such as TVA 2020, and particulate monitors such as the PDR 1500, TSI DustTrak, or instruments do not speciate between specific compounds.  
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# Phased Air Monitoring Tiers (PATs)

- Utilize during unified command for incidents.
- Highlights the most relevant action levels for public protection air monitoring.
- Offers equipment option with lowest detection limit

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**Last Updated: 3/21/2024**

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# Objectives

- This website is meant to be a resource tool for quick guidance and reference before and during an emergency response for EPA OSC, EPA contractors, other federal agencies, State agencies, and Local agencies.
- It will assist with consistency across agencies during air monitoring events at an emergency response.
- A “one-stop shop” for air monitoring, instead of researching several different websites for air monitoring guidance.



Contact information for the RRT6  
Air Monitoring Initiative response  
site.





# RRT6 Air Monitoring Initiative



**Site Contact:**

Alejandro Lara Jr.  
OSC  
(Lara.Alejandro@epa.gov)

**Site Location:**

Dallas, TX 75212

[response.epa.gov/airmonitoringinitiative](https://response.epa.gov/airmonitoringinitiative)

[Edit Site Info](#)

[Edit Contaminants](#)

[Edit Site Abstract](#)

The primary goal of the Air Monitoring Initiative is to develop emergency response community air monitoring plans that support local officials in their decisions to issue and end shelter-in-place or evacuation orders during significant incidences.



[All Documents](#)

[Contacts](#)

6SF-EO

Kelsey Fisher  
(fisher.kelsey@epa.gov)

RRT Co-Chair

Craig Carroll  
(carroll.craig@epa.gov)

[All Contacts](#)





# Thank you & Questions?

EPA OSC Alejandro Lara Jr

Email: [lara.alejandro@epa.gov](mailto:lara.alejandro@epa.gov)

Work Cell: 214-315-8185

# RRT-6 RCP Vol 4 Cleanup and Website Improvements

Bray Fisher, USEPA

Todd Peterson, USCG

# Project Overview

1. Identified Annexes to keep
2. Identified Annexes to be consolidated into compendiums
3. Identified Annexes to be removed and/or linked in the RCP
  - a. Path Forward: Review RCP Vol 1 and Vol 2 to see where we can add links to source documents (e.g., USCG IMH, EPA IMH,...)
  - b. Target Date: Fall 2024
4. Identified Job Aids and Fact Sheets to be consolidated in compendiums
5. Established new file names for all the documents using a standard naming convention
6. Updated Category (e.g., 1. RCP Vol 1; 2. RCP Vol 2; RCP Vol 3; and RCP Vol 4, etc., ...)

# RRT-6 Homepage



**Site Contact:**  
Bray Fisher  
OSC  
(Fisher.Kelsey@epa.gov)

**Site Location:**  
Dallas, TX 75202  
[response.epa.gov/rrt6-homepage](https://response.epa.gov/rrt6-homepage)

## Resources

### Notices

- [RRT-6 Spring 2024 Meeting...](#)
- [All Notices](#)

### Documents

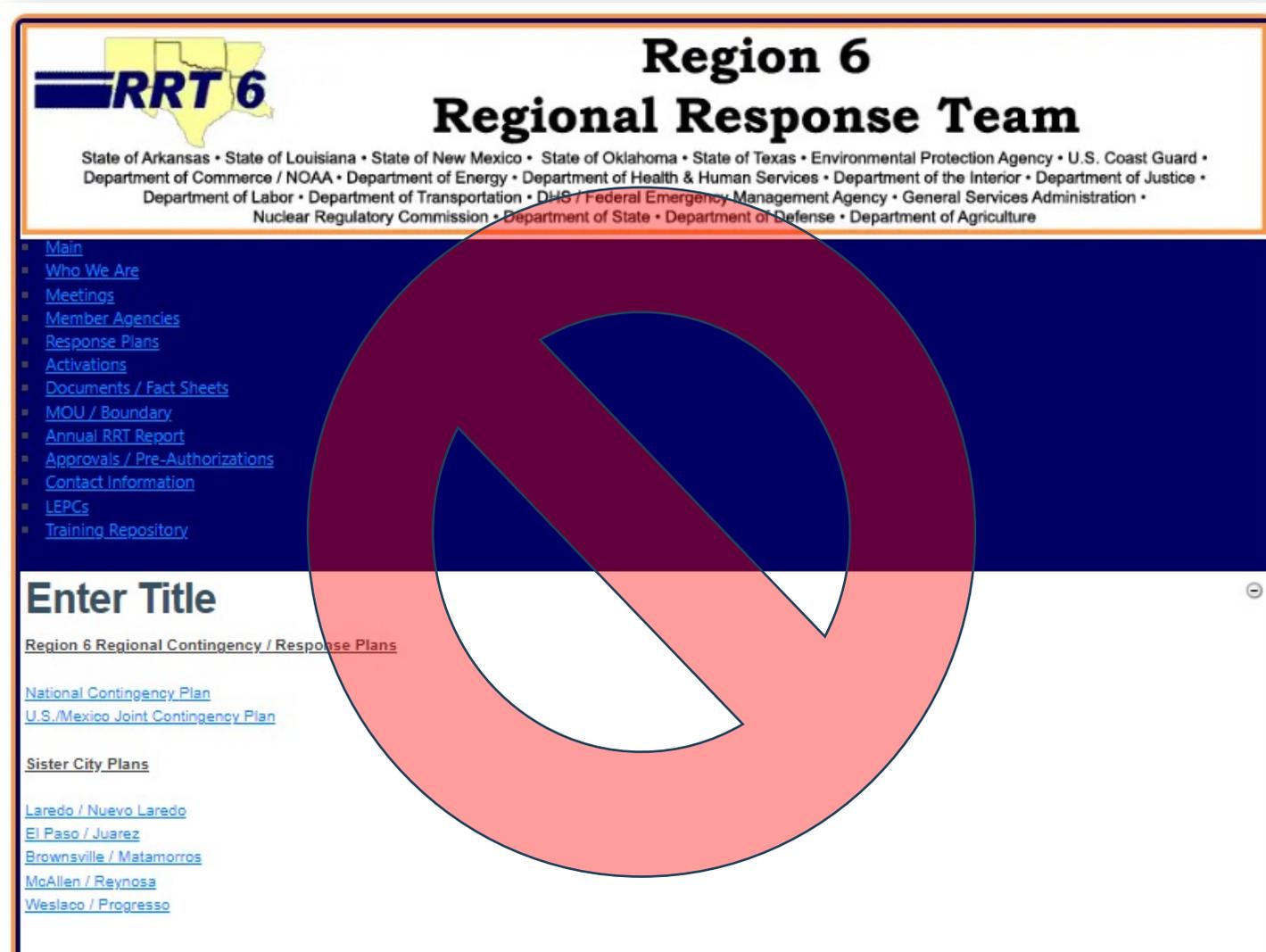
- [Current EPA/USCG MOU Map-kmz f...](#)
- [Job Aid ...](#)
- [South Texas Coastal Zone Area ...](#)
- [Joint Contingency Plan between...](#)
- [All Documents](#)

### Links

- [Region 6 Chemical](#)

**Region 6 Regional Response Team (RRT-6):**

# Obsolete RRT-6 Website



**RRT 6**

## Region 6 Regional Response Team

State of Arkansas • State of Louisiana • State of New Mexico • State of Oklahoma • State of Texas • Environmental Protection Agency • U.S. Coast Guard • Department of Commerce / NOAA • Department of Energy • Department of Health & Human Services • Department of the Interior • Department of Justice • Department of Labor • Department of Transportation • DHS / Federal Emergency Management Agency • General Services Administration • Nuclear Regulatory Commission • Department of State • Department of Defense • Department of Agriculture

- [Main](#)
- [Who We Are](#)
- [Meetings](#)
- [Member Agencies](#)
- [Response Plans](#)
- [Activations](#)
- [Documents / Fact Sheets](#)
- [MOU / Boundary](#)
- [Annual RRT Report](#)
- [Approvals / Pre-Authorizations](#)
- [Contact Information](#)
- [LEPCs](#)
- [Training Repository](#)

### Enter Title

[Region 6 Regional Contingency / Response Plans](#)

[National Contingency Plan](#)  
[U.S./Mexico Joint Contingency Plan](#)

Sister City Plans

[Laredo / Nuevo Laredo](#)  
[El Paso / Juarez](#)  
[Brownsville / Matamorros](#)  
[McAllen / Reynosa](#)  
[Weslaco / Progresso](#)

<https://www.rrt6.org/ResponsePlans.html>

# RRT-6 Homepage

## Documents

04. RCP v4 [20]

### Categories

All Documents

01. RCP v1

02. RCP v2

03. RCP v3

**04. RCP v4**

05. Fact Sheets

06. Job Aid

08. EPA-USCG MOA Map

09. Activations

10. Annual Reports

11. Meet Summaries

12. 101 Present

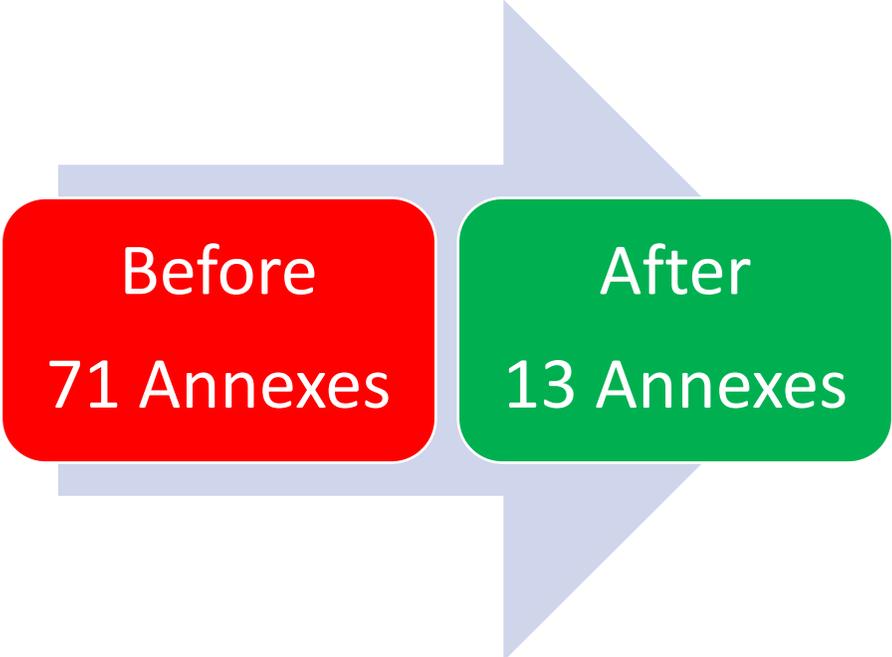
13. Member Directory

14. MEXUS

15. DWH Bio Opin Response Plans v4

Page Size ALL

File Name ▲	Description	Category	Uploaded	Size	Download ⬇
Annex.01--RRT-6-By-Laws.pdf	Annex 01 -- RRT-6 By-laws -- 12-20-2019	04. RCP v4	4/4/2024	339 KB	Download
Annex.02--RRT-6-Acronyms.pdf	Annex 02 -- Acronyms used in the Region 6 RCP, Inland & Coastal ACPs -- 09-05-2013	04. RCP v4	4/4/2024	137 KB	Download
Annex.03--RRT-6-MOA.MOU.Compendium.pdf	Annex 03 -- Compendium of MOUs and MOAs within RRT-6	04. RCP v4	4/24/2024	13812 KB	Download
Annex.04--RRT-6-Subpart.J.Compendium.pdf	Annex 04 -- Compendium of RRT-6 Subpart J Documents -- 04-23-2024	04. RCP v4	4/23/2024	18939 KB	Download
Annex.05--RRT-6-Consultation-Compendium.pdf	Annex 05 -- Compendium of Consultations & Compliance Guides -- 04-24-2024	04. RCP v4	4/24/2024	13437 KB	Download
Annex.06-FWSEP.WRP.Contact.List.xlsx	Annex 06 -- FWSEP / WRP Contact List	04. RCP v4	4/24/2024	114 KB	Download
Annex.07-TE-CH_Spreadsheet.xlsx	Annex 07 -- ESA / EFH List	04. RCP v4	4/24/2024	62 KB	Download
Annex.08-Biological_Evaluation_Consultation_Form.pdf	Annex 08 -- Biological Evaluation Consultation Form	04. RCP v4	4/26/2024	962 KB	Download
Annex.09--RRT-6-NRDA.pdf	Annex 09 -- Region 6 Natural Resource Damage Assessment (NRDA) -- Unified Command Coordination -- 03-2019	04. RCP v4	4/4/2024	231 KB	Download
Annex.10--RRT-6-ST.Advisor.pdf	Annex 10 -- RRT-6 Science & Technology (S&T) Advisor Guidance -- 03-13-2019	04. RCP v4	4/4/2024	416 KB	Download
Annex.11--RRT-6-Seafood.Liaison.Specialist.pdf	Annex 11 -- RRT-6 Seafood Liaison Specialist Guidance -- 03-13-2019	04. RCP v4	4/4/2024	377 KB	Download
Annex.12--RRT-6-Flower.Garden.Banks.NMS.Guidance.pdf	Annex 12 -- RRT 6 Flower Garden Banks National Marine Sanctuary Guidance -- 03-01-2019	04. RCP v4	4/4/2024	259 KB	Download
Annex.13--RRT-6-USCG.Eighth_District_NDPR.Guidance.pdf	Annex 13 -- USCG Eight District Natural Disaster Pollution Response (NDPR) Guidance for the Coastal Zone -- 07-2022	04. RCP v4	4/4/2024	835 KB	Download



**Note:** We did not delete any of the old Annexes.

# New Compendiums

## RCP Vol 4

- Annex 3 - MOA/MOU
- Annex 4 - Subpart J
- Annex 5 - Consultations

Documents

04. RCP v4 [20]

Categories

All Documents

01. RCP v1

02. RCP v2

03. RCP v3

**04. RCP v4**

05. Fact Sheets

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08. EPA-USCG  
MOA Map

09. Activations

10. Annual  
Reports

11. Meet  
Summaries

12. 101 Present

13. Member  
Directory

14. MEXUS

15. DWH Bio Opin  
Response Plans  
v4

## Categories

- Fact Sheets
- Job Aids
- RRT-6 Activations (2005 to present)
- Annual Reports
- Meeting Summaries

**Reduction of files from over 500 to less than 150**

## ANNEX 4

# Compendium of Subpart J Countermeasure Documents



March 20, 2024

## ANNEX 4 -- Compendium of Subpart J Countermeasure Documents

### Table of Contents

[Part 1000 – In-Situ Burn \(ISB\)](#)

[Part 2000 – Surface Washing Agents \(SWA\)](#)

[Part 3000 – Dispersants](#)

[Part 4000 – Loose Sorbents](#)

[Part 5000 – Herding Agents](#)

[Part 6000 – Bioremediation Agents](#)

[Part 7000 – Additional RRT-6 Resources](#)

[Part 8000 – External Resources](#)

# Annex 4 - Subpart J Compendium

Bookmarks

- Master Table of Contents
- Table of Contents
- ISB Policy (Part 1000, Section 1100.1101)
- ISB Policy for Offshore Environment (Part 1000, Section 1100.1102)
- ISB Burn Plan (1994) (Part 1000, Section 1100.1103)
- ISB Coastal Zone Checklist (Part 1000, Section 1200.1201).pdf
- ISB Post Burn Report (Part 1000, Section 1200.1202).pdf
- ISB ART Evaluation Job Aid (Part 1000, Section 1300.1301)
- RRT-6 SWA Policy (Part 2000, Section 2100.2101)
- SWA Post Report Form -- April 2020 (Part 2000, Section 2100.2102)
- Houston SWA Preauthorization Letter -- 2014 (Part 2000, Section 2200.2201)
- Corpus Christi SWA Preauthorization Letter -- 2018 (Part 2000, Section 2200.2202)
- Dispersant -- Near Shore Expedited Approval Process and Checklist (Part

ANNEX 4 -- Compendium of Subpart J Countermeasure Documents

Table of Contents (TOC)

Part 1000 – In-Situ Burn (ISB)

Section 1100 – RRT-6 ISB Preauthorization

- [1101 – ISB Policy for the Coastal Zone \(Near Shore/Inshore Environment\) \(Previously Annex 13a\)](#)
- [1102 – ISB Policy for the Offshore Environment \(new version – no signatures\) \(Previously Annex 13\)](#)
- [1103 – ISB Burn Plan \(1994 version\) \(Previously Annex 13\)](#)

Section 1200 – RRT-6 ISB FOSC Support Forms

- [1201 – FOSC Checklist for ISB in the Coastal Zone \(Previously Annex 13a App A\)](#) [Fillable Form](#)
- [1202 – FOSC Report ISB Post Burn Report \(Previously Annex 13 and 13a App E\)](#) [Fillable Form](#)

Section 1300 – RRT-6 ISB Job Aid

- [1301 – RRT-6 Members ART Evaluation Job Aid \(Previously Annex 13 and 13a\)](#) [Fillable Form](#)

[Return to TOC](#)

Regional Response Team (RRT) 6  
In-Situ Burn Policy

Part 1000, Section 1100.1101

(Previously Annex 13a)

August 2022

[Return to TOC](#)

# Annex 4 - Subpart J Compendium

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- 1103 – ISB Burn Plan (1994 version) (Previously Annex 13)

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- 1201 – FOSC Checklist for ISB in the Coastal Zone (Previously Annex 13a App A) [Fillable Form](#)
- 1202 – FOSC Report ISB Post Burn Report (Previously Annex 13 and 13a App E) [Fillable Form](#)

Section 1300 – RRT-6 ISB Job Aid

- 1301 – RRT-6 Members ART Evaluation Job Aid (Previously Annex 13 and 13a) [Fillable Form](#)

[Return to TOC](#)

Post Burn Report Form
Method of ignition; include amount & type of burning agents employed (if used); (Character limit: 300)
Number burns conducted; include the duration & amount of oil burned for each; (Character limit: 300)
Air monitoring results; highlight instances where Level of Concern and other action level thresholds were exceeded; (Character limit: 300)
Overall effectiveness of the burn(s); describe any follow on actions (residue recovery, post burn monitoring, etc.); (Character limit: 600)
Any significant operational departures from the burn plan approved by the FOSC; (Character limit: 500)
Any lessons learned, best practices, or recommended process improvements for future response; (Character limit: 600)

[RRT-6--Post.Burn.Report.Form-ISB.pdf](#)

# Questions



**Todd Peterson**

USCG District Eight

[Todd.M.Peterson@uscg.mil](mailto:Todd.M.Peterson@uscg.mil)

**Bray Fisher**

EPA Region 6

[Fisher.Kelsey@epa.gov](mailto:Fisher.Kelsey@epa.gov)



20-Minute Break

# Open Forum



# RRT-6 Co-Chair Report Outs

Michael Sams, USCG D8

Craig Carroll, EPA R6

# RRT-6 Co-Chair Report Outs - USCG D8



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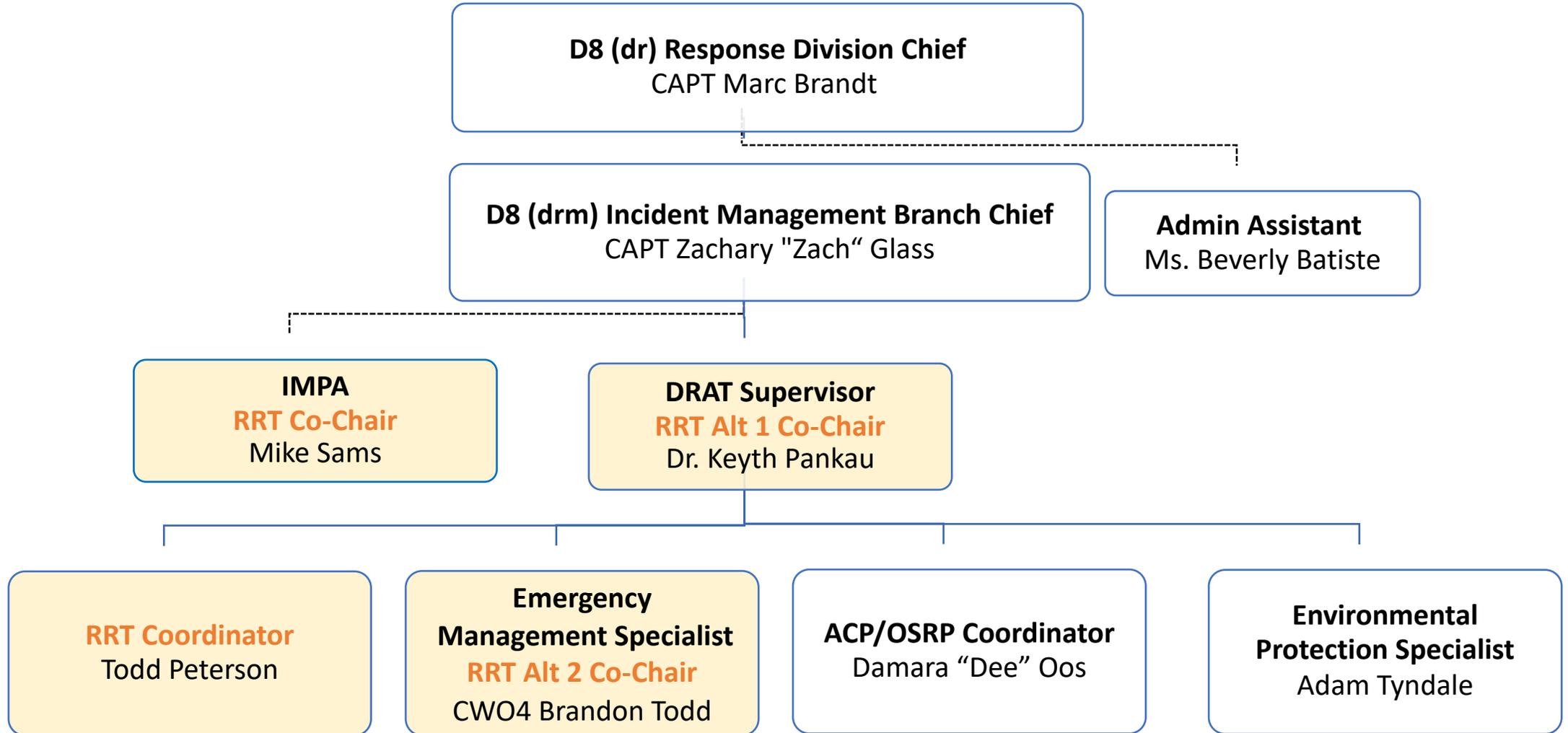
Michael Sams, USCG D8



Role	RRT Member	Contact Info
Co-Chair	Mr. Michael Sams	(571) 607-5403 <a href="mailto:Michael.K.Sams@uscg.mil">Michael.K.Sams@uscg.mil</a>
Co-Chair Alternate 1	Dr. Keyth Pankau	(206) 815-1056 <a href="mailto:Keyth.A.Pankau2@uscg.mil">Keyth.A.Pankau2@uscg.mil</a>
Co-Chair Alternate 2	CWO4 Brandon Todd	(571) 607-0442 <a href="mailto:Brandon.L.Todd@uscg.mil">Brandon.L.Todd@uscg.mil</a>
Coordinator	Mr. Todd Peterson	(571) 607-6190 <a href="mailto:Todd.M.Peterson@uscg.mil">Todd.M.Peterson@uscg.mil</a>



# D8 (drm) Incident Management Branch





# Overview

- Preparedness
- Annual Coastal Area Contingency Plan Update
- Environmental Consultations



# Laws/Regulations/Policies

- **CG Headquarters:**

- CG Incident Management Handbook (IMH)
- CG Marine Environmental Response and Preparedness Manual
- Coast Guard National Review Panel (CGNRP)

- **CGD 8:**

- Federal On-Scene Coordinator Representative (FOSCR) College



# Hurricane Preparedness

## Preseason

- CGD 8 conducts the following actions to prepare for Hurricane Season:
  - All-hands Hurricane Training
  - Personnel accountability list updated
  - Alert Warning System test
  - Alignment with BSEE GOM Region
- RRT-6 conducts the following Hurricane Season Briefs:
  - Federal Hurricane Briefs (FEMA R6, EPA R6, USCG D8) – 12 Apr 2024 – Virtual
  - State-specific Hurricane Briefs:
    - Texas (TGLO, TCEQ, TRRC, and other relevant state agencies; EPA R6, BSEE, USCG (D8 & USCG COTPs)
    - Louisiana (LOSCO, LDEQ, and other relevant state agencies; EPA R6, BSEE, USCG (D8 & USCG COTPs)

**ATLANTIC HURRICANE SEASON FORECAST**  
2024  
Exclusive AccuWeather Forecast

	Named Storms	Hurricanes	Major Hurricanes	Accumulated Cyclone Energy (ACE)	Direct U.S. Impacts
Forecast 2024	20-25	8-12	4-7	175-225	4-6
Previous Year 2023	19	7	3	145.6	4
30-Year Historical Average 1990-2020	14	7	3	123	4



# Accomplishments

Since last RRT meeting

## Federal, state, and local Planning and Coordination Efforts

Description	Location	Dates
Clean Gulf Conference	San Antonio, TX	7-9 Nov 2023
RRT-3 Meeting	Annville, PA	5-7 Dec 2023
LA SACESG Meeting	Telcon	7 Feb 2024
RRT-7 Meeting	Lenexa, KS	27-28 Mar 2024
FEMA R6 Regional Interagency Steering Committee	Denton, TX	2-4 Apr 2024
8th Annual Clean Waterways Conference	Cincinnati, OH	9-11 Apr 2024
2024 NRT/RRT Co-Chairs Annual Meeting	St. Louis, MO	23-25 Apr 2024
RRT-5 Meeting	St Paul, MN	30 Apr -1 May 2024
RRT-8 Meeting	Denver, CO	1 May 2024
RRT-3 Meeting	Virginia Beach, VA	7-9 May 2024



# Outlook

Until Next RRT meeting

Federal, state, and local Planning and Coordination Efforts		
Description	Location	Dates
International Oil Spill Conference (IOSC)	New Orleans, LA	13-16 May 2024
RRT-4 Meeting	Gautier, MS	29-30 May 2024
LA SACESG	Baton Rouge, LA	11 Jun 2024
API Dispersant Workshop	OHMSETT Facility – Leonardo, NJ	26-27 Jun 2024
FOSCR College	Sector Houston-Galveston	15-19 Jul 2024
RRT-7 Summer Meeting	Lenexa, KS	14-15 Aug 2024
LA SACESG Mtg	Virtual	16 Oct 2024

# RRT-6 Co-Chair Report Outs

- USEPA



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Craig Carroll, EPA R6



Role	RRT Member	Agency	Contact Info
Co-Chair	Craig Carroll	EPA	(214) 665-2220 carroll.craig@epa.gov
Coordinator	Bray Fisher	EPA	(214) 665-2712 fisher.kelsey@epa.gov
Alternate Co-Chair	Eric Delgado	EPA	(214) 665-2703 delgado.eric@epa.gov



# EPA R6 Response & Removal Branch



<b>Response &amp; Removal Branch Manager – Craig Carroll -x2220</b>					
<b>SEDE</b>					
<b>Emergency &amp; Preparedness Section SEDE-R</b>		<b>AR/LA/OK Section SEDE-A</b>		<b>TX/NM Section SEDE-T</b>	
<b>Eric Delgado -x2703</b>		<b>VACANT -x#####</b>		<b>Chris Petersen -x3167</b>	
Adams,Adam	x2779	Guidry,Randy	x2277	Brescia,Nicolas	x2291
Adams,Pratistha	x2214	McAteer,Michael	x7157	VACANT	x#####
VACANT	x#####	Mzee,Nabil	x7322	Lara,Alex	x2239
Fisher,Bray	x2712	Polk,Jennifer	469-834-9476	Patel,Anish	281-983-2233
Loesel,Matt	x8544	Robertson,David	x7363	Ouedraogo,Idrissa	281-983-2146
VACANT	x#####	Roff,Nicholas	x3157	VACANT	x#####
Paisley,Eric	x6405	Sejour,Julie	225-427-7559	Volker,John	x2162
Perry,Chris	x6702			Zehner,Warren	281-983-2229
Fausel,Betsy SEE	x2712			Parsons,Nellie SEE	x3164
VACANT SEE	x#####				
VACANT SEE	x#####				
McKay,Tom SEE	x2180				
Pursell,Tracey SEE	x3185				



# Overview

- **Challenges**

- Supporting protective action decisions by state and local responders
- Public availability of data
- Public health information
- After-action discussion with impacted communities
- Environmental Justice
- Climate Change
- Tribal coordination
- New staff

- **Best Practices**

- Air monitoring guidance
- Dashboards/Hub Sites for responses and removals
- Poison Center coordination
- Out-posting

- **Significant Responses**

- Sawtooth Oil Spill
- Shamrock Oil Spill
- DiamondJacks Casino Oil Spill
- OK City Mystery Oil Spill
- Wathen #2 Oil Spill
- American Recycling
- QPL Thibodaux
- Benton Creosote



# Hurricane Preparedness



Preseason	Pre-Storm	Post Storm
Review / Update Data Mgmt Plans and Crisis Communications Plans	Load Information on Potentially Impacted Facilities into Data Mgmt Systems	Coordinate with Tribal and State partners to follow up with potentially impacted facilities
Update List of NPL Sites and Regulated Facilities in Response Manager	Pre-landfall Rapid Response Assessments of NPL Sites (with State and local partners and PRPs)	Post-landfall Rapid Response Assessments of NPL Sites (with State and local partners and PRPs)
RRT6 Advisory sent out on BMP for securing Tanks, Drums, Containers prior to storm (EPA R6 to RRT State contacts to LEPCs)	Standing-up light-IMT and coordinating with State and Tribal partners	Coordinate assessments with Federal, Tribal, State, and local partners, if MA-tasked.
EPA Region 6 press releases on preparing for and responding to natural disasters	Public Service Announcements and Clean-up Guidance disseminated to media outlets and state and local agencies	Communicate response activities through <a href="https://response.epa.gov">response.epa.gov</a> , if MA-tasked.



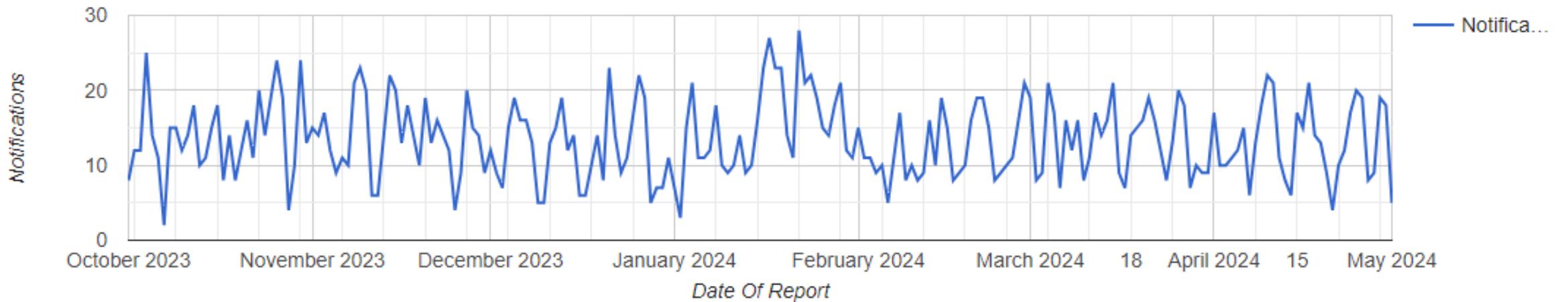
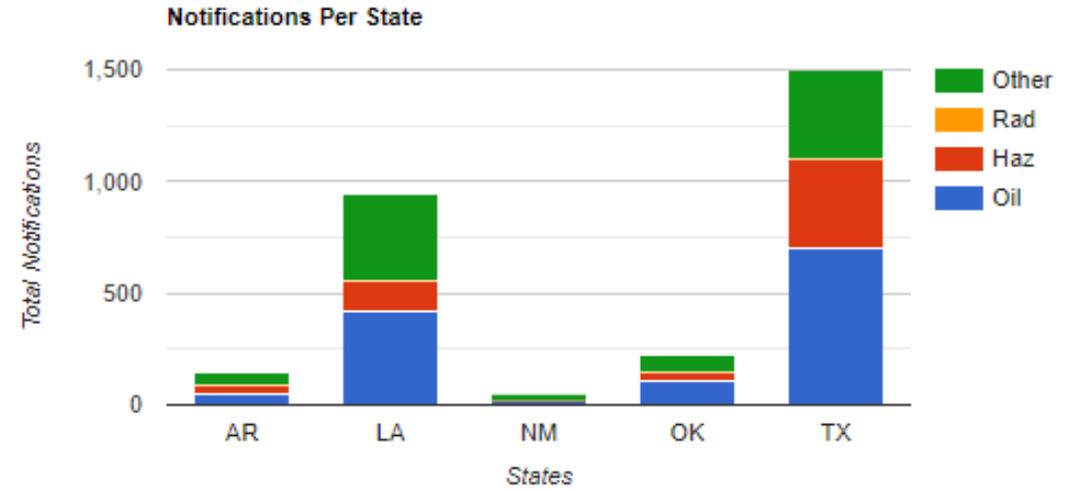
# Laws/Regulations/Policies

- PFAS final rule as hazardous substance under CERCLA signed
  - Under the rule, entities are required to immediately report releases of PFOA and PFOS that meet or exceed the reportable quantity of one pound within a 24-hour period to the National Response Center, State, Tribal, and local emergency responders.
  - EPA plans to publish the Final Rule in the Federal Register on May 8, 2024. The rule will become effective 60 days later July 8, 2024.
- CWA Hazardous Substance FRP Rule
  - Final rule signed on March 14, 2024, effective date May 28, 2024.

## Notifications

**Total: 2,866 (+1 unclassified in the Hotline Log)**

State	Oil	Haz	Rad	Other
AR	47	43	0	57
LA	422	137	0	385
NM	16	4	0	32
OK	103	39	0	84
TX	697	401	4	395





# Accomplishments

FY2024

Federal, state, and local Planning and Coordination Efforts		
Description	Location	Dates
Completed 9 CERCLA and 8 OPA removal actions	Various	Various
Completed 31 FRP and 70 SPCC inspections	Various	Various
17 Tabletop/Field Exercises; includes 1 GIUE	Various	Various
Held 7 OSC monthly meetings; includes PDO Viewer exercises	Virtual/Dallas, TX	Various
OSC Readiness	Saint Louis, MO	February 12-16, 2024
ESF #10 Hurricane Coordination Meeting with Federal Partners	Virtual	April 12, 2024
Coastal Area Planning Committee: SE Texas, SW Louisiana, and S Texas	Various	Various
LEPC Meetings: Greater Harris & Jefferson Counties; Greater Houston, SE Regional, Deer Park, and Dallas County	Various	Various
Central TX Coastal Area Committee	Various	Various
NRT/RRT Co-Chairs Meeting	Saint Louis, MO	April 23-25, 2024
RRT6 Executive Committee monthly calls	Virtual	Various
RRT6 Fall 2023 Meeting	Addison, TX	November 2-3, 2023
Colonial Pipeline Tier III Workshop	Paradis, LA	April 24-25, 2024



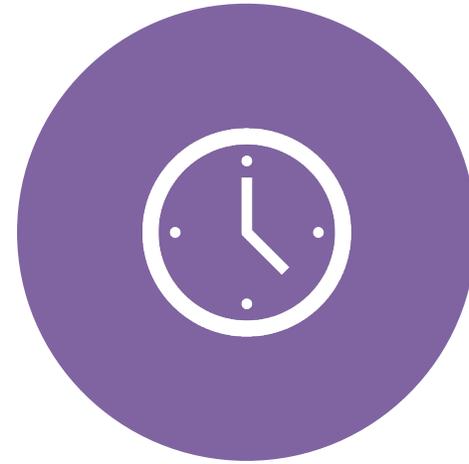
# Outlook

Until Next RRT meeting

Federal, state, and local Planning and Coordination Efforts		
Description	Location	Dates
OSC monthly meetings	Dallas, TX	1 <sup>st</sup> Monday
RRT6 Executive Committee monthly calls	Virtual	2 <sup>nd</sup> Wednesday
LEPC Meetings: Greater Harris & Jefferson Counties; Greater Houston, SE Regional, Deer Park, NE OK	Various	Various
Coastal Area Planning Committee: SE Texas, SW Louisiana, and S Texas	Various	Various
Central TX Coastal Area Committee	Various	Various
SE Louisiana Area Committee Meeting	Gretna, LA	May 22, 2024
NDOW Full Scale ESF #10 (Hurricane) Exercise	Houston, TX	May 20-24, 2024
ESF #10 Hurricane Coordination Meeting with State Partners	Virtual	May 14 and 17, 2024
Change of Command-Sector New Orleans	New Orleans, LA	June 7, 2024



**LUNCH**



**90-MINUTES**

# State Report Outs



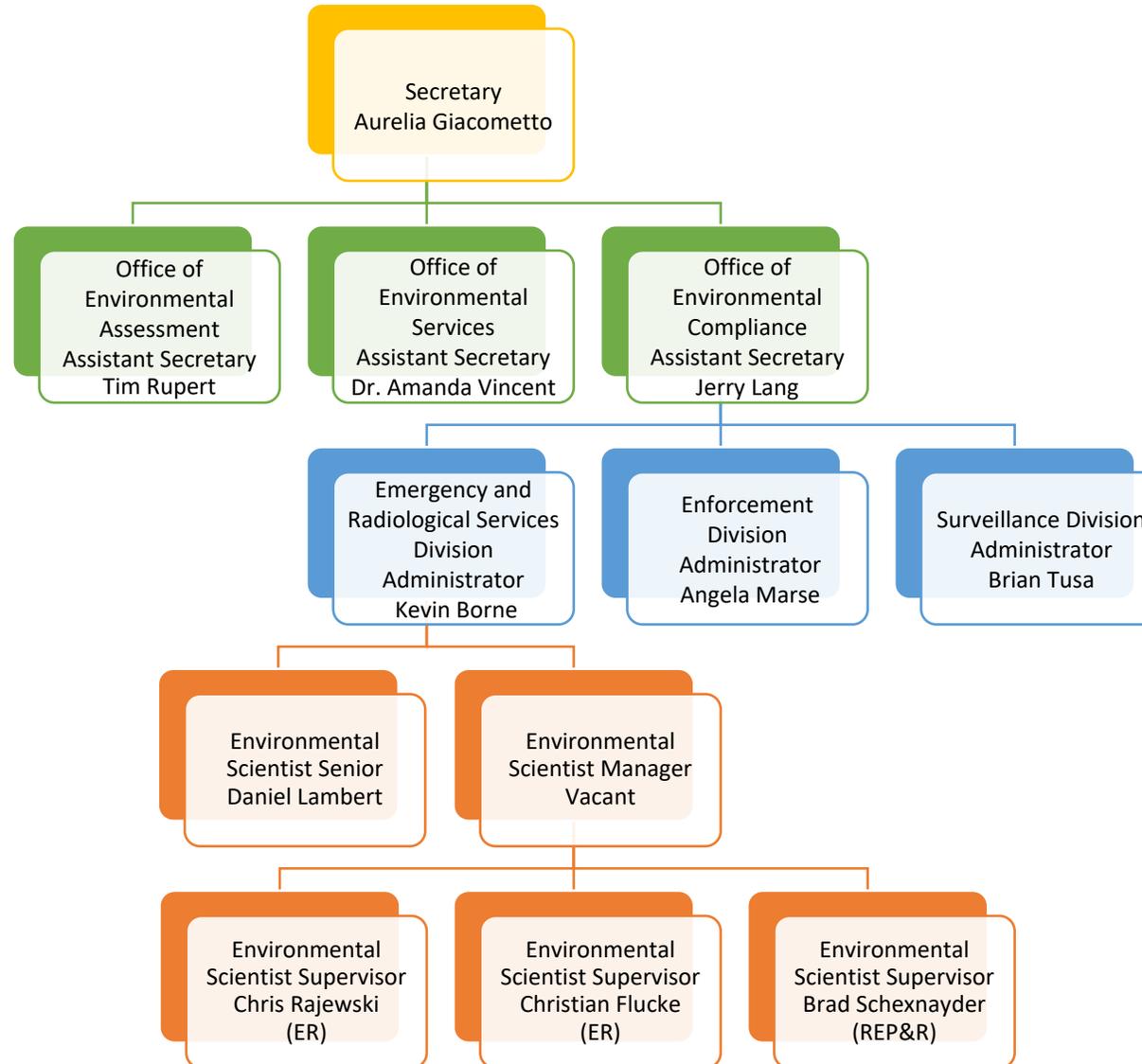


# **Louisiana Department of Environmental Quality (LDEQ)**



<b>Role</b>	<b>RRT Member</b>	<b>Agency</b>	<b>Contact Info</b>
Primary	Jerry Lang	LDEQ	225-219-2966 Jerry.Lang@la.gov
Alternate	Daniel Lambert	LDEQ	225-219-3368 Daniel.Lambert@la.gov
Alternate	Kevin Borne	LDEQ	225-219-3616 Kevin.Borne@la.gov
Alternate	Shane Miller	LDEQ	225-262-5586 Shane.Miller2@la.gov

# LDEQ Organizational Chart



# Notification/Response Activities Overview



- 2,745 Industry Notifications and Complaints processed by Single Point of Contact (October 18, 2023 – April 28th, 2024)
- 485 - Emergency Responses from October 18, 2023 – April 28th, 2024

# Weber Marine - 10/17/23 – Convent, LA



- 1800 Tons of Shredded Tires on Fire
- Multiple Road Closures due to Smoke
- River Water used to Extinguish Flames
- Smoldering Ceased on 10/17/23

# Womack Brothers - 2/5/24 – Alto, LA



- Illegal dumping of oilfield tank bottoms
- Responsible party performing cleanup operations
- LDEQ Criminal Investigations – Executed a search warrant and obtained samples resulting in one arrest for illegal disposal of a substance

# Whitney Oil & Gas – 3/6/24 – 10 Miles SE of Houma



- Estimated released volume 40 to 60 bbls of oil.
- Area impacted est 150 yd x 75 yd of marsh.
- In-Situ burn performed following RRT consultation

# Accomplishments - ER

Since Last RRT meeting



## Federal, state, and local Planning and Coordination Efforts

Description	Location	Dates
ESF-10 Lead Meetings	GOHSEP	Multiple
Statewide Exercise Planning Meetings	GOHSEP	Multiple
Louisiana Chemical Association Meetings	LCA	Multiple
LEPC Meetings	Various	Multiple
Multiple Meetings at GOHSEP with New Administration	GOHSEP	Multiple
Meetings with EPA and Contractors concerning Response Manager and Dashboards	Various	Multiple

# Accomplishments - ER

Since Last RRT meeting



## Federal, state, and local Planning and Coordination Efforts

Description	Location	Dates
State EOC Training for ESF-10 Desk Staff	Virtual & In-Person	Multiple
Technician Refresher Training with LSP and BRFD	JESTC	10/23/23
Eco Services Tabletop	Baton Rouge Facility	12/4/23
Meet & Greet with Julie Sejour (EPA BR)	LDEQ HQ	2/28/24
Chemical TTX with LDH	Lafayette	3/20/24
Statewide Exercise	GOHSEP	4/16/24 - 4/18/24

# Accomplishments (REPR)

Since last RRT meeting

Federal, state, and local Planning and Coordination Efforts		
Description	Location	Dates
Paulina Fire Department Emergency Worker Monitoring and Decontamination Center Walk-Through	Paulina, LA	October 16, 2023
Grand Gulf Nuclear Station Site Drill	Multiple	October 25, 2023
East Baton Rouge Parish School Bus Driver Annual Radiation Training	Baton Rouge, LA	October 23-26, 2023
Pontchartrain Reception Center Walk-Through	Kenner, LA	October 30, 2023
Pontchartrain Reception Center Demonstration	Kenner, LA	November 1, 2023
Paulina Fire Department Emergency Worker Monitoring and Decontamination Station	Paulina, LA	November 1, 2023
Richmond Community Center Reception Center Training	Richmond, LA	November 9, 2023

# Accomplishments (REPR)

Since last RRT meeting

Federal, state, and local Planning and Coordination Efforts		
Description	Location	Dates
West Feliciana Parish Hospital MS-1 Demonstration	St. Francisville, LA	November 16, 2023
Ochsner Medical Center MS-1 Walk-Through	New Orleans, LA	November 27, 2023
Ochsner Medical Center MS-1 Demonstration	New Orleans, LA	November 29, 2023
Richmond Reception Center Demonstration	Richmond, LA	December 5, 2023
River Bend Station Site Drill	Multiple	December 6, 2024
West Baton Rouge Fire Department Annual Radiation Training	Port Allen, LA	December 11, 2023
Zachary Fire Department Annual Radiation Training	Zachary, LA	December 18-20, 2023
River Bend Station Dress Rehearsal	Multiple	April 19, 2024

# Outlook (ER)

Until Next RRT meeting

Federal, state, and local Planning and Coordination Efforts		
Description	Location	Dates
ESF-10 Lead Meetings	GOHSEP	Multiple
Louisiana Chemical Association Meetings	LCA	Multiple
LEPC Meetings	Various	Multiple
Louisiana Emergency Management Conference	Lake Charles	5/6/24 – 5/8/24
State/Federal Hurricane Meeting	Various	TBD
State/Local Hurricane Meetings	Various	TBD

# Outlook (REPR)

Until Next RRT meeting

Federal, state, and local Planning and Coordination Efforts		
Description	Location	Dates
Multiple LEPC & GOHSEP Regional Meetings	Various	Multiple
Multiple Facility Tours with Louisiana State Police Emergency Services Unit	Various	Multiple
Kenner Fire Department Emergency Worker Monitoring and Decontamination Station Demonstration	Kenner, LA	May 30, 2024
River Bend Station Evaluated Exercise	Multiple	June 25, 2024
FEMA Hostile Action Based Workshop	LDEQ HQ	July 30, 2024

# Outlook (REPR)

Until Next RRT meeting

Federal, state, and local Planning and Coordination Efforts		
Description	Location	Dates
Waterford 3 Station Site Drill	Various	October 1, 2024
Grand Gulf Nuclear Site Drill	Various	October 16, 2024
Our Lady of the Lake MS-1 Demonstration	Baton Rouge, LA	October 24, 2024
West Jefferson Medical MS-1 Demonstration	New Orleans, LA	October 25, 2024
FEMA Ingestion Pathway Workshop	LDEQ HQ	October 29, 2024



# **Louisiana Oil Spill Coordinator's Office (LOSCO)**

# Louisiana - LOSCO



- Personnel
- Laws/Regulations/Policies
- Well Plugging Priorities
- Hurricane Preparedness
- Planning Activities/Priorities
- RRT Activations
- LOSCO Spill Contact Information



# Agency Organization Chart

Department of Public Safety - Superintendent	Robert Hodges
Louisiana Oil Spill Coordinator's Office - Coordinator	Manny Acosta
Louisiana Oil Spill Coordinator's Office - Deputy Coordinator	Karolien Debusschere
Louisiana Oil Spill Coordinator's Office - Program Manager	Gina Saizan
Louisiana Oil Spill Coordinator's Office - Responders	Multiple

# Louisiana - LOSCO



Role	RRT Member	Agency	Title	Contact Info
Primary	Karolien Debusschere	LOSCO	Deputy Coordinator	225-925-7017 Karolien.Debusschere@la.gov
Alternate	Gina Saizan	LOSCO	Program Manager	225-925-7016 Gina.Saizan@la.gov



# Laws/Regulations/Policies



HB 810



# Well Plugging Priorities

- LDENR OSR Main Webpage – Orphan Site list with Priorities (priority on last column)
  - You can export the data portal webpage to an Excel document to make it sortable
  - <http://www.dnr.louisiana.gov/index.cfm/page/155>
  - <http://sonlite.dnr.state.la.us/pls/apex/f?p=108:12050:33268423224>
- LDENR OSR Federal Funding Site – Orphan site with updates/documents/bids
  - Updated as the project progresses
  - <http://www.dnr.louisiana.gov/index.cfm/page/1622>



# Hurricane Preparedness Preseason



- Does the Agency participate in stakeholder outreach events for hurricane preparedness? If so, provide examples.
  - Yes
  - Local Emergency Planning Committee (LEPC) meetings
  - Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP) ESF Leads Quarterly Meetings
- Does the Agency participate or conduct hurricane preparedness exercises (WS, TTX, or FSE)? If so, provide dates, locations, lessons learned and/or recommended best practices.
  - Participate
  - Executive Education Seminar
  - Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP) Rehearsal of Concepts (ROC) exercise

# Accomplishments

Since Last RRT Meeting 2-3 November 2023

Federal, state, and local Planning and Coordination Efforts		
Description	Name	Dates
Drills	LOOP	11/08/23
	EMPCO MASE	03/28/24
	Colonial Tier 3	04/24-25/24
	Chevron	05/08-09/24
	GIUES (USCG and BSEE)	Multiple
Meeting	SETX/SWLA AC	03/06/24
Plan	Special Monitoring of Applied Response Technologies (SMART)	n/a
	RRT-6 Fish and Wildlife and Sensitive Environments Plan – Annex 28	n/a
	Area Contingency Plans	n/a

# Outlook

Until Next RRT meeting 13-14 Nov 2024 and beyond

## Federal, state, and local Planning and Coordination Efforts

Description	Location	Dates
Meeting	ESF10 Coordination	TBD
	SE Louisiana Area Committee Meeting	05/22/24
	Statewide AC Meeting	06/11/24
	LA Statewide Area Committee Executive Steering Group (LA SACESG)	06/11/24 10/16/24
	CGA Annual Meeting	07/11/24
	SCLA AC Meeting	09/10/24
Drill	GIUES	multiple
Plan	RRT-6 Priorities	ongoing
	LA Statewide Area Committee Executive Steering Group Priorities (LA SACESG) (see next 8 slides)	ongoing
	Area Committee Priorities	TBD



# LA Statewide Area Committee Executive Steering Group (LA SACESG)



Priority List – In Progress or Continuing			
Priority		Assigned	Status
1.	Conduct Two ESG Teleconferences Annually	LA SACESG	Ongoing
2	Conduct One Face-To-Face Meeting Annually	LA SACESG	Ongoing
3	Prioritize ACP Updates (including Charters and Memberships)	LA SACESG	Ongoing
4	Develop Geographic Response Strategies (GRS) Outreach Documents and Procedures	LA SACESG	In Progress
5	Implement Best Practices for State Historic Preservation Office (SHPO) Engagement	LA SACESG	In Progress
6	Training, Exercises, Lessons Learned Statewide Information Sharing	LA SACESG	In Progress
7	Revise ESF-10 Guidance and Natural Disaster Response Plan (NDRP)	LA SACESG	In Progress
8.	Develop Abandoned Facilities/Wells Assessment and Mitigation SOP	LA SACESG	In Progress

# LA SAC Executive Steering Group Planning Priority List Highlights

- Prioritize ACP updates (including charters/memberships)
  - Environmental Data Gateway
  - Risk Analysis: Shoreline Cleanup Methods
  - Annex 2 – Contact Spreadsheet

# Louisiana Oil Spill Management System (LOSMS)

**LOUISIANA OIL SPILL MANAGEMENT SYSTEM** 10.0.198

Search LOSCO Spill Response Search NRDA Search NRDA Restoration Projects Search Administrative Records Submit a Project Search Restoration Funds Environmental Data Gateway

**LOSCO Spill Response**  
This portal allows you to search available LOSCO Oil Spill Response records.  
SEARCH

**NRDA Information**  
This portal allows you to search available Louisiana NRDA information records.  
SEARCH

**NRDA Restoration Project Information**  
This portal allows you to search available Louisiana NRDA Restoration Project records.  
SEARCH

**LOSCO Managed Restoration Funds**  
This portal allows you to search available LOSCO managed restoration funds.  
SEARCH

**Administrative Record**  
This portal allows you to search available Louisiana Administrative Records.  
SEARCH

**Submit a Project**  
This portal allows you to submit a restoration project for potential inclusion in the Louisiana Regional Restoration Planning Program.  
SUBMIT A PROJECT

**Outreach**  
Outreach events and activities are designed to be educational and informative. LOSCO is available to visit a variety of venues such as: classrooms, community based festivals, meetings, drills, trainings, and much more.  
CONTACT US

**Environmental Data Gateway**  
This portal provides access to open tabular and geospatial data sets, web based applications, and websites related to oil spill response and natural resource/environmental management.  
SEARCH

**LOSMS**  
[data.losco.org](http://data.losco.org)  
CONTACT US:  
[LOSICO@LA.GOV](mailto:LOSICO@LA.GOV)

This database was created and is maintained by the La. Oil Spill Coordinator's Office (LOSICO) for informational purposes only. The user should be aware that the information contained in this database may have come from a variety of sources, which are of varying degrees of accuracy. LOSICO does not warrant or guarantee its accuracy, nor does LOSICO assume any responsibility or liability for any reliance thereon. The information in this database is not and is in no way intended to be comprehensive and does NOT contain information on all oil spills impacting Louisiana.

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- Oil Spill Response Records
- NRDA Information
- NRDA Restoration Project Information
- LOSCO Managed Restoration Funds
- Administrative Records
- Restoration Project Submittal
- Outreach Event Request
- **Environmental Data Gateway**

# Louisiana Oil Spill Management System (LOSMS)

## LOUISIANA OIL SPILL MANAGEMENT SYSTEM

10.0.352

Search LOSCO Spill Response Search NRDA Search NRDA Restoration Projects Search Administrative Records Submit a Project Search Restoration Funds **Environmental Data Gateway**



### Environmental Data Gateway

The Environmental Data Gateway (EDG) identifies and catalogues a variety of information and technical data potentially useful in oil spill prevention, planning and response initiatives throughout inland and coastal Louisiana. The EDG is designed to provide quick access to open tabular and geospatial data sets, web based applications, and websites to oil spill response and natural resource/environmental management practitioners.

Category

Organization

Keyword Search



### Ambient Air Monitoring Data & Reports

LA Dept. of Environmental Quality (LDEQ)

<https://www.deq.louisiana.gov/page/ambient-air-monitoring-data-reports>

This web portal includes current and historical ambient air monitoring data and reports by the LA Dept. of Environmental Quality (LDEQ).

Category: Environmental Quality and Monitoring



### Bureau of Safety Environmental Enforcement (BSEE) Data Center

Bureau of Safety Environmental Enforcement (BSEE)

<https://www.data.bsee.gov>

The Bureau of Safety Environmental Enforcement (BSEE) Data Center includes, among other information, data on offshore fields and reserves, wells, leases, pipelines, and platforms/rigs.

Category: Cadastral; Economic; Governmental Unit; Infrastructure



### Census Data

US Census Bureau

# Risk Analysis: Shoreline Cleanup Methods



**HOMEPORT**  
US DEPARTMENT OF HOMELAND SECURITY  
UNITED STATES COAST GUARD

Missions

Port Directory

Featured Homeport Links ▾

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My Homeport | Contingency Plans | Area Contingency Plan

## South-central Louisiana Area Contingency Plan (SCLACP)

**Summary:** The South-central Louisiana Area Contingency Plan (SCLACP) describes the strategy for a coordinated federal, state, tribal, and local response to a discharge or substantial threat of discharge of oil, or a release or substantial threat of release of hazardous substance(s), within the boundaries of the South-central Louisiana coastal zone.



### ATTACHMENTS:

- > 2023.0\_SCLACP.pdf
- > A-Annex.1\_Risk.Analysis.Shoreline.Cleanup.Methods.pdf
- > B-Annex.1a\_Risk.Analysis.Area.Planning.Scenarios.pdf
- > C-Annex.1b\_Risk.Analysis.Places.of.Refuge.Policy.pdf
- > D-Annex.2\_Contact.Spreadsheet.pdf
- > E-Annex.2a\_Contacts.USCG.DOCL.ICS.Form-207.pdf
- > F-Annex.3\_Initial.Reporting.Form.pdf
- > G-Annex.4\_Site.Safety.Plan.pdf
- > H-Annex.5\_Public.Health.and.Safety.Environmental.Health.Support.Guidance.pdf
- > I-Annex.5a\_Public.Health.and.Safety.Community.Air.Monitoring.Protocols.pdf
- > J-Annex.5b\_Public.Health.and.Safety.Water.Sampling.Protocols.pdf
- > K-Annex.6\_Response.Protocols.96-Hour.Plan.pdf
- > L-Annex.6a\_Response.Protocols.Volunteers.pdf
- > M-Annex.6b\_Response.Protocols.Disposal.pdf
- > N-Annex.6c\_LA.Decanting.pdf
- > O-Annex.7\_Consultations.LA.SHPO.pdf
- > P-Annex.8\_Hazardous.Substance.Response.pdf
- > Q-Annex.9\_Marine.Fire.Fighting.and.Salvage.pdf
- > R-Annex.11\_Unconventional.Oil.Response.pdf

A1 Group 3: Medium Crude Oils and Intermediate Refined Products

A	B	C	D Inland Habitat Types												R Shoreline Habitat Types												AA	AB
Group 3: Medium Crude Oils and Intermediate Refined Products			Water				Land								Intertidal													
Green= Least Impact Yellow= Some Impact Orange C= Significant Impact Red= Greatest Impact I - Insufficient Information-			Lake (API 2016 pg. 44)	Pond (API 2016 pg. 44)	Large River (API 2016 pg. 44)	Stream (API 2016 pg. 44)	Developed Land (API 2016 pg. 44)	Forested Upland (API 2016 pg. 44)	Forested Wetland (API 2016 pg. 44)	Grassland/ Cropland (API 2016 pg. 44)	Vegetated Shoreline (NOAA & API 1994 pg. 78)	Mud (NOAA & API 1994 pg. 84)	Grassy Wetland (API 2016 pg. 44)	Permeable Substrate (API 2016 pg. 44)	Floating Marsh (Henry et al. 2003 pg. 4)	Impermeable Substrate (API 2016 pg. 44)	Exposed, Solid Man-made Structures (NOAA)	Sand Beaches (NOAA 2010a pg.22)	Sand and Gravel Beaches (NOAA 2010a pg.28)	Gravel Beaches (NOAA 2010a pg.31)	Riprap (NOAA 2010a pg.34)	Exposed Tidal Flats (NOAA 2010a pg.37)	Sheltered, Solid Man-made Structures (NOAA)	Peat Shores (NOAA 2010a pg.47)	Sheltered Tidal Flats (NOAA 2010a pg.50)	Salt to Brackish Marsh (NOAA 2010a pg.53)	Mangroves (NOAA 2010a pg.56)	Coral/Reefs
Response Technique			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
Natural Attenuation			A	B	A	B	B	B	A	A	B	A	B	A	C	A	A	B	B	B	B	A	B	A	B	B	A	
Containment/Recovery																												
Booming			A	A	A	A	-	-	B	-			B	-	-	-												
Skimming			A	A	A	A	-	-	B	-			B	-	-	-												
Barriers			A	A	A	A	A	A	B	A			D	A	-	A	-	B	C	B	-	B	-	-	C	B	B	
Trenching			-	-	-	B	A	B	D	B			D	A	-	-	-	B	C	B	-	B	-	-	C	B	B	
Removal																												
Manual Removal			-	B	-	B	A	A	B	A	B	C	B	A	A <sup>(1)</sup>	A	B	A	B	B	A	B	B	B	C	C*	C	
Vacuum/Pumping			A	A	A	A	A	A	B	A	B	A	A	B	A	-	B	B	B	A	B	-	B	B	B	B		
Sorbents			A	A	A	A	A	A	A	B	A	A	A	B	A	A	A	A	A	A	A	A	A	A	A	A	A	
Excavation			B	D	B	B	A	B	D	B	C	D	D	B	D	-	-	B	B	C	C	C	-	D	-	D**	-	
Dredging			B	D	B	D	-	-	D	-	C	D	D	-	D	-	-	B	B	C	C	C	-	D	-	D**	-	
Debris Removal			A	A	A	A	A	A	A	B	B	A	A	C <sup>(2)</sup>	A	-	A	A	A	A	A	B	A	B	B	B	A	
Washing/Recovery																												
Flooding			-	-	-	A	A	A	A	A	A	A	A	-	A	-	A	B	B	B	B	A	-	B	B	B	B	
Low Pressure/Ambient Water Flushing			-	-	-	A	A	B	B	B	A	C	A	A	-	A	A	B	A	A	B	B	B	C	B	C		
High Pressure/Hot Water Flushing			-	-	-	A	B	D	-	D	D	D	B	-	B	C	-	D	C	C	C	-	C	-	-	-		
In Situ Treatment																												
Sediment Reworking/Mixing On Land			-	-	-	A	B	D	B	D	D	D	B	B <sup>(3)</sup>	-	-	B	B	B	-	C	-	B	-	D	-		
Sediment Agitation in Water			B	B	B	B	-	-	D	-			D	-	-	-												
Vegetation Removal			B	B	B	B	A	B	D	B	B	D	-	D <sup>(4)</sup>	-	B	C	C	C	C	D	-	C	D	C	-		
In Situ Burning			A	B	A	B	A	D	D	A	B	C	B	B	I	B	-	C	C	C	D	-	-	-	B	-		
Biological Treatment																												
Nutrient Addition			-	-	-	A	A	B	A	B	I	B	A	I	-	-	A	A	A	A	C	I	B	I	B	I		
Microbe Seeding			-	-	-	A	A	B	A	I	I	-	A	I	-	-	I	I	I	I	I	I	I	I	I	I		
Phytoremediation			-	-	-	A	A	A	A			B	A	-	-	-	I	I	I	I	I	I	I	I	I	I		
Chemical Treatment																												
Solidifier			A	A	A	A	A	B	-	D	C	A	-	A	-	B	B	B	B	B	C	-	-	C	C	-		
Surface Washing Agent			-	-	-	A	B	B	-	I	D	B	B	-	B	B	C	C	B	B	-	B	-	-	B	C		

<b>Group 3: Medium Crude Oils and Intermediate Refined Products</b>		<b>Resource Group</b>					
<b>Green</b> A= Least Impact <b>Yellow</b> B= Some Impact <b>Orange</b> C= Significant Impact <b>Red</b> D= Greatest Impact <b>I</b> = Insufficient Information-		Birds	Fish	Aquatic Invertebrates	Amphibians	Reptiles	Mammals
<b>Response Technique</b>		1	2	3	4	5	6
Natural Attenuation		D	D	D	D	D	D
<b>Containment/Recovery</b>							
Booming		A	A	A	A	A	B
Skimming		A	A	B	A	A	B
Barriers		A	A	B	A	B	A
Trenching		B	C	B	B	C	A
<b>Removal</b>							
Manual Removal		A	B	B	B	B	A
Vacuum/Pumping		A	A	B	B	B	B
Sorbents		A	A	A	A	A	A
Excavation		A	C	D	C	C	B
Dredging		B	C	D	C	C	B
Debris Removal		A	B	C	C	C	A
<b>Washing/Recovery</b>							
Flooding		C	B	C	C	B	B
Low Pressure/Ambient Water Flushing		C	C	C	C	B	B
High Pressure/Hot Water Flushing		B	D	D	D	D	D
<b>In Situ Treatment</b>							
Sediment Reworking/Mixing On Land		C	C	C	B	C	B
Sediment Agitation in Water		C	C	D	C	B	B
Vegetation Removal		B	B	C	C	B	B
In Situ Burning		B	A	B	C	C	C
<b>Biological Treatment</b>							
Nutrient Addition		A	B	C	B	B	A
Microbe Seeding		A	C	D	C	B	C
Phytoremediation		B	A	A	A	A	A
<b>Chemical Treatment</b>							
Solidifier		A	A	A	A	A	A
Surface Washing Agent		A	D	D	D	C	B
Herding Agent		B	B	B	C	C	B
Dry Ice Blasting		-	-	-	D	D	D

Disclaimer: While these matrices provide general guidance regarding potential appropriate cleanup methods in various environments, specific response tactics (cleanup methods) will need to be employed on an incident- and site-specific basis. The potential impacts of response actions on all resources at risk must be considered. Moreover, RRT 6 Fish and Wildlife and Sensitive Environments Plan, Annex 28 the existence of these matrices does not preclude the need to engage with resource agency representatives to discuss specifics associated with a particular response.

# LA SAC Executive Steering Group Planning Priority List Highlights

- Prioritize ACP updates (including charters/memberships)
  - Environmental Data Gateway
  - Risk Analysis: Shoreline Cleanup Methods
  - Annex 2 – Contact Spreadsheet

# RRT Activation



# Louisiana Oil Spill Coordinator's Office

Department of Public Safety & Corrections



24-Hour Emergency Response Contact:

(225) 200-1921

[la.oilspill@la.gov](mailto:la.oilspill@la.gov)

**TO REPORT AN OIL SPILL, CALL:**  
**LSP HAZMAT Hotline (877) 925-6595**  
**NRC Hotline (800) 424-8802**





# **Texas Commission on Environmental Quality (TCEQ)**



# TCEQ Spring 2024 RRT Report

Anthony Buck



# TCEQ RRT Members

Role	RRT Member	Agency	Contact Info
Primary	Anthony Buck	TCEQ	512-563-3935 anthony.buck@tceq.Texas.gov
Alternate	Jeff Kunze	TCEQ	512-605-9651 jeff.kunze@tceq.Texas.gov

# Overview

## Mission Statement

- The Texas Commission on Environmental Quality strives to protect our state's public health and natural resources consistent with sustainable economic development. Our goal is clean air, clean water, and the safe management of waste.

# Overview

## Agency Philosophy

To accomplish our mission, we will:

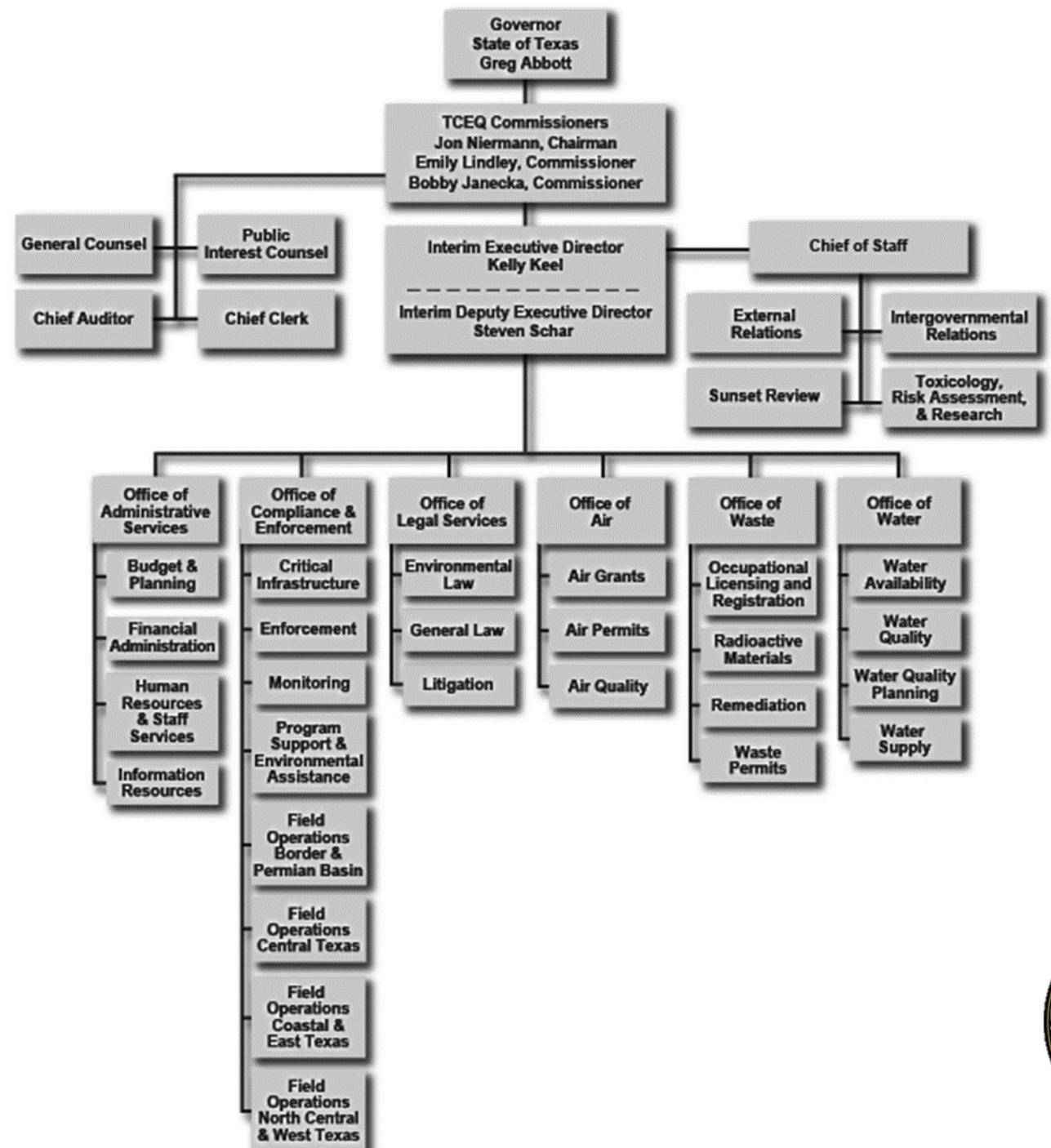
- base decisions on the law, common sense, sound science, and fiscal responsibility;
- ensure that regulations are necessary, effective, and current;
- apply regulations clearly and consistently;
- ensure consistent, just, and timely enforcement when environmental laws are violated;
- ensure meaningful public participation in the decision-making process;
- promote and foster voluntary compliance with environmental laws and provide flexibility in achieving environmental goals; and
- hire, develop, and retain a high-quality, diverse workforce.

## EEO Commitment

- The TCEQ is an equal opportunity employer. The agency does not allow discrimination on the basis of race, color, religion, national origin, sex, disability, age, sexual orientation or veteran status.



# TCEQ ORG CHART



# Trends/Challenges

## Several Large Complex Responses

- Shell Deer Park
- Sherman Williams Fire
- Sound Resources
- Shamrock Products



# Trends/Challenges

## Tier II Reports

- Total T2 facilities reported for FY23: 109,141
- Total AN facilities reported for 2023: 21

# TCEQ Preparedness for 2024 Hurricane Season

- **NDOW Communications Exercise**
- **ESF-10 pre-season meeting**
- **Full Scale hurricane exercise**
- **SOC hurricane exercise**
- **TMF hurricane ROC Drill**
- **RM trainings throughout Texas**



# TCEQ Preparedness for 2025 Hurricane Season

**The cycle starts all over again**



# Questions?





# **Railroad Commission of Texas (RRC)**



## Railroad Commission of Texas – Personnel Updates

Role	Name/Position	Division/Section	Contact Info
Primary RRT Representative	Peter G. Pope, Manager	Oil & Gas – Site Remediation – Field Operations	512-463-8202 peter.pope@rrc.texas.gov
Alternate RRT Representative	Melissa LaSalle, Engineering Specialist	Oil & Gas – Field Operations	512-463-6799 melissa.lasalle@rrc.texas.gov
Emergency Operations	Chance Karshens, Safety Officer	Critical Infrastructure	512-463-7318 chance.karshens@rrc.texas.gov
Emergency Operations	Tyler Lichnovsky, Safety Officer	Critical Infrastructure	512-318-3353 tyler.lichnovsky@rrc.texas.gov



# Laws/Regulations/Policies

No updates



# Outlook/Accomplishments

Federal, state, and local Planning and Coordination Efforts		
Description	Location	Dates
Annual Pre-hurricane Season ESF-10 Call	Call In	May 17, 2024
Rapid Needs Assessment Training	San Angelo EOC	March 22, 2024
HAZWOPER 8-hr Refresher	RRC Austin	April 4, 2024
NDOW	TCEQ Austin	January 10 and 11, 2024



# Metrics/Trends/Challenges

## **FY 24 Oilfield Cleanup Program Work Plan**

### Plugging

Goal - 1,800 plugged wells (1,000 OGRC, 800 IIJA)

Performance –849 as of 5/6/2024

### Cleanup

Goal - 400 completed activities (200 OGRC, 200 IIJA)

Performance – 246 as of 5/6/2024



# Funding Sources

## Plugging

State – Oil and Gas Regulation and Cleanup Fund (OGRC)

Federal – IIJA funds from DOI and NPS (Indirectly)

## Cleanup

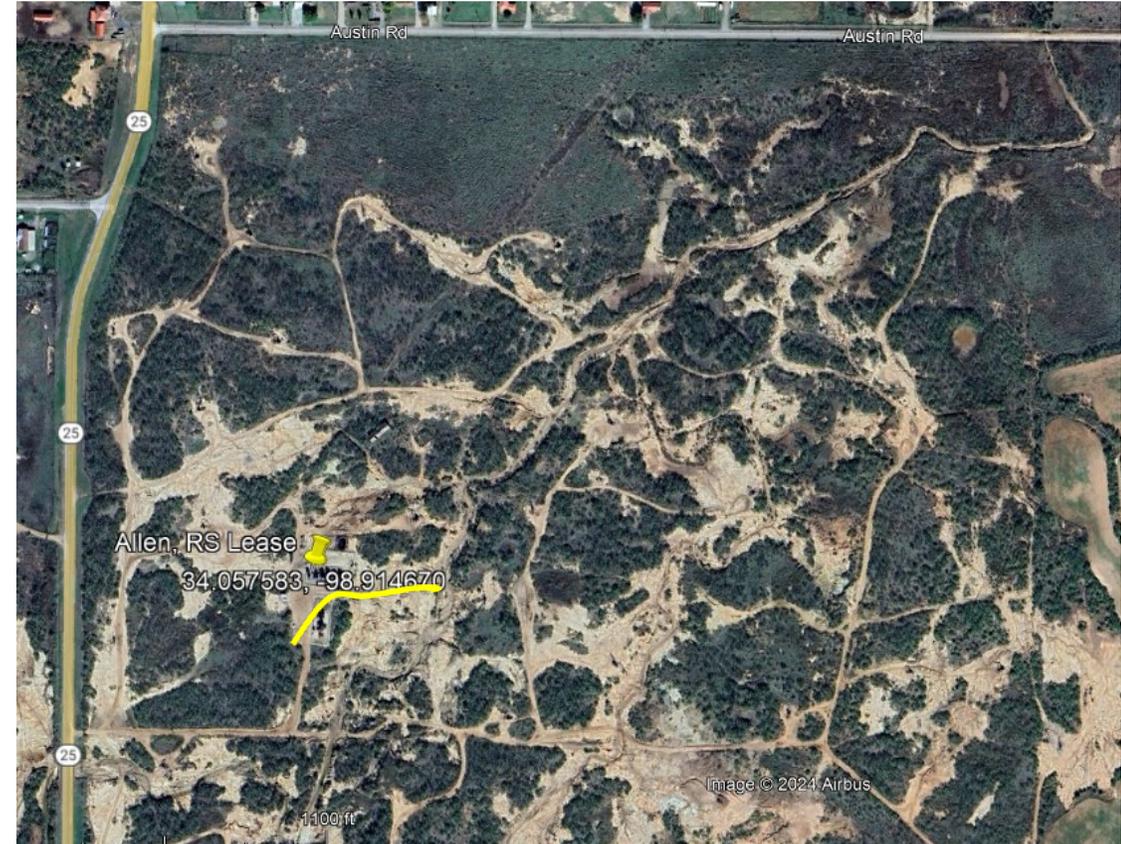
State – Oil and Gas Regulation and Cleanup Fund (OGRC)

Federal – IIJA funds from DOI, NPS (Indirectly),  
EPA (Brownfield Program)



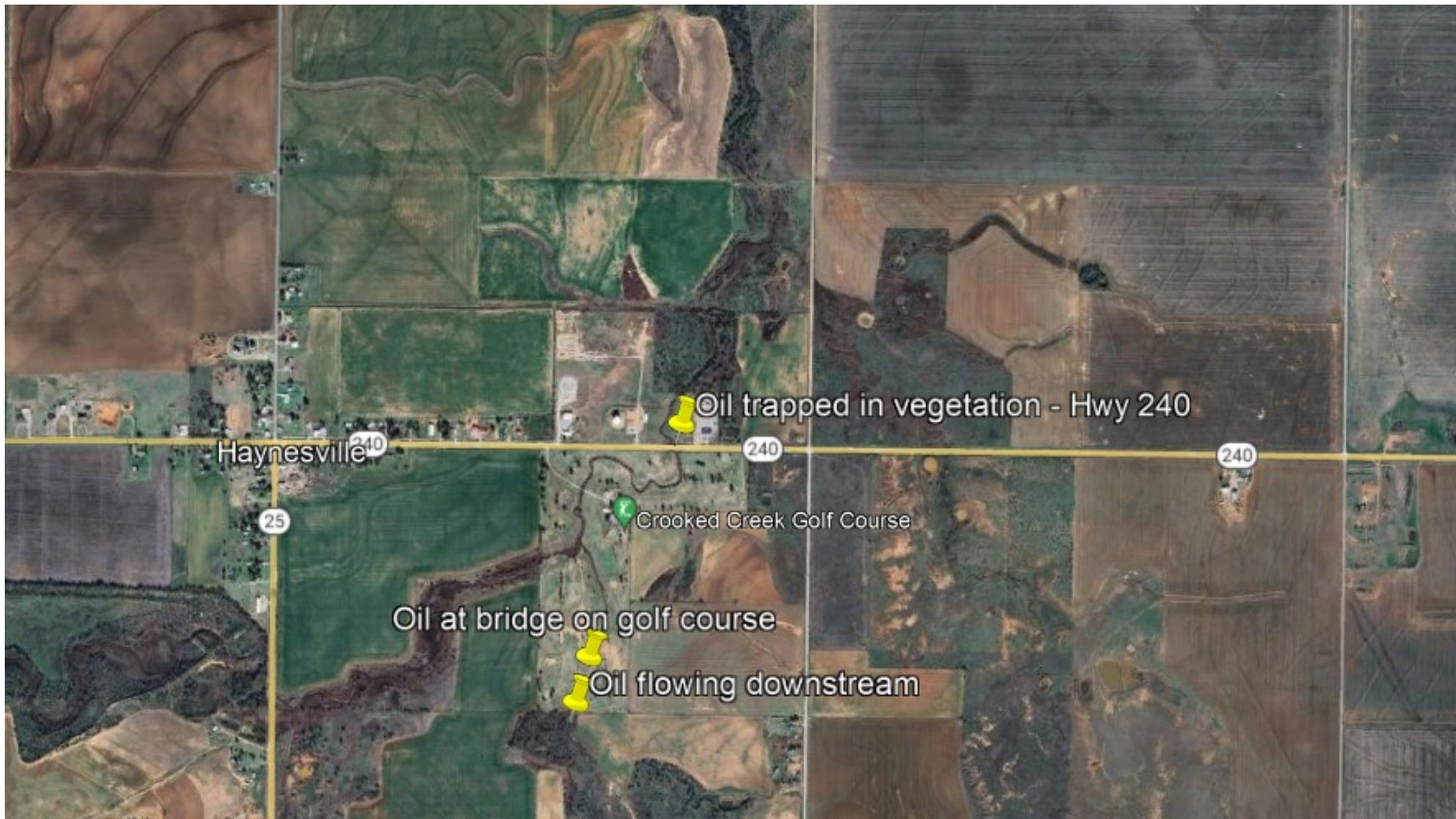
# Allen, R.S. Lease (26755), Wichita County

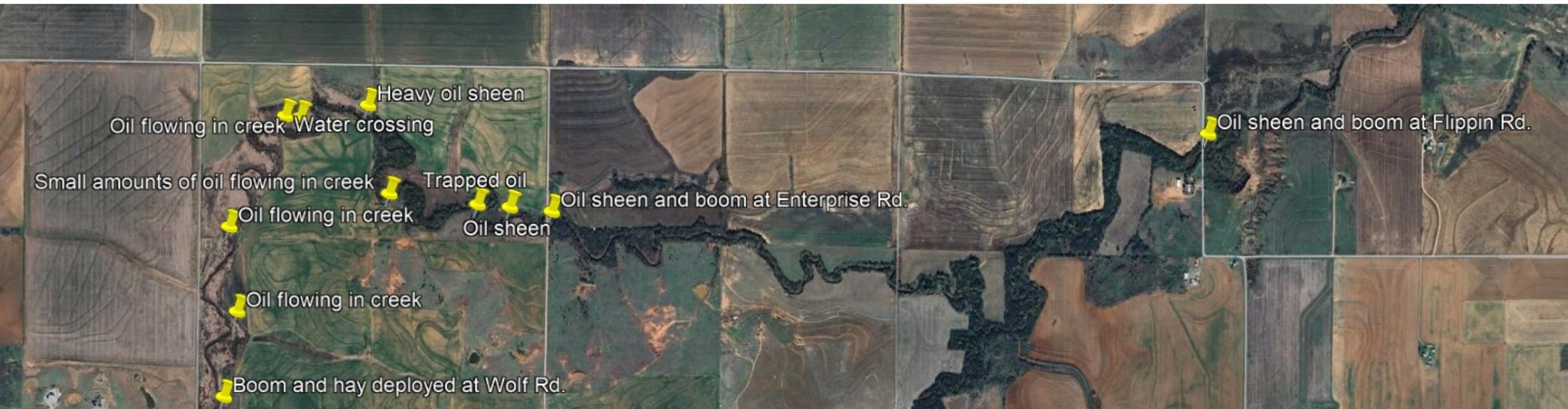
<b>Date:</b>	April 27, 2024
<b>Type and amount of product spilled:</b>	60 BBLs Crude Oil.
<b>Cause of spill:</b>	Collapsed 3" skim line from SW tank inside dike. Breached the diked area and flowed into a creek traveling over 3 miles. (7 miles to the Red River)
<b>Key operational activities:</b>	Primary and secondary containment failed during heavy rains. RRC drone survey sighted oil occurrences. Operator is utilizing flume, hay bales, drone surveys, sorbent boom, hard booms, weir dams, skimmers, and vacuum trucks to recover oil.
<b>Agencies Involved:</b>	RRC
<b>Major lessons learned:</b>	Majority of oil migrated downstream before RRC was notified. Ongoing as of May 7. RRC considered taking over cleanup.













**Texas General Land Office (TGLO)**



## Texas General Land Office

<b>Role</b>	<b>RRT Member</b>	<b>Agency</b>	<b>Contact Info</b>
Primary	Jimmy A. Martinez	GLO	512-475-1575 Jimmy.a.Martinez@glo.texas.gov
Alternate	Brent Koza	GLO	361-438-4928 Brent.koza@glo.texas.gov



# Overview

- Derelict Vessel Removals
  - Additional/Permanent funding sources
  - Partnership Agreements
- Response Equipment Acquisition
  - New response boats
  - TABS Buoys
- Staffing updates
  - New support staff
- 2024 Storm Season Preparation



# OIL SPILL PREVENTION & RESPONSE

**Texas Land Commissioner**  
Dawn Buckingham, M.D.

**Chief Clerk**  
Mark Havens

**Deputy Land Commissioner**  
Jennifer Jones

**Sr. Deputy Director Coastal Protection**  
David Green

**Project Manager,**  
Gloria Maynard

**Deputy Director Oil Spill**  
Jimmy A. Martinez

**Executive Assistant**  
(vacant)

**Public Outreach & NDOW Coordinator**  
Austin Dulany

**R&D Scientific Support**  
Brent Koza

**DVS Coordinator/Cost Documentation**  
Michelle Castilleja

**Compliance and Enforcement Coordinator**  
D'Anne Stites\*

**Preparedness & Prevention Coordinator**  
Bruce Simons

**Vessel Operations Coordinator**  
Craig Cook  
(La Porte)

**Upper Texas Coastal Zone Regional Director**  
Jeff Davis

**Admin Assistant**  
Season Reeves

**South Texas Coastal Zone Regional Director**  
Raymond Oliveira

**Admin Assistant**  
Alejandra Rivas

**Nederland, Reg 1 Manager**  
Eric Robertson

**La Porte, Reg 2 Manager**  
Jesse Mayorga

**Corpus Christi, Reg 3 Manager**  
James Duenes

**Brownsville, Reg 4 Manager**  
Michael Janskowski

**Port Lavaca, Reg 5 Manager**  
Tony Belton

**Response Officers**  
Jami Brown  
Ron Gaspard  
Ryan Lytle  
Ricardo Saldana Jr.  
Veronica Sealy

**Response Officers**  
Kurt Adams  
Jordan Binkley  
Wes McDaniel  
Gray Powell  
Paula Saltzmann  
Tyler Swanson  
Trey Trahan  
(vacant)

**Response Officers**  
Marshall Hawkins  
Daniel Davis  
Frank McDaniel  
Pedro Naranjo  
Tim Moebius  
Albert Oswalt  
William Thompson

**Response Officers**  
Troy McWhorter  
Zeke Navarro  
Gonzalo Pena

**Response Officers**  
Robert Koch  
Doreen Mata  
Rusty Moon

**Admin. Assistant**  
Amanda Marek



# Laws/Regulations/Policies

## Derelict Vessel Partnership Agreements

**A new tool for resource sharing for local communities to remove derelict vessels**

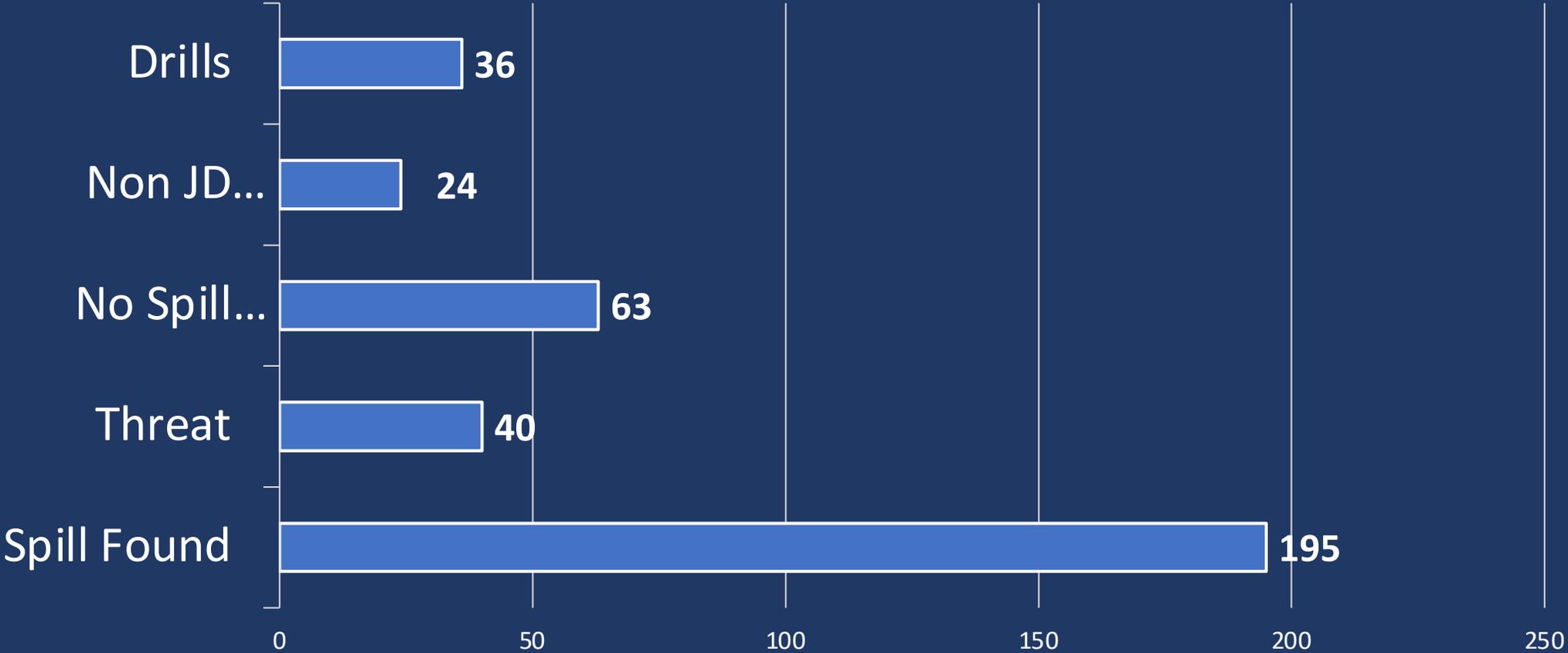
- Although the General Land Office has authority to remove abandoned/derelict vessels, the agency is not required to pull and dispose of vessels
  - Through a newly developed Partnership Agreement process, the GLO may authorize an abandoned vessel as eligible for removal and an interested party may pay the salvage and disposal costs
  - The Agreement Process is intended to be an expedited process and should be completed in a 5-10 days
  - Partnership Agreements are available for both public and private entities
    - Governmental Entity Vessel Removal Partnership Agreement
    - Non-Governmental Vessel Removal Partnership Agreement
- Private parties, non-profit or other organizations, as well as individuals, are eligible



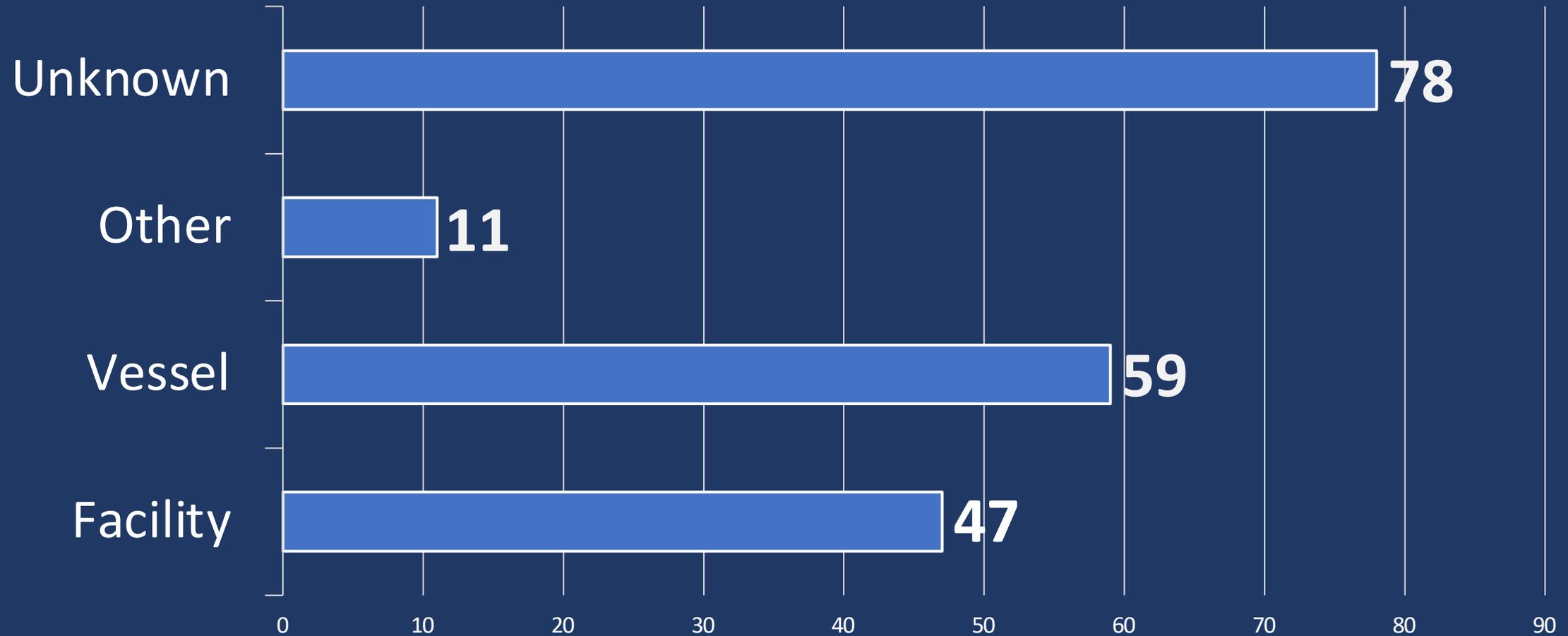
*27' fiberglass sailboat removed from Clear Lake, Harris County by Citizens Against Dumping Derelicts (CADD)*

# Oil Spill Responses FY 2024 – 1<sup>st</sup> Half

358 total responses, including drills

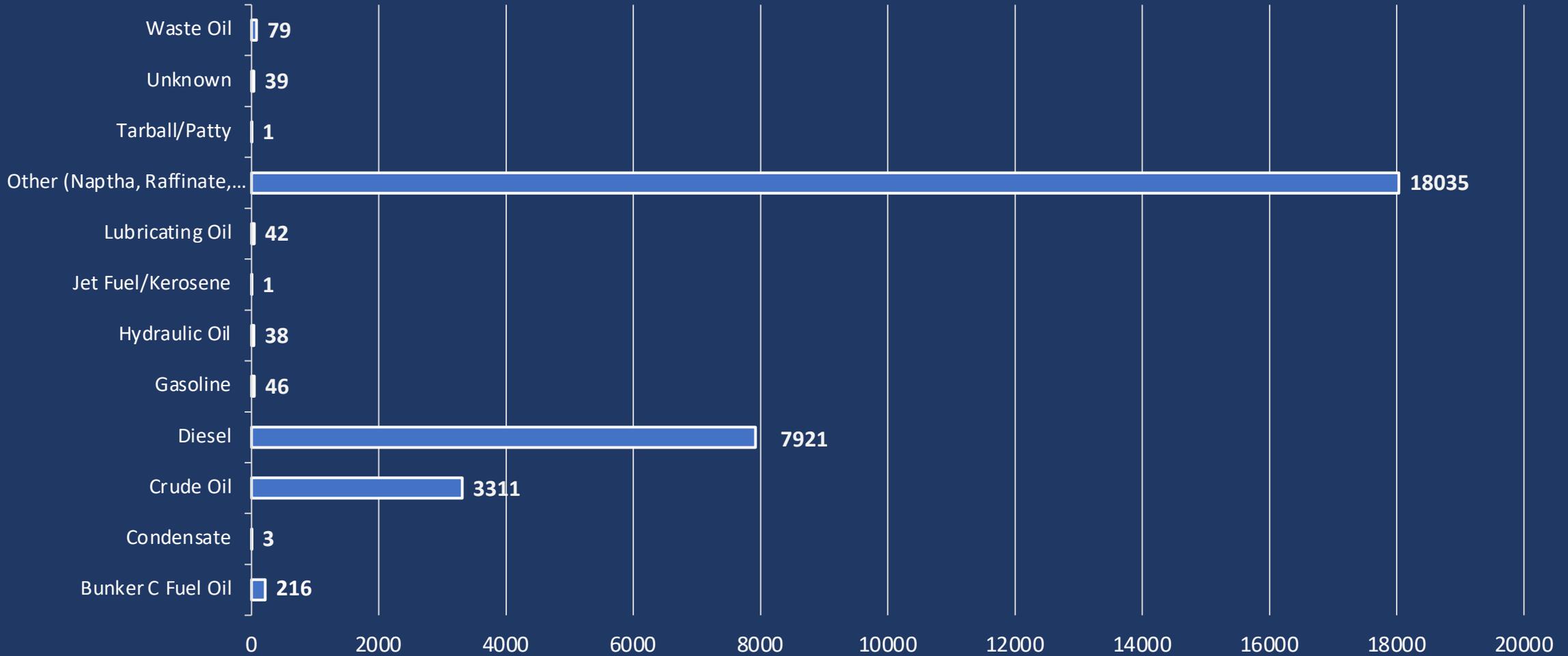


# Oil Spill Sources FY 2024 – 1<sup>st</sup> Half



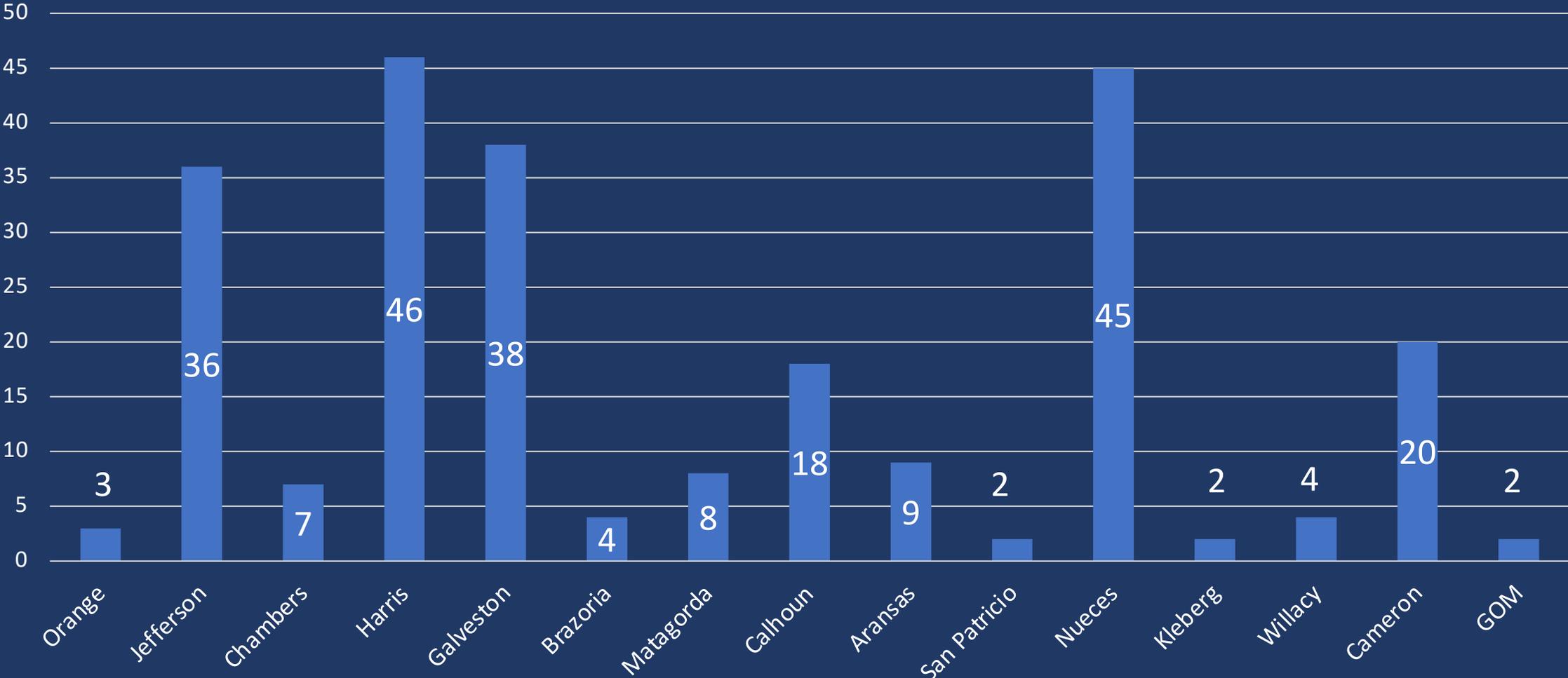
# Oil Spill Product Spilled

## FY 2024 – 1st Half



# Oil Spill Program Spill & Threat Locations by County

## FY 2024 – 1<sup>st</sup> Half



# Spills of Significance

## FY 2024 – 1<sup>st</sup> Half

Incident Date	Source	County	Water Body	Product	Amount in Water
1/26/2024	Vessel	Harris	San Jacinto River	Naptha	18,000
12/26/2023	Vessel	Jefferson	Sabine Neches Ship Channel	Diesel	5,753
12/16/2023	Facility	Jefferson	Neches River	Crude Oil	3,150
2/19/2024	Vessel	Jefferson	Gulf of Mexico	Diesel	1,979
12/22/2023	Vessel	Galveston	Texas City Ship Channel	Bunker C/Heavy Fuel	201
11/25/2023	Vessel	Harris	Buffalo Bayou	Diesel	150
9/15/2023	Unknown	Nueces	Gulf of Mexico	Crude Oil	73
11/28/2023	Vessel	Jefferson	Gulf Intracoastal Waterway	Diesel	50
1/20/2024	Facility	Harris	Houston Ship Channel	Naptha	42



# Oil Spill Prevention Activities & Targets

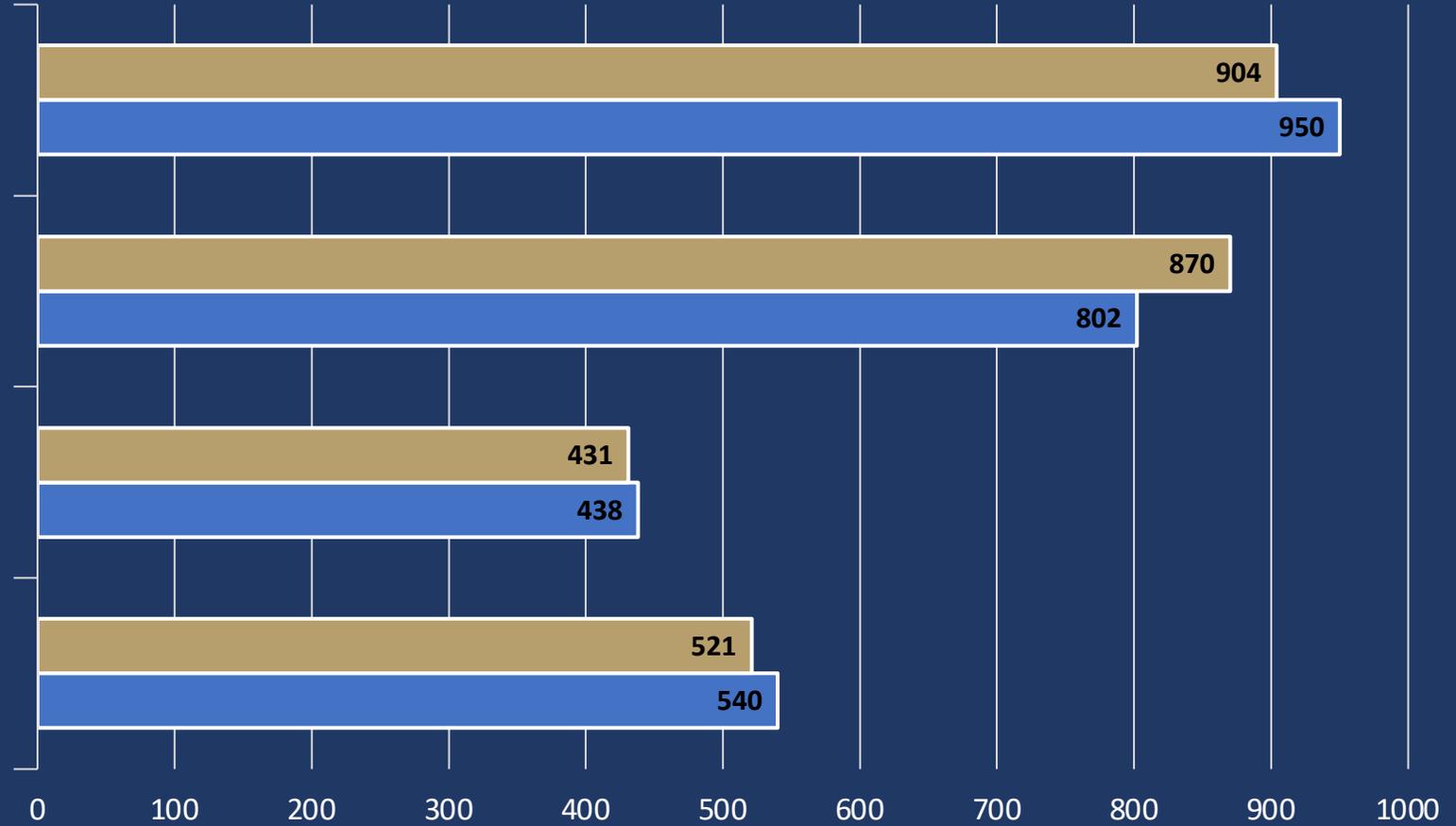
## FY 2024 – 1<sup>st</sup> Half

Shore & Water Patrols

Vessel Activities

Facility Activities

Certified Facilities



■ FY 2024

■ Target

Texas General Land Office  
Commissioner Dawn Buckingham, M.D.



# Oil Spill Derelict Vessel Removal Activity

## FY 2024 – 1st Half

The Oil Spill Program continues to support derelict vessel removals to rid coastal areas of pollution sources, environmental and navigational hazards through two programs:

- **Derelict Abandoned Vessel Program** - Oil Spill uses administrative authority to remove abandoned vessels using existing program resources.
- **Vessel Turn In Program (VTIP)** – VTIP is a voluntary collaborative program with participating cities, counties, state agencies and local businesses that allows owners to bring their unwanted vessels to local turn-in events at no cost.
  - 4 VTIP Events conducted from January – April, 2024
    - Port Isabel/South Padre Island
    - Galveston Co.
    - Brazoria Co.
    - Orange Co.
  - **137** vessels relinquished during FY 2024



# Derelict Abandoned Vessel Program Removals FY 2024 – 1<sup>st</sup> Half

County	Vessels Removed
Jefferson	1
Chambers	6
Harris	4
Galveston	8
Brazoria	1
Calhoun	1
Matagorda	1
Aransas	1
Nueces	1
Cameron	3
<b>Total</b>	<b>27</b>



Texas General Land Office  
Commissioner Dawn Buckingham, MD





Texas General Land Office  
Commissioner Dawn Buckingham, M.D.





Texas General Land Office  
Commissioner Dawn Buckingham, M.D.



# Orphan Well Aging Infrastructure Cleanup

The GLO initially identified 186 orphan wells in Texas coastal bays for removal.

Oil Spill field teams conducted site assessments of the wells using a customized ArcGIS Field Map application.

Field personnel photographed and collected information on well location, condition and other data useful for plugging prioritization.

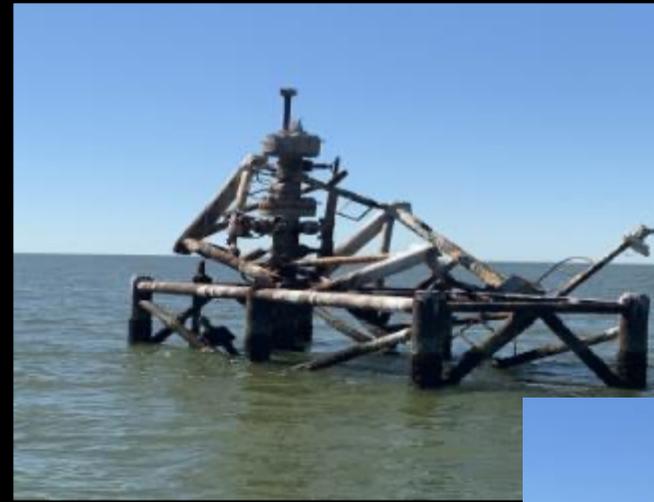
Oil Spill Austin staff analyzed the field data to quantify environmental sensitivity (proximity of the wells to wildlife refuges, sensitive habitat, shorelines and public parks) and examined spill history to assign a plugging prioritization score.

Oil Spill compiled a comprehensive report to share with the agency's Energy division and Railroad Commission partners for planning purposes.

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***The GLO is contributing \$10 million dollars to the RRC Oil & Gas Regulation Cleanup Fund to support orphan oil and gas well plugging in Trinity Bay.***

***The GLO and RRC have signed a Memorandum of Agreement and will develop a timeline for well plugging and associated platform removal.***



Texas General Land Office  
Commissioner Dawn Buckingham, M.D.





# Accomplishments

Description	Location	Dates
ExxonMobil Pipeline Exercise	Baytown	1-Nov-23
Clean Gulf Conference Exercise	San Antonio	7-Nov-23
TotalEnergies Petrochemicals & Refining USA GIUE	Port Arthur	15-Nov-23
Cheniere Spill Response Exercise	Gregory	14-Dec-23
Bryan Mound Strategic Petroleum Reserve Exercise	Freeport	10-Jan-24
Chevron Pasadena Refining System GIUE	Pasadena	25-Jan-24
NuStar Logistics LP - Corpus Christi Pipeline & Terminal GIUE	Corpus Christi	30-Jan-24
Titan Fuel Terminal Exercise	Harlingen	8-Feb-24
Witt O'Brien's 2024 IMT TTX	Houston	7-Mar-24
Houston Pipeline TGS 83rd Street Facility Exercise	Galveston	12-Mar-24
Big Hill PREP Exercise	Winnie	27-Mar-24
Valero Full-Scale WCD Exercise	Corpus Christi	27-Mar-24
Valero Refining GIUE	Houston	10-Apr-24
Phillips 66 Beaumont Terminal Deployment Exercise	Beaumont	9-May-24

# Spring 2024

## Hurricane Preparedness and Response





# Hurricane Preparedness



List the regulatory authorities over the following facilities or entities that handle hazardous substances and/or oil that may be impacted by a hurricane (e.g., permitted facilities, RMP, FRP, transfer facilities) ***The General Land Office Oil Spill Prevention and Response Program certifies coastal oil handling facilities - facilities located within 100 yards of coastal waters. The GLO also works regularly with the US Coast Guard, Texas Commission on Environmental Quality (TCEQ) and the Texas Railroad Commission.***

Does the Agency maintain a list of facilities or entities that may be impacted, with contact information? If so, how often is the list updated? ***Yes. The Oil Spill Program maintains a list of designated contacts (Persons in Charge) for every OSPRA certified facility. Keeping the contact information updated is the responsibility of the certificate holder; the GLO conducts annual audits and inspections to ensure contact with each facility.***

Does the Agency participate in stakeholder outreach events for hurricane preparedness? ***Yes. See Hurricane Season Planning Event Chart***

Does the Agency conduct any public affairs or external outreach to facilities (or public) potentially impacted? If so, provide examples of activities. ***Yes. The GLO provides storm information and resources through agency social media channels and website, outreach events.***

<https://www.facebook.com/photo/?fbid=566915568908642&set=a.21286332098053>

<https://www.facebook.com/photo?fbid=566623782271154&set=a.21286332098053>

<https://www.facebook.com/photo?fbid=565518282381704&set=a.212863327647203>

Does the Agency participate or conduct hurricane preparedness exercises (WS, TTX, or FSE)? If so, provide dates, locations, lessons learned and/or recommended best practices. ***Yes. See Hurricane Season Planning Event Chart.***



# Hurricane Preparedness

## Pre-Storm



- How does the Agency maintain situation awareness PRE-landfall (e.g., common operating picture, assessments, viewers)? Provide examples. ***The GLO maintains situational awareness in cooperation with other agencies and local partners such as Natural Disaster Operational Workgroup (NDOW), Disaster District Coordinators and Local Emergency Planning Committees (LEPC), Texas Division of Emergency Management (TDEM) and State Operations Center (SOC).***
- Provide Agency stakeholder outreach activities (e.g., conference calls, pre-positioning of LNOs, site walks, inspections). ***The GLO conducts pre-storm and pre-landfall assessments with stakeholders including marinas and environmental areas of concern where oil could escape.***
- Provide public affairs and external outreach activities (e.g., monitoring of social media, press releases, monitoring of local news broadcasts for community information). ***Oil Spill Prevention and Response works cooperatively with the agency's Communication Division to ensure public messages concerning safety and environmental needs in weather events are addressed.***



# Hurricane Planning Events



Description	Location	Date
Texas General Land Office Hurricane Planning Workshop	Austin	2/27/2024
Mid Coast Hurricane and Disaster Conference	Victoria	4/18/2024
NOAA Hurricane Preparedness Summit	Virtual	4/24/2024
Coastal Bend Hurricane Conference	Robstown	5/1/2024
NDOW Hurricane Exercise	Galveston	5/20/2024
Chambers County Judges Hurricane Workshop	Anahuac	5/23/2024
Texas Dept. of Emergency Management Hurricane Prep Exercise	Austin	6/25/2024



# **Arkansas Department of Energy and Environment (ADEE)**



**ARKANSAS**  
ENERGY & ENVIRONMENT



Role	RRT Member	Agency	Contact Info
Primary	Stephen Ratley	ADEE	<a href="mailto:Stephen.Ratley@adeq.state.ar.us">Stephen.Ratley@adeq.state.ar.us</a> 501-682-0716
Alternate	Zack Smalling	ADEE	<a href="mailto:Zack.Smalling@adeq.state.ar.us">Zack.Smalling@adeq.state.ar.us</a> 501-353-9244
Primary	Mark McEntire	ADEM	<a href="mailto:Mark.Mcentire@adem.arkansas.gov">Mark.Mcentire@adem.arkansas.gov</a> 501-258-2147
Alternate	Vacant	ADEM	
Primary	Andrew Haner	ADH	<a href="mailto:Andrew.Haner@arkansas.gov">Andrew.Haner@arkansas.gov</a> 501-661-2621
Alternate	Rebecca Davis	ADH	<a href="mailto:Rebecca.Davis@arkansas.gov">Rebecca.Davis@arkansas.gov</a> 501-661-2232



**ARKANSAS**  
ENERGY & ENVIRONMENT



## ADEM Overview

- ADEM Emergency Management Classes
  - 2023 – 48 trainings, 931 trained
  - 2024 – YTD 18 trainings, 224 trained
- ADEM HAZMAT Classes
  - 2023 – 69 trainings, 1449 trained
  - 2024 – YTD 14 trainings, 746 trained
- ADEM Pipeline Awareness Training
  - 2023 - 29 Classes, 943 Students
  - 2024 – YTD 32 Classes
- TIER II Reporting 2,278 Facilities – Reporting Year 2023



**ARKANSAS**  
ENERGY & ENVIRONMENT



## ADH Overview

- In the process of making the ‘Occupational and Military’ definition changes required by the state to the ‘Rules Pertaining to Lead-Based Paint Activities’ for AR
- Soil Screening, Health, Outreach, and Partnership (soilSHOP)
- PFAC Stakeholder Monthly Meetings



**ARKANSAS**  
ENERGY & ENVIRONMENT



## E&E Overview

- Air Monitoring Equipment
- Lithium Extraction
- Hydrogen Hub
- Orphaned Well Update
- Coal Plants & Mining



# E&E Emergency Management - DEQ

<b>Incident Category</b>	<b>Total</b>
Total # Incidents (October 25, 2023 – April 30, 2024)	171
# Referred to DEQ Regulatory Programs	22
<b>Environmental Media/Program Impacted</b>	<b>Total</b>
# Water	105
# Air	15
# Hazardous Waste	25
# Regulated Storage Tanks	4
# Solid Waste	1
# Multimedia	33
# Complaints	1083
# NRC	44

# Outlook

## Training

Description	Dates
HAZWOPER 8-hr refresher	Fall 2024
Hydrogen Sulfide Safety	Spring 2024
First Aid/CPR/AED	Multiple 2024

## Exercises/Workshops

Description	Dates
AEMA	August 27 <sup>th</sup> - 30 <sup>th</sup>
Union Pacific	May 8 <sup>th</sup>
New Madrid ROC	Fall 2023 & 2024

## Fed/State/Local planning and coordination

Description	Status
4H Construction, Fort Smith	Ongoing
Anthony Timberlands, Malvern	Maintenance
Warren Oil, West Memphis	Remediation



20-Minute Break

# Federal Agency / Tribal Reports





Department of Transportation (DOT) –  
**Pipeline and Hazardous Materials Safety  
Administration (PHMSA)**



# Federal Report Outs



# PHMSA Pipeline Contacts



**National Pipeline Incident Coordinator (NPIC)**

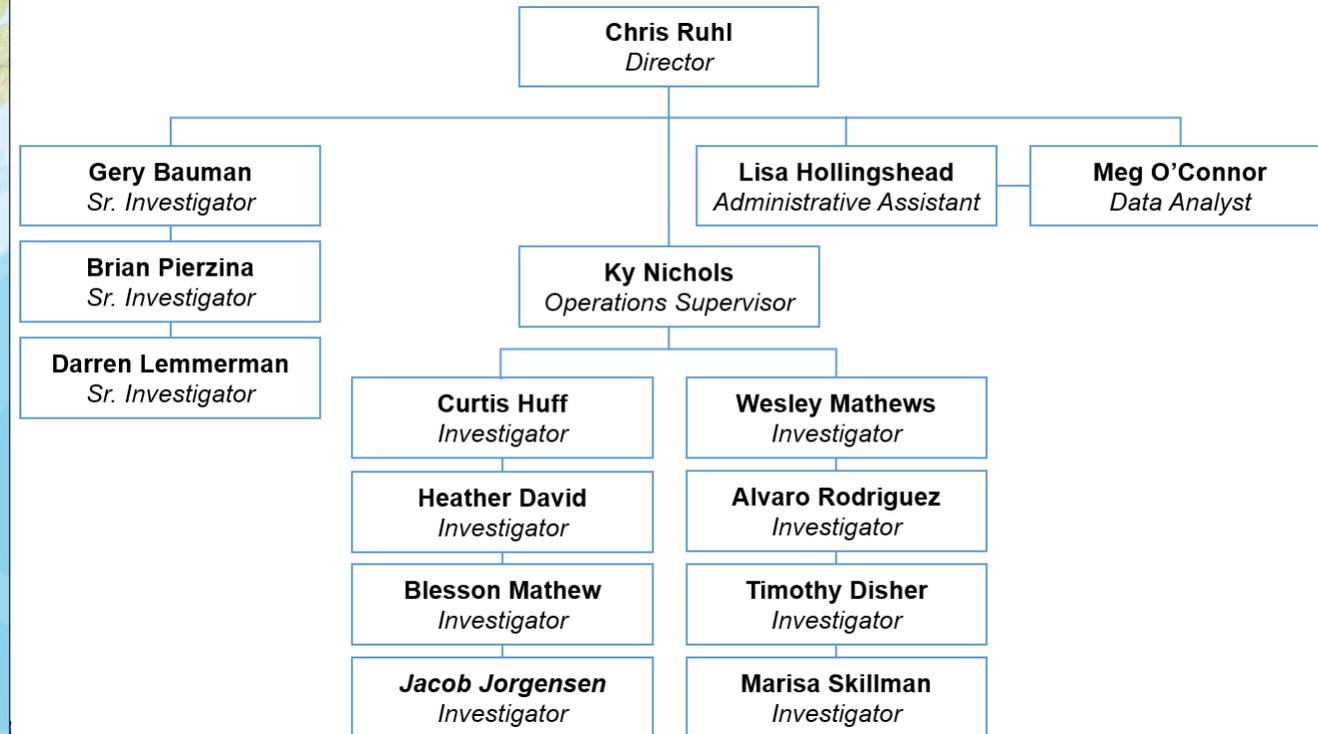
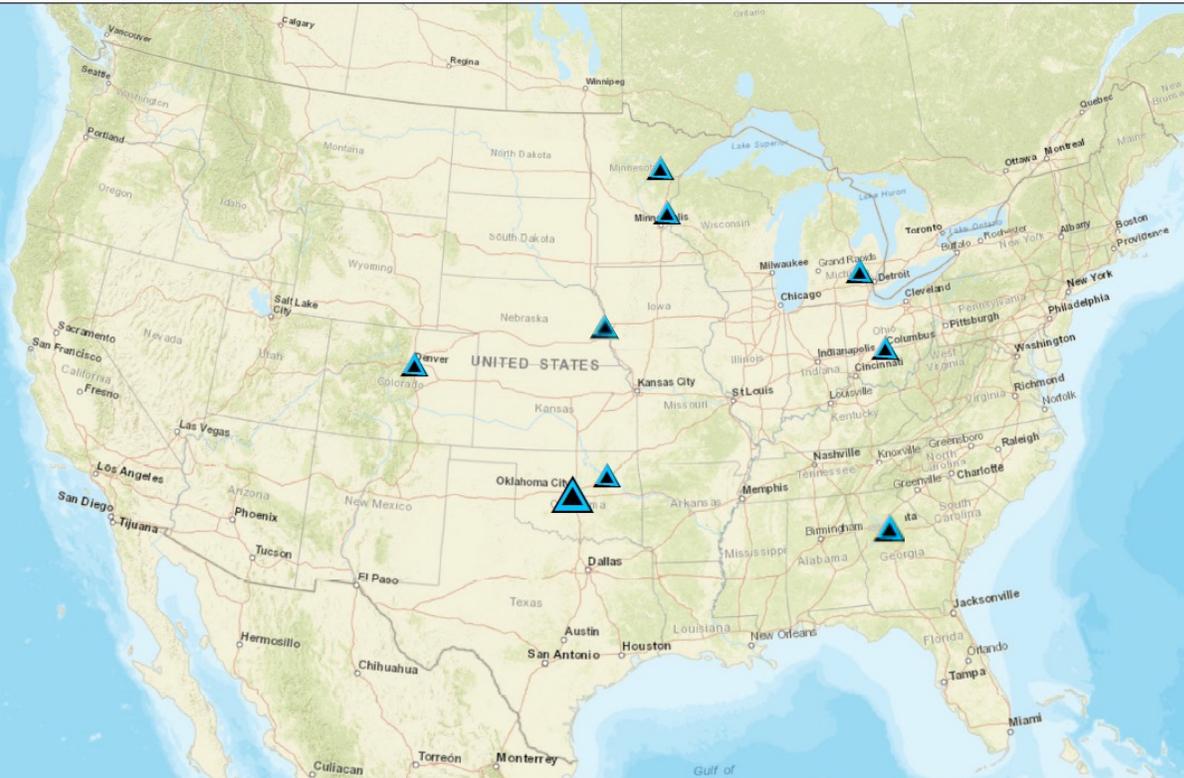
**Hotline (888) 719-9033**

**[PHMSAAID@dot.gov](mailto:PHMSAAID@dot.gov)**





# Accident Investigation Division



# Laws / Regulations / Policies



- Share common operating picture with other Agency Duty Officers via NPIC Duty Officer
  - EPA
  - BSEE
  - USCG
  - State Pipeline Safety Programs
- Emphasis on our engagement with state and federal response partners through onsite investigators

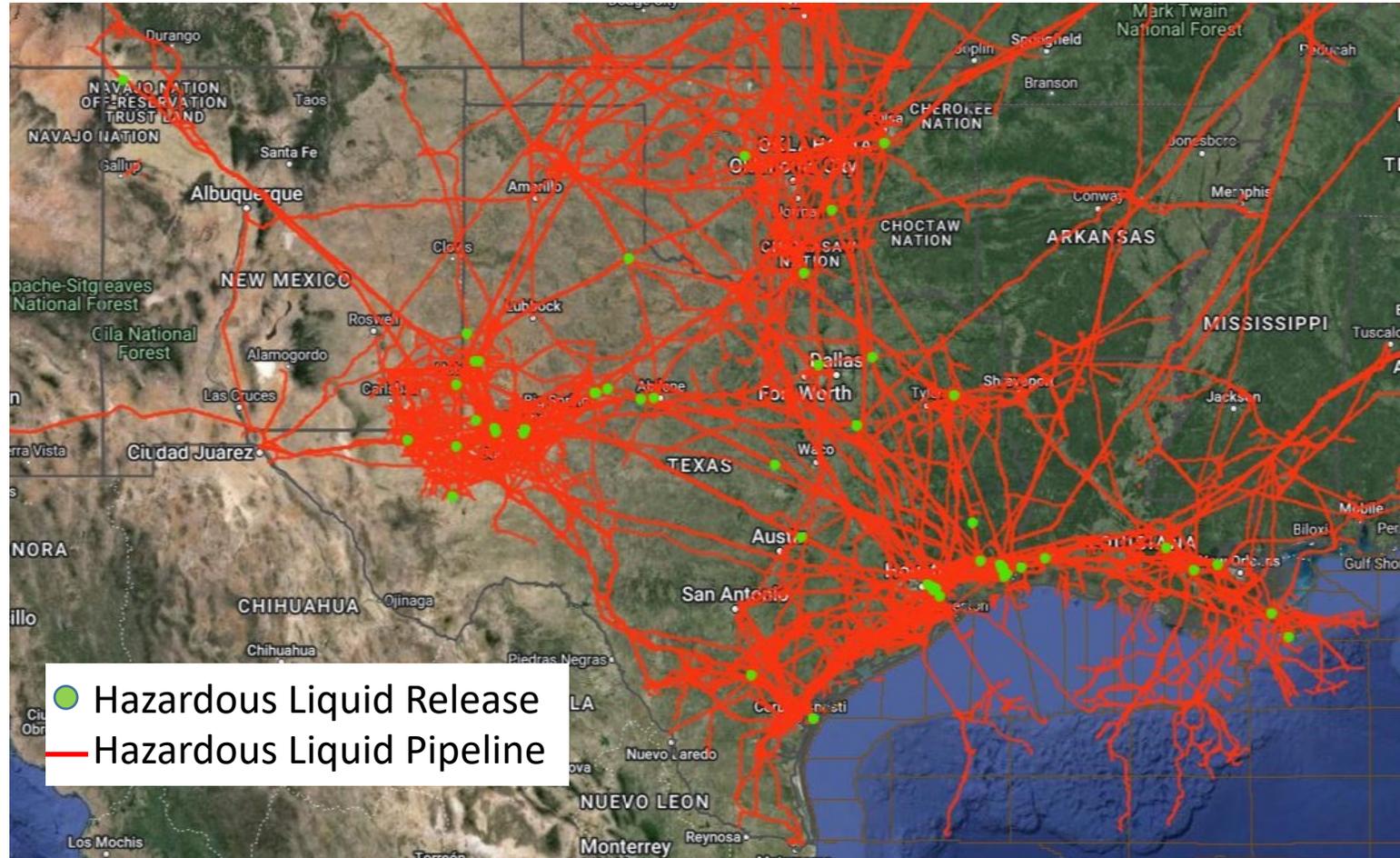


# Accomplishments – Since Last RRT Meeting



## ■ Hazardous Liquid Releases November 2023 – April 2024

- 57 PHMSA Regulated Accidents in RRT6
- 0.1 barrels to >26,000 barrels
- Three releases >200 barrels



# Accomplishments – Since Last RRT Meeting



## Federal, state, and local Planning and Coordination Efforts

Description	Location	Product	Date
Panther Operating Company – Main Pass Oil Gathering – Gulf of Mexico - release of <b>&gt;26,000</b> barrels of crude oil, impacted the GOM water and wildlife	Main Pass Blk 69 GOM	Crude Oil	November 16, 2023
Flint Hills Resources – release of <b>2,814</b> barrels of crude oil, no water impacts	Ingleside, TX	Crude Oil	January 6, 2024
Navajo Nation Oil and Gas Company – release of <b>1,010</b> barrels of crude oil, no water impacts	Shiprock, NM	Crude Oil	December 11, 2023



# Outlook – Until Next RRT Meeting



- Public Awareness for One-Call excavation notices “811” in August
- PHMSA participation in spill response drills
- Seen a significant increase in the number of methane releases observed by satellites
  - PHMSA is notifying pipeline operators of potential releases
  - Multi Agency effort – EPA, NASA, United Nations





**United States Department of Agriculture  
(USDA)**



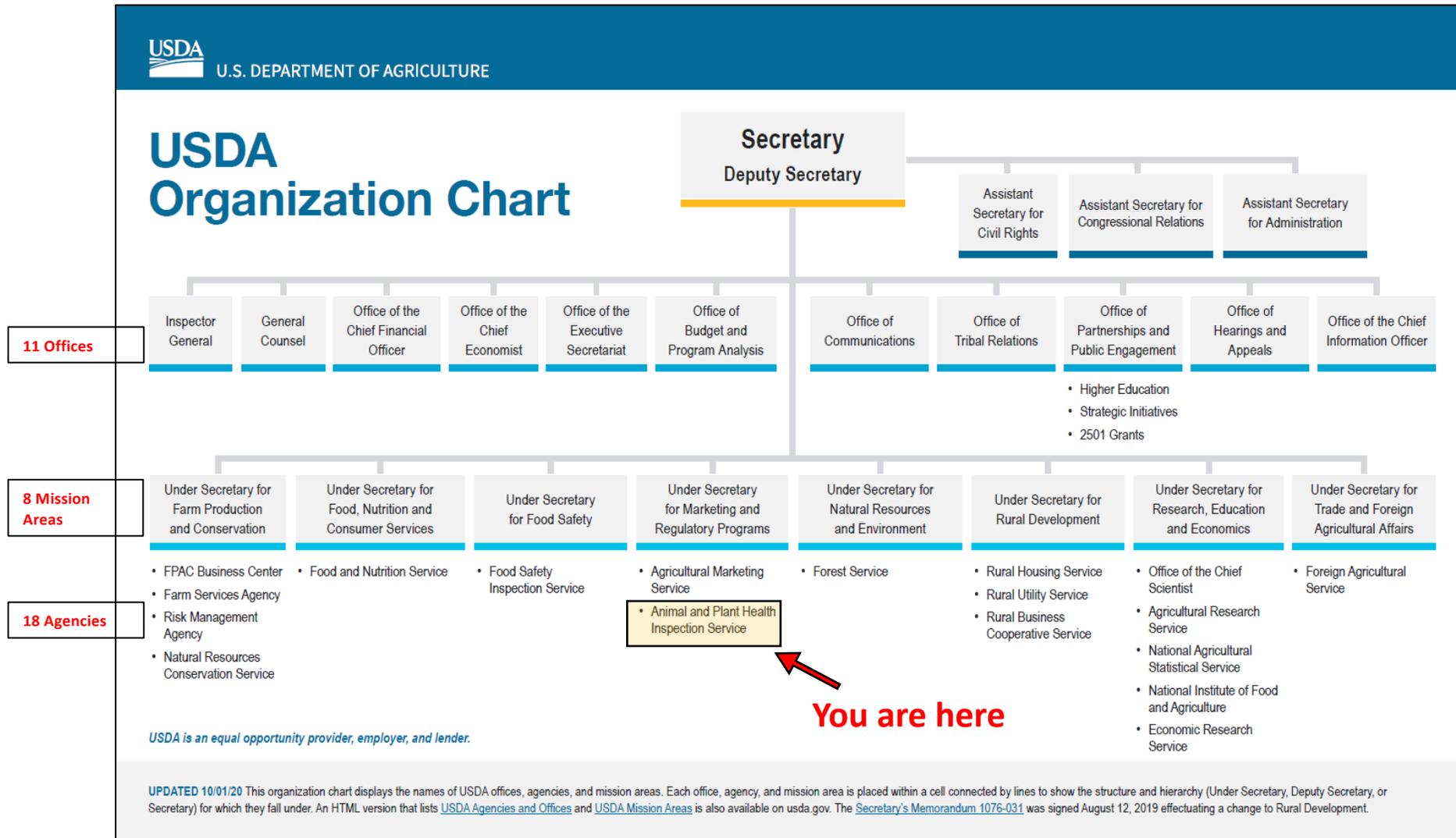
## ESF #11 – Agriculture and Natural Resources

Role	RRT Member	Agency	Contact Info
Primary	David Rivas	USDA	Phone 940-218-4520 Email <a href="mailto:david.rivas@usda.gov">david.rivas@usda.gov</a>
Alternate	Todd Smith	USDA	Phone 970-631-3279 Email <a href="mailto:todd.l.smith@usda.gov">todd.l.smith@usda.gov</a>

# Overview

- HPAI in dairy cattle in R6

# Agency Organization Chart



# Accomplishments

Since last RRT meeting  
Fall, 2023

## Federal, state, and local Planning and Coordination Efforts

Description	Location	Dates
Conducted ICS Training for State Agriculture	OKC, OK	Nov 23, Jan 24
Conducted ESF11 Training for Tribal Nations	Albuquerque, NM	April 24
Participated in NM AG Foreign Animal Disease Workshop	Albuquerque, NM	Jan 24



Department of Defense (DoD) –  
**Defense Coordinating Element (DCE)**



# Defense Coordinating Element (DCE) Region VI Regional Overview



**DCE Region VI: TX, AR, LA, OK, and NM**



# DCO/DCE RGN VI Overview



Role	RRT Member	Agency	Contact Info
Primary	COL Richard Ball	DCE RGN VI	210-247-8870 Richard.J.Ball.mil@army.mil
Alternate	LTC James Balutowski	DCE RGN VI	210-845-9145 James.R.Balutowski.mil@army.mil

***DCE Region VI: TX, AR, LA, OK, and NM***



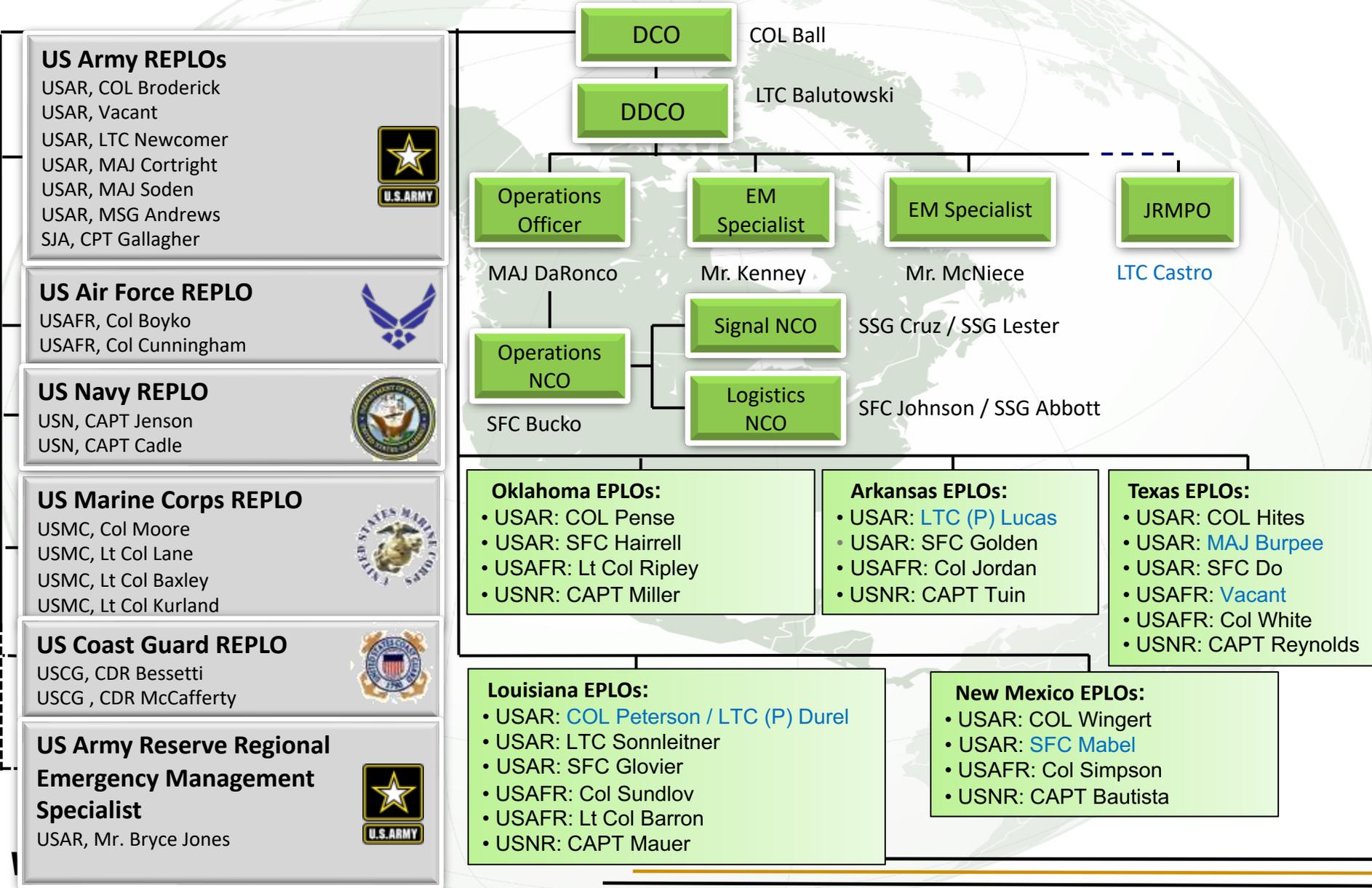
# DCO/DCE Roles and Functions



- The role of the **Defense Coordinating Officer (DCO)** is the **SecDef's Single Point of Contact** for DOD Title 10 support to the Lead Federal Agency. The DCO is supported by the Defense Coordinating Element (DCE).
- The DCO/E has Five (5) Functions:
  - ✓ Process Requests for Assistance (RFAs)/Validate Mission Assignments (MAs)
  - ✓ Provide Situational Understanding (SU)
  - ✓ Provide Liaison to Federal, State, and Local Partners
  - ✓ Assist Planning with Regional, State, and Local All Hazards and Enable Planning for DOD Response Operations
  - ✓ Provide Mission Control of T10 Forces when required



# Task Organization



DCE Region



# Role of the DCO - Contingency Operations -

- DoD representative in the disaster Area
- Provide Situational Awareness to DOD Agencies
- Link between Lead Federal Agency (LFA) representative and DoD
- Liaison to State, local and other Federal agencies
- Validates Resource Request Form (RRF) and accepts Mission Assignment (MA) from Federal Coordinating Officer (FCO)
- Assist with receiving, staging, onward movement, & integration (JRSOI) of units/personnel
- Recommends military resource to meet RFA requirements; forwards MA to NORTHCOM
- Provide link to Base Support Installation (BSI)
- Coordinate administrative & logistical support of deployed military forces
- Controls small DOD units & resources in the disaster area until DSC stood up
- Maintains accounting records for reimbursement (w/G8 augmentation)

# Accomplishments

Since last RRT meeting  
Fall, 2023

Federal, state, and local Planning and Coordination Efforts		
Description	Location	Dates
Homeland Defense Workshop	Fort Worth, FAA Bldg.	23-24 APR 2024
NDMS Exercise	San Antonio, TX	6-10 May 24

# Outlook

Until Next RRT meeting  
Fall, 2024

Federal, state, and local Planning and Coordination Efforts		
Description	Location	Dates
NDMS Exercise	San Antonio, TX	6-10 May 24
ARNORTH Hurricane ROC Drill	JBSA	3-8 JUN 24
ERT COOP EX w/ FEMA IMAT	Sheppard AFB, TX	5 JUN 24
Homeland Defense Workshop	TBD	NOV 24



Department of Homeland Security (DHS) –  
**Federal Emergency Management Agency (FEMA)**



# FEMA

<b>Role</b>	<b>RRT Member</b>	<b>Agency</b>	<b>Contact Info</b>
Primary	Amanda Cesani-Roberts	FEMA - Operations	940-205-6799 Amanda.Cesani@fema.dhs.gov
Alternate	TBD	FEMA - Operations	
Alternate	Latoya Leger	FEMA – Regional Environmental Officer	940-703-9058 Latoya.Leger@fema.dhs.gov

# FEMA R6 Operations Integration Branch



**FEMA**

# Laws/Regulations/Policies

## Mission Assignment Policy – early 2024

- Mission Assignment Policy #104-010-03
- Signed by FEMA Assistant Administrator, John Rabin, January 8, 2024
- Socialized to OFA partners February 13, 2024
- DFA Mission Completion = Final Inspection Report (OFA Action Officer & State PM will sign off)

**BILLING UPDATE:**  
**Legacy MAs**  
(MAs beyond 3 years)  
will not be paid past  
**August 13, 2024**

## **Period of Performance (POP) Impacts**

- Initial Surge (SU) and EM MA POP may be issued up to 30 days
- Under a Major Declaration (DR), POP for FOS MAs will be issued to meet duration of mission.
- Direct Federal Assistance (DFA) MAs will not exceed 60 days from the President's declaration, unless approved due to extenuating circumstance.
- MAs which extend a year from the date of declaration will be converted to an IAA, IRWA, or other funding mechanism.
- MAs may not extend beyond two years from the date of declaration.
- Last day of the POP will align with the operational completion of the mission.

*IFMIS Stamps are internal to FEMA and **FAO Signature** makes the MA actionable.*



# Laws/Regulations/Policies

## Responder Lodging

FEMA HQ Responder Support Branch, in coordination with the Region, supports responders anywhere they are deployed for response and recovery operations by implementing lodging, food, laundry, and shuttle solutions and coordinating with health and safety.

- Lodging solutions include policy waivers, hotel room blocks, fixed facilities, full-service responder villages, responder support camps, vessels, and austere solutions.
- FEMA Leadership will decide whether to establish an initial Responder Lodging solution 96 hours prior to impact.

COA	Description
<b>First, Expand Traditional Lodging Options</b>	<ul style="list-style-type: none"><li>• Policy waivers, hotel room blocks, or powering up a hotel</li><li>• Dorms, corporate apartments, or military lodging options</li></ul>
<b>Then, Establish Responder Villages</b>	<ul style="list-style-type: none"><li>• Manufactured lodging quarters with individual sleeping units, and amenities like dining, laundry, health and wellness, and parking</li></ul>
<b>In Catastrophic Disasters, Consider Maritime and Austere Solutions</b>	<ul style="list-style-type: none"><li>• Cruise ship cabins or berths on a maritime vessel</li><li>• Sleeping areas for responders in fixed facilities like gymnasiums or convention centers with wraparound services</li><li>• Traditional basecamps with tents, cots, and wraparound services</li></ul>



**FEMA**

# Accomplishments

Federal, state, and local Planning and Coordination Efforts		
Description	Location	Dates
Operationalizing Equity- Deployment	Chicago, IL	January 22 – February 26, 2024
MIEP	Baton Rouge, Louisiana	February 7-8, 2024
Q1 ESF/OFA Training	Denton, Texas	February 13, 2024
L-348 (Mission Assignments) Training	Denton, Texas	February 14-15, 2024
FCC Exercise	DFW	February 20, 2024
Austere Horizon Full Scale Exercise	Disaster City, College Station	February 23-26, 2024
Spring RISC & Q2 ESF/OFA Training	Embassy Suites, Denton Texas	April 2-4, 2024
Mass Evacuation Concept Briefing in support of Region 4	Virtual	April 8, 2024
Virtual Patient Movement Exercise	Virtual	May 1, 2024



**FEMA**

# Outlook

## Federal, state, and local Planning and Coordination Efforts

Description	Location	Dates
FIFA World Cup 2026 Emergency Comm Planning Event	Dallas, Texas	May 14-15, 2024
R6 Wildland Fire & Drought Workshop	Las Vegas, NM	May 14-16, 2024
FEMA R6 All-Hazards TTX	Denton, Texas	July 9-10, 2024
ESF/OFA Training	Denton, Texas	July 25, 2024
Fall RISC	TBD	November 13-14, 2024





Department of Homeland Security (DHS) –  
**Cybersecurity and Infrastructure Security Agency  
(CISA)**



<b>Role</b>	<b>RRT Member</b>	<b>Agency</b>	<b>Contact Info</b>
Primary	Steven Shedd	DHS / CISA	202-738-2764 steven.shedd@cisa.dhs.gov
Alternate	David Gonyea	DHS / CISA	202-329-0849 david.gonyea@cisa.dhs.gov
Alternate	Shawn Perceful	DHS / CISA	202-440-0761 shawn.a.perceful@cisa.dhs.gov

# Overview

- CFATS- Statutory authority for CFATS remains expired. CISA cannot conduct any of the regulatory work that was done prior to the expiration of authority.
- Focus on voluntary chemical security programs continues.
  1. ChemLock outreach to Water / Wastewater Systems Sector.
  2. Operation Flashpoint and ChemLock visits expanded to hardware and pool supply stores, farm supply, and beauty supply retailers.
  3. Integration into PSA Security Assessment at First Entry (SAFE) program.

# Accomplishments

Since last RRT meeting

Federal, state, and local Planning and Coordination Efforts		
Description	Location	Dates
Chlorine Institute Annual Meeting (briefed resources available to the chlor-alkali industry)	New Orleans, LA	9-10 April 2024
NMDHS Emergency Management Annual Conference (trained DHS Exercise and Evaluation Program)	Ruidoso, NM	13 -16 November 2024
American Fuel and Petrochemical Manufacturers (AFPM) Security Conference	New Orleans, LA	18-19 April 2024

# Outlook

Until Next RRT meeting

Federal, state, and local Planning and Coordination Efforts		
Description	Location	Dates
Water & Wastewater Systems Sector Chemical Security Workshop	Irving, TX	14 May 2024
Texas Natural Disaster Operations Workgroup (NDOW) Hurricane Exercise	Houston / Galveston	21- 23 May 2024
FEMA Region 6 Drought and Wildland Fire Workshop	Las Vegas, NV	14-16 May 2024



Department of Commerce (DOC) –  
**National Oceanic and Atmospheric  
Administration (NOAA)**

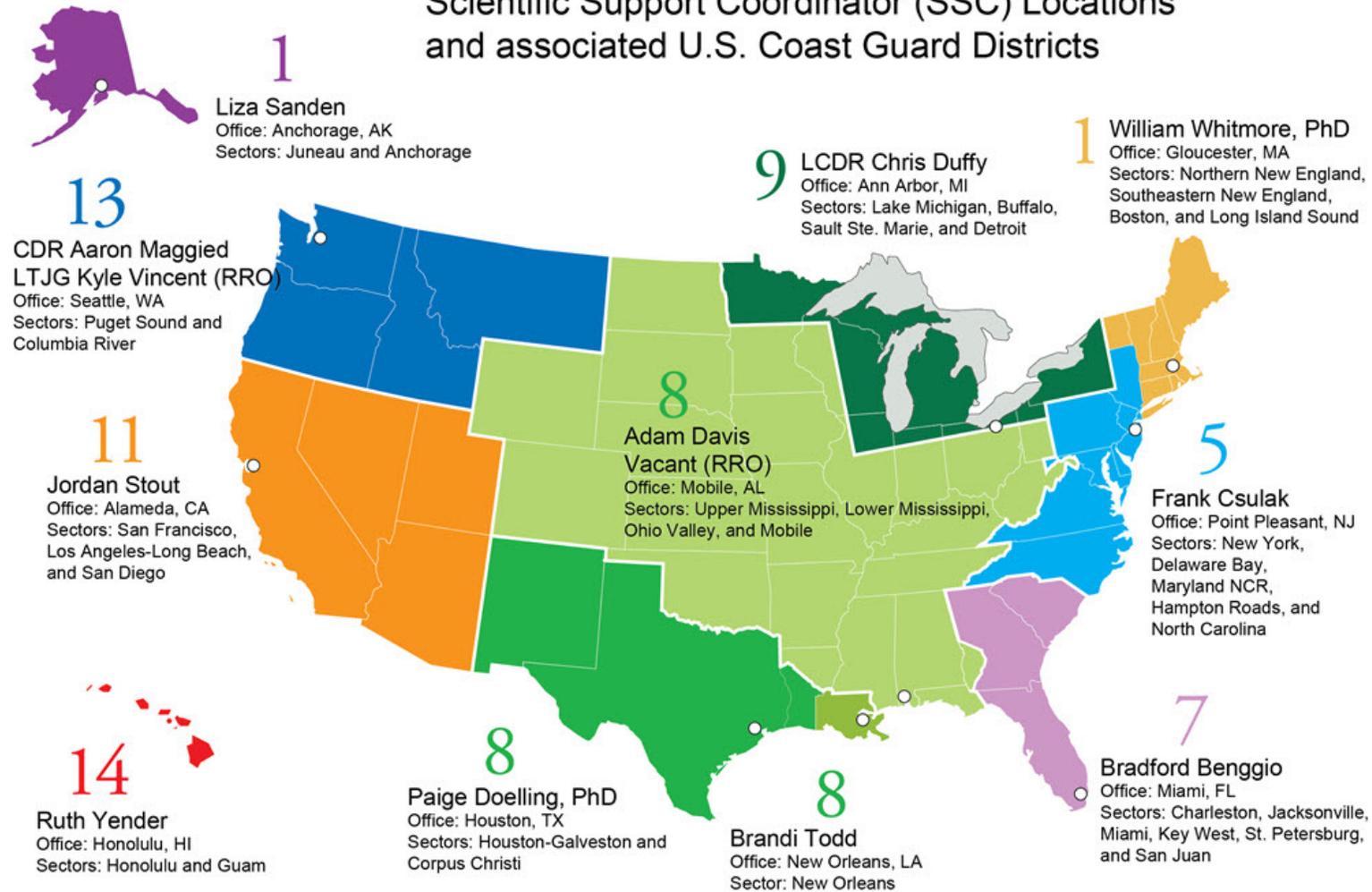


Role	RRT Member	Agency	Contact Info
Primary	Paige Doelling	NOAA	Phone 206-549-7819 Email <a href="mailto:paige.doelling@noaa.gov">paige.doelling@noaa.gov</a>
Alternate	Brandi Todd	NOAA	Phone 504-376-3213 Email <a href="mailto:brandi.todd@noaa.gov">brandi.todd@noaa.gov</a>
Alternate	Charlie Henry	NOAA	Phone 206-849-9928 Email <a href="mailto:Charlie.henry@noaa.gov">Charlie.henry@noaa.gov</a>

- Responses – 23 SSC supported responses thus far in FY24
- NOAA FY 24 Training
  - SOS Mobile, March; [SOS Seattle, June](#); [SOS Ann Arbor, Sept](#)
  - SOCR Mobile, March; [SOCR Seattle, May](#)
  - NOAA/TGLO SCAT; Corpus Christi, April; SCAT Houma, Feb
- New job aids: Fact Sheets!
  - Light Shale (Tight) Oil Spills
  - Synthetic Based Drilling Mud Spills
  - Dielectric Fluid Spills (non-PCB)
  - And more...<https://response.restoration.noaa.gov/resources/oil-fact-sheets-spill-responders>
- Exercises
  - NDOW Annual Exercise
- International Oil Spill Conference – New Orleans

- GOM Listed Species Update
  - No species listed since last RRT-6 meeting
  - Proposed species: queen conch
  - Candidate: smalltail shark, tope shark
  - Petitions: horseshoe crab, Alabama shad
- NRDA News
  - Ingleside Dock 5 Leak – Settlement proposed April 2024
  - ITC Proposed Settlement - \$6.65 million, public comment period closes May 2024
  - Mississippi Canyon 209 – Settlement finalized June 2023

## Scientific Support Coordinator (SSC) Locations and associated U.S. Coast Guard Districts



RPC (Regional Preparedness Coordinator for NOAA's Disaster Preparedness Program): William Whitmore (Northeast), PhD; Liza Sanden (Alaska)  
 RRO (Regional Response Officer): LTJG Kyle Vincent (West Coast); Vacant (Gulf Coast)

Updated 05/01/24



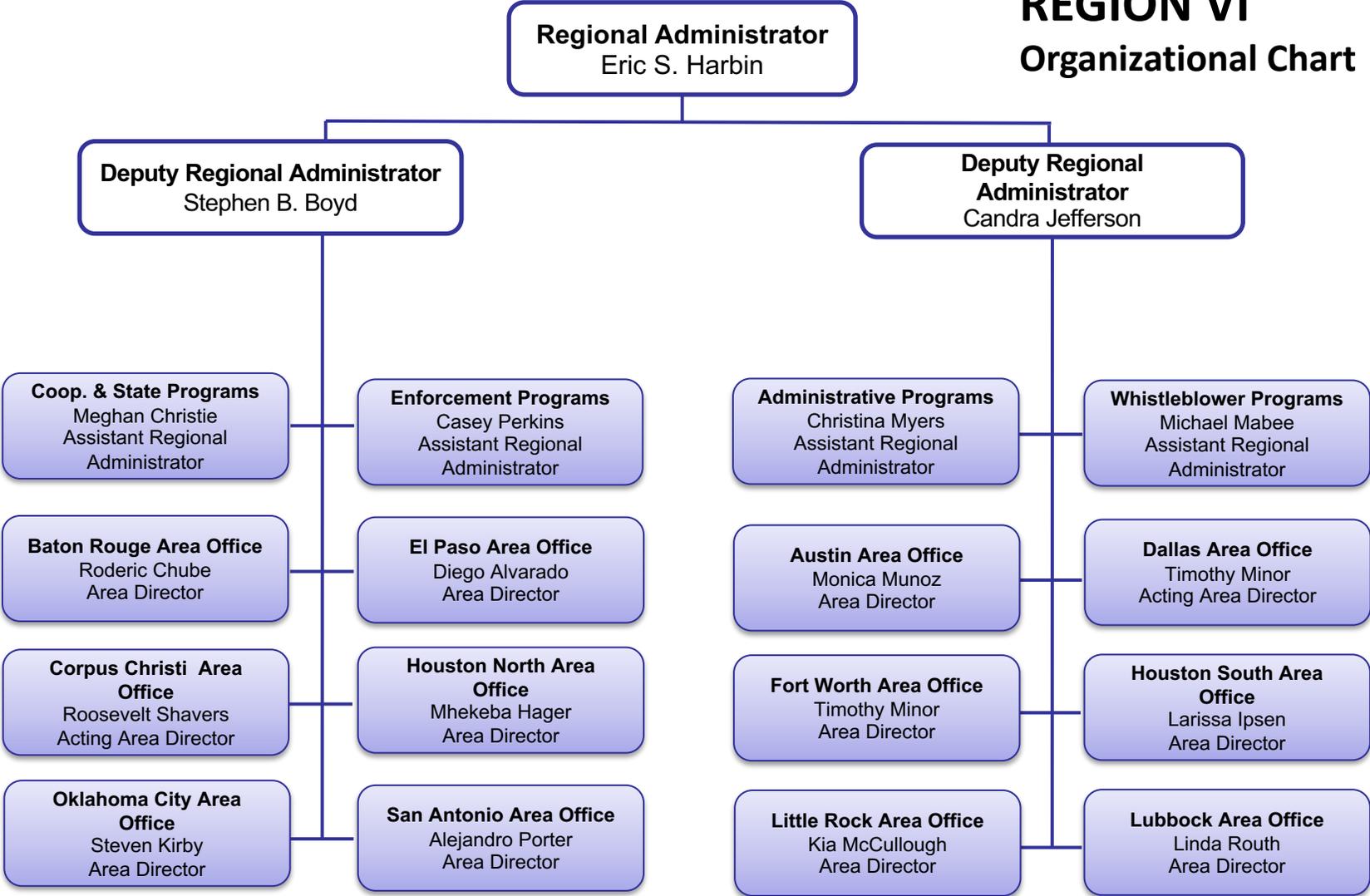
Department of Labor (DOL) –  
**Occupational Safety and Health Administration  
(OSHA)**

**U.S. Department of Labor  
Occupational Safety and Health Administration (OSHA)**



<b>Role</b>	<b>RRT Member</b>	<b>Agency</b>	<b>Contact Info</b>
Primary	James Nevers Emergency Response Coordinator	OSHA	<a href="mailto:Nevers.James@dol.gov">Nevers.James@dol.gov</a> 225-337-8669
Alternate	Meghan Christie, ARA Cooperative and State Programs	OSHA	<a href="mailto:Christie.Meghan@dol.gov">Christie.Meghan@dol.gov</a> 972-850-4196

# OSHA REGION VI Organizational Chart



# Overview

- Reviewing OSHA Region 6 Regional Continuity Operation Plan
- Reviewing Area Offices Continuity of Operation Plans (COOP)
- Updating Region 6 Regional Emergency Response Team (RERT)
- OSHA Region 6 Heat Initiative Video

A stylized thermometer icon with a yellow bulb at the bottom and a vertical bar above it, divided into three segments: yellow at the bottom, orange in the middle, and red at the top.

# Heat Illness Prevention



# OSHA INSTRUCTION

U.S. DEPARTMENT OF LABOR

Occupational Safety and Health Administration

**DIRECTIVE NUMBER:** CPL 03-00-024      **EFFECTIVE DATE:** April 8, 2022

**SUBJECT:** National Emphasis Program – Outdoor and Indoor Heat-Related Hazards

## ABSTRACT

**Purpose:** This Instruction describes policies and procedures for implementing a National Emphasis Program (NEP) to protect employees from heat-related hazards and resulting injuries and illnesses in outdoor and indoor workplaces. This NEP expands on the agency's ongoing heat-related illness prevention initiative and campaign by setting forth a targeted enforcement component and reiterating its compliance assistance and outreach efforts. This approach is intended to encourage early interventions by employers to prevent illnesses and deaths among workers during high heat conditions, such as working outdoors in a local area experiencing a heat wave, as announced by the National Weather Service. Early interventions include, but are not limited to, implementing water, rest, shade, training, and acclimatization procedures for new or returning employees.

**Scope:** This Instruction applies OSHA-wide.

**References:** Section 5(a)(1) of the Occupational Safety and Health Act (OSH Act), 29 U.S.C. § 654.

OSHA Instruction, CPL 02-00-164, *Field Operations Manual (FOM)*, April 14, 2020.

(See [Section III](#) for additional references.)

**Cancellations:** None.

**State Plan Impact:** Notice of Intent Required, Adoption Encouraged. Federal Program Change, Notice of Intent Required, Equivalency Required. See [Section VI](#).

## Laws/Regulations/Policies

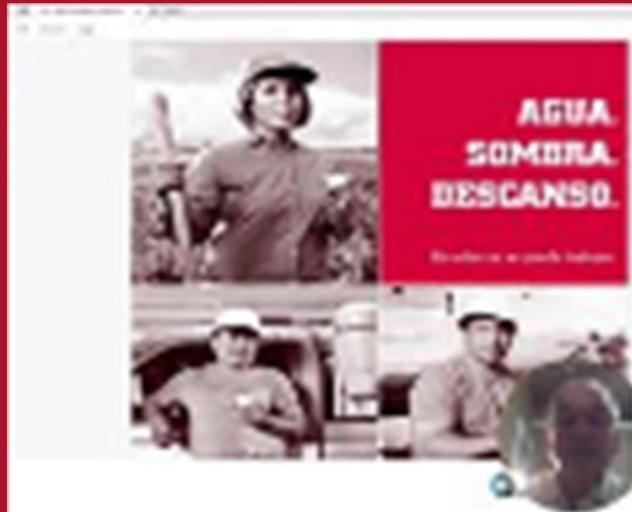
Our climate's rising temperatures present a growing hazard for workers in extreme heat environments. Heat illness affects thousands of indoor and outdoor workers each year and can tragically lead to death.

Last fall, OSHA published an Advance Notice of Proposed Rulemaking (ANPRM) for Heat Injury and Illness Prevention in Outdoor and Indoor Work Settings.

The Occupational Safety and Health Administration announced effective April 8, 2022, a National Emphasis Program focused on heat hazards.

- ❑ The National Emphasis Program targets over 70 high-risk industries for both indoor and outdoor workers, from farmworkers to construction and warehouse workers.
- ❑ For the first time ever, OSHA will be able to proactively inspect workplaces for heat-related hazards before workers suffer preventable injuries, illnesses, or, even worse, fatalities.
- ❑ Through this new effort, OSHA is engaging unions, employers, and worker advocates on rules and best practices for keeping workers safe in extreme heat, while helping workers understand and identify the risks of heat illness.

# Heat Initiative Video



OSHA Region Seis- Iniciativa de Calor para Trab...

Esta iniciativa de calor tiene como objetivo proporcionar entrenamiento y recursos a los trabajadores sobre como...

youtu.be

[https://youtu.be/PMrqL\\_gCazw](https://youtu.be/PMrqL_gCazw)

# *Everbridge*

DOL's Emergency Notification System



# What is Everbridge?



## Everbridge:

- Is DOL's Emergency Notification System.
- **Disseminates critical information to select employees across multiple communications capabilities.**
  - These capabilities include work, cellular and home telephone calls and text messages, work and home e-mail.
- **Allows messages to be sent to specific contacts.**
  - Messages can be crafted for particular groups of contacts and sent concurrently.
- **Creates reports on pending and sent notifications.**
  - These reports provide specific information regarding the actual results of the notification/response process and detail the notification process by device and individual.



# Why Everbridge?

- Critical events happen every day: severe weather, workplace violence, active shooters, terrorism, IT / power outages, and medical emergencies. ... They threaten safety and disrupt operations.
- DOL uses this platform to provide notification of hazards and to aid in accountability.

# Communication Devices

Everbridge will attempt to contact appropriate DOL personnel through various communication methods, including:

- Work phone
- DOL cell phone
- Home phone
- Text message
- Work email
- Personal cell phone
- Personal email



Everbridge sends SMS text messages to mobile devices.

# Emergency Response Rulemaking

**Update: The deadline for comment submission has been extended to June 21, 2024.**

**The Emergency Response proposed rule is here!**

OSHA is happy to announce that the Emergency Response proposed rule has been published in the [Federal Register](#) and is now available for viewing.

OSHA welcomes and encourages the submission of public comments in response to this proposed rule. OSHA will be extending the window for comment submission. The comment period now ends on June 21, 2024.

Comments can be submitted to the Emergency Response Docket at <https://www.regulations.gov/docket/OSHA-2007-0073>.

OSHA will also be hosting a **public hearing**, the date of which has yet to be determined. To ensure access to the hearing for all interested members of the public, remote access will be provided.

Additional information on OSHA's rulemaking process and how stakeholders can participate is available at <https://www.osha.gov/laws-regs/rulemakingprocess>.

## Background

Emergency response workers in America face considerable occupational health and safety hazards in dynamic and unpredictable work environments. Current OSHA emergency response and preparedness standards are outdated and incomplete. They do not address the full range of hazards facing emergency responders, lag behind changes in protective equipment performance and industry practices, conflict with industry consensus standards, and are not aligned with many current emergency response guidelines provided by other federal agencies (e.g., DHS/FEMA). In recognition of the inadequacy of the outdated safeguards provided by the current OSHA standards, the proposed rule seeks to ensure that workers involved in Emergency Response activities get the protections they deserve from the hazards they are likely to encounter while on the job.

## About the Rule

The proposed rule would replace OSHA's existing Fire Brigades standard, 29 CFR 1910.156, which was originally promulgated in 1980, covers only a subset of present-day emergency responders (firefighters) and has only had minor updates in the 43 years since it was published.

The focus of the proposed *Emergency Response* rule is to provide basic workplace protections for workers who respond to emergencies as part of their regularly assigned duties. Notably, the scope of protected workers under the proposed rule would be expanded to include workers who provide emergency medical service and technical search and rescue.

This rulemaking effort is separate from OSHA's technical assistance resources for emergency response and recovery workers. For those resources, visit OSHA's [Emergency Preparedness and Response page](#).

## Resources

- [Emergency Response Proposed Rule](#)
- [Compilation of NPRM Issues and Questions](#)
- [USFA and OSHA presentation on the NPRM](#)
- Emergency Response on the [Unified Regulatory Agenda - Fall 2023](#)
- RFI and comments to the RFI are available in [Docket # OSHA-2007-0073](#)
- Documents related to the work of the Emergency Response subcommittee are available in [Docket # OSHA-2015-0010](#)

# Accomplishments

Since last RRT meeting  
Fall, 2023

Federal, state, and local Planning and Coordination Efforts		
Description	Location	Dates
Eagle Horizon Devolution Exercise	National	August 2023
Conducted OSHA Region 6 Accountability Exercise	OSHA Region 6	February 2024
Developed Heat Initiative Video	OSHA Region 6	Went Live April 17, 2024

# Outlook

Until Next RRT meeting  
Fall, 2024

## Federal, state, and local Planning and Coordination Efforts

Description	Location	Dates
OSHA Region 6 Preparedness and Response Tabletop Exercise	OSHA Region 6	May 2024
Eagle Horizon Exercise	National	July 2024
Planning Safe + Sound Week events throughout the region.	OSHA Region 6	Aug – Sept 2024
OSHA accepting comments on Emergency Response proposed rule.	National	Extended to June 21, 2024



**Department of the Interior (DOI)**

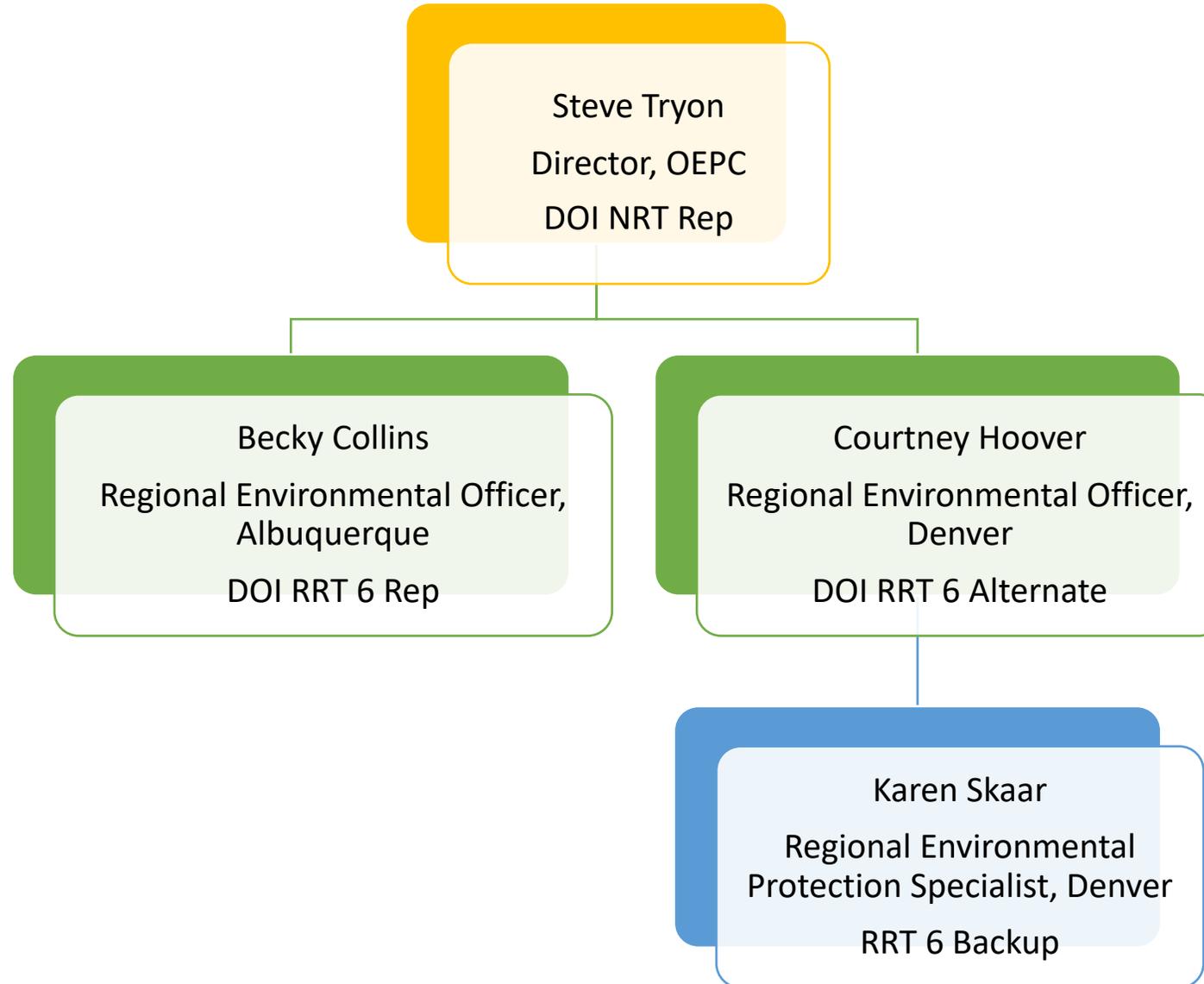
# Department of the Interior



## Office of Environmental Policy & Compliance (OEPC) Contacts

Role	RRT Member	Agency	Contact Info
Primary	Becky Collins	DOI-OEPC	720-814-6167 rebecca_collins@ios.doi.gov
Alternate	Courtney Hoover	DOI-OEPC	303-478-3373 courtney_hoover@ios.doi.gov
Backup	Karen Skaar	DOI-OEPC	720-505-1699 karen_skaar@ios.doi.gov

# Agency Organization Chart



 U.S. Fish & Wildlife Service  
**National Conservation Training Center**  
*Training Announcement*

**Inland Oil Spill Response for DOI**  
*CSP3129*

**Course Description**  
 This course will cover the many aspects of oil spill response from the DOI perspective, such as what roles DOI staff have within the Unified Command, evaluating and selecting appropriate habitat protection and cleanup methods and cleanup endpoints, being a member of a Shoreline Cleanup Assessment Technique (SCAT) team, emergency consultation, and juggling the roles of response and natural resource damage assessment. Oil fate, transport, and effects in inland environments will be covered through basic principles as well as case histories. A drill exercise will be used to apply many of these topics during realistic scenarios.



**Objectives**  
 Upon completion of this course, you will be able to:

- Identify DOI roles and responsibilities during oil spill response
- Describe the principles and basic structure of the Incident Command System (ICS) and Unified Command (UC) and how DOI responders integrate into the system
- Using OSHA requirements, determine safety and PPE requirements for DOI responders
- Identify oil properties, behavior and environmental fate & effects
- Assess the spill using the Shoreline Cleanup Assessment Technique (SCAT)
- Identify on-water response strategies and environmental cleanup methods and endpoints
- Develop sampling plan for ephemeral data collection
- Collect environmental samples
- Demonstrate spill response reporting procedures required by the Department of the Interior (DOI)

*In every out thrust  
 headland, in every curving  
 beach, in every grain of sand  
 there is a story of the earth.*

*Rachel Carson*

**Dates/Locations**  
 March 4 – 8, 2024  
 National Conservation Training Center,  
 Shepherdstown, WV

**Who Should Attend**  
 DOI personnel and partner agencies who are involved in response to oil spills.

**Length**  
 4.5 days

**College Credit**  
 2 semester hours

**Tuition**  
 Tuition for selected DOI and partner agency personnel is prepaid.

**To Register**  
 Register online using DOI Talent, the Department of the Interior's Learning Management System at:  
<https://talent.doi.gov>

**Course Contact**  
 Gary Schatzempl, 304-876-7255  
[Gary\\_schatzempl@fws.gov](mailto:Gary_schatzempl@fws.gov)

**Reasonable Accommodation**  
 The U.S. Fish and Wildlife Service is committed to providing access to this training for all participants. Please direct all requests for sign language interpreting services, close captioning, or other accommodation needs to Michele Allen, 204-876-7999 or by email at [Michele\\_Allen@fws.gov](mailto:Michele_Allen@fws.gov), TTY 800-877-8339 N.T. 30 days prior to the start date of the course.

 National Park Service  
 Resources Training Program  
 Stephen T. Mather Training Center

**Oil Spill Response for Cultural Resources Professionals**

**Course Description**  
 This course trains cultural resource professionals to fill the role of a Historic Properties Specialist (HPS) to advise spill responders on how to avoid or mitigate potential impacts to cultural resources such as historic structures, archeological sites, traditional cultural places and cultural landscapes, and to ensure legally sufficient consultation with stakeholders, including tribes. Emphasizes cooperation with Incident Command staff and other spill responders, effective communication of cultural resource concepts and needs, and response techniques. A workshop format is used to encourage dialog and discussion among participants.

**Prerequisites**  
 Incident Command System (ICS) Training 100 and 200 level courses, available free online at:  
 1. [Introduction to the Incident Command System, ICS-100](#)  
 2. [Basic Incident Command System for Initial Response, ICS-200](#)

Individuals deployed to the field during a spill incident will also need additional training consisting of 24-hour or 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) training. Agencies may also have additional training requirements for spill response personnel.

**Instructors**  
 Meredith Hardy, Deputy Manager, NPS  
 Jen Welbeck, Environmental Response and Recovery, DOI  
 Dan Odess, National Park Service (retired)  
 John Nelson, Regional Environmental Officer, DOI

**Dates**  
 March 26 – 28, 2024

**Location**  
 Minnesota Valley National Wildlife Refuge  
 3815 American Boulevard East,  
 Bloomington, Minnesota

**Who Should Attend**  
 Training is open to any involved in spill response and have an interest in how cultural resources are considered during a spill.

**Tuition**  
 No Tuition cost. Travel costs must be paid by attendee's home park, program, or office. A limited number of scholarships/invitational travel may be available to help with travel costs.

**To Register**  
 Register [using this form](#) by Feb 15

**Course Coordinator**  
 John Nelson  
 Regional Environmental Officer  
[john\\_nelson@ios.doi.gov](mailto:john_nelson@ios.doi.gov)  
 215-266-5155

# Agency Updates



DOI Orphaned Well Plugging Office Story Map – [Plugging Away](#)

DOI Inland Oil Spill Preparedness Program (IOSPP) receives approximately \$2 Million each year to fund bureau projects that support oil spill preparedness.

## Current Training Opportunities:

- Inland Oil Spill for DOI Response Webinar Series  
<https://www.fws.gov/training/inland-oil-spill-for-doi-response-webinar-series>
- DOI Inland Oil Spill Response Course
- Historic Preservation Specialist Workshops: Oil Spill Response for Cultural Resource Professionals
- 8 years and 800+ students trained (in person)

## Future:

- IOSPP Training Working Group** - identify new courses to begin developing in FY25 and opportunities to utilize trainings that EPA, NOAA, and other agencies host. Developed a spill training survey for DOI employees. Responses due May 31.
- IOSPP Tribal Training Working Group** – identify tribal training needs and provide access to training to more effectively support our tribal partners. DOI can provide travel funding to support attendance.

# Agency Accomplishments

Since last RRT meeting  
November 2023



## Federal, state, and local Planning and Coordination Efforts

Description	Location	Dates
Colorado River Spill Exercise	Grand Junction, CO	November 7-8, 2023
MPOG 11015 Response	GOM	November 2023 – April 2024
DOI Inland Oil Spill Response Training	Shepherdstown, WV	March 4-8, 2024

# Agency Outlook

Until next RRT meeting  
November 2024



## Federal, state, and local Planning and Coordination Efforts

Description	Location	Dates
Quad Cities Spill Exercise	Davenport, IA	June 24-26, 2024
DOI Historic Preservation Specialist Workshop	Twin Cities, MN	TBD 2024
DOI Inland Oil Spill Response Training	San Juan, Puerto Rico	November 4-8, 2024
DOI Pollution Removal Funding Authorizations Environmental Compliance Memorandum 16-4 Update	HQ	TBD 2024



# Bureau Updates - FWS

## FWS Contacts

<b>FWS-Spill Response</b>	National Spill Response Coordinator/EPA R 6 Liaison	Barry Forsythe	barry_forsythe@fws.gov
<b>FWS-Spills/Contaminates</b>	Regional Spill Response NM, TX, OK	Suzanne Dunn (acting) Mary Maddux	suzanne_dunn@fws.gov mary_maddux@fws.gov
<b>FWS – Spills/Contaminates</b>	Regional Spill Response AR, LA	Rob Tawes Jimmy Laurent	robert_tawes@fws.gov jimmy_laurent@fws.gov
<b>FWS - AR</b>	Spill Response/ESA	Chris Davidson Steve Alexander	chris_davidson@fws.gov steven_alexander@fws.gov
<b>FWS-LA SE</b>	Oil & Gas, SE Refuges	Jimmy Laurent Chelsea Stringfield	jimmy_laurent@fws.gov chelsea_stringfield@fws.gov
<b>FWS-LA SW</b>	Oil & Gas, SW Refuges	Vacant	Contact Jimmy and Chelsea
<b>FWS-LA</b>	Spill Response/ESA	Lindsey Adams	lindsey_adams@fws.gov
<b>FWS - NM</b>	Spill Response/ESA	Robert Prather	robert_prather@fws.gov
<b>FWS-OK</b>	Spill Response/ESA	Jonathan Fischer Todd Adornato	jonathan_fischer@fws.gov todd_adornato@fws.gov
<b>FWS-TX</b>	Spill Response/ESA for Inland & Coastal	Erik Orsak Denise Ruffino Heather Biggs Claire Iseton Monique Slaughter	erik_orsak@fws.gov denise_ruffino@fws.gov heather_biggs@fws.gov claire_iseton@fws.gov monique_slaughter@fws.gov



# Bureau Updates - FWS

## ESA DECISION – Region 2 (Southwest) & 4 (Southeast)

Species	Geographic Area	<u>DECISION</u>	Effective Date	Federal Register Link
Silverspot Butterfly	Colfax, Mora, Rio Arriba, San Juan, San Miguel, Santa Fe, and Taos Counties, NM	Final Listing as Threatened	3/18/2024	<a href="#">89 FR 11750 2/15/24</a>
Black-Capped Petrel	LA	Final Listing as Endangered	1/29/2024	<a href="#">88 FR 89611 12/28/23</a>
San Marcos Gambusia	Blanco, Comal, and Hays Counties, TX	Delisted due to Extinction	11/16/2023	<a href="#">88 FR 71644 10/17/23</a>



*Silverspot Butterfly –Photo courtesy of USFWS*



*Black-capped Petrel –Photo courtesy of USFWS*



*San Marcos Gambusia –Photo courtesy of TPWD*



# Bureau Updates - FWS

## ESA Under Review – Region 2 (Southwest) & 4 (Southeast)

Species	Geographic Area	<u>UNDER REVIEW</u>	Comment Period	Federal Register Link
Bushy Whitlow-Wort	Jim Hogg County, TX	Proposed Listing as Endangered	3/19/2024-5/20/2024	<a href="#">89 FR 19526 3/19/24</a>



*Bushy Whitlow-Wort –Photo courtesy of FWS*



# Laws/Regulations/Policies

- Endangered and Threatened Wildlife and Plants: Regulations Pertaining to Endangered and Threatened Wildlife and Plants
  - [89 FR 23919 04/05/2024 - Effective May 6, 2024](#)
- Endangered and Threatened Wildlife and Plants: Regulations for Interagency Cooperation
  - [89 FR 24268 04/5/2024 - Effective May 6, 2024](#)
- Endangered and Threatened Wildlife and Plants: Listing Endangered and Threatened Species and Designating Critical Habitat
  - [89 FR 24300 04/5/2024 - Effective May 6, 2024](#)
- Endangered and Threatened Species: Enhancement of Survival and Incidental Take Permits
  - [89 FR 26070 04/12/2024 - Effective May 13, 2024](#)



# Laws/Regulations/Policies

- Endangered and Threatened Wildlife and Plants; Regulations Pertaining to Endangered and Threatened Wildlife and Plants
  - [89 FR 23919 04/05/2024 - Effective May 6, 2024](#)
  - Revision to regulations concerning protections of endangered species and threatened species under the Endangered Species Act (Act or ESA).
  - Reinstate the general application of the “blanket rule” option for protecting newly listed threatened species pursuant to section 4(d) of the Act, with the continued option to promulgate species-specific section 4(d) rules.
  - Extension to federally recognized Tribes the exceptions to prohibitions for threatened species that the regulations currently provide to the employees or agents of the Service and other Federal and State agencies to aid, salvage, or dispose of threatened species.
  - Minor changes to clarify or correct the existing regulations for endangered species and threatened species; these minor changes do not alter the substance or scope of the regulations.



# Laws/Regulations/Policies

- Endangered and Threatened Wildlife and Plants: Regulations for Interagency Cooperation
  - [89 FR 24268 04/5/2024 - Effective May 6, 2024](#)
  - The U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS; collectively, the "Services"), finalize revisions to portions of our regulations that implement section 7 of the Endangered Species Act of 1973, as amended.
  - The revisions to the regulations clarify, interpret, and implement portions of the Act concerning the interagency cooperation procedures.



# Laws/Regulations/Policies

- Endangered and Threatened Wildlife and Plants: Listing Endangered and Threatened Species and Designating Critical Habitat
  - [89 FR 24300 04/5/2024 - Effective May 6, 2024](#)
  - The U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS; collectively, the "Services"), finalized revisions to portions of our regulations that implement section 4 of the Endangered Species Act of 1973, as amended.
  - The revisions to the regulations clarify, interpret, and implement portions of the Act concerning the procedures and criteria used for listing, reclassifying, and delisting species on the Lists of Endangered and Threatened Wildlife and Plants (Lists) and designating critical habitat.



# Laws/Regulations/Policies

- Endangered and Threatened Species: Enhancement of Survival and Incidental Take Permits
  - [89 FR 26070 04/12/2024 - Effective May 13, 2024](#)
  - Revision to the regulations concerning the issuance of enhancement of survival and incidental take permits under the Endangered Species Act of 1973, as amended.
  - Clarify the appropriate use of enhancement of survival permits and incidental take permits;
  - Clarify authority to issue these permits for non-listed species without also including a listed species;
  - Simplify the requirements for enhancement of survival permits by combining safe harbor agreements and candidate conservation agreements with assurances into one agreement type;
  - Incorporate portions of our five-point policies for safe harbor agreements, candidate conservation agreements with assurances, and habitat conservation plans into the regulations to reduce uncertainty.
  - The regulatory changes are intended to reduce costs and time associated with negotiating and developing the required documents to support the applications. Anticipate that these improvements will encourage more individuals and companies to engage in these voluntary programs, thereby generating greater conservation results overall.

# FWS Accomplishments



Since last RRT meeting  
November 2023

## Federal, state, and local Planning and Coordination Efforts

Description	Location	Dates
Oiled Wildlife Training	Corpus Christi, TX	December 1, 2023
Central TX Coastal Zone Area Contingency Meeting	Houston, TX	February 1, 2024
South TX Coastal Zone Area Contingency Meeting	Corpus Christi, TX	February 28, 2024
SETX/SWLA Coastal Area Contingency Meeting	Orange, TX	March 6, 2024
Southeast Regional Spill Response/NRDAR Integration Workshop (AR/LA)	Fairhope, AL	March 19-21, 2024
Virtual 8HR HAZWOPER Refresher	Virtual	April 29, 2024

# FWS Outlook

Until next RRT meeting  
November 2024



## Federal, state, and local Planning and Coordination Efforts

Description	Location	Dates
Best Practices for Migratory Bird Care During Oil Spill Response Guidance	FWS HQ	Summer 2024
24 hr HAZWOPER Training	Lacombe, LA	May 21-23, 2024
40 hr HAZWOPER Training	Tulsa, OK	June 24-28, 2024
40 hr HAZWOPER Training	Honolulu, HI	August 12-26, 2024
24 hr HAZWOPER Training	Portland, OR	September 17-29, 2024
40 hr HAZWOPER Training	Anchorage, AK	October 21-25, 2024

# DOI Bureau Contacts Continued

<b>BIA</b>	National	Sherry Kircher	sherry.kircher@bia.gov
<b>BIA</b>	Eastern Region (AR, LA)	Jerry Page Keith Bluecloud	jerry.paige@bia.gov keith.bluecloud@bia.gov
<b>BIA</b>	Southwest Region (NM)	Donna Kraidy	donna.kraidy@bia.gov
<b>BIA</b>	Navajo Region (NM)	George Padilla	george.padilla@bia.gov
<b>BIA</b>	Southern Plains (portions of OK, TX)	Dave Anderson Stephanie Henderson	david.anderson@bia.gov stephanie.henderson@bia.gov
<b>BIA</b>	Eastern Oklahoma (portions of OK)	Mosby Halterman	mosby.halterman@bia.gov
<b>BLM</b>	NM, TX, OK, KS	Dave Jevons	dejevons@blm.gov
<b>NPS</b>	National	Lyndsey Nguyen	lyndsey_nguyen@nps.gov
<b>NPS</b>	Midwest Region (AR)	Olivia Garcia	olivia_garcia@nps.gov
<b>NPS</b>	Southwest Region (LA)	Kelly Kachurak	kelly_kachurak@nps.gov
<b>NPS</b>	Intermountain Region (NM, OK, TX)	Paul Torcoletti	paul_torcoletti@nps.gov

Contact Becky Collins for Bureau of Reclamation, US Geological Service, and Office of Surface Mining & Reclamation contacts



# Bureau Updates - BSEE

## BSEE Contacts

<b>BSEE – OSPD</b> (Planning & Preparedness)	GOM Supervisor	Sara Moore	<a href="mailto:sara.moore@bsee.gov">sara.moore@bsee.gov</a>
<b>BSEE – OSPD</b> (Planning & Preparedness)	Senior Preparedness Analyst – OSPD RRT6 Rep.	Cullen Jones	<a href="mailto:cullen.jones@bsee.gov">cullen.jones@bsee.gov</a>
<b>BSEE – GOM Region</b> (Response)	Source Control Support Coordinator	James Fletcher	<a href="mailto:james.fletcher@bsee.gov">james.fletcher@bsee.gov</a>

**\*New Position Update: BSEE OSPD Training & Exercise Technical Specialist**

Dr. Harry Juneau, [harry.juneau@bsee.gov](mailto:harry.juneau@bsee.gov)



# Bureau Updates - BSEE

- BSEE Decommissioning of Orphaned Wells Project - ongoing
  - Abandonment of Orphaned wells on the OCS – Matagorda Island blocks (MI-632, 656, & 657; USCG Sector Corpus Christi AOR)
  - Contractors expected to commence decommissioning operations in Summer 2024
  - Facilities became orphaned due to operator liquidation via bankruptcy

# Laws/Regulations/Policies



- Reg. Update: 30 CFR 254 Oil Spill Response Requirements for Facilities Located Seaward of the Coastline
- Reg. Update: 30 CFR 250, Subpart J: Pipelines and Pipeline Rights-of-Way
- Research: BSEE Response Research Branch
  - <https://bsee.gov/research-record>
  - Project # 1154: Optimized Underwater Detection of Dispersed Oil Using Scanning Fluorometry
  - Project # 1156: Surface Water Droplet Size Distribution Instruments: laboratory Validation, Tank Deployment, & Field Evaluation

# BSEE Hurricane Response

## 2024 Hurricane Season



- BSEE's Hurricane Response Team readies for 2024 Hurricane Season
  - Operators must report impacts to production. BSEE verifies and publishes the information daily.
  - Specific reporting requirements are found in Notice to Lessees 2015-G02.
  - Reporting and monitoring continues during storms and until operations return to normal following the severe weather.
  - Through an interagency collaboration, USCG personnel are embedded within BSEE's HRT to better coordinate response activities.
  - BSEE plans to participate in the upcoming Pre-Hurricane ESF-10 Call

# BSEE Accomplishments

Since last RRT meeting  
November 2023



## Federal, state, and local Planning and Coordination Efforts

Description	Location	Dates
BSEE/BOEM/USCG MOU	<a href="#">Non-Mineral Energy Installations and Vessels on the OCS</a>	April 2024
BSEE/USCG MOU	<a href="#">Building a Partnership to Improve Safety &amp; Environmental Protection</a>	December 2023
4 Joint BSEE GIUEs with USCG &/or state response personnel (i.e. LOSCO)	LA & TX	FY 24 to date
14 Operator-led FE/FSE Audits; 12 Equipment Preparedness Verifications (depots)	GOM	FY 24 to date
Incident Response: MPOG	Main Pass, LA	Nov 2023 – Apr 2024

# Outlook

Until Next RRT meeting  
Fall, 2024



## Federal, state, and local Planning and Coordination Efforts

Description	Location	Dates
2024 Chevron Emergency Response Training & Exercise event	Covington, LA	May 7-9, 2024
2024 International Oil Spill Conference (IOSC)	New Orleans, LA	May 13-16, 2024
LA Statewide Area Committee Meeting	Baton Rouge, LA	June 11, 2024
BSEE-OSPD Standard Compliance Activities (GIUE, EV, SROT, FE)	GOM	FY 2024 (ongoing)

# Action Items

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No	Items	Assigned To
1	Unmanned Aircraft Systems UAS Data Call <i>(Availability and capabilities?)</i>	EC
2	Consider the value-added need to develop Fact Sheets for Alternative Fuels <i>(e.g., Ammonia and Hydrogen)</i>	EC
3	EPA R6, D8, and SHG will collaborate and develop a facilitated TTX to work through FOSC roles and responsibilities in advance of SHG's PREP exercise scheduled for 31 Oct 2024.	EC

# Closing Remarks

## Co-Chairs



Craig Carroll, U.S. EPA



Michael Sams, USCG

# Welcome to the Spring 2024 Meeting

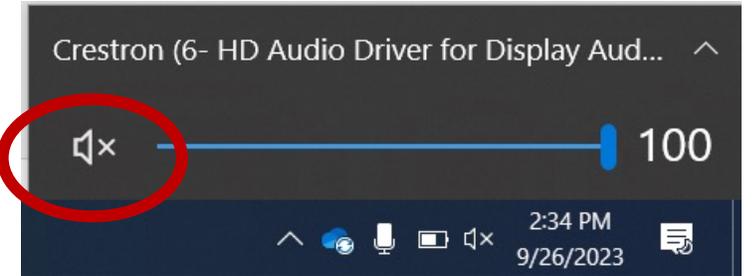


9 May 2024  
Day 2

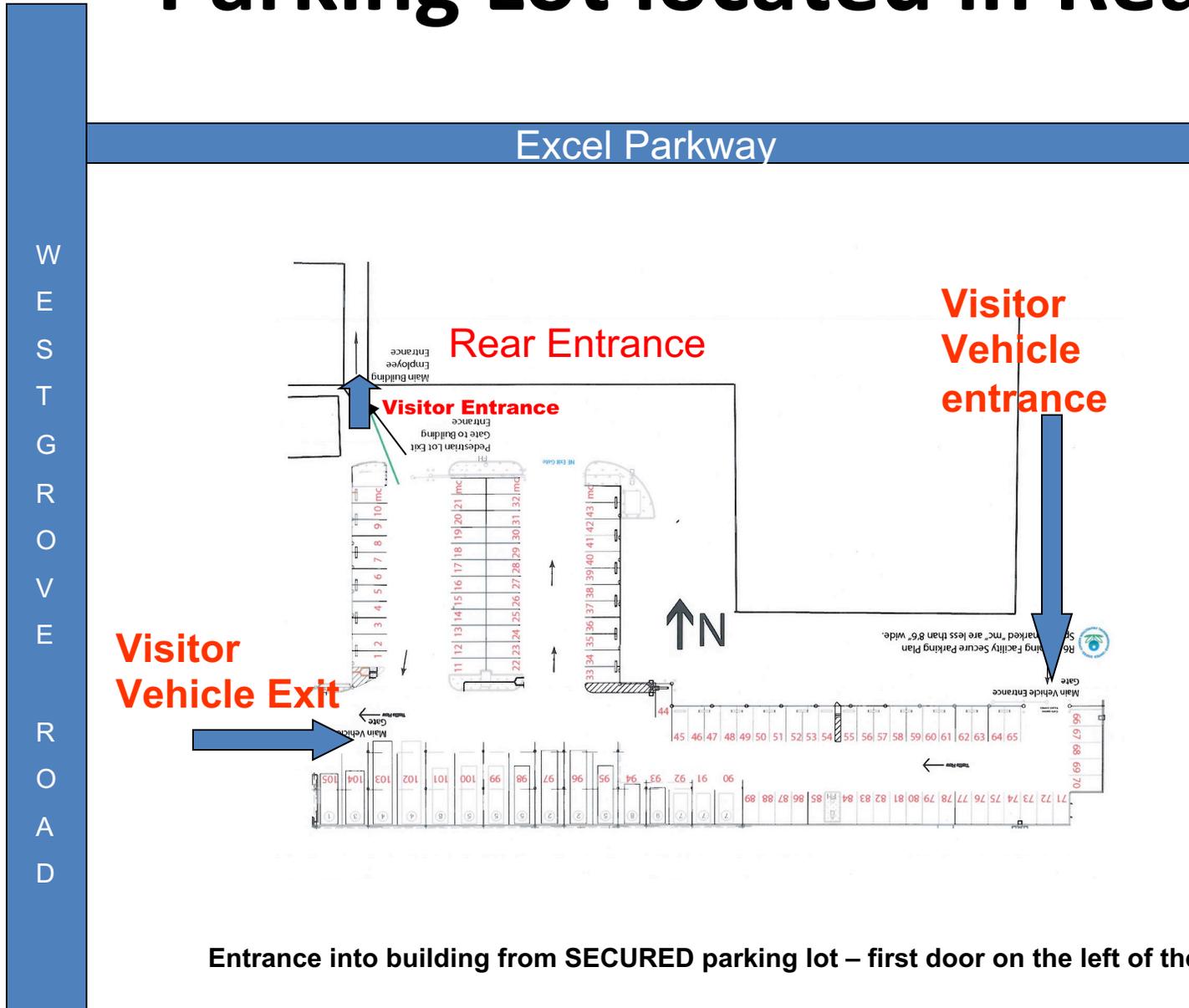
Meeting Call-in Number: (210) 469-3886 Passcode: 478 595 417#

# Meeting Admin: In-person Attendees

- Silence all Cell Phones
- Turn PC Speakers OFF
- Please Use Microphones and Identify Yourself
- Limit Sidebar Talking Conversations/Noise
- Avoid Acronyms
- Breaks/Lunch
- Sign in sheets

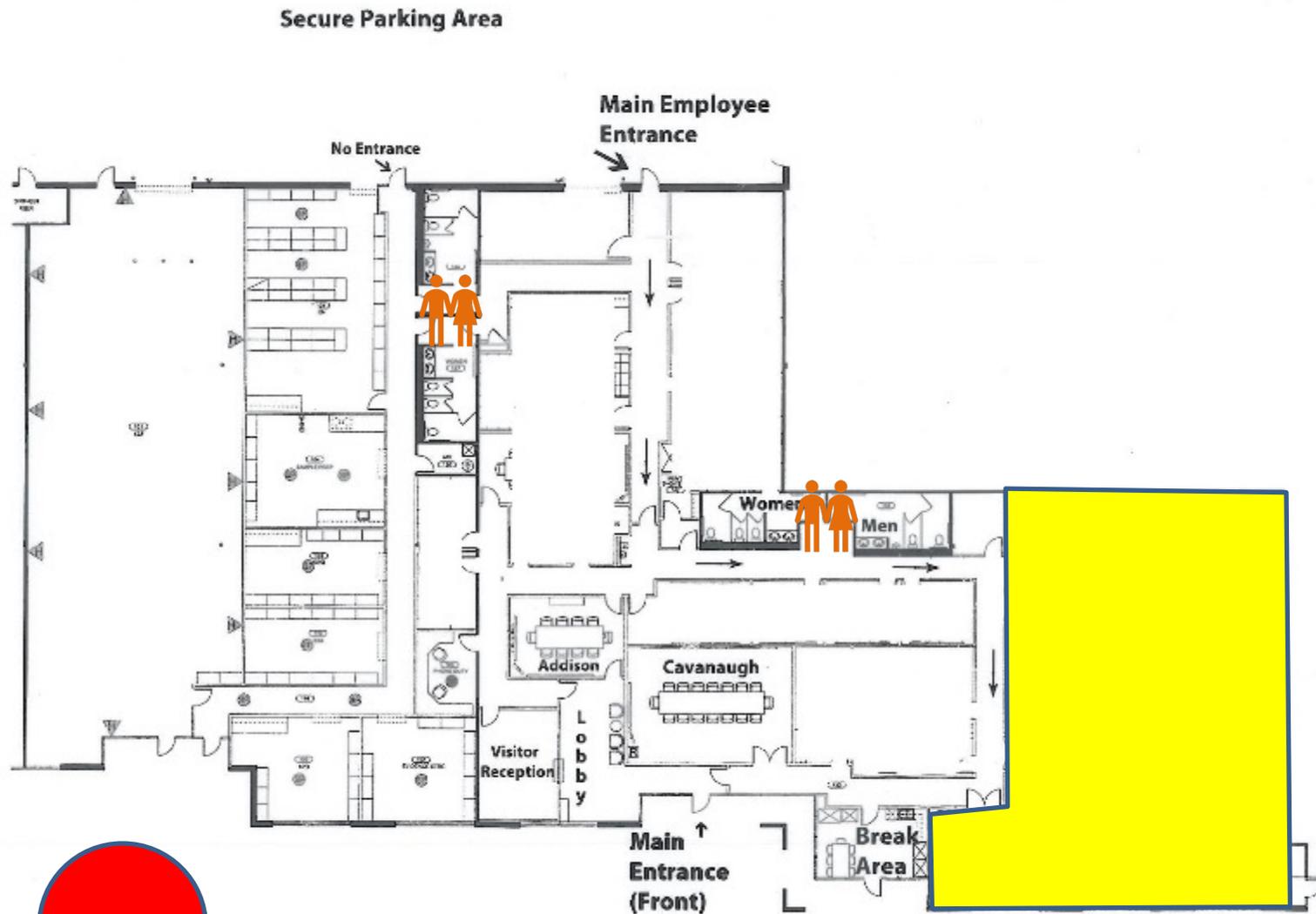


# Parking Lot located in Rear



Entrance into building from SECURED parking lot – first door on the left of the facility.

# Rest Rooms



# Meeting Admin: Remote Attendees

- Turn off Cameras and Mute Mics
- Do not put your phones on hold
- \*6 to mute/unmute
- Identify yourself when speaking
- Raise Hand and/or Use Meeting Chat
- Roll Call Process:

If you called in and you do not see your name displayed in Teams, please type your name in the meeting chat so we can add you to the meeting summary or [Fisher.Kelsey@epa.gov](mailto:Fisher.Kelsey@epa.gov)



# Day 2

 2024 Regional Response Team (RRT) 6 Spring Meeting Agenda

Day 2		Thursday, May 9, 2024	
0830 – 0835	Welcome	Co-Chairs & Coordinators	
0835 – 0905	HAZSUB Final Rule Overview	Rebecca Broussard, USEPA HQ	
0905 – 0935	Surface Dispersant Monitoring with Autonomous Underwater Surface Vehicle (AUSV)	James Hanzalik, Clean Gulf Associates	
0935 – 1005	EPA Case Study – Sherwin Williams Emergency Response	Nabil Mzee, USEPA	
20-Minutes	<i>Break</i>		
1025 – 1055	EPA Case Study – Sawtooth Emergency Response	Anish Patel, USEPA	
1055 – 1155	<b>USCG FOSC Reports (unit reps from each of the below will present ~10 min):</b> <ul style="list-style-type: none"> <li>1. Sector Lower Mississippi River</li> <li>2. Marine Safety Unit Port Arthur</li> <li>3. Marine Safety Unit Houma</li> <li>4. Sector Corpus Christi</li> <li>5. Sector Houston-Galveston</li> <li>6. Sector New Orleans</li> </ul>		
		LT John Krueger	CWO-2 Andrew Christopherson
		LT Michael Civay	LT Alexis Williams
		MSTC Ronnie Lucas	LTJG Craig Feeney
1155 – 1210	Open Forum	All/Co-Chairs	
1210– 1220	Review Action Items & Future Meeting Dates	Coordinators	
1220 – 1230	Closing Remarks	All/Co-Chairs	
1230	<i>Adjourn</i>		

Dates for future RRT-6 Meetings		
Semiannual Meetings	Location	Dates
Fall 2024	Addison, TX	13-14 Nov 2024
Spring 2025 Joint RRT-6/7 mtg	Lenexa, KS	2-3 Apr 2025
Fall 2025	Addison, TX	5-6 Nov 2025
Spring 2026	Addison, TX	6-7 May 2026

# Opening Remarks

## Co-Chairs



Craig Carroll, U.S. EPA



Michael Sams, USCG

# HAZSUB Final Rule Overview

Rebecca Broussard, USEPA HQ



# Clean Water Act Hazardous Substance Facility Response Plans Final Rule 40 CFR 118

Rebecca Broussard  
Office of Land and Emergency Management  
May 2024

# Background: Statutory and Regulatory

Under section 311(j)(5) of the [Clean Water Act](#) (CWA), the President:

- “shall issue regulations which require an owner or operator of a . . . facility . . . to prepare and submit to the President a plan for responding, to the maximum extent practicable, to a worst case discharge, and to a substantial threat of such a discharge, of oil or a hazardous substance.”

Oil requirements promulgated in 1994: [Facility Response Plans \(FRP\)](#) under [Subpart D of 40 CFR 112](#).

EPA had not previously proposed worst-case discharge planning regulations for CWA hazardous substances (HS) under 311(j)(5).



# Background: Timeline

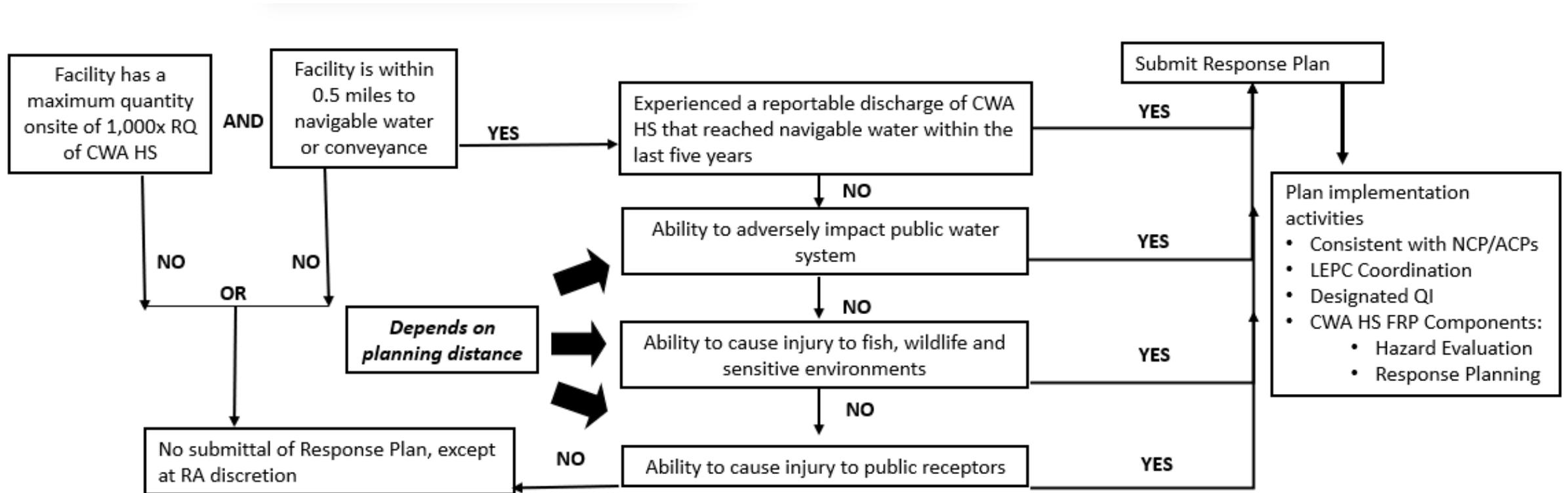


## Major Changes from Proposal

- RQ multiplier lowered from 10,000x to 1,000x
- Threshold and worst case discharge (WCD) quantities based on maximum quantity on site, not capacity
- Worst case discharge scenarios for each CWA HS on site above threshold quantity (1,000xRQ)
- FRP must cover only CWA HS on site above threshold quantity
- 1 & 2-hour Response Actions
- FRP must include ERAP
- Recertify every 5 years, not resubmit

# Final Applicability Criteria – 118.3

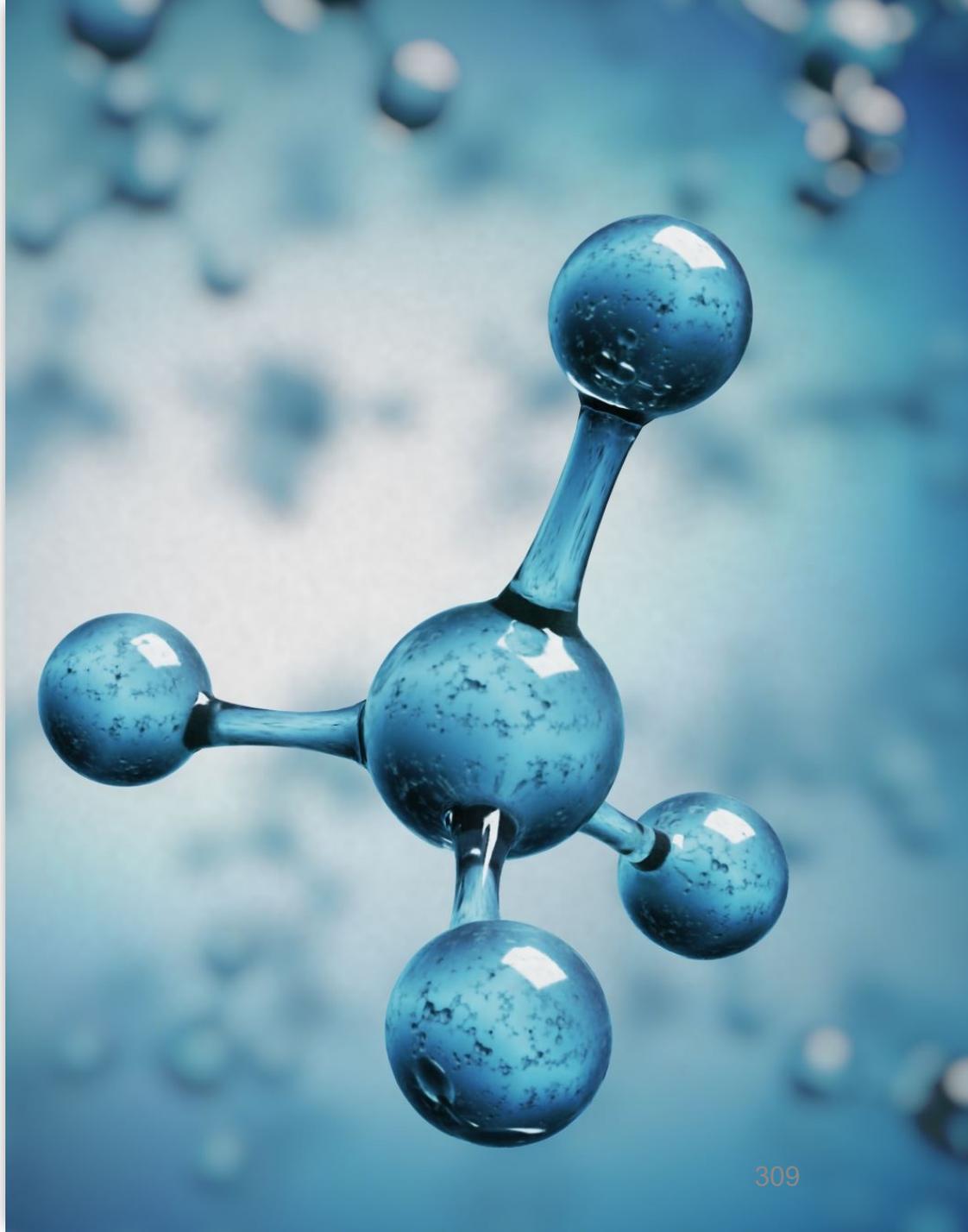
\* Facility – onshore non-transportation-related



# Screening Criterion: Threshold Quantity – 118.2(a)

Any CWA hazardous substance on site (in aggregate and including mixtures) at or above 1,000x Reportable Quantity at any time

- 296 CWA hazardous substances as listed in [40 CFR 116.4](#)
- Reportable Quantities as listed in [40 CFR 117.3](#)
- Will be added to [EPA's List of Lists](#)



## Mixture Rule – 118.9

If mixed with oil, regulated as oil.

Otherwise, CERCLA mixture rule, no *de minimus* quantity.

- If all quantities known, meets threshold quantity when the maximum quantity onsite meets or exceeds the threshold quantity of any CWA hazardous substance in the mixture.
- If unknown quantities, meets the threshold when maximum quantity onsite meets or exceeds the quantity for the CWA hazardous substance with the lowest threshold quantity.



Screening  
Criterion: Distance  
to Navigable  
Water – 118.3(b)

Facility is within one-half (0.5) mile of navigable water or conveyance to navigable water

- Navigable water is defined through [Waters of the United States \(WOTUS\) 40 CFR 120](#)
- Statutory authority is “based on location”

# Applicability: Ability to Cause Substantial Harm to the Environment – 118.3(c)

CWA: Covered facility is “[an] onshore facility that, because of its location, **could reasonably be expected to cause substantial harm to the environment** by discharging into or on the navigable waters, adjoining shorelines, or the exclusive economic zone”

1. Ability to adversely impact public water system (PWS)
2. Ability to cause injury to fish, wildlife, and sensitive environments (FWSE)
3. Ability to cause injury to public receptors
4. Reportable discharge history

# Substantial Harm Criterion: Ability to Cause Injury to FWSE – 118.3(c)(1)



May include wetlands, national and State parks, critical habitats for endangered or threatened species, wilderness and natural resource areas, marine sanctuaries and estuarine reserves, conservation areas, preserves, wildlife areas, wildlife refuges, wild and scenic rivers, recreational areas, national forests, Federal and State lands that are research national areas, heritage program areas, land trust areas, historical and archaeological sites and parks, include unique habitats such as aquaculture sites and agricultural surface water intakes, bird nesting areas, critical biological resource areas, designated migratory routes, and designated seasonal habitats.

Requires planning distance calculations

Endpoints in Appendix B based on 96-hour LC50  
FWSE in Area Contingency Plans (intended to be updated)

# Substantial Harm Criterion: Ability to Adversely Impact PWS – 118.3(c)(2)

Outcome-based; must work with PWS to determine (if possible)

1. Violates any National Primary Drinking Water Standard (NPDWS) or State Drinking Water Regulation (SDWR), such as an exceedance of a MCL
2. Compromises the ability of the PWS to produce water that complies with any NPDWS or SDWR
3. Results in adverse health impacts in people exposed to the maximum concentration that could enter a drinking water distribution system
4. Contaminates public water system infrastructure, including but not limited to intake structures, treatment facilities, and drinking water distribution systems, or premise plumbing systems to a degree that requires remediation to restore system components to acceptable performance
5. Impairs the taste, odor, or other aesthetic characteristic of the water entering a drinking water distribution system to a degree that could make the water unacceptable to consumers and that could prompt the public water system to issue use restrictions

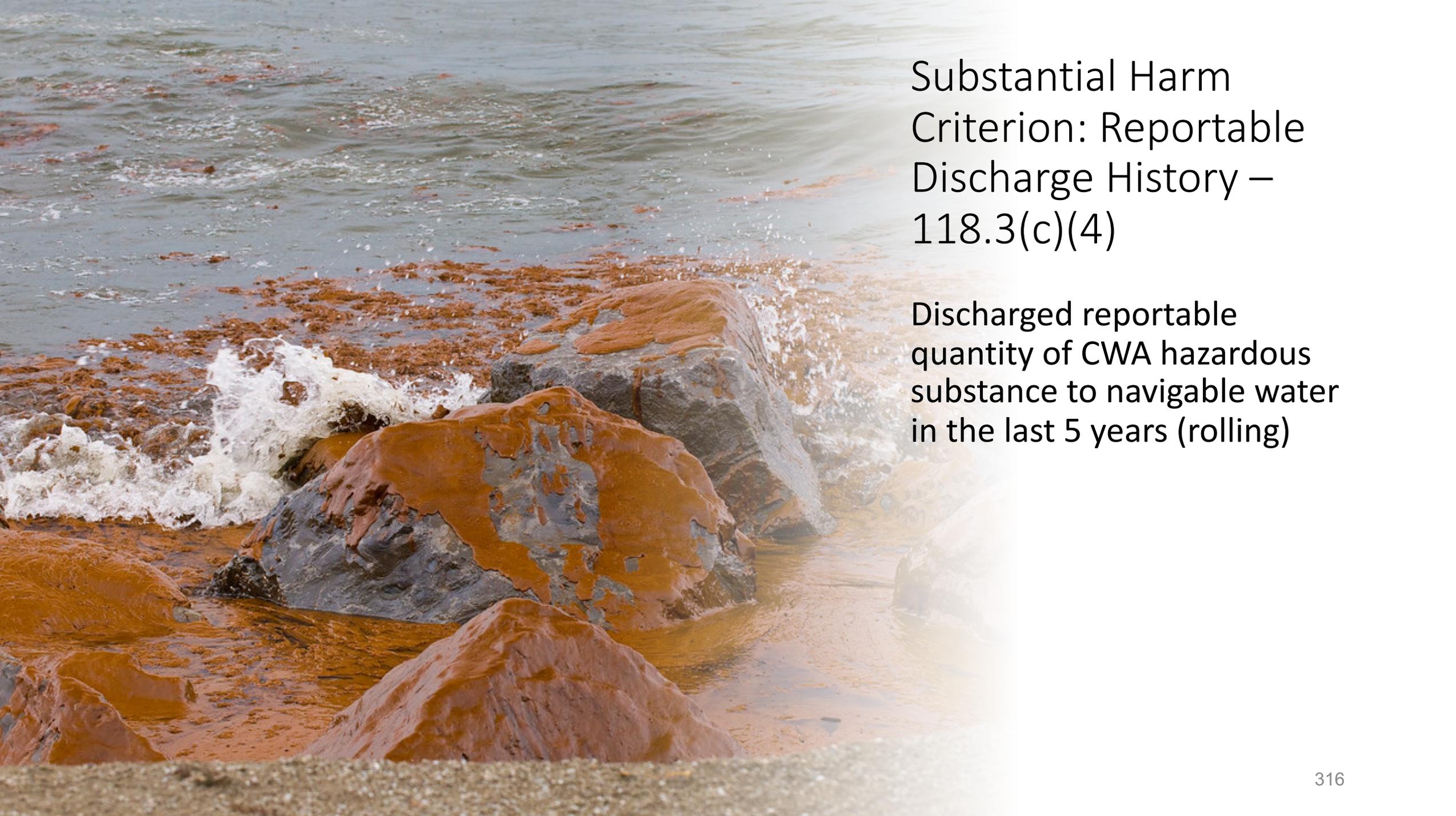
## Substantial Harm Criterion: Ability to Cause Injury to Public Receptors – 118.3(c)(3)

Parks, recreational areas, docks, or other public spaces inhabited, occupied, or used by the public at any time where members of the public could be injured as a result of a worst case discharge into or on the navigable waters or a conveyance to navigable waters.

Requires planning distance calculations

Endpoints in Appendix B based on LD50





Substantial Harm  
Criterion: Reportable  
Discharge History –  
118.3(c)(4)

Discharged reportable  
quantity of CWA hazardous  
substance to navigable water  
in the last 5 years (rolling)

# Worst Case Discharge Scenarios – (118.10)

Use endpoints in Appendix B for FWSE/public receptors

**Quantity:** max in a single container or multiple interconnected containers

**Planning Distance:** must consider

*Overland transport including:*

- Nearest opportunity for discharge into or on the navigable waters
- Ground conditions (topography, draining, etc.)
- Properties of CWA HS

*In-water transport including:*

- Point of entry to navigable waters
- Flow rate and duration of the discharge
- Direction of the discharge at the point of entry
- Surface versus underwater entry
- Conditions of the receiving water

*Adverse weather conditions:* calculated based on adverse winds, currents, and/or river stages, over a range of seasons, weather conditions, and river stages.

*Properties of the CWA hazardous substance* such as solubility in water, speciation in water, density (relative to water), polarity, vapor pressure, reactivity with water and common solutes in natural waterbodies, human toxicity, mammalian toxicity, aquatic toxicity, and flammability.



# Applicability: Exceptions and Exemptions – 118.8

## Exceptions

- Anything in transportation (DOT PHMSA)
- Under USCG or DOI authority
- Underground Storage Tanks under [40 CFR 280](#)

## Exemptions:

- Articles
- Uses:
  - Structural components
  - Janitorial
  - Foods, drugs, cosmetics
  - Process/cooling water
  - Wastewater treated by POTWs
  - Compressed air
  - Retail/personal use
  - RCRA HazWaste ([40 CFR 264](#), [265](#), [262 Subpart M](#))

# Major Rule Provisions: RA Authority – 118.5

EPA Regional Administrator (RA) can require FRPs based on:

1. Type of transfer operation(s)
2. CWA hazardous substance quantity, category, characteristics
3. Proximity to FWSE
4. Ability to adversely impact PWS
5. Location in a source water protection area
6. Ability to cause injury to public receptors
7. Lack of passive mitigation measures or systems
8. Potential to adversely impact communities with environmental justice concerns;
9. Potential vulnerability to adverse weather conditions resulting from climate change
10. Density of facilities with CWA hazardous substances onsite in the immediate area
11. Reportable discharge history
12. Other site-specific characteristics and environmental factors that the RA determines to be relevant to recovery, shoreline protection, and cleanup.

EPA RA determines if a facility can cause significant and substantial harm to environment – these plans must be approved by EPA

1. Frequency of past reportable discharges
2. Proximity to navigable waters or a conveyance to navigable waters
3. Age or condition of containers and equipment;
4. Potential for hazards such as flooding, hurricanes, earthquakes, or other disasters that could result in a worst case discharge
5. Other facility- and Region-specific information, including local impacts on public health

# Major Rule Provisions: Appeals (118.6) and Petitions (118.7)

## Appeals

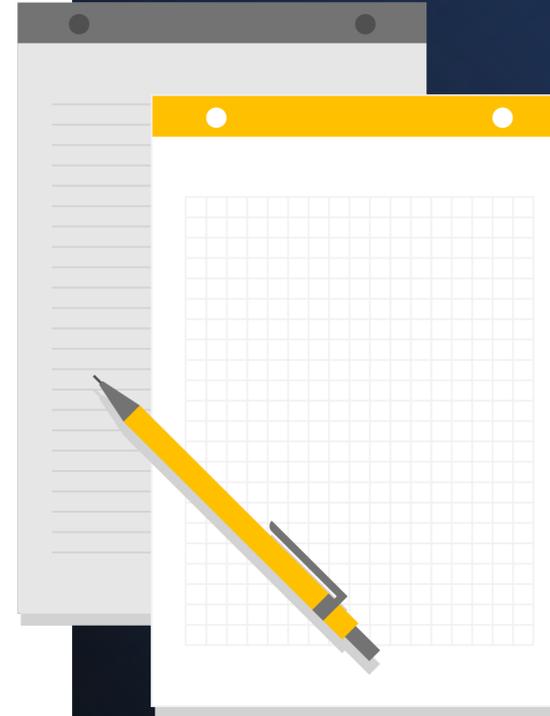
- Facility O/O can appeal that it meets applicability criteria or RA determination of sub or sig/sub harm, or amendments
- Facility O/O can appeal classification or status as sub or sig/sub harm
- Appeal can go up to EPA administrator

## Petitions

- Any member of public can petition RA to consider if facility could cause sub harm to environment
- Petition must discuss why and will be made available to facility O/O and O/O has opportunity to reply

# Facility Response Plans: General Requirements – 118.11(a)

- Consistent with NCP and ACPs - Review annually and revise
- ID Qualified Individual (trained to Incident Commander)
- ID and ensure by contract or other means private personnel and equipment
- Describe the training, equipment testing, periodic unannounced drills, and response actions
- Update facility response plan periodically and resubmit to the Regional Administrator for approval of each significant change



# Two Way Street – NCP/ACPs

**FRP:** Hazard evaluation must detail potential impacts to FWSE from worst case discharge; this informs response actions and equipment, notifications, sampling, monitoring, etc.

**ACPs/GRPs:** Plan information can then be worked back into ACPs or GRPs (quantities, plume pathways)

# Facility Response Plans: Plan Elements – 118.11(b)

- Facility information
- Owner/operator information
- Reportable discharge history: to water, 5 years
- Response personnel and equipment: private personnel and equipment necessary to respond to the maximum extent practicable to WCD or threat of WCD
- Hazard evaluation
- Notifications
- Discharge information
- Personnel roles and responsibilities
- Evacuation plans (+diagrams)
- Discharge detection systems
- Response actions
- Disposal plans
- Containment measures
- Training procedures
- Exercise procedures
- Self-inspection
- Emergency Response Action Plan (ERAP)

# Coordination Activities – 118.12



FRP must be coordinated with local ER plan developed under EPCRA 303.



Facility must provide FRP to LEPC/TEPC/SERC/TERC or other local emergency planning or response org (upon request).



Facility must coordinate with locals to determine how addressed in local ER plan and ensure community awareness of risks at facility.



At least annual coordination including information sharing and drill/exercise schedule establishment



Must include documentation, including good faith efforts to coordinate

# Response Actions – 1 and 2-hour Requirements 118.11(b)(13)

## **1-hour:**

- Complete notifications
- Mobilize facility response personnel for immediate response actions
- Identify the scale of the incident, coordinate with SRO on response actions
- Complete WCD scenario cross-check and potential effects and start tactical planning;
- Ensure containment and neutralization systems are operational;
- Coordinate facility evacuation;
- Coordinate with drinking water authorities;
- Mobilize response equipment coordinate with local police and fire officials.

- Initiate community evacuation plan,
- Evaluate if downstream/upstream public receptors that could be impacted and may require evacuation

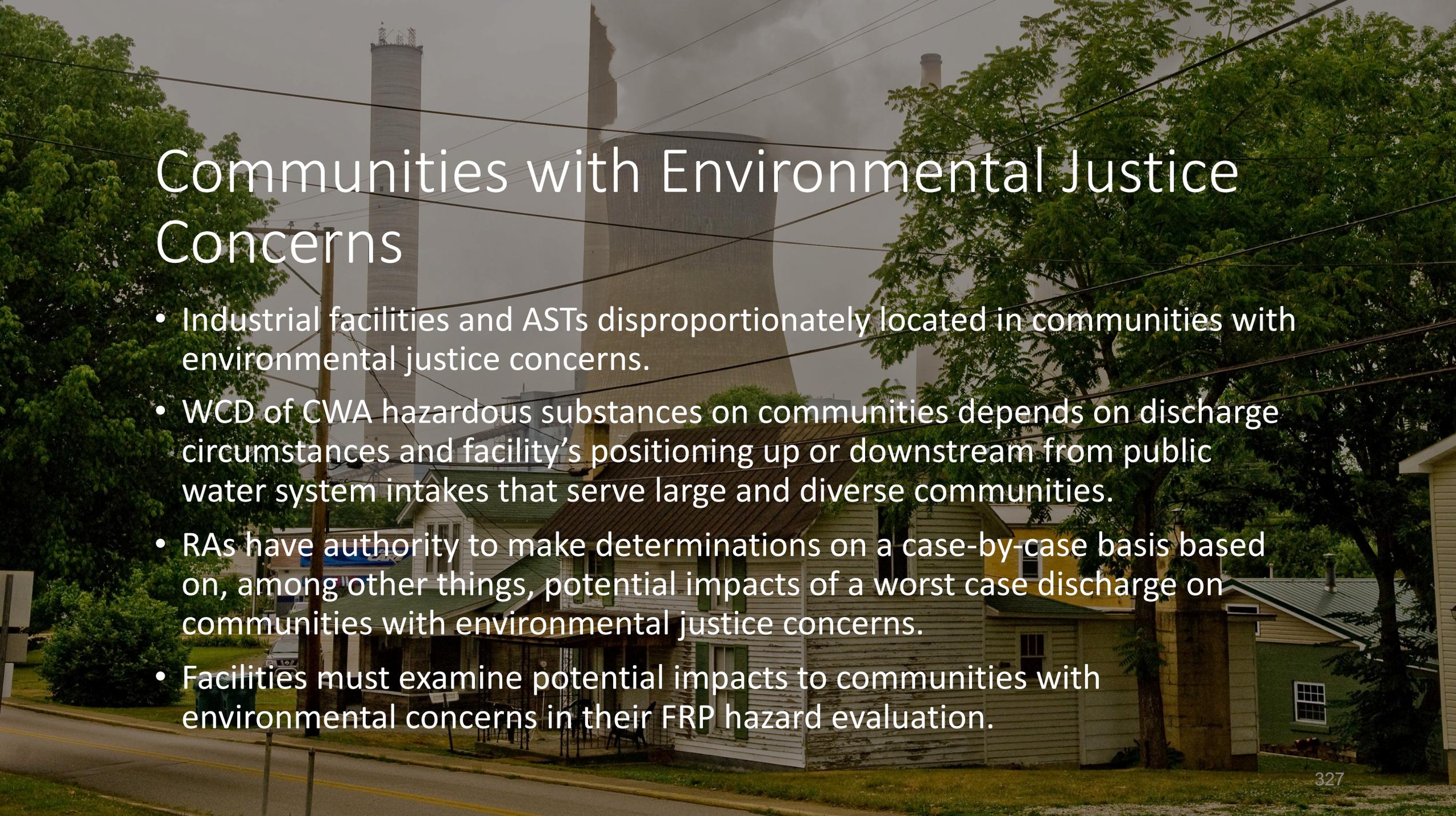
## **2-hour:**

- Deploy response resources identified in the response plan:
  - Containment and recovery devices (such as containment dams, culvert plugs, underflow dams, containment booms, skimmer equipment or acid/base neutralization resources);
- Initiate any water, soil, and air monitoring as outlined in the response plan.

# Substantial Harm Certification Form – Appendix A

Facilities that meet the screening criteria but not the substantial harm criteria need to submit a Substantial Harm Certification Form (Appendix A) to EPA

Facilities submitting FRPs can submit their forms along with the full plans



# Communities with Environmental Justice Concerns

- Industrial facilities and ASTs disproportionately located in communities with environmental justice concerns.
- WCD of CWA hazardous substances on communities depends on discharge circumstances and facility's positioning up or downstream from public water system intakes that serve large and diverse communities.
- RAs have authority to make determinations on a case-by-case basis based on, among other things, potential impacts of a worst case discharge on communities with environmental justice concerns.
- Facilities must examine potential impacts to communities with environmental concerns in their FRP hazard evaluation.

# Climate Change

- A worst case discharge: the largest foreseeable discharge in adverse weather conditions, which is inclusive of conditions due to climate change.
- RAs have authority to make determinations on a case-by-case basis based on, among other things, concerns related to climate change risks.
- Facilities must examine climate change impacts in their FRP hazard evaluation.



# Facility Response Plans: Compliance Dates – 118.4



**FRPs due:  
June 1, 2027**



**Substantial Harm  
Certification Forms  
due:  
June 1, 2027**



**After initial  
period:  
FRPs due within 6  
months of meeting  
criteria**

Substantial Harm  
Certification forms  
due within **60 days**  
of meeting criteria



**Recertify plans  
and Substantial  
Harm Certification  
Forms every 5  
years**



**Amendments  
(material  
changes) within  
60 days**

## ESTIMATED FACILITY COUNT

Region	Est. HS FRP count
1	214
2	268
3	375
4	750
5	750
6	1,339
7	321
8	321
9	375
10	589
Total	5,354

## NOTES ON CONNECTIONS

- Same authorizing legislation as and largely modeled on oil FRP program.
- Plans must be consistent with NCP/ACPs and ACPs consulted for determining FWSE
- Must conduct GUIEs

# State/Tribal/Local Impacts



Program cannot be delegated to State under CWA, but EPA will work with States with existing programs to ease administrative burden



Data availability: EPA will make data from Plans/Substantial Harm Certification Forms available to States/Tribes/Locals for their awareness/purposes



States/Tribes/Locals can petition Regional Administrator to consider requiring plans from facilities that do not meet the published applicability criteria

# Also Updated NCP 40 CFR 300

- **§ 300.185 Nongovernmental participation** – Added reference to 40 CFR part 118
- **§ 300.211 OPA facility and vessel response plans** – Added reference to 40 CFR part 118
- **Added § 300.411:** Details requirements for responses to CWA hazardous substance worst case discharges.
  - Mirror the requirements for oil worst case discharges in § 300.324 (for oil)
  - OSC responsibilities to notify the NSFCC
  - Require FRP initiation
  - Implement ACP worst case discharge plans
  - Take response actions
  - Coordinate private and public equipment for response



# Questions?

Rebecca Broussard

[broussard.rebecca@epa.gov](mailto:broussard.rebecca@epa.gov)

## More information:

<https://www.epa.gov/hazardous-substance-spills-planning-regulations>

# Surface Dispersant Monitoring with Autonomous Underwater Surface Vehicle (AUSV)

James Hanzalik, Clean Gulf Associates, Inc

# Why do we have oil spill response cooperatives?

- **Industry owned**
- **Typically, non-profit**
- **Dedicated equipment services multiple members**
- **Members pay dues**



**Equipment tailored for environment and oil type encountered**



**Best maintained equipment and trained personnel**



**Ensures steady capable workforce**



**Regional experts**

# CGA CONSTRUCT



Board of Directors



Clean Gulf Associates,  
Inc. Non-Profit  
Organization  
Formed 1972



GoM E&P Membership



Ocean Aero –  
Dispersant Monitoring



CGA Services – People  
ER Mechanical Recovery



ASI - Dispersants

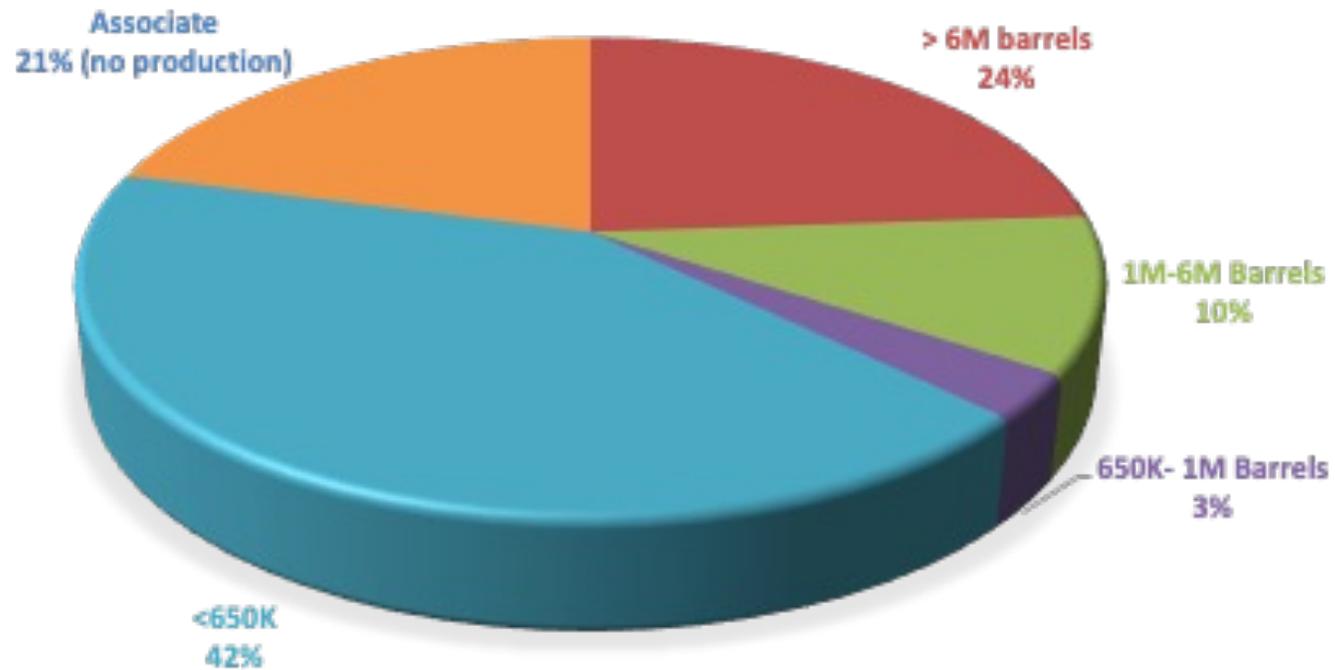


T&T – Koseq Arms  
Surge Capacity



# CGA MEMBERSHIP

## 2023 ANNUAL PRODUCTION BY MEMBERSHIP CATEGORY



# SURFACE DISPERSANT MONITORING PRE-2024

<b>SMART Tier I</b> <b>Timing - immediate</b>	<b>Tier II</b> <b>Timing – as soon as practicable</b>	<b>Tier III</b> <b>Timing – when required</b>
<p>A trained observer, flying over the oil slick and using photographic job aids or advanced remote sensing instruments, <u>assesses dispersant efficacy</u></p>	<p>Provides real-time data from the treated slick and <u>assesses dispersant efficacy</u></p>	<p>Provides information on where the dispersed oil goes and what happens to it – <u>Provides dispersant fate and effects</u></p> <ul style="list-style-type: none"> <li>- Two instruments are used on the same vessel to monitor at two water depths.</li> <li>- Monitoring is conducted in the center of the treated slick at several water depths, from 1 to 10 meters</li> <li>- A portable water laboratory provides data on water temperature, pH, conductivity, dissolved oxygen, and turbidity.</li> </ul>

Smoke rising from the *New Carissa*, February 1999. Photo by USCG



# SURFACE DISPERSANT USE MONITORING REQUIREMENTS – 2024

## Monitoring Requirements:

These monitoring requirements apply to the responsible party of an oil discharge. The amendments establish surface dispersant monitoring requirements when responding to oil discharges (when dispersants are used) as follows:

1. **Prolonged Surface** – Any surface use of dispersant for more than 96 hours after initial application, and
2. **Major Oil Discharges** – Any surface use of dispersant in response to oil discharges of more than 100,000 U.S. gallons occurring within a 24-hour period.

## Monitoring Elements:

The monitoring Elements in the EPA final rule cover several key areas including:

1. Regulatory Applicability Criteria
2. Source Characterization/ Information On Dispersant Application
3. Oil Distribution Analysis/ Ecological Characterization
4. **Water Column Sampling**
5. Immediate and Daily Reporting



OCEAN AERO

# SURFACE DISPERSANT MONITORING RESEARCH & DEVELOPMENT

- CGA funded research and development for the use of “Autonomous Underwater and Surface Vehicle” or AUSVs to conduct surface dispersant monitoring
- **Triton AUSV Generation 3**
  - **Solar/Battery powered with unlimited time/range**
  - Fiberglass hull 14' x 14' x 2.7'
  - Can stay submerged for 8 days
  - Up to 100-meter operating depth
  - 2-5 knot transit speed (wx dependent)
  - Can be launched by vessel, pier or boat ramp
  - Collision avoidance software
  - Communications
- The Triton AUSV has been equipped and tested with dispersant monitoring equipment in alignment with NCP Subpart J

## Ocean Aero Triton (Gen 3) AUSV

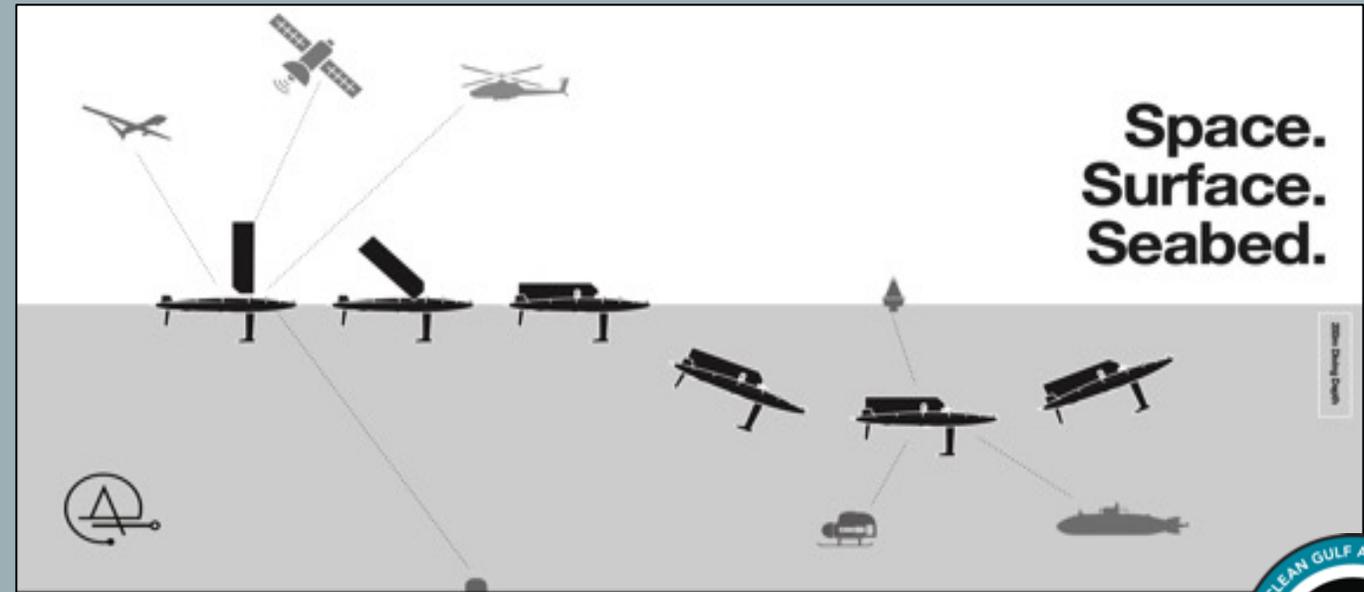
- The world's only AUSV (Autonomous Underwater & Surface Vehicle)

### Key Product Attributes

- Dual-modality (surface & subsurface)
- Solar & wind powered
- Mobile & easy to deploy & retrieve
- Payload versatile

### Value Differentiator

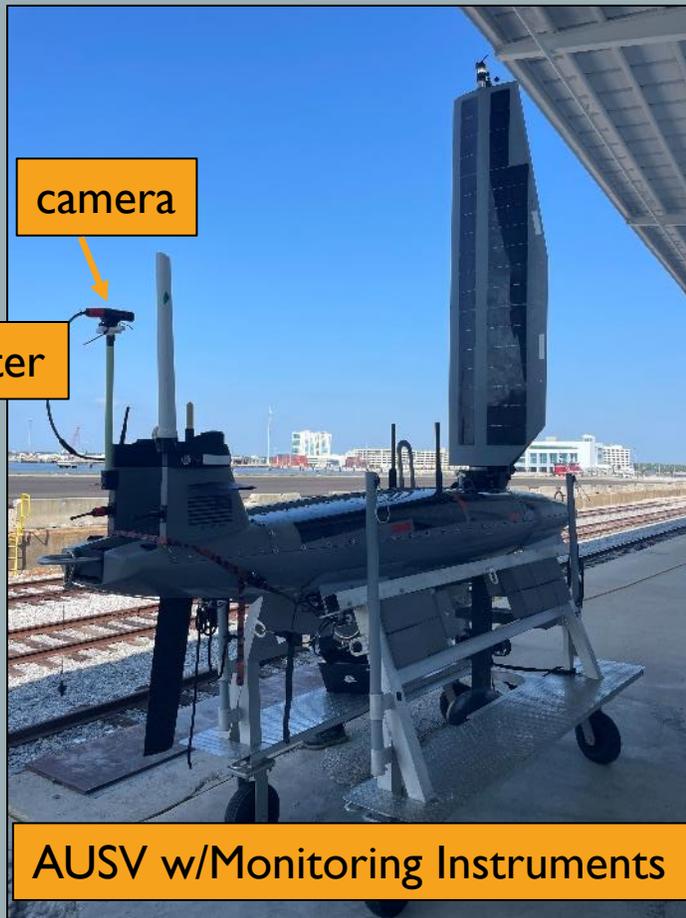
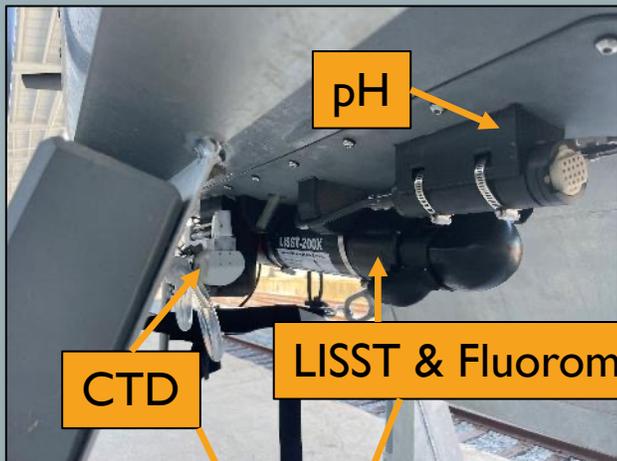
- Collision avoidance & surface weather
- Longer duration by recharging ability
- Enables AUV mode remote launch
- Enables ASV mode ship launch



# TESTS FOR HURRICANE DAMAGE ASSESSMENT (HESS)



# AUSV CONFIGURATION AS TESTED

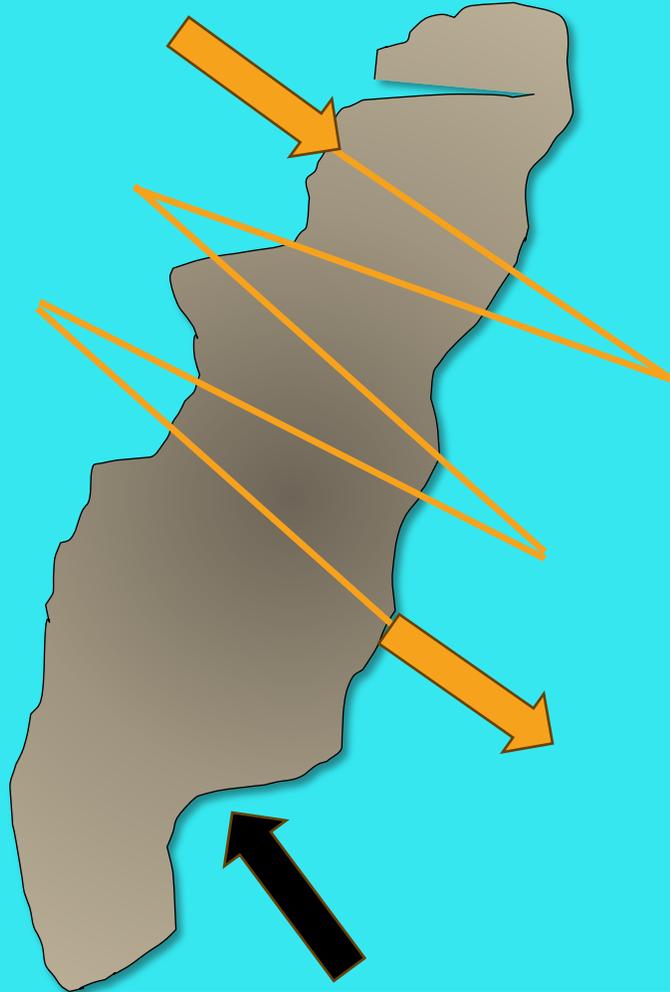


Ocean Aero sampling Device

# NCP SUBPART J VS ONBOARD SENSOR EQUIPMENT

Subpart J Requirement	Sensor	
PAH, heavy metals	Ocean Aero Sampler	
pH	ANB OC-300	
Conductivity, pressure and temperature	Seabird Scientific CTD	
Oil particle size	Sequoia LISST-200x	
Fluorescence	Turner C3 Fluorometer or	
Turbidity	Seabird Scientific ECO 190408	

Transects by monitoring vessel



Oil slick treated with dispersants

## AUSV Capabilities

Logging, sampling and data transmission–

- Turbidity
- Water temperature, pH, and conductivity
- Background or baseline –Fluorometer and LISST

Water Column Sampling –

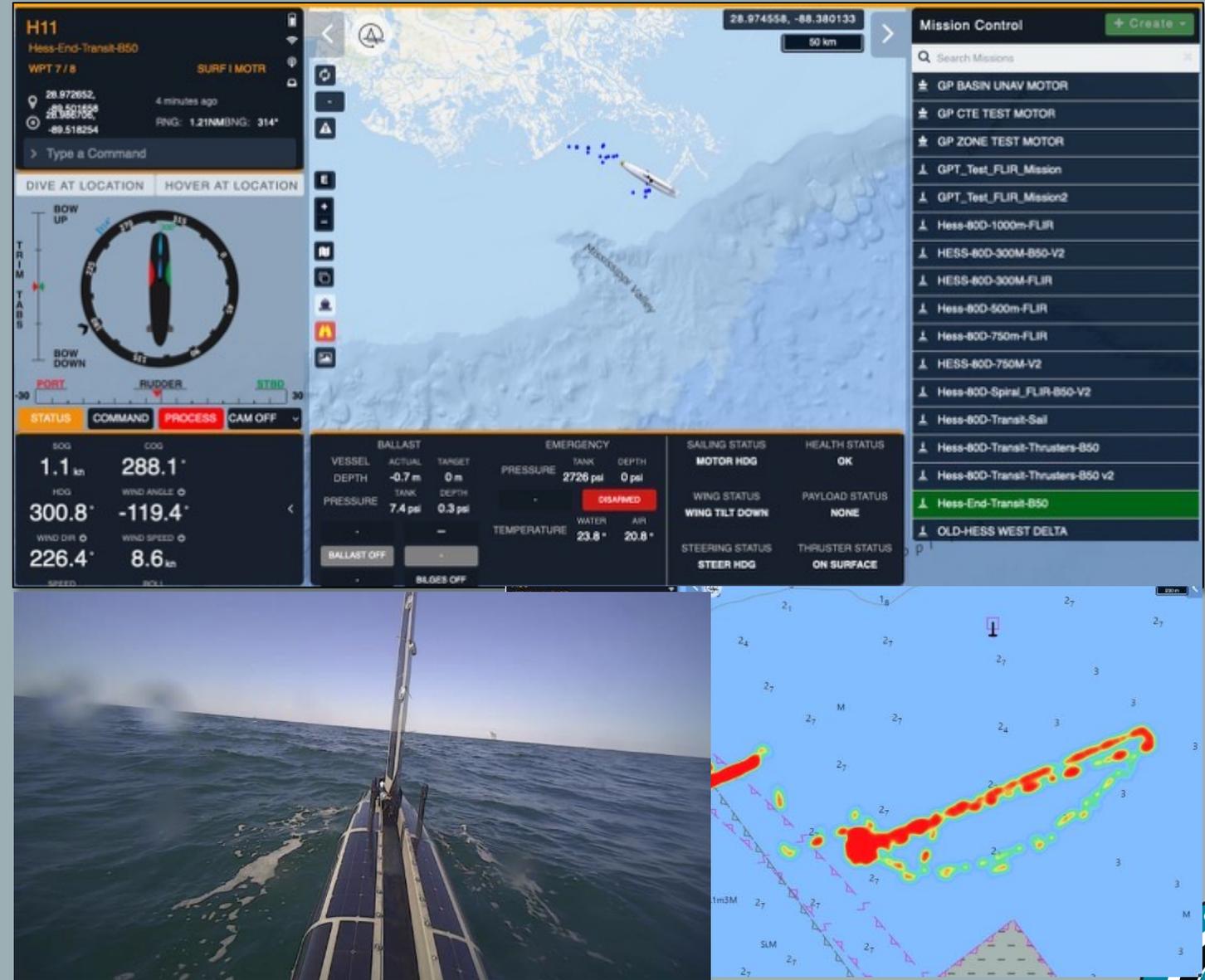
- Dispersed oil plume water column in-situ sampling for later analysis
  - Hydrocarbons (PAH)
  - Heavy metals

Reporting real-time to near real-time –

- Ability to transmit logging data for daily reporting or immediately for specified deviations via satellite, WIFI or cellular
- Sample data as soon as practicable – daily or other specified time for water sampling for lab analyses

## CGA-Ocean Aero tested the AUSV w/sensors

- 30-days of on-water tests were completed in November 2023
- Fluorometer and LISST readings were “heat mapped” for near real-time reporting through their GI
- Programming of sensor “parameter” data capture w/photos
- Other WQI info was transmitted in data packets to the “ICP”
- Tested communications (cellular), Iridium (Satellite) and Silvis (WiFi)
- CGA has executed a contract with Ocean Aero, Inc.,
  - Provide Triton 3 within 24 –hours for a major spill where surface dispersants have been used
  - Or 96 hours of surface dispersant use



# AUSV VS. TRADITIONAL DISPERSANT SURFACE MONITORING

SMART/Surface Vessel Monitoring platforms (towed or vessel deployed systems)	Autonomous Underwater and Surface Vehicle (AUSV)
Safety - personnel are located on board the surface vessels to conduct dispersant monitoring can be exposed	No personnel exposure to VOCs or overspray from dispersants
Endurance - Crew boat's etc., are more expensive and crews are more likely to suffer fatigue in rough weather, etc.	Small vessel to operate and maintain, no crew, or fatigue, vessel can submerge in inclement weather and operate in low light conditions – virtually unlimited fuel (sunlight)
Expertise – may require an onboard scientist to ensure equipment is deployed properly, etc., communication to agency representative or scientist	Ability to transmit environmental data from the AUSV – No onboard scientist needed information may be passed directly to an agency representative or scientist
Maintenance – current subsea shipboard monitoring equipment is more expensive to house, train, operate and maintain.	Commercial off-the-shelf monitoring equipment can be utilized with an AUSV to meet regulatory requirements for surface dispersant use. AUSV's are relatively inexpensive to store and maintain.



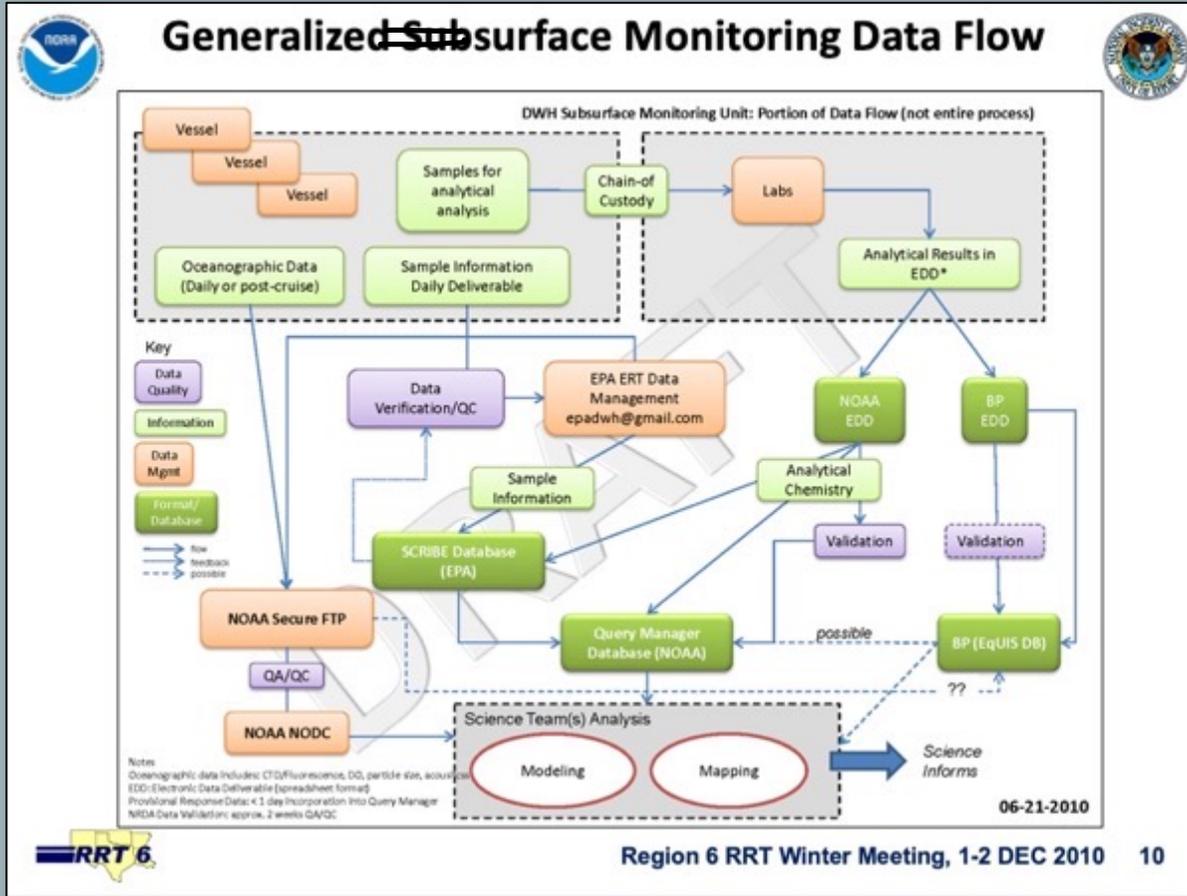
# NOAA SSC, USCG D8, & GULF STRIKE TEAM VISIT



## SURFACE DISPERSANT USE MONITORING ISSUES TO BE RESOLVED – 2024

- Regional Response Plan update w/ACPs (Smart Protocol vs. RP monitoring)
- Is this monitoring considered, operational (go, no go) or environmental, NRDA or both?
- What scientific/environmental questions need to be answered by these methods?
- What are acceptable data parameters that need to be submitted to NOAA?

# DATA STREAM UNKNOWNNS (RP PERSPECTIVE)



- The USCG FOSC makes operational decisions based on Tier I and Tier II SMART
- Where does the RP surface data go (instrument logs, etc.) and to whom?



## RP OAI SURFACE DISPERSANT MONITORING

- **What CGA/Ocean Aero tested AUSV with sensors is :**
  - **Surface dispersant monitoring after a surface application of dispersants for a major spill within 24 hours and/or extended surface dispersant use beyond 96 hours.**
  - **Like the requirement for a member company to have a Dispersant Use Plan in their OSRP, this sensor data will be made available via electronic means to be included, as required, in a member company's Dispersant Monitoring Quality Assurance Project Plan.**

### **What CGA/Ocean Aero tested AUSV with sensors is not:**

- It is **not** a substitute for SMART Tier I or Tier II government guidance still provided for this government function
- It is **not** efficacy testing for “go - no go” FOSC decisions for continued dispersant use
- **Subsea dispersant monitoring**



# EPA Case Study – Sherwin Williams Emergency Response

Nabil Mzee, EPA



# Sherwin Williams Plant Fire Response





## Timeline of Early Events

- August 7, 2023 1:30 A.M. – Garland Fire Department responded to a structural fire at the Sherwin Williams Plant Facility.
- Fire units immediately evacuated the plant and ensured employees were accounted for, one employee was treated at the scene for minor injuries
- The fire was suppressed after ~ 2 hours



## Timeline of Early Events

---

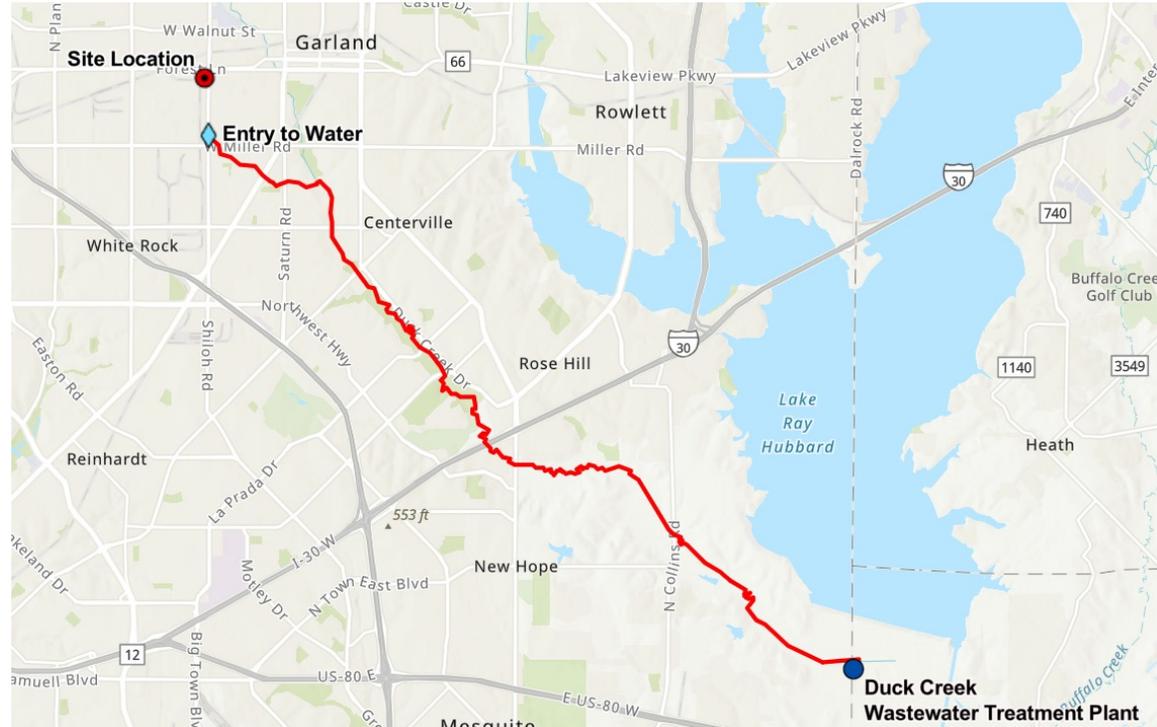
- Delay in reporting the incident to NRC
- Incident occurred at Facility at 1:30 A.M.
- NRC notified at 9:00 A.M.
- EPA OSC arrived on-site at around 1:30 P.M.





# Site Evaluation

- Compromised tanks still stable
- 7.4 miles of surface waters consisting of Stream 2C4 and Duck Creek impacted by AFFF/firewater
- Several odor complaints were reported by the community to EPA and TCEQ.
- Several resources on-site



# Unified Command



- EPA
- TCEQ
- City of Garland Emergency Management
- Sherwin Williams

# Enforcement Authorities



Clean Water Act  
Section 311  
Administrative Order



TCEQ  
Demand  
Letter

# Incident Objectives



1. The RP will prioritize the removal of the acrylic acid polymer to reduce the threat to workers and the public.
2. The RP will contain the firewater and AFFF in the impacted downstream locations.
3. The RP will collect multi-media samples for VOCs, SVOCs, TPH, Metals, and AFFF related PFAS compounds.
4. The RP will conduct air monitoring in neighboring communities, sensitive receptors, commercial lots, industrial properties, and at the Site in Garland, Texas area.
5. EPA and TCEQ will observe and document stormwater/ fire suppression runoff and recovery operations at the Site.
6. The Contractor, Texas Parks and Wildlife, will document impacted wildlife locations at the Site in conjunction with TCEQ.
7. EPA, TCEQ, Garland will coordinate to put provide prompt and timely information to the public

# Air Monitoring



- EPA conducted community air monitoring
  - MultiRAE Pro equipped with a HCN sensor
  - Draeger XPID 9500 to analyze for acrylates, benzene, toluene, ethylene, xylene, and styrene
  - Personal DataRam pDR-1500 to monitor for PM 2.5
- TCEQ conducted air monitoring with its DUVAS vehicle

***Air monitoring readings were below the site-specific community action levels***

## Removal of the acrylic acid polymer from tanks



- 8/8/2023 – 8/9/2023
  - Planning for offloading of tanks
- 8/10/2023
  - Offloading of tanks completed

## Assessment/Containment Along Impacted Waterways



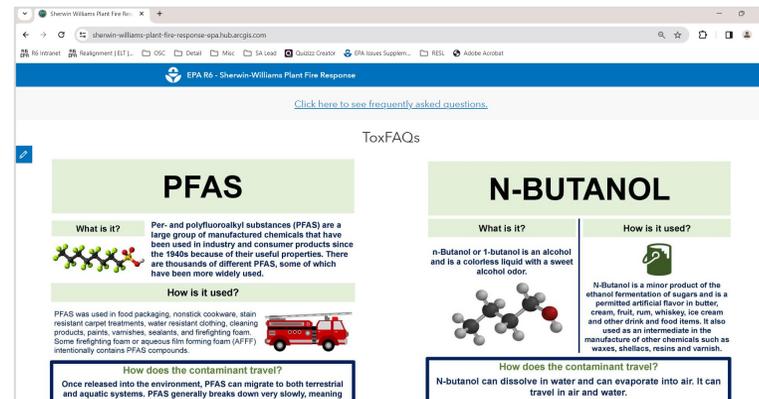
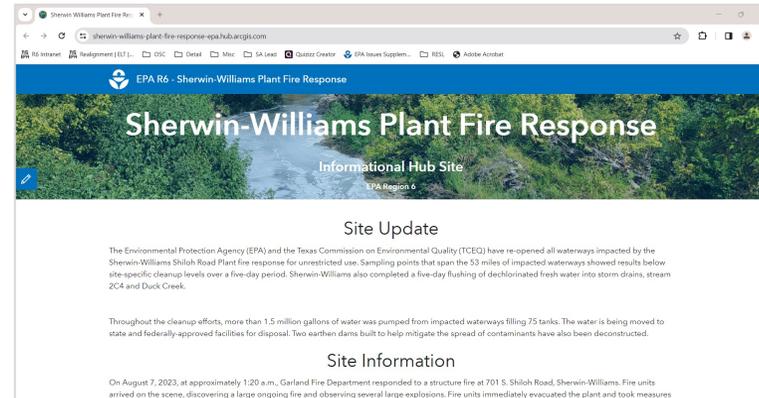
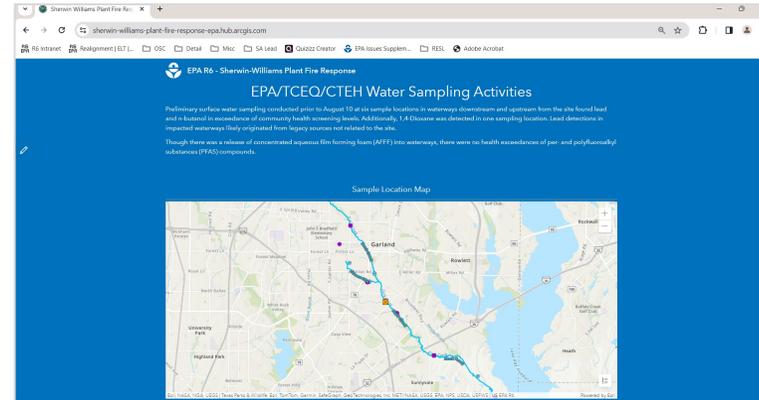
- Containment
  - Construction of earthen dams
- Assessment
  - Drone overflights
  - Water sampling
  - Residential soil sampling
  - Wildlife impacts

## Clean-up Along Impacted Waterways



- Vacuum truck
- Foam fractionation
- Recovery of fish carcasses
- ~1,540,000 gallons of fluid recovered

# Public Information Sharing



# Coordination and Information Sharing with other Agencies



**Thank You**

Questions/Comments





20-Minute Break

# EPA Case Study – Sawtooth Emergency Response

Anish Patel, EPA

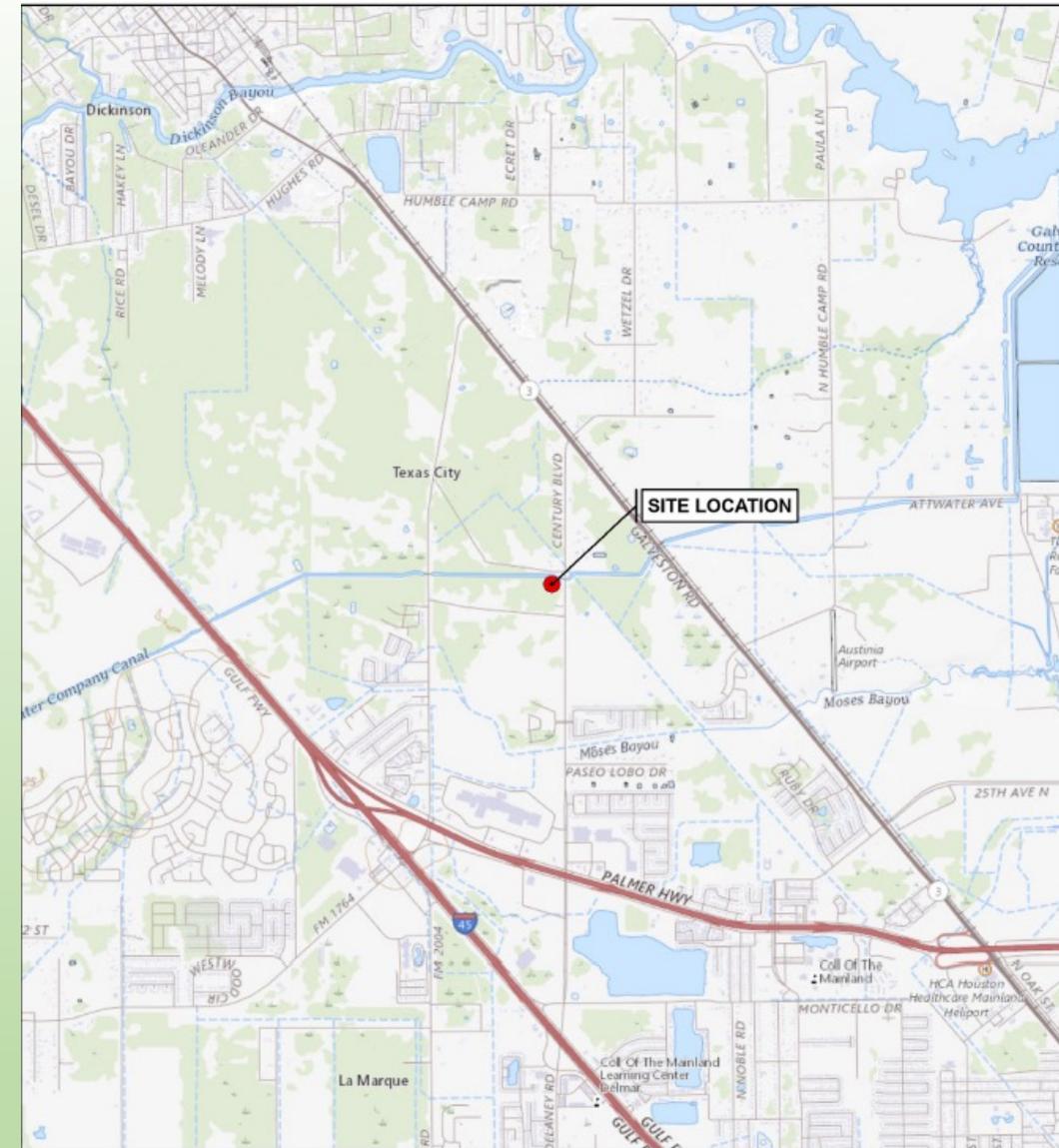


# Sawtooth Oil Spill Emergency Response



# Site Location

- 5400 Block of Century Blvd, Texas City, Galveston County, Texas.
- Site is operated by Sawtooth Oil and Gas.
- Immediate area is undeveloped.
- Closest residence is 300 yards to the southeast
- Large residential development to the south.



## LEGEND

● SITE LOCATION



0 4,000 8,000

SCALE IN FEET

SOURCE: NATIONAL GEOGRAPHIC TOPO; ESRI  
TASK-ELIN: 01HE70423F0302-001  
FPN: UCOPE24662



US EPA REGION 6

**ATTACHMENT B**  
SITE AREA MAP  
SAWTOOTH OIL SPILL

LATITUDE 29.4219898° NORTH AND  
LONGITUDE 95.0212540° WEST  
TEXAS CITY, GALVESTON COUNTY, TEXAS

DATE  
APRIL 2024

PROJECT NO  
26900.012.002.0044

SCALE  
AS SHOWN

# Incident Overview

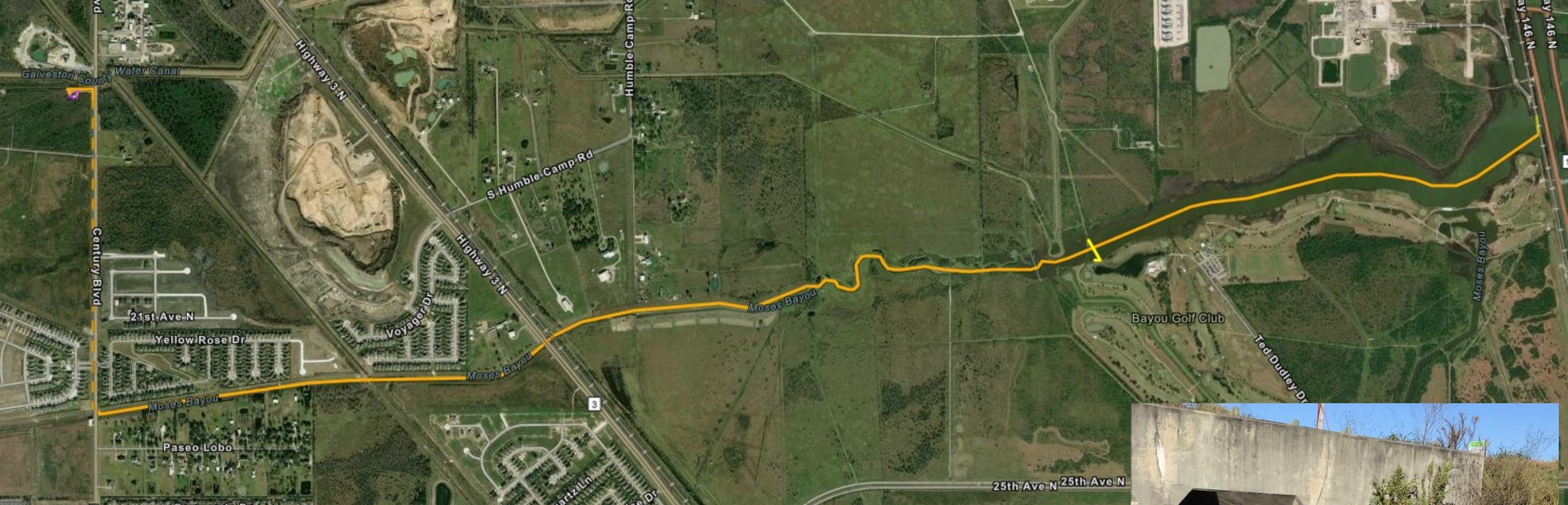
- The site disposes of saltwater from oil production wells.
- Steel tank (2,000 barrel) is used for separation of saltwater and residual oil before saltwater is disposed into an on-site injection well.
- On 12/25/2023, the operator discovered the separation tank had overflowed and crude oil had flowed out of the top of the tank into secondary containment.
- Low point of the secondary containment allowed the crude oil to breach containment and flow into swampy area northwest of the well pad.



# Incident Overview

- RP estimated approximately 10 to 20 barrels of oil left the secondary containment.
- Towards the end of recovery operations, the RP reported a total of **522 barrels** of oil recovered from Moses Bayou.





- Crude oil flowed east along access road to stormwater ditch on the west side of Century Blvd.
- Then south 22 yards into a stormwater drain.
- Crude oil flowed underground in the concrete storm pipe approximately 0.75 miles.
- Then discharged into Moses Bayou (tributary of Moses Lake).
- **Approximately 1.82 miles of Moses Bayou was impacted.**
- Moses Bayou flows within 30 yards of single-family residences and the livestock grazing areas.



# Operations

- On 12/26/2023, local fire department responded and deployed boom.
- Texas City Office of Emergency Management contacted the RP on 12/27/2023
- RP hired a contractor to begin containment and removal procedures.
- Initial booms deployed to prevent oil from leaving the facility and entering Moses Lake.
- Additional booms deployed to limit the migration of crude oil further down Moses Bayou and allow for vacuum truck recovery.
- Recovery of oil in the bayou was initiated on 12/27/2023.



# ER Air Monitoring

- EPA conducted ER community air monitoring and monitored for volatile organic compounds (VOC) using a MultiRAE.
- If a sustained reading of 1 part per million (ppm) or greater VOC was observed, a benzene specific measurement was taken using an UltraRAE with a benzene separation tube.
- The VOC readings were 0 to 0.1 ppm in the areas.
- RP contractors also conducted air monitoring.



# UAS Operations

- Local agencies provided UAS support to collect video and photographic documentation along the spill path.
- EPA provided expanded UAS capabilities with real-time kinematic positioning (RTK) system to develop a targeted georeferenced spill map.
- The targeted maps were developed and included only the corridor of the spill path (avoid private properties not affected by the spill).
- The georeferenced maps were shared with UC and used for planning and asset management.
- Georeferenced maps provide accurate representations and can be used to determine distances and target location coordinates to share with field teams.
- Use of the UAS provided rapid data for planning and decision-making purposes while improving safety for field staff.



## Unified Command:

- EPA Region 6
- Texas Railroad Commission
- Texas City Office of Emergency Management
- Responsible Party

## Cooperating Agencies:

- United States Coast Guard
- Texas Department of Emergency Management
- Texas Parks and Wildlife
- Texas General Land Office
- Galveston County Emergency Management
- Galveston County Drainage District
- Texas City Fire Department
- Texas City Police Department
- Texas City Engineering
- Texas City Public Works
- Texas City Technology Department
- Texas City Communications
- National Weather Service

## Coordinated Approach

- EPA – provided oversight of the cleanup operations of the impacted WOTUS, UAS, air monitoring.
- Texas City OEM provided EOC, security, UAS, liaisons, public outreach, & notifications.
- TX RRC provided oversight of the cleanup operations of the well pad and impacted soil.
- TX P&W (in coordination with TGLO) provided oversight of wildlife impacts response and sensitive ecosystems.
- USCG provided observers for the impact from the incident closer to Moses Lake (USCG AOR).





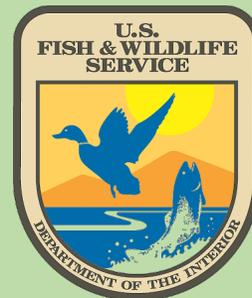
*Texas City*  
EST. 1911



GALVESTON COUNTY  
**OEM**  
Office of Emergency Management



# Questions?



# USCG FOSC Briefs

1. Sector Lower Mississippi River
2. Marine Safety Unit Port Arthur
3. Marine Safety Unit Houma
4. Sector Corpus Christi
5. Sector Houston-Galveston
6. Sector New Orleans

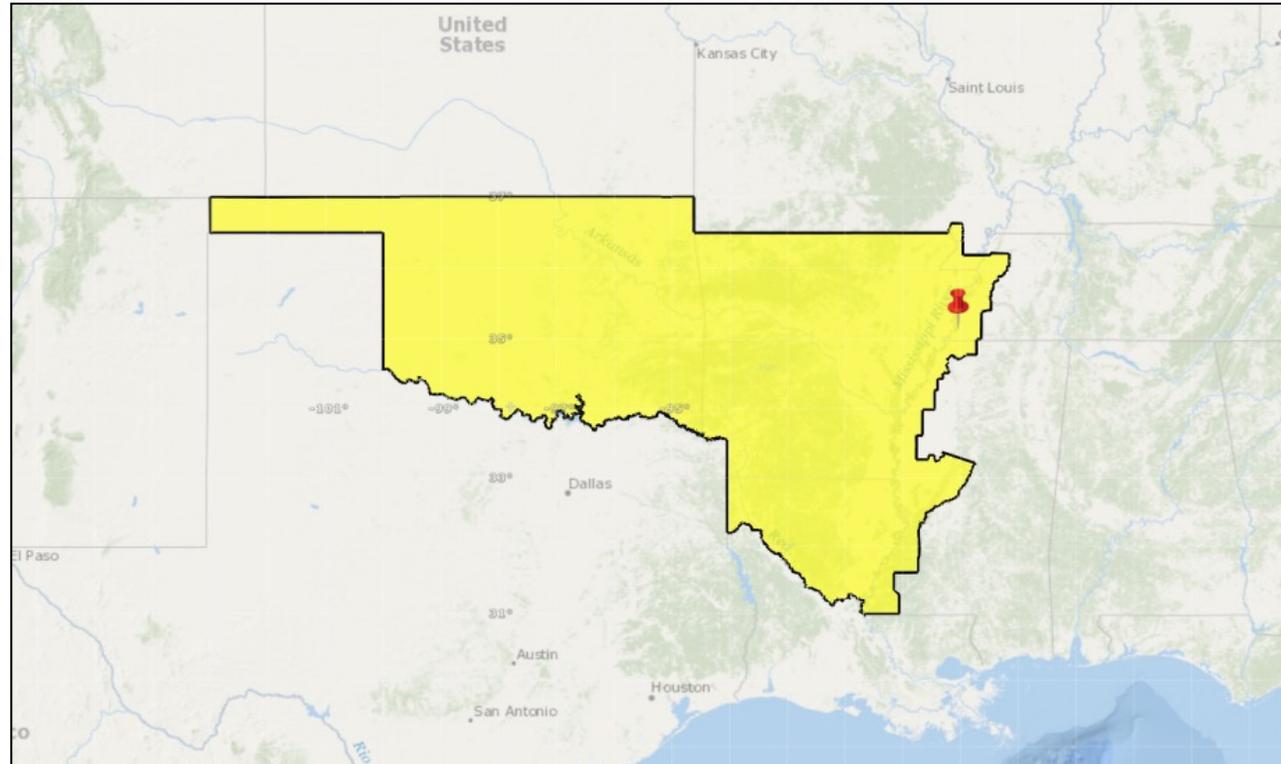
LT John Krueger  
MSSR Andrew Christopherson  
LT Michael Civay  
LT Alexis Williams  
MSTC Ronnie Lucas  
LTJG Craig Feeney



# Sector Lower Mississippi River



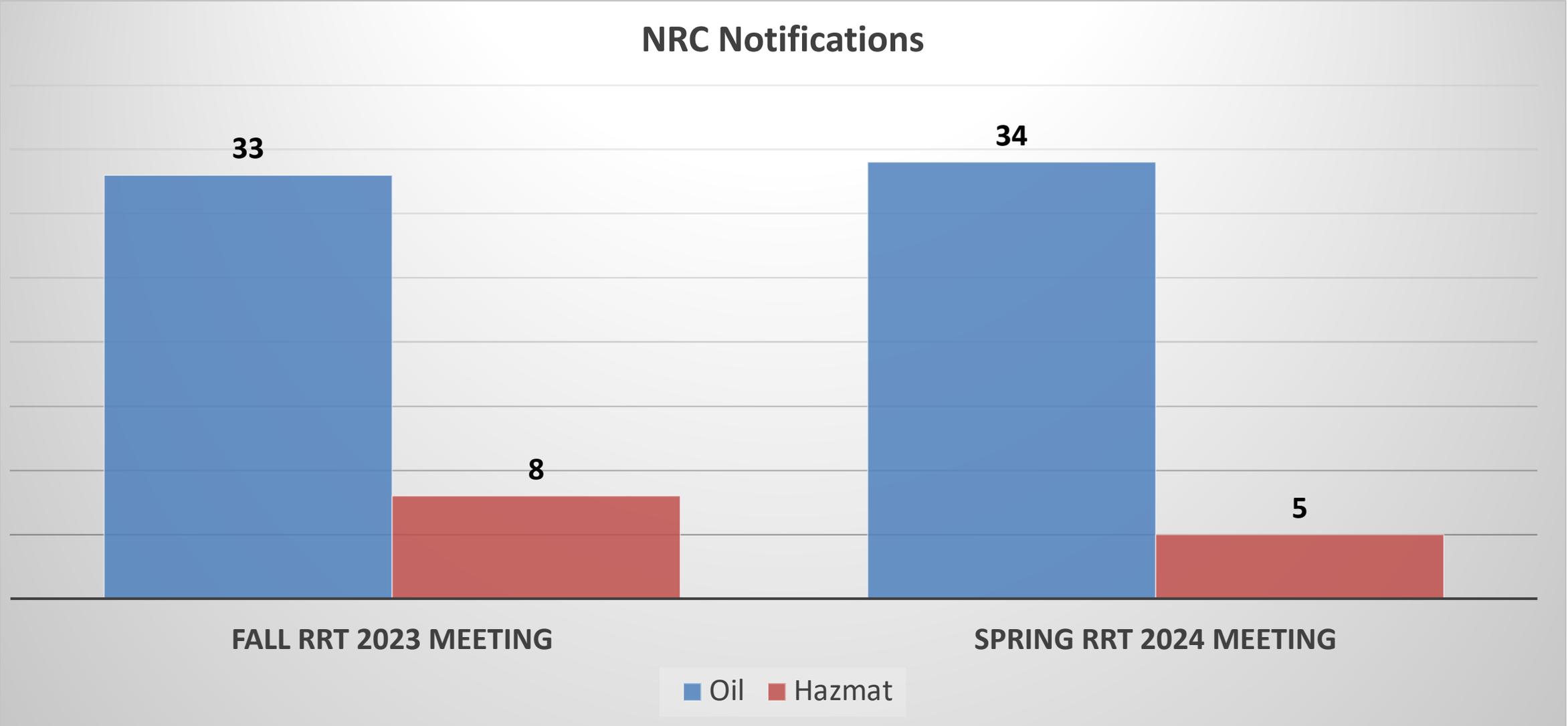
Captain Kristi Bernstein  
Sector Commander



NRC Notifications	RRT Activations	Federal Projects	CERCLA Projects
39	0	0	0



## NRC Notifications



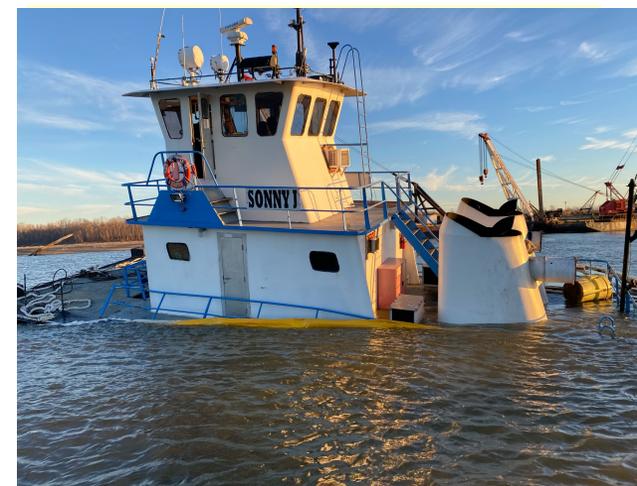


# RRT Activation / Notification



## or Significant Case

<b>Date:</b>	<b>07 Jan 2024</b>	<b>Activation</b>	<b>Notification</b>
<b>Incident Name:</b>	ITV SONNY J – Allison and Sinking		
<b>Location:</b>	MM 480.3; Lower Mississippi River		
<b>Responsible Party:</b>	Terral River Service		
<b>Type and amount of product spilled:</b>	Estimated 21 Gallons of Oil, misc: From Engines		
<b>Initial Response:</b>	<p>The vessel lost steering controls and the vessel did not respond to backing down controls. A previous allision from earlier that day caused hull damage to the SONNY J and allowed water egress into the forward spaces. The damage to the hull caused the vessel to sink as it was attempting to transit to Lake Providence to conduct a full assessment of damages. The crew abandoned ship onto an assist vessel.</p> <p>There were no injuries reported. Pollution, an oil/fuel discharge, was discovered on scene and absorbent boom was deployed. The OSRO was engaged, and divers were brought on scene to seal the exterior valves/vents which were underwater. The salvage company was able to raise and refloat the vessel for transit.</p>		
<b>Agencies Involved:</b>	USCG, CG SERT, EPA, USFWS, Louisiana Ecological Services Office, Mississippi Department of Archives and History, Mississippi Ecological Services Field Office, Mississippi Department of Archives and History,		
<b>Issues/Concerns:</b>	A-Frames spudding down for salvage operations/ Used best management practices		





# Consultations

Unit	Incident Name	Start Date	Stop Date	With	Phase	For	Response Actions	Species (Common Name)	Type	Federal Listing Status	Critical Habitat	General Cost	Land Cost	Total Cost
Sector Lower Mississippi River, TN	ITV SONNY J	1/7/2024	1/12/2024	Tribal Historic Preservation Office (THPO)	Response	Emergency Consultation	Booming	N/A	NHPA	N/A	No	\$300	\$0	\$300
Sector Lower Mississippi River, TN	ITV SONNY J	1/7/2024	1/12/2024	DOI/USFWS	Response	Emergency Consultation	Booming.	Multiple	ESA	Not Possible to Account Accurately for Individual Species	No	\$300	\$0	\$300
Sector Lower Mississippi River, TN	ITV SONNY J	1/7/2024	1/12/2024	State Historic Preservation Office (SHPO)	Response	Emergency Consultation	Booming	Multiple	ESA	N/A	No	\$300	\$0	\$300

[D8 Combined.MER.Consultations.Master.xlsx](#)



# Accomplishments

Since last RRT meeting

Training		Exercises / Workshops		Federal, state, and local planning and coordination efforts	
Description	Dates	Description	Dates	Description	Dates
Transfer Monitors	8 Nov 2023	Clean Gulf Conference	7-9 Nov 2023	RRT-4 Meeting	31 Oct – 2 Nov 2023
Pollution Laws	13 Dec 2023	Annual CBRN drill	21 Feb 2024	RRT-7 Meeting	27-28 Mar 2024
FOSCR, PR, and ICS sign-offs and qualifications	Ongoing	GIUE Q1	02 Nov 2023	ExxonMobil Worst Case Discharge Exercise	18 Apr 2024
Drone Pilot Ground School	22-26 Jan 2024	GIUE Q2	14 Feb 2024		
		8 <sup>th</sup> Annual Clean Waterways Conference (Cincinnati, OH)	9-11 Apr 2024		



# Outlook

Until Next RRT meeting

Training		Exercises / Workshops		Federal, state, and local planning and coordination efforts	
Description	Dates	Description	Dates	Description	Dates
River SCAT Training (Nashville, TN)	28-31 May 2024	International Oil Spill Conference (IOSC)	13-16 May 2024	RRT-4 Meeting	29-30 May 2024
FOSCR College (Sector Houston-Galveston)	15-19 Jul 2024	GIUE Q3	May 2024	Heart Land Blues ICS Exercise	Sep 2024
Drone Pilot Ground School	Spring 2024	GIUE Q4	Tentatively Aug 2024		



# MSU Port Arthur

Captain Anthony Migliorini

Commanding Officer



NRC Notifications	RRT Activations	Federal Projects	CERCLA Projects
142	0	5	1

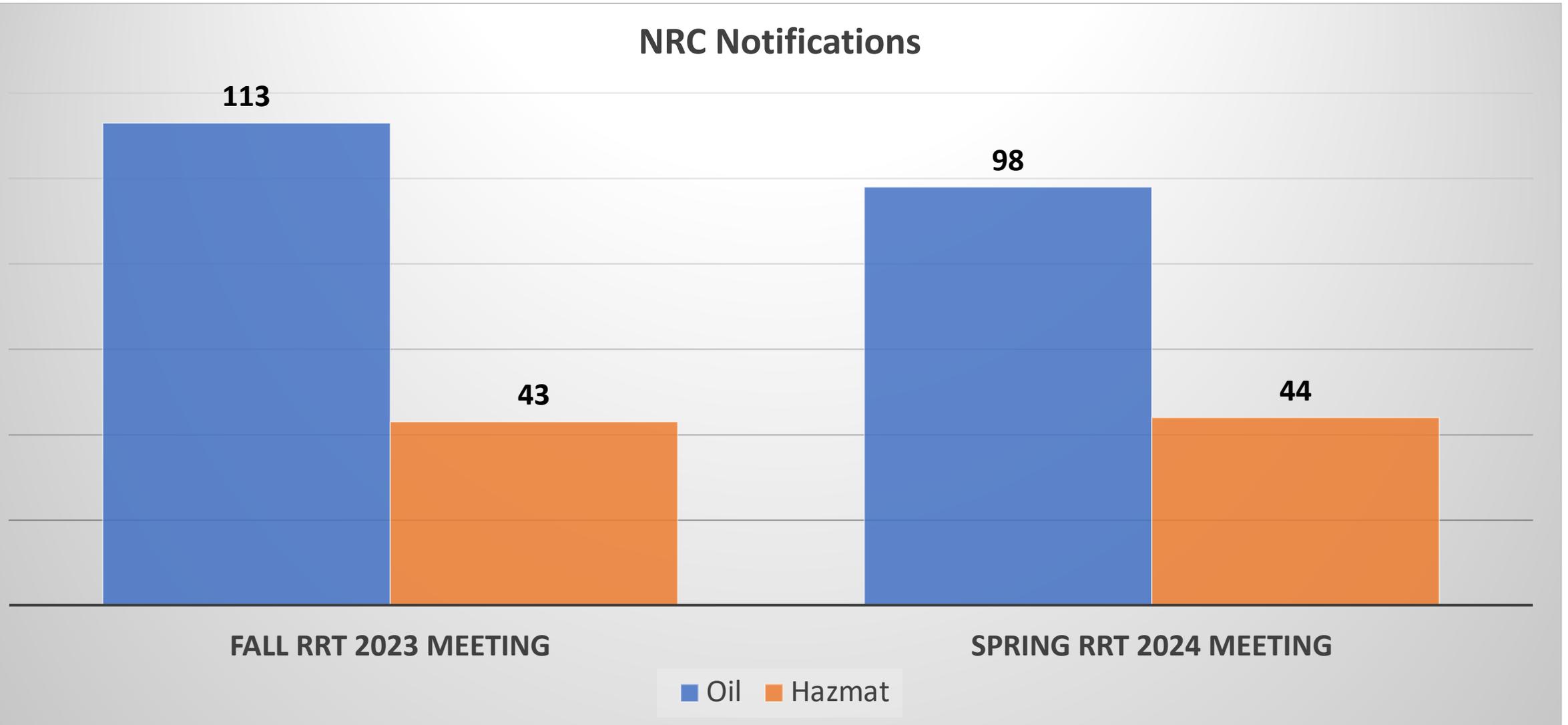


# Executive Summary

<b>Challenges-</b>	Deterioration of abandoned/derelict infrastructure.
<b>Lessons Learned-</b>	
<b>Best Practices-</b>	



## NRC Notifications





# Consultations



Unit	Incident Name	Start Date	Stop Date	With	Phase	For	Response Actions	Species (Common Name)	Type	Federal Listing Status	Critical Habitat	General Cost	Land Cost	Total Cost
MSU PA	Black Lake Flowline	06 Nov 23	15 Nov 23	State Historic Preservation Office (SHPO)	Response	Emergency Consultation	Booming, Manual Recovery	N/A	NHPA	N/A	N/A	\$1000	\$0	\$1000
MSU PA	Black Lake Flowline	06 Nov 23	15 Nov 23	DOI/USFWS	Response	Emergency Consultation	Booming, Manual Recovery	N/A	ESA	N/A	N/A	200	0	200

[D8 Combined.MER.Consultations.Master.xlsx](#)

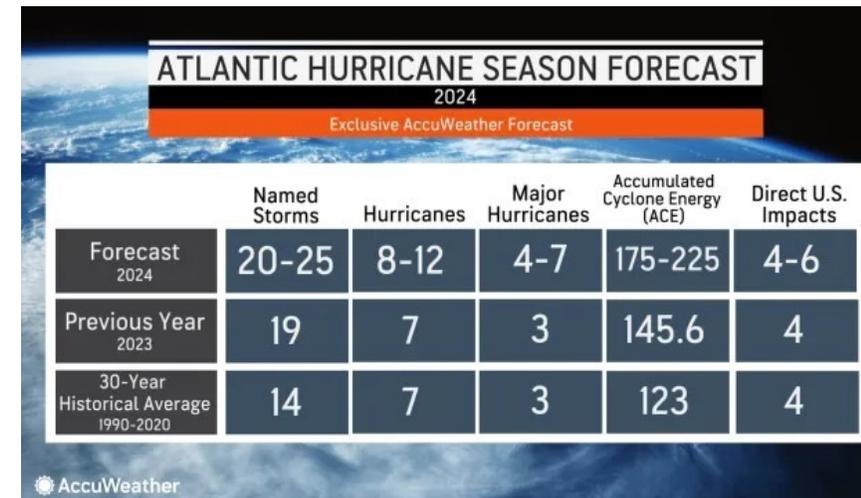


# Hurricane Preparedness

## Preseason



- **Regulatory authority over the following facilities or entities that handle oil:**
  - Marine Transfer Facilities
  - Mobile Transfer Facilities
  - Commercial Vessel and Transfer Operations
  - CG Regulated portion of a facility (1st valve within secondary containment) **TGLO, LOSCO, EPA, USCG**
- **Do you maintain a list of facilities or entities and how often do you update it?**
  - **Yes, annually**
- **Stakeholder outreach?**
  - **Active participant in LEPCs and other committees, discussed hurricane prep at two LEPCs, ACM, SETX and SWLA AC, and AMSC meetings**
- **Public Affairs and External Outreach**
  - **Work with Ombudsman to share hurricane information with families, have not done anything with external partners**
- **Exercises (WS, TTX, or FSE)?**
  - **2 May 2024 Hurricane/COOP FE for unit, next year plan to coordinate with TGLO for large-scale exercise**
  - **Participating in NDOW FSE**
  - **Motiva, Bechtel (Port Arthur LNG), Big Hill SPR TTXs, Targa FSE, SNCA FSE, helping plan 4-year exercise timeline with Southeast Texas Regional Planning Commission (SETRPC)**





# Accomplishments

Since last RRT meeting

Training		Exercises / Workshops		Federal, state, and local planning and coordination efforts	
Description	Dates	Description	Dates	Description	Dates
OSC Crisis Management	04-08 Dec 2023	GIUE (PA)	FY24 Q2	Clean Gulf Conference	07-09 Nov 2023
ICS-339 (DIVS/Group Supervisor)	16-17 Jan 2024	SPR Big Hill Worst Case Flow Line Exercise (PREP)	27 Mar 2024	Type III Hazards ICS	11-15 Dec 2023
NEMAA E0452 Advanced I	04-10 Feb 2024 21-27 Apr 2024			LA Statewide Area Committee Executive Steering Group (LA SACESG)	07 Feb 2024
Pollution Incident Response School	05-16 Feb 2024			TX Area Committee Executive Steering Group (TACESG)	28 Feb 2024
Oil Spill Control School	11-15 Mar 2024 29 Apr – 03 May 2024			SETX & SWLA Area Committee Meeting	06 Mar 2024
NOAA Science of Oil Spills	18-22 Mar 2024				
NOAA SCAT Course	01-05 Apr 2024				



# Outlook

Until Next RRT meeting

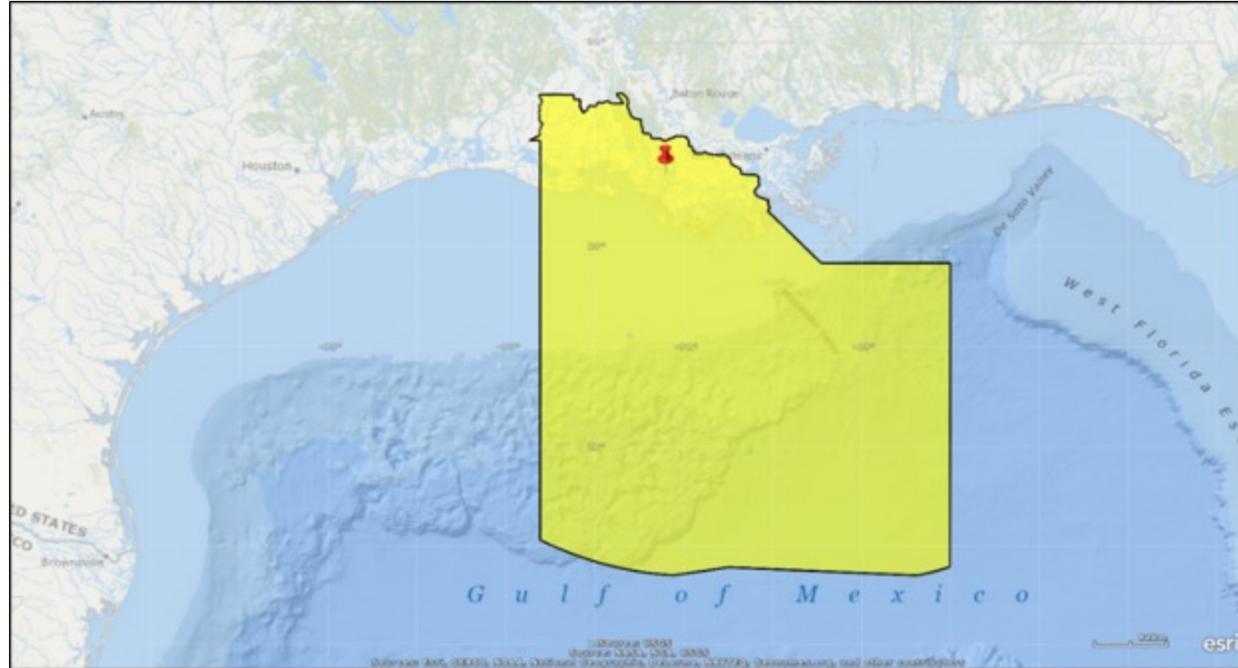
Training		Exercises / Workshops		Federal, state, and local planning and coordination efforts	
Description	Dates	Description	Dates	Description	Dates
PR College	17-20 Jun 2024	GIUE (PA)	27 May 2024	LA Statewide Area Committee Executive Steering Group (LA SACESG)	11 Jun 2024 16 Oct 2024
FOSCR College	15-19 Jul 2024	NDOW FSE	20 – 23 May 2024	LA Statewide Area Committee Meeting	11 Jun 2024
NEMAA E0454 Advanced III	18–24 Aug 2024				



# MSU Houma

Captain Loan O'Brien

MSU Commanding Officer



NRC Notifications	RRT Activations	Federal Projects	CERCLA Projects
414	1	3	0

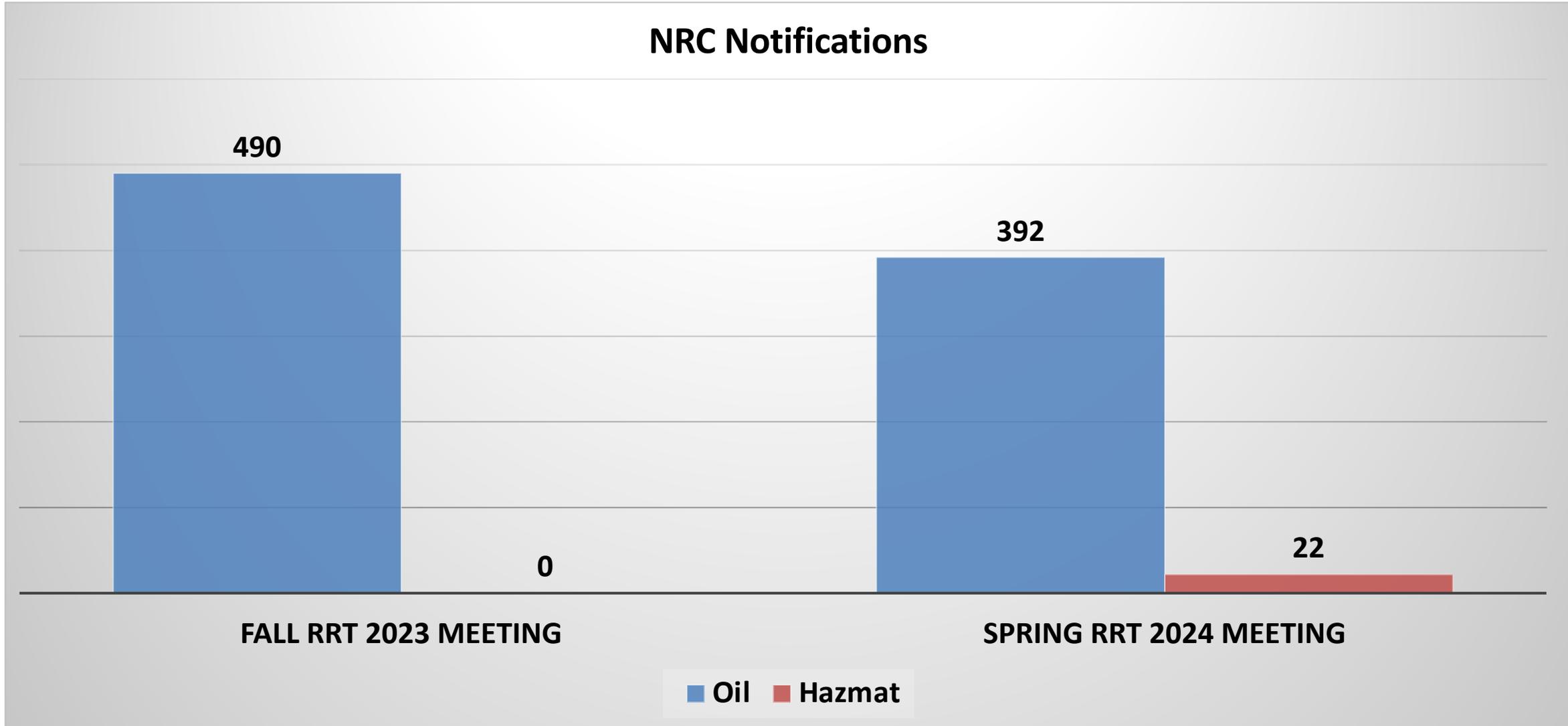


# Executive Summary

<b>Challenges-</b>	Upcoming personnel changes with transfer season. Expedited timeline for burn.
<b>Lessons Learned-</b>	Engage District Response Advisory Team early. More training on In-Situ Burn policy & procedures would be helpful.
<b>Best Practices-</b>	



# NRC Notifications





# RRT Activation / Notification

## *or Significant Case*



<b>Date:</b>	<b>11 Mar 2024</b>	<b>Activation</b>	<b>X</b>	<b>Notification</b>	
<b>Incident Name:</b>	Well B-42 Test Flowline Leak In-Situ Burn / Federal Project UCGPN24021				
<b>Location:</b>	Approximately 12-miles west-southwest of Houma, Louisiana. (29°31' 36.73"N, 90°51'20.37"W)				
<b>Responsible Party:</b>	Whitney Oil & Gas				
<b>Type and amount of product spilled:</b>	4,200 + gallons crude oil. (Estimated by LDEQ by the heat, smoke and color)				
<b>Initial Response:</b>	On Wednesday 06 MAR IMD received report of a crude oil discharge from a well operated by Whitney Oil & Gas. 378 gallons of oil/water mix and 179 bags of vegetation were initially recovered by ES&H. In-situ burn was considered as a less intrusive remediation. Burn checklist and plan formed with partner agencies leading to RRT-6 approval. Burn conducted on 11 MAR in marsh.				
<b>Agencies Involved:</b>	LOSCO, NOAA, LDEQ, USFWS, LDNR and SHPO.				
<b>Issues/Concerns:</b>	<p>More crude may remain under the marsh mat as the initial post burn site visit observed residual oiled pockets.</p> <p>Are there any more scientific ways to estimate the discharge?</p> <p>Is there any way to determine amount of oil under the marsh mat.</p> <p>Test line has been secured but long-term resolution is TBD.</p>				





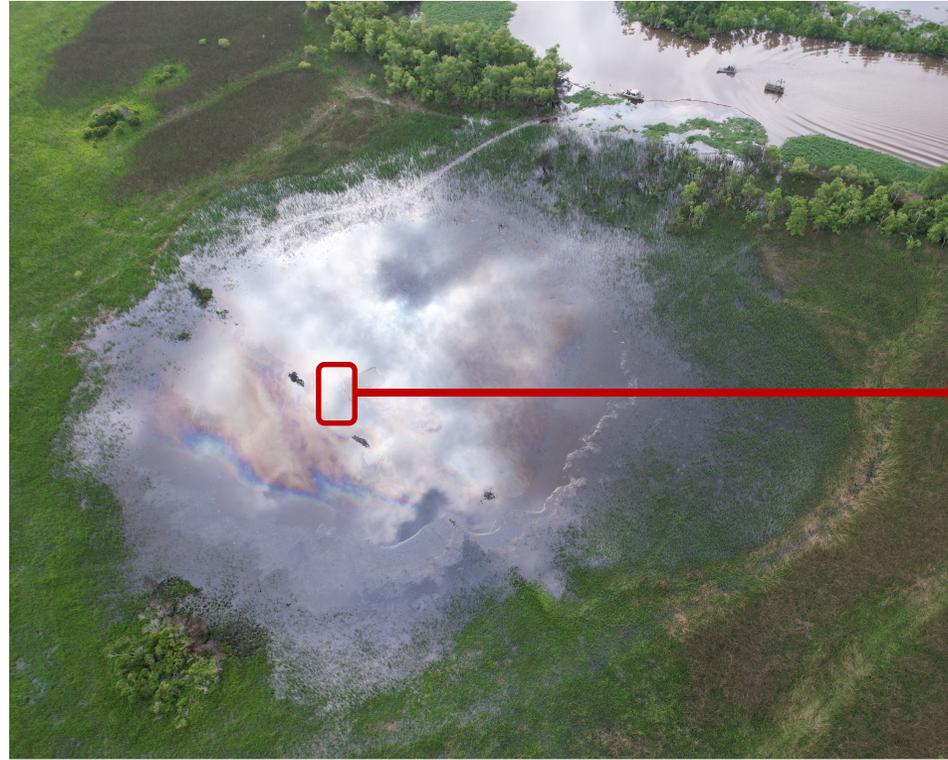
# Well B-42 Test Flowline Leak In-Situ Burn



Burn area is 255' wide & 413' long from the canal



19 March 2024  
(1 week post burn)



01 May 2024  
(7 weeks post burn)



01 May 2024  
("Zoom-in" over source)



# RRT Activation / Notification

## *or Significant Case*

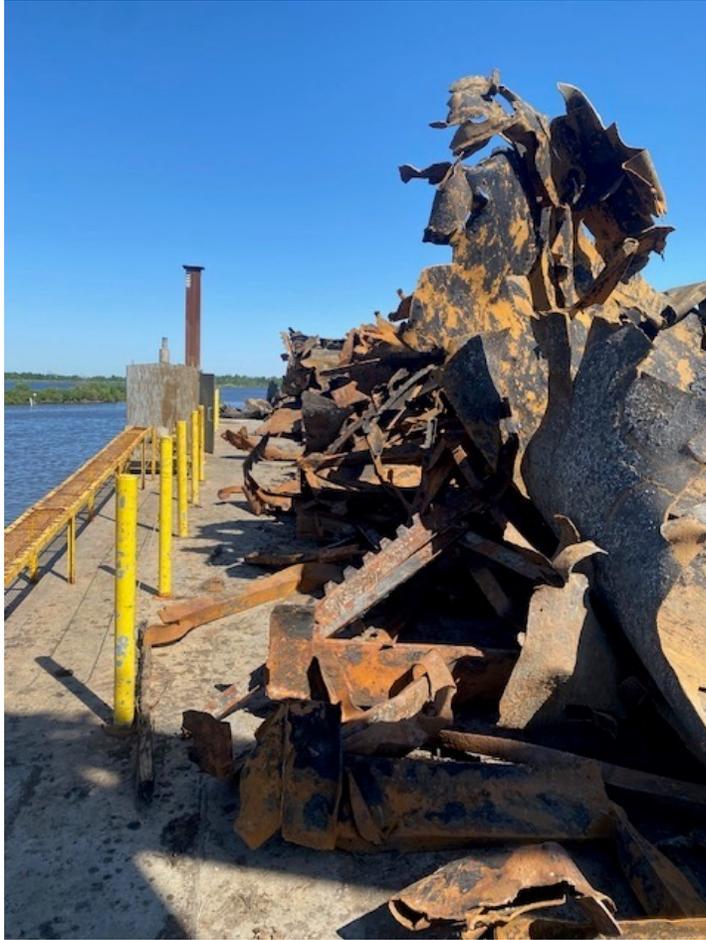


<b>Date:</b>	<b>03 Apr 2024</b>	<b>Activation</b>		<b>Notification</b>	
<b>Incident Name:</b>	Tar Balls in Chauvin				
<b>Location:</b>	Chauvin, LA IVO Boudreaux Canal (29.47180° N, 90.61484° W)				
<b>Responsible Party:</b>	Hilcorp				
<b>Type and amount of product spilled:</b>	4,127 gallons of heavy petroleum oil recovered.				
<b>Initial Response:</b>	IMD responded to a discharge of tar balls in Chauvin resulting from the improper destruction of a barge. Working alongside NOAA and LOSCO, IMD personnel led (initial to final) shoreline assessments ensuring the removal of 4,127 gallons of heavy oil from 6.4 miles of affected shoreline.				
<b>Agencies Involved:</b>	LOSCO, NOAA, LDEQ, USFWS, LDNR, and SHPO.				
<b>Issues/Concerns:</b>	Difficulty contacting EPA to verify if permits were obtained prior to demolition. Was the method of demolition of the barge common practice, are more barges to be demolished?				





# Tar Balls in Chauvin





# RRT Activation / Notification

## *or Significant Case*



<b>Date:</b>	<b>17 Feb 2024</b>	<b>Activation</b>	<b>Notification</b>
<b>Incident Name:</b>	Crocodile Bayou Orphaned Oil Well / Federal Project UCGPN24019		
<b>Location:</b>	Atchafalaya River Basin (30°10'52.3"N 91°39'29.9"W)		
<b>Responsible Party:</b>	None		
<b>Type and amount of product spilled:</b>	120 barrels crude oil		
<b>Initial Response:</b>	Orphaned well (API#17099213350000) discharged crude oil from a flowline that threatened the Atchafalaya River, a navigable waterway of the United States. Approximately 120 barrels of crude oil were discharged. Federal Project Number 24019 was created to remove crude oil from the environment. E3 OMI was contracted and the oil clean up spanned over two weeks.		
<b>Agencies Involved:</b>	LOSCO, NOAA, LDEQ and USFWS.		
<b>Issues/Concerns:</b>	With no responsible party available, there was difficulty in determining who could operate the well head to secure the discharge initially. LDNR allowed for the OSRO to close the valves to secure the discharge the day after discovery.		





# RRT Activation / Notification

*or Significant Case*



<b>Date:</b>	26 Jan 2024	Activation	Notification
<b>Incident Name:</b>	M/V VIVKI & M/V ROADRUNNER / Federal Project UCGPN24014		
<b>Location:</b>	Lake Verret, LA		
<b>Responsible Party:</b>	White Oak		
<b>Type and amount of product spilled:</b>	50 gallons of diesel/waste oil were removed from fuel tanks. Also, 12 mystery drums and 18 bags of oiled sorbents.		
<b>Initial Response:</b>	The facility was previously owned by White Oak, but the company declared bankruptcy and the Louisiana Department of Natural Resources (LDNR) has since placed the facility within its abandoned facility/well program. Received NRC report that the two barges sunk at the facility pier and were sheening. Due to the vessels being outside of LDNR's authority and jurisdiction, MSU Morgan City utilized the Oil Spill Liability Trust Fund (OSLTF) and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) to contract ES&H for removal of remaining oil products associated with the barges and the mystery drums.		
<b>Agencies Involved:</b>	LOSCO, LDNR and LDEQ.		
<b>Issues/Concerns:</b>	Barges are still sunken at pier and the facility has been abandoned; however, the substantial pollution threat has been eliminated from the barges.		





# Consultations



Unit	Incident Name	Start Date	Stop Date	With	Phase	For	Response Actions	Species (Common Name)	Type	Federal Listing Status	Critical Habitat	General Cost	Land Cost	Total Cost
MSU Houma	Well B-42 Test Flowline Leak In-Situ Burn	03/10/2024	03/10/2024	State Historic Preservation Office (SHPO)	Response	Emergency Consultation	In-situ Burning	N/A	NHPA	N/A	No	100	0	100
MSU Houma	Well B-42 Test Flowline Leak In-Situ Burn	03/10/2024	03/10/2024	DOI/USFWS	Response	Emergency Consultation	In-situ Burning.	Multiple	ESA	Not Possible to Account Accurately for Individual Species	No	100	0	100
MSU Houma	Tar Balls in Chauvin	04/08/2024	04/08/2024	State Historic Preservation Office (SHPO)	Response	Emergency Consultation	Booming	N/A	NHPA	N/A	No	100	0	100
MSU Houma	Tar Balls in Chauvin	04/08/2024	04/08/2024	DOI/USFWS	Response	Emergency Consultation	Booming	Multiple	ESA	Not Possible to Account Accurately for Individual Species	No	100	0	100
MSU Houma	Tar Balls in Chauvin	04/08/2024	04/08/2024	DOI/USFWS	Response	Emergency Consultation	Booming	Multiple	ESA	Not Possible to Account Accurately for Individual Species	No	100	0	100
MSU Houma	M/V Vivki & M/V Roadrunner	01/26/2024	01/26/2024	DOI/USFWS	Response	Emergency Consultation	Booming	Multiple	ESA	Not Possible to Account Accurately for Individual Species	No	100	0	100



# Hurricane Preparedness

## Preseason

- **Regulatory authority over the following facilities or entities that handle oil:**
  - Marine Transfer Facilities
  - Mobile Transfer Facilities
  - Commercial Vessel and Transfer Operations
  - CG Regulated portion of a facility (1st valve within secondary containment)
- **Do you maintain a list of facilities or entities and how often do you update it?**
  - Yes, annually
- **Stakeholder outreach**
  - Participate in Port Stakeholder Hurricane Town Hall
  - Marine Safety Information Bulletin (MSIB)
- **Public Affairs and External Outreach**
  - Press Releases
  - Social Media (Facebook, Twitter, Instagram, ...)
- **Exercises (WS, TTX, or FSE)?**
  - 01 May 2024 FEMA Hurricane Preparedness Training
  - 08 May 2024 Hurricane TTX – Area Command
  - Data collection and Display Tools (VADR and ERMA) Training with NOAA



# Accomplishments

Since last RRT meeting

Training		Exercises / Workshops		Federal, state, and local planning and coordination efforts	
Description	Dates	Description	Dates	Description	Dates
SCAT	27-29 Feb 2023	LOOP/LOCAP (Larose)	08 Nov 2023	Clean Gulf Conference	07-09 Nov 2023
Drone Operator @ ATC Mobile (MSU Morgan City)	13-14 Nov 2023	GIUE (MSU Lafayette)	13 Dec 2023	LA Statewide Area Committee Executive Steering Group (LA SACESG) (Virtual)	07 Feb 2024
Environmental Unit Leader Training (MSU Lafayette)	17 Apr 2024	GIUE (MSU Morgan City)	12 Mar 2024	Louisiana Emergency Management Conference	06-09 May 2024



# Outlook

Until Next RRT meeting

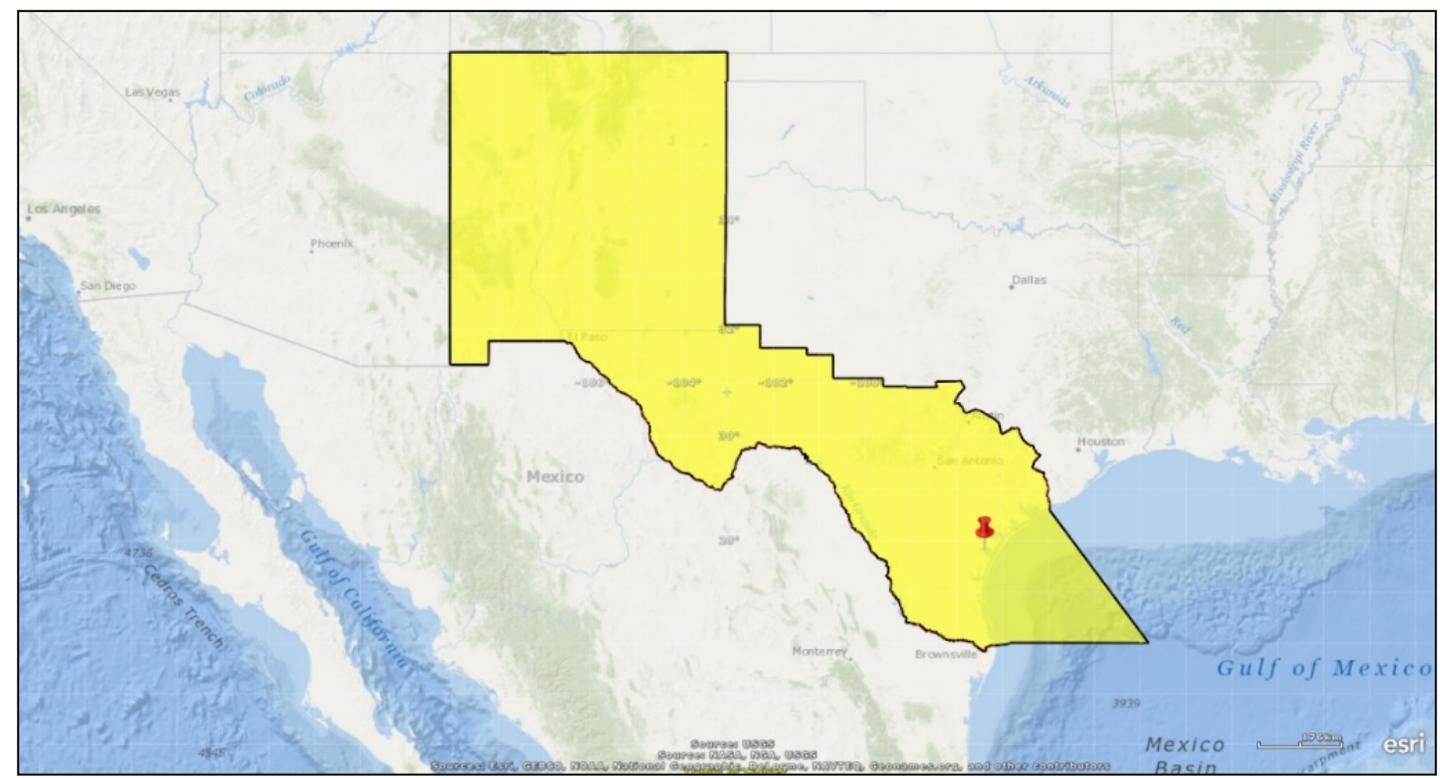
Training		Exercises / Workshops		Federal, state, and local planning and coordination efforts	
Description	Dates	Description	Dates	Description	Dates
HWCG, LLC. <i>(Deepwater well containment consortium)</i>	16 May 2024	Chevron Emergency Response Tabletop Exercise	08-09 May 2024	Terrebonne Parish EOC meeting regarding Hurricane Preparedness	21 May 2024
Hurricane Preparedness Training & Exercise with NOAA (VADR & ERMA)	15-19 Jun 2024	GIUE x2 Planned (MSU Houma)	TBD	LA Statewide Area Committee Meeting	11 Jun 2024
FOSCR College	15-19 Jul 2024			LA Statewide Area Committee Executive Steering Group (LA SACESG)	11 Jun 2024 16 Oct 2024
MWCC <i>(Marine Well Containment Company)</i>	19 Sep 2024			Hurricane Preparedness w/ NOAA (MSU Morgan City)	17-18 Jun 2024



# Sector Corpus Christi

Captain Jason Gunning

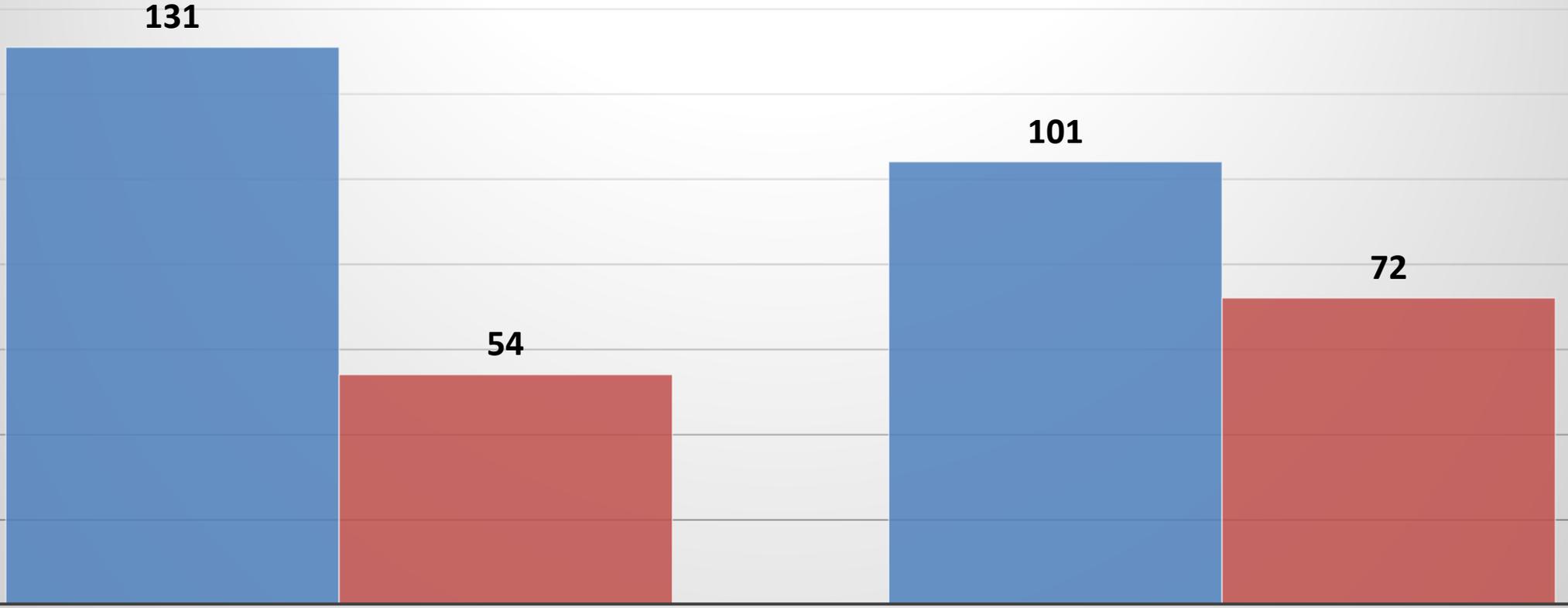
Sector Commander



NRC Notifications	RRT Activations	Federal Projects	CERCLA Projects
173	0	3	0



# NRC Notifications



FALL RRT 2023 MEETING

SPRING RRT 2024 MEETING

Oil Hazmat



# Consultations

Unit	Incident Name	Start Date	Stop Date	With	Phase	For	Response Actions	Species (Common Name)	Type	Federal Listing Status	Critical Habitat	General Cost	Land Cost	Total Cost
None														

[D8 Combined.MER.Consultations.Master.xlsx](#)

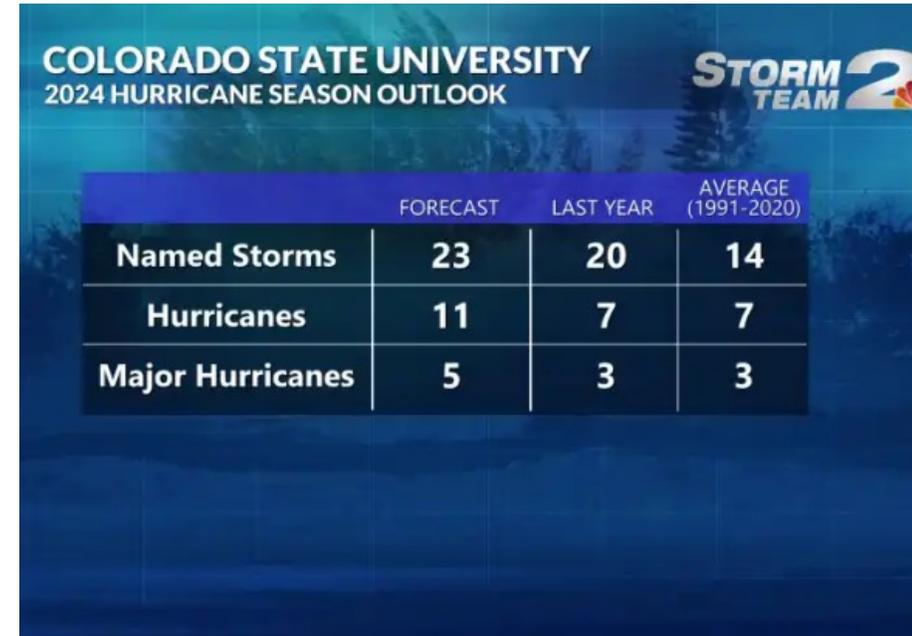


# Hurricane Preparedness



## Preseason

- List the regulatory authorities over the following facilities or entities that handle hazardous substances and/or oil that may be impacted by a hurricane (e.g., permitted facilities, RMP, FRP, transfer facilities) **Marine transfer facilities, Mobile transfer facilities, Commercial vessel and transfer operations, Coast Guard regulated portion of a facility**
- Does the Agency maintain a list of facilities or entities that may be impacted, with contact information? **PREVENTION maintains. Kept updated as they are informed, reviewed at least annually.**
- Does the Agency participate in stakeholder outreach events for hurricane preparedness? **South Texas All Hazards Conference in Brownsville, Coastal Bend Hurricane Conference in Corpus Christi, Mid Coast Hurricane Conference in Victoria, Texas Division of Emergency Management All Hazards Conference.**
- Does the Agency conduct any public affairs or external outreach to facilities (or public) potentially impacted? **Marine Safety Information Bulletin released at the beginning of the season; posted on Facebook.**
- Does the Agency participate or conduct hurricane preparedness exercises (WS, TTX, or FSE)? **Sector Corpus Christi Severe Weather/COOP TTX; D8 HURREX; Coastal Bend Hurricane Conference TTX; Sec Corpus Christi Hurricane All-Hands Workshop; Sector Corpus Christi Hurricane Family Night, NDOW FSE Annually**





# Accomplishments

Since last RRT meeting

Training		Exercises / Workshops		Federal, state, and local planning and coordination efforts	
Description	Dates	Description	Dates	Description	Dates
TGLO Toolkit	13 Nov 2023	Oiled Wildlife Response Workshop	01 Dec 2023	Clean Gulf Conference	07-09 Nov 2023
SCAT Training	Apr 2-4	Chenier Response Drill	14 Dec 2023	NSFCC PAV	13-15 Nov 2023
		Valero FSE	27-28 Apr 2024	South Texas Coastal Zone ACM ESG	18 Jan 2024
				CC Preparedness Consortium	13 Feb 2024
				South Texas Coastal Zone ACM	28 Feb 2024
				TX Area Committee Executive Steering Group (TACESG)	28 Feb 2024
				Coastal Bend Hurricane Conference	02-03 May 2024



# Outlook

Until Next RRT meeting

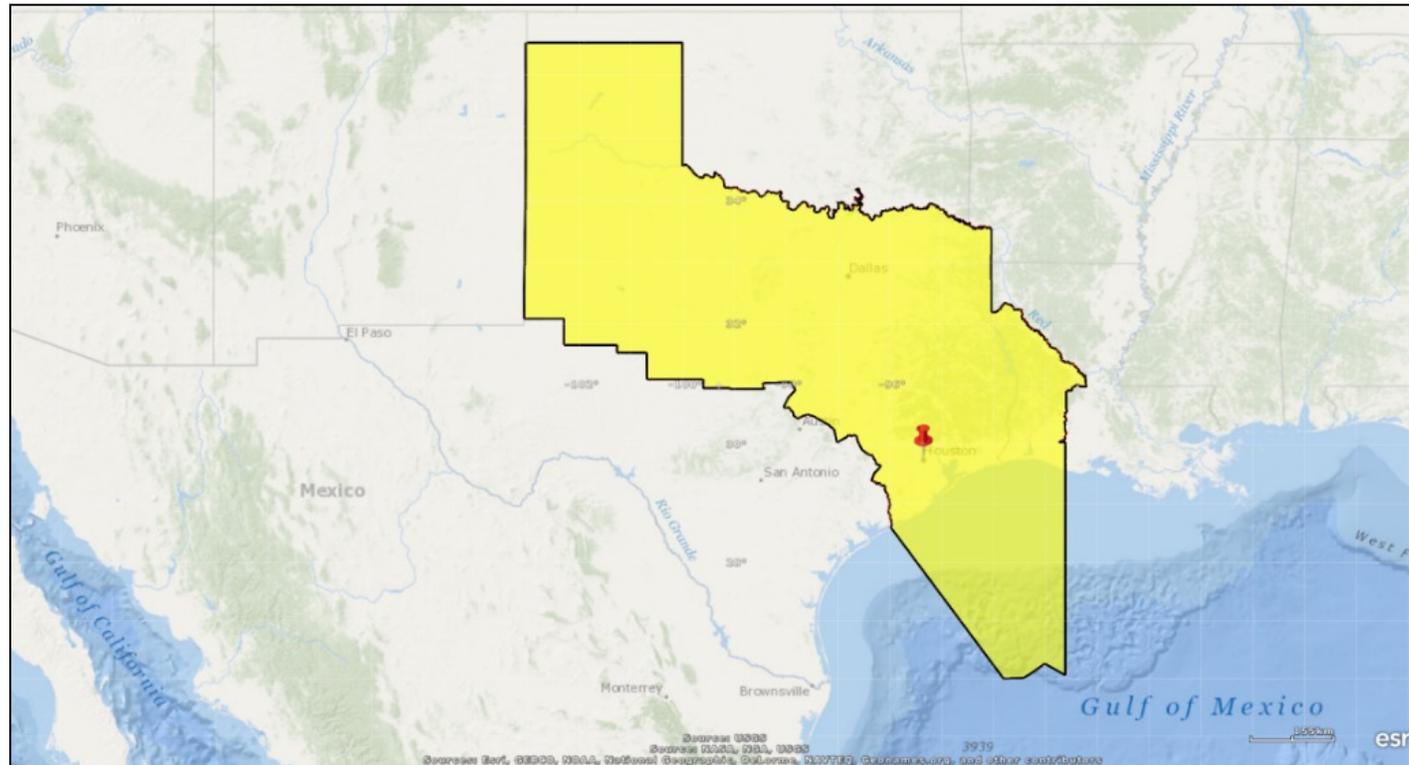
Training		Exercises / Workshops		Federal, state, and local planning and coordination efforts	
Description	Dates	Description	Dates	Description	Dates
ICS-300	Jun 2024	PORT CC PREPARED 2024 Trail Derailment FSE	Oct 2024	South Texas Coastal Zone ACM ESG	May & Sep 2024
Pollution Incident Responder (PIR) College	Jun 2024	Coastal Bend Hurricane TTX	3 May 2024	South Texas Coastal Zone ACM	Jul & Oct 2024
FOSCR College	Jul 2024			TX Area Committee Executive Steering Group (TACESG)	Sep 2024



# Sector Houston-Galveston



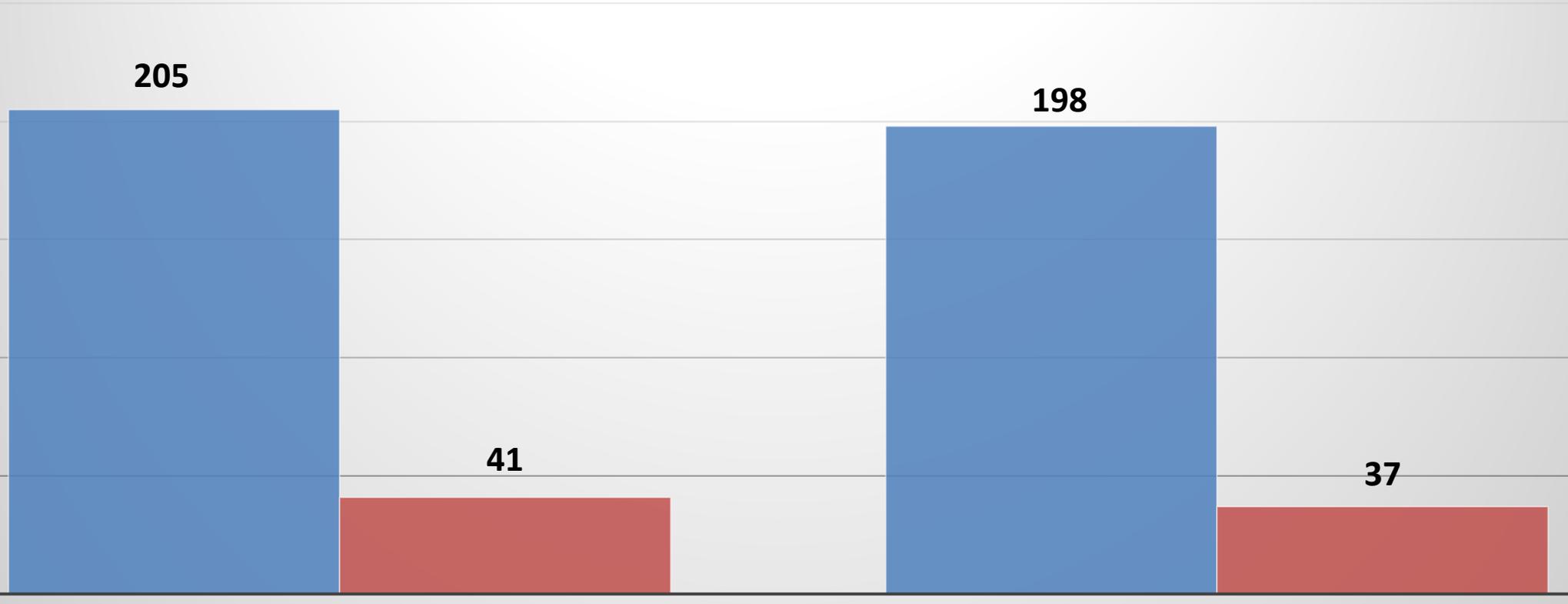
Captain Keith Donohue  
Sector Commander



NRC Notifications	RRT Activations	OSLTF Projects	CERCLA Projects
235	0	2	0



# NRC Notifications



FALL RRT 2023 MEETING

SPRING RRT 2024 MEETING

Oil Hazmat



# Consultations

Unit	Incident Name	Start Date	Stop Date	With	Phase	For	Response Actions	Species (Common Name)	Type	Federal Listing Status	Critical Habitat	General Cost	Land Cost	Total Cost
None														

[D8 Combined.MER.Consultations.Master.xlsx](#)



# Hurricane Preparedness

## Preseason



- Agency list of facilities or entities that may be impacted is annually updated.
- Agency stakeholder outreach events:
  - NOAA Hurricane Awareness Tour
  - Family Preparedness Townhall
- Agency public affairs or external outreach to facilities:
  - Issue marine safety information bulletins pre and during hurricane season
- Agency hurricane preparedness exercises:
  - Sector Houston-Galveston Severe Weather Seminar: May 13, 2024
  - SHG/Natural Disaster Operational Workgroup FSE: May 20-23, 2024



# Accomplishments

Since last RRT meeting

Training		Exercises / Workshops		Federal, state, and local planning and coordination efforts	
Description	Dates	Description	Dates	Description	Dates
Clean Gulf Associates & MSRC offshore oil recovery demonstrations	27-29 Feb 2024	MSST DIVS Ex.	30 Nov 2023	Clean Gulf Conference	07-09 Nov 2023
NDOW Training	21 Mar 2024	TX A&M Disaster Workshop	14-15 Dec	Galveston County EM Meeting	06 Dec 2023
		Reserve IMT Workshop	9-10 Mar 2024	County Wide EMC Meeting	21 Nov 2023 16 Jan 2024 20 Feb 2024
		ACP Response Basics Workshop	21 Mar 2024	CTCAC Meeting	01 Feb 2024
		HAZAT Though Leaders	25-25 Mar 2024	CIMA Meeting	21 Feb 2024
		Hess Exercise	25 Apr 2024	TACESG Meeting	28 Feb 2024
				Multiple LEPCs	Various dates



# Outlook



Until Next RRT meeting

Training		Exercises / Workshops		Federal, state, and local planning and coordination efforts	
Description	Dates	Description	Dates	Description	Dates
PR College (Corpus Christi)	17-20 Jun 2024	SHG/NDOW FSE	20-23 May 2024	County Wide EMC Meeting	21 May 2024 18 Jun 2024 16 Jul 2024 20 Aug 2024 17 Sep 2024 15 Oct 2024
FOSCR College (Houston)	15-19 Jul 2024	PREP IMT TTX	31 Oct 2024	LEPC Deer Park Meeting	28 May 2024 25 Jun 2024 23 Jul 2024 27 Aug 2024 24 Sep 2024 22 Oct 2024
				CTCAC Meeting	09 Sep 2024
				Area Committee Executive Steering Group (TACESG)	Sep 2024
				City of Harris County Meeting	14 Nov 2024



# Sector New Orleans

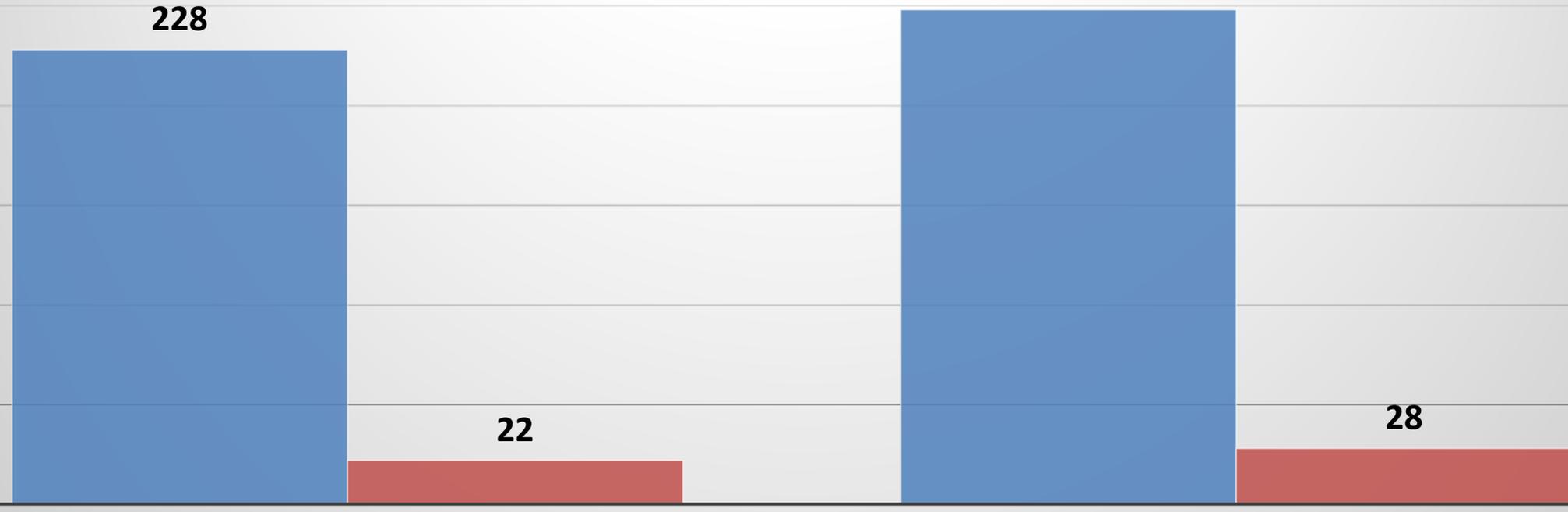
Captain Kelly Denning  
Sector Commander



NRC Notifications	RRT Activations	Federal Projects	CERCLA Projects
276	1	2	0



# NRC Notifications



FALL RRT 2023 MEETING

SPRING RRT 2024 MEETING

Oil Hazmat



# RRT Activation / Notification

## *or Significant Case*



<b>Date:</b>	26 Feb 2024	Activation	Notification
<b>Incident Name:</b>	ASL SINGAPORE		
<b>Location:</b>	New Orleans, LA		
<b>Responsible Party:</b>	ASL SINGAPORE		
<b>Type and amount of product spilled:</b>	8 cubic meters/2,113 gal of oily water		
<b>Initial Response:</b>	During a USCG exam, upon the identification of oil record anomalies, the Incident Management Division (IMD) was requested to collect oil samples onboard. A total of 10 samples were sent to the Marine Safety Lab for processing with results that validated the suspicions that the oily water separator was bypassed in violation of three U.S. Codes.		
<b>Agencies Involved:</b>	USCG SEC NOLA Prevention Department, USCG District Eight Legal, United States Attorney's Office for the Eastern District of LA		
<b>Issues/Concerns:</b>	Extended marine pollution cases are time consuming and arduous, requiring a high level of coordination between multiple USCG SEC NOLA Divisions, USCG Investigative Service, DOJ, and flag state.		





# Consultations



Unit	Incident Name	Start Date	Stop Date	With	Phase	For	Response Actions	Species (Common Name)	Type	Federal Listing Status	Critical Habitat	General Cost	Land Cost	Total Cost
Sector NOLA	Crescent Midstream Empire, LA	3/13/24	4/19/24	DOI/USFWS	Response	Informal Consultation	Booming	Multiple	ESA	Not Possible to Account Accurately for Individual Species	No	\$200	0	\$200
Sector NOLA	MPOG	11/16/2023	04/05/24	DOI/USFWS	Response	Informal Consultation	Skimming	Multiple	ESA	Not Possible to Account Accurately for Individual Species	No	\$1000	0	\$1000



# Hurricane Preparedness

## Preseason



**USCG Sector New Orleans conducts the following actions to prepare for hurricane season:**

1. Severe weather COOP plans-annual review and update
2. Attends NOAA annual hurricane awareness seminars/training
3. Posts MSIB on Homeport to inform the public of the beginning of hurricane season
4. Conducts an annual internal severe weather and COOP exercise (Cyber Innovation Center, Shreveport)
5. Conducts a zone coverage exercise to assess its area of responsibility prior to hurricane season
6. Updated severe wx IAP and updated IMT personnel
7. AREPs have connected with appropriate local agency/Training has started



# Accomplishments

Since last RRT meeting



Training		Exercises / Workshops		Federal, state, and local planning and coordination efforts	
Description	Dates	Description	Dates	Description	Dates
ICS 339 (DIVS)	Various	GIUE RETIF Oil	12 Dec 2023	Harbor Safety Committee Meeting	Bi-Monthly
Pollution Responder (PR)	Various	GIUE Nu Star Energy	20 Feb 2024	Clean Gulf Conference	7-9 Nov 2023
Federal On-Scene Coord (FOSCR)	Various	Statewide Hurricane Exercise	17 Apr 2024	LA Statewide ESG Meeting	7 Feb 2024
ICS 345 SITL/RESL/DEMOB	Various	Colonial Pipeline Workshop	24-25 Apr 2024	Industry Bankruptcy Discussion	1 Mar 2024
IMAT Workshop	6-8 Mar 2024	GIUE John W. Stone	29 Apr 2024	St Bernard LEPC	18 Mar 2024



# Accomplishments

Since last RRT meeting



Training		Exercises / Workshops		Federal, state, and local planning and coordination efforts	
Description	Dates	Description	Dates	Description	Dates
NOAA Science Of Spills	18-22 Mar 2024	Sector New Orleans Severe WX Exercise	29 Apr – 01 May 2024	Plaquemines	17 Apr 2024
Oil Spill Control Course	25-29 Mar 2024	Sector New Orleans COOP Exercise	02 – 03 May 2024		
ICS 300/400	Apr 8-9/14-15 2024				
UAS Course	19-22 Apr 2024				



# Outlook

Until Next RRT meeting



Training		Exercises / Workshops		Federal, state, and local planning and coordination efforts	
Description	Dates	Description	Dates	Description	Dates
Pre-Hurricane Refresher Training (ERMA/VADR)	17-18 Jun 2024	Jefferson Parish Train Derailment TTX	21 May 2024	Int'l Oil Spill Conf	13-16 May 2024
D8 PR College	17-20 Jun 2024	SE Louisiana PREP TTX	10 Jul 2024	SELAC Meeting	22 May 2024
D8 FOSCR College	15-19 Jul 2024			LA Statewide Area Committee Meeting	11 Jun 2024
				LA Statewide Area Committee Executive Steering Group (LA SACESG)	11 Jun 2024 16 Oct 2024

# Open Forum



# Action Items

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No	Items	Assigned To
1	Unmanned Aircraft Systems UAS Data Call <i>(Availability and capabilities?)</i>	EC
2	Consider the value-added need to develop Fact Sheets for Alternative Fuels <i>(e.g., Ammonia and Hydrogen)</i>	EC
3	EPA R6, D8, and SHG will collaborate and develop a facilitated TTX to work through FOSC roles and responsibilities in advance of SHG's PREP exercise scheduled for 31 Oct 2024.	EC
4	Proposed new RRT-6 Priority – Develop Dispersant Monitoring Data Management Process/Plan	EC

# Future Meeting Dates

<b>Dates for future RRT-6 Meetings</b>		
<b>Semiannual Meetings</b>	<b>Location</b>	<b>Dates</b>
Fall 2024	Addison, TX	13-14 Nov 2024
Spring 2025 Joint RRT-6/7 mtg	Lenexa, KS	2-3 Apr 2025
Fall 2025	Addison, TX	5-6 Nov 2025
Spring 2026	Addison, TX	6-7 May 2026

# Closing Remarks

## Co-Chairs



Craig Carroll, U.S. EPA



Michael Sams, USCG