Deepwater Horizon Oil Spill

Region 4 REOC Update

Subject: **Region 4 Update #75**
Deepwater Horizon Oil Spill
Date: July 10, 2010
To: Shane Hitchcock, Regional Incident Coordinator
Thru: Planning Section
From: Situation Unit
Reporting Period: July 9, 2010 1500 – July 10, 2010 1500

Site Name:	Deepwater Horizon Oil	**Location:**	50 miles offshore Venice, LA
Incident Date:	4/20/2010	**FPN:**	N10036
Mobilization Date:	4/27/2010	**Start Date:**	4/28/2010

Figure 1: BP contractors straightening displaced boom. Heron Bay, AL

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1. EPA DAILY HIGHLIGHTS

- Currently, there are 43 EPA employees (35 OSCs), 22 contractors, and 1 ATSDR employee deployed to the field.
- A total of $5,239,659 of the $7,090,000 ceiling has been expended or obligated to date with $1,850,341 remaining.

Executive Summary 0600 UC Mobile SitBrief

- 12 barrels of oily water mix were collected by 124 skimmers yesterday (7/9) - cumulative total of 117,356 barrels to date.
- 1628 VoOs operated in near shore and in shore waters of AL, FL and MS yesterday (7/9) with an additional 768 vessels operating under branch control (total of 2396 VoOs).
- The following is from yesterday's (7/8) BP Waste Operations Tracking Report (attached):

WM Profile ID	Cumulative Amount Manifested to Date	Units
Solid Wastes	18,551.2	Tons
Oily Solid	17,061.5	Tons
Solid	1,476.3	Tons
Recyclables	13.5	Tons

Environmental Impacts

SCAT Segment lengths surveyed on 8-Jul-2010 and to-date totals (miles)										
	Heavy	Mod	Light	Very Light	Heavy TB	Mod TB	Light TB	Negligible TB	No Oil Observed	Total
MS day total (mi)	0.0	0.0	7.6	1.6	0.0	0.0	0.0	0.0	8.9	18.1
AL day total (mi)	0.0	0.0	4.3	0.0	0.0	0.0	0.0	0.0	0.0	4.3
FL day total (mi)	0.7	0.0	5.2	0.0	0.0	0.0	0.0	0.0	21.1	26.9
Day TOTAL (mi)	**0.7**	**0.0**	**17.1**	**1.6**	**0.0**	**0.0**	**0.0**	**0.0**	**30.0**	**49.4**

Sector Mobile UC: Deployed Boom Stats

State	Boom Deployed Yesterday		Total Boom Deployed	
	Hard	Sorbent	Hard	Sorbent
Mississippi	0	5,990	448,050	173,750
Alabama	10,300	9,350	604,800	212,780
Florida	5,000	0	447,400	8,260
Total	**15,300**	**15,340**	**1,500,250**	**394,790**

2. CURRENT SITUATION

2.1. Sector Mobile Unified Command (UC)

2.1.1. FOSCR – Beach Clean-up Oversight

FOSCR role under Mobile Command Operations is currently being defined at the Branch (County) level in coastal Mississippi (Hancock, Harrison, and Jackson Counties), Alabama (Mobile County (including Dauphin Island) and Baldwin County), and the panhandle of Florida (Escambia to Wakulla Counties).

The following is a summary of EPA operations that occurred during the 0600 to 0600 operation period ending on July 10, 2010.

[Note that the units being reported of waste collected vary based on the waste management protocols of the particular area. Not all the waste is weighed and therefore is sometimes reported in volumetric units of measure. For a complete picture of waste management activities, refer to BP's Waste Daily Operations Report attached]

ALABAMA

BALDWIN COUNTY BRANCH

- Division 1 - Viewed tar balls between 3-Mile Lane and 3-Mile Road. Area east of End of Pontoon Lane in both directions had excessive tar balls. 30° 13' 45" N, 87° 52' 52" W – large area of tar balls and oiled seaweed. 30° 13' 43.3" N, 87° 52' 18.7" W – residential dunes and fences well oiled.
- Division 2 – Small ribbons of emulsified oil observed swirling in the surf near the shoreline, located at approximately N 30 deg. 16.062', W 87 deg. 35.265', at or near Cotton Bayou. Several Depressed areas, approximately 50' to 100' from the shoreline appear to collect and pool tidal water. These areas appear heavily oil stained as the pooled tidal water evaporates during the day. Crews observed cleaning these areas throughout the day, however several areas still require cleanup.
- Total number of cleanup crew: 560.
- Estimated waste collected: 104,000 lb.

MOBILE COUNTY BRANCH

Light impact over most of island, moderate in sector 3. Night Ops canceled 7/09/10. USCG, USEPA, ADEM and BP officials met with State-led Katrina Cut project to resolve issues between work crews and state project crews. BP discussed their plan to submit to IC concerning Western Island. They want to leave Western Island until the Katrina Cut project is complete and there is a roadway to the Island. Currently there are H&S issues regarding Island work and lack of transport during hazardous weather.
Total number of clean-up crew: Boat Div 1 – 255, Div 2 & 3 – 201, Div 4 – 205,
(661 total in boat divisions); Beach Div 1 – 665
Total waste collected: 13,300 lbs of oil solids, 12,300 lbs of oiled debris.

MISSISSIPPI
HANCOCK/HARRISON COUNTIES

Hancock County Division-1

- Water Ops: (at Bayou Caddy) performing boom maintenance, marking boom for navigation, deploying snare boom across Heron Bay, and deploying hard and soft boom to protect marsh areas.
- Beach Ops: performing patrol and recovery of tar balls, boom maintenance, and pressure washing roads, sidewalks, and parking lots.

Harrison County Division-1

- Water Ops: performing boom deployment at Cat Island.
- Beach Ops: performing beach cleanup at Cat Island with a 30 man task force.

Harrison County Division-2

- Water Ops: (at Henderson Point) performing boom deployment across St. Louis Bay, marking boom for navigation, and deploying boom to protect small waterways in the back portion of St. Louis Bay.
- Beach Ops: performing patrol and recovery of tar balls, boom maintenance, and pressure washing roads, sidewalks, and parking lots.

Harrison County Division-3

- Water Ops: (at Gulfport) performing boom deployment and marking boom for navigation.
- Beach Ops: performing boom maintenance, tar ball recovery, protecting Least Turn Nesting Grounds, and pressure washing roads, sidewalks, and parking lots.

Harrison County Division-4

- Water Ops: (at Biloxi Bay) deploying sorbent and snare between Deer Island and March Point, marking boom for navigation, and performing boom maintenance.
- Beach Ops: recovering tar balls, performing boom maintenance, and pressure washing roads, sidewalks, and parking lots.

Harrison County Division-5

- Water Ops: (at Ship Island) deploying boom at Ft. Massachusetts, performing boom maintenance, and marking boom for navigation.
- Beach Ops: operating at Ship Island with a 30 man task force to perform beach cleanup.

Harrison County Divisions 2 & 4 Gate Keeping

- Operating boom gates at Biloxi Bay (Deer Island – Marsh Island), Back Bay of Biloxi, and the opening to St. Louise Bay.

Total number of clean-up crew: **3,615**
Total waste collected: **71,305 lbs**

JACKSON COUNTY

- Petit Bois Island (Div 1) – Beach cleanup.
- Horn Island (Div 2) – Beach cleanup.

- Belle Fontaine Beach (Div 3a) – Beach cleanup.
- Lake Mars Ave. Boat Launch and Jetty (Div 3b) –Recovered product on boat ramp and jetty,
- Point Aux Chene Area, Ocean Springs (Div3c) – Beach cleanup.
- Singing River Island (Div 4b) – Beach cleanup.
- Pascagoula Beach (Div 4a) – Beach cleanup.
- "Magnolia Project" – 22,600-feet Boom maintenance across the mouth of Pascagoula Bay from Singing River IS to Shepard State Park on the west bank of the Singing River. Work continues to adjust the deflection angle on the series of booms to move product northward to the west bank.

Total number of clean-up crew: Div 1 – 30, Div 2 – 40, Div 3 – 180 (2 shifts), Div 4 – 400 (2 shifts); total – 650

Estimated waste collected: Div 1 – 5,500 lbs., Div 2 – 12,650 lbs., Div 3 – 650 lbs, Div 4 – 2,040 lbs; Total 20,840 lbs.

FLORIDA

ESCAMBIA/SANTA ROSA COUNTIES

- Escambia Div 1: At Perdido Key, beach cleanup of daily tidal in-flow of tar paddies continued at the seven beach access points, (i.e., Crab Trap restaurant, Perdido Key State Park east and west entrances, public beach access #1, #2, #3, and Johnson Beach). At NAS, contractor continues to remove daily accumulation of tar paddies from beaches (Musket, Sugar Island, WMR, and Barrancas). No night ops planned. No work due to Blue Angels Air show at Fort Pickens (Gulf Coast National Seashore).
- Escambia Div 2: - No beach clean-up during the day due to Blue Angels Air show. Night Ops will be focus of clean-up.
- Escambia Div 3: - East of Navarre Pier, a few tar balls visible on beach, mostly above the rack line deposited from previous storm event. Beach has severe slope/grade and tidal activity did not appear to be bringing up new material today. West of Navarre Pier clean-up continues.

Total number of clean-up crew: - Escambia Div 1 – 600, Div 2 – 700, Div 3 – 560, total 1860

Estimated waste collected: - Escambia Div 1 – 177,254 lbs., Div 2 – 76,274 lbs., Div 3 – 27,016 lbs., Total 280,544 lbs.

FRANKLIN COUNTY

- USCG continued to monitor boom placement, boom maintenance and boom integrity. USCG conducted surveillance of approx 70 miles of water and shoreline along the coast – no oil reported.

Total number of clean-up crew: 83

BAY/GULF COUNTIES

- Div 1- (County Line to West PC Pass) – 19 miles surveyed
- Div 2- (Shell Island to Crooked Island) – 9 miles surveyed
- Div 3- (Crooked Island E to Mexico Beach) – 10 miles surveyed

- Near Shore Skimming Task Force 1 – Crews primarily conducting beach clean-up and boom repair. Crews collected 54 bags of trash.

Total number of clean-up crew: Div 1 – 840, Div 2 – 12, Div 3 – 19, total 871
Estimated waste collected: Div 1 – 44 lbs., Div 2 – 22 lbs., Div 3 – 0; total 66 lbs.

WAKULLA/JEFFERSON COUNTIES

- USCG conducted surveillance of areas along the coast – no oil reported. USCG reports that boom placement is complete. Monitoring of boom will continue.

Total number of clean-up crew: 58

WALTON/OKALOOSA COUNTIES

- Beach teams covering beach area twice a day looking for and removing observed tar balls. Minor impacts of pea to 3 to 4 inch-sized tar balls along portions of both counties with the greatest numbers located on Elgin AFB. Night Ops reported tarball recovery operations occurred in six beach areas including Miramar Beach (from Crab Trap to RV Park), Top Sail Park, Dune Allen, Sea Grove, Sea Crest beaches over approximately 9.75 miles.

Total number of clean-up crew available: 1,322 day Ops, 500 night Ops
Estimated waste collected: 12,534 pounds of solid oily material.

2.2. Environmental Branch Air Monitoring Sampling Group

2.2.1. SCAT Teams

- SCAT Team 5 operated in Ono Beach, AL (ALBA 300-309, 170, 172, 173) 8.1 km beach assessed. SCAT Team 7 assessed on Horn Island, MS.

2.2.2. AreaRae Teams

- START air monitoring teams responded to odor complaints and conducted air monitoring activities at various locations along the Region 4 Gulf Coast at the following locations: Bay St. Louis MS (BPA001), Bay Pass Christian, MS (BPA002 and BPA003), Biloxi, MS, Fort Morgan, AL (BPA004), Gulf Shores, AL, and Destin, FL. Tar balls were present on beaches at Bay St. Louis, MS and on the beach and a private pier at Pass Christian, MS. No crude oil odors were observed, no elevated readings were obtained on the instruments and no samples were collected.
- DataRAMs were deployed by Tetra Tech START to monitor for particulates (PM10) at the locations on the table below. The instruments were co-located with an Area RAE. Below is the Time Weighted Averages (TWA) for air monitoring activities conducted by location.

EPA AIR MONITORING RESULT SUMMARY MAXIMUM HOURLY AVERAGE READINGS JULY 08, 2010	
City	**TWA PM_{10} ($\mu g/m^3$)**
Bay St. Louis, MS	32.30 $\mu g/m^3$
Pass Christian, MS	26.60$\mu g/m^3$
Biloxi, MS	40.40 $\mu g/m^3$
Fort Morgan, AL	8.20 $\mu g/m^3$
Gulf Shores, AL	13.00 $\mu g/m^3$
Destin, FL	31.10 $\mu g/m^3$

2.2.3. SESD (5 FIXED SITES)

Air VOC Sampling:

- The 24 hour VOC samples were collected at all five augmented fixed sites (Waveland, MS; Gulfport, MS; Fairhope, AL; Pensacola NAS, FL; Panama City, FL).

Air SVOC Sampling:

- The 24 hour SVOC samples were collected at all five augmented fixed sites. (Waveland, MS; Gulfport, MS; Fairhope, AL; Pensacola NAS, FL; Panama City, FL).

SAMPLES COLLECTED AND SHIPPED:

- 6 – VOC Summa canister samples (24-hour).
- 0 – VOC Summa canister trip blank on the East/West run.
- 6 – SVOC PUF samples (24-hour), including one duplicate from Waveland MS.
- 1 – SVOC PUF field blank on the East run.
- 13 Total Samples to be deployed.

2.2.4 Water/Sediment Sampling

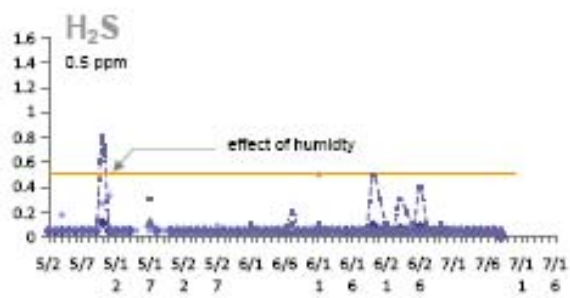
- Post impact sampling of affected beaches continues. The Water Team will assess and where appropriate sample beaches daily. On 07/08 the Water Team assessed a shoreline area in Waveland, MS recently impacted by oil. Two water samples (one at discharge to the Gulf and one at the wetland side) were collected from culvert/canal systems along the shoreline, with visible oil present on the beach, in the canal, and the wetland.

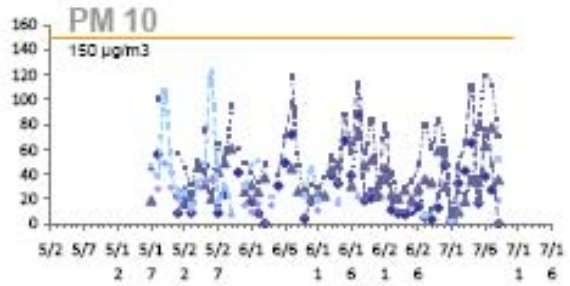
2.2.5. TAGA AIR TEAM

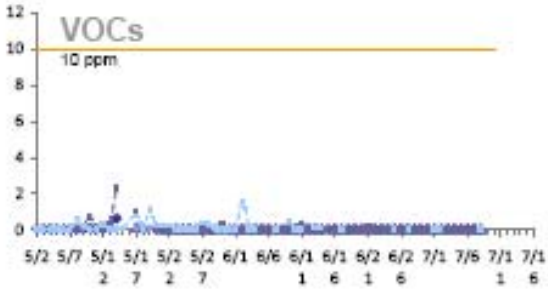
- The 1693 TAGA laboratory performed mobile air monitoring from Pensacola Beach, FL to Stennis, MS. There was no BTEX detected which was attributed to the offshore oil spill.
- The 1693 TAGA laboratory GC/MS was available for Tedlar bag analysis as requested.

Air Monitoring Summary

The charts below summarize EPA monitoring data collected in Alabama, Florida, and Mississippi. The source data used to calculate the maximum values is previously averaged on an hourly basis. There are gaps in the source data due to a variety of reasons, including weather conditions or readings being collected in one of the other states. Maximum values are shown as a line for sequential days only.

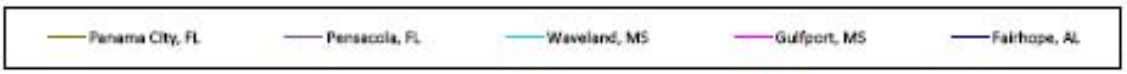


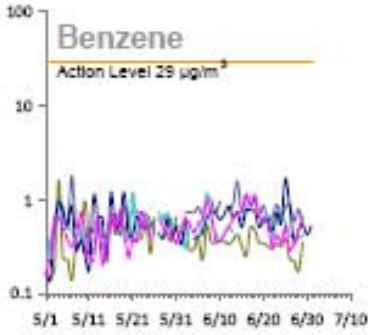


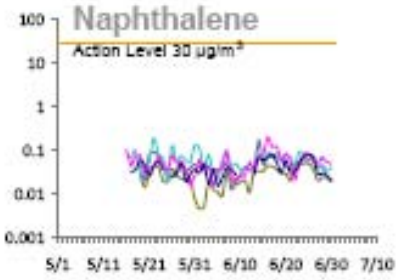


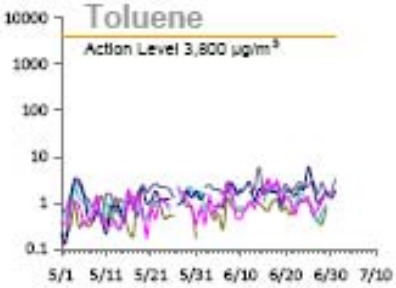
EPA Air Sampling Results for Selected Analytes

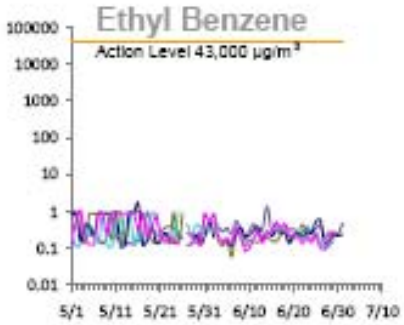
The charts below illustrate the analytical results for air samples collected by EPA at fixed locations. Action Levels are derived from Primary Comparison Concentrations for 24-hour sampling results from the Gulf Canyon Mississippi Monitoring Plan (5-7-10). The primary comparison concentrations were determined based on the following hierarchy: 1) Agency for Toxic Substances and Disease Registry's (ATSDR's) Acute Minimum Risk Levels [MRLs (protective of 1-14 day exposures)], or 2) the lower of either the 1E-4 risk level (adjusted for a 1 year exposure), the non-cancer concentration at a HQ of 10, or the intermediate MRL.

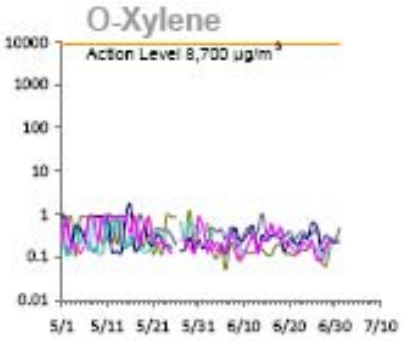


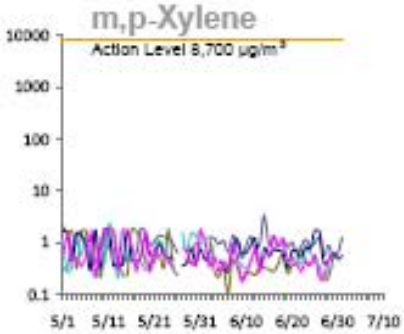












2.2.6. ASPECT

- ASPECT did not fly missions on July 9, 2010

2.2.7. Public Health and Environment

- As per the ICP reorganization, the public health unit in the planning section has been stood down and replaced with technical specialists assigned to each IC. ATSDR is now a technical specialist for EPA under the plans section.
- Conducted a media interview with the EPA PIO and the Sun-Herald (Gulfport/Biloxi MS) 7/08/10 regarding waste materials. Met with the JIC PIO regarding community health concerns. Participated in Public Health Planning call.

2.2.8. Public Information Officer (PIO)

- PIO received 5 media inquires. PIO worked with MSDEQ and ATSDR on resolution of the Sun Herald inquiry. ATSDR participated in an interview with the Sun Herald.
- Media inquiries and intergovernmental inquires are increasing along with requests to provide representatives at Community Meetings.
- PIO met with Community Outreach leaders to determine to determine how to integrate EPA into the system. PIO developed extensive SOW requesting START assistance. PIO continues to do research to develop SOPs for the PIO and Community Outreach portions of EPAs response.

2.3 Region 4 REOC

2.3.1. Air, Pesticides and Toxics Management Division

- No reporting monitors in the Gulf showed exceedances of the 24-hr $PM_{2.5}$ or 8-hr ozone NAAQS from data reported on July 9.
- No exceedances of the total volatile organic compound (VOC) screening levels were observed from the latest monitoring data report. Review of speciated VOC and SVOC sampling data showed no exceedances of the screening levels.

3. EPA RESOURCES

3.1. Resources Deployed

3.1.1. Personnel

PERSONNEL	Unified Command Mobile, AL	REOC Atlanta, GA	TOTALS
EPA - OSC	35	1	36
EPA - RSC	5	1	6
EPA - PIO/CIC	1	0	1
EPA - RCRA	1	0	1
EPA - RPM	1 AIR		1
EPA - ERT	3 AIR 0 TAGA 1 Data 1 WATER		3 0 1 1
EPA-NDT	2 ASPECT		2
EPA - RERT	1 AIR		1
EPA - SESD	0 FIXED 0 WATER 0 APTMD	0	0
START	3 AIR 1 Cmnd Spt 2 GIS 0 WATER	0	6
G2 Warehouse	0 MCP	0	0
ESAT Contractor	2 AIR FIXED		2
TAGA SERAS Personnel	4 AIR		4
SERAS- Air Oversight	2		2
ATSDR Personnel	1 PIO AND ENV	0	1
EPA Other	0	2	2
TOTALS	**66**	**4**	**70**

3.1.2. Equipment

Equipment	Total
Bus (TAGA)	1
AreaRAE	8
Mobile Command Post (MCP)	0
ASPECT Aircraft	1
Boat	0
EBAMS PM2.5 Monitors	3
BAM 1020 PM2.5 Monitors	5
YSI multi-parameter data sondes	2
DataRam Monitors PM_{10}	3

4. FINANCE

4.1. Pollution Removal Funding Authorization

- Region 4 is currently operating under a $7,090,000 PRFA ceiling with the USCG.

4.2. Current Cost Estimates

CONTRACTS:	OBLIGATIONS
START- OTIE	$308,000
START- TETRATECH	$1,314,000
ATSDR (IA)	$60,000
SERAS- TAGA	$300,000
ERG- VOCs	$242,610
ERG- SVOCs	$178,496
ESAT	$195,002
ASPECT	$205,000
G-2	$5,000
Misc. Lab Obligations	$13,058
SUBTOTAL	**$2,821,166**
PAYROLL	$931,518
TRAVEL	$579,866
EXPENSES	$72,624
INDIRECT EXPENSES	$834,485
SUBTOTAL	**$2,418,493**
TOTAL OBLIGATIONS/EXPENSES	**$5,239,659**
AVAILABLE FUNDS BALANCE	**$1,850,341**

Daily burn rate for Region - $72,010

5. ATTACHMENTS

1.UC Mobile SitBrief Power Point (07-10-10)
2. Waste Daily Operations Report (07-09-10)
2. Odor Reports Map (07-10-10)
3. Odor Reports Map (07-10-10) - Alabama
4. Odor Reports Map (07-10-10) - Florida
5. Odor Reports Map (07-10-10) - Mississippi
6. Air Monitoring Map (07-10-10)
7. Water Sampling Map (07-10-10)

ABBREVIATIONS/ACRONYMS

ORA	Area of Responsibility	NRC	National Response Center
APTMD	Air, Pesticides and Toxics Management Division (EPA Region 4)	OAQPS	Office of Air Quality Planning and Standards (EPA)
ATSDR	Agency for Toxic Substances and Disease Registry (CDC)	ORD	Office of Research and Development (EPA)
BP	British Petroleum	ORO	Oil Range Organics
BTEX	Benzene, toluene, ethylbenzene, xylene	OSHA	Occupational Safety and Health Administration
COE	Army Corps of Engineers	OSWER	Office of Solid Waste and Emergency Response (EPA)
CDC	Centers for Disease Control and Prevention	OWOW	Office of Wetlands, Oceans, and Watershed (EPA)
CTEH	Center for Toxicology and Environmental Health (BP consultant)	PAH	Poly Aromatic Hydrocarbons
DMP	Data Management Plan	PIO	Public Information Officer
DRO	Diesel Range Organics	PM2.5	Particulate Matter (aerodynamic diameter < 2.5 microns)
EBAM	Electronic Beta Attenuation Monitor	PM10	Particulate Matter (aerodynamic diameter < 10 microns)
EOC	Emergency Operations Center (EPA HQ)	PRFA	Pollution Removal Funding Authorization
EPA	Environmental Protection Agency	QAPP	Quality Assurance Project Plan
ERMA	Environmental Response Management Application	QASP	Quality Assurance Sampling Plan
ERT	EPA Environmental Response Team	REOC	Regional Emergency Operations Center
ESAT	Environmental Services Assistance Team (SESD contractors)	RP	Responsible Party
FDA	Food and Drug Administration	RSC	Response Support Corps
GRP	Geographic Response Plan (GRP)	SERAS	Scientific, Engineering, Response, and Analytical Services
FOSCR	Federal On-Scene Coordinator Representative	SESD	Science and Ecosystem Support Division (EPA Region 4)
FDEP	Florida Department of Environmental Protection	START	Superfund Technical Assessment and Response Team
HQ	EPA Headquarters (Washington D.C.)	SVOC	Semi-volatile Organic Compounds
ICS	Incident Command System	TAGA	Trace Atmospheric Gas Analyzer
IH	Industrial Hygienist	TCLP	Toxicity Characteristic Leaching Procedure
JIC	Joint Incident Command	TSS	Technical Services Section
MODU	Mobile Offshore Drilling Unit	TWA	Time Weighted Average
MSDEQ	Mississippi Department of Environmental Quality	UC	Unified Command
MSDMR	Mississippi Department of Marine Resources	USCG	United States Coast Guard
NAAQS	National Ambient Air Quality Standards	VOC	Volatile Organic Compounds
NAS	Naval Air Station	VoO	Vessels of Opportunity
NIOSH	National Institute for Occupational Safety and Health	WMP	Waste Management Plan
NOAA	National Oceanic and Atmospheric Administration		