Deepwater Horizon Incident, Gulf of Mexico

Region 6 REOC Update

Subject:	**Region 6 Update # 8** **Deepwater Horizon Incident, Gulf of Mexico**
Date:	May 5, 2010
To:	Incident Command
Thru:	Planning Section
From:	Situation Unit
Reporting Period:	May 4, 2010 1300 – May 5, 2010 1300

1. Background

Site Name:	Deepwater Horizon Incident	**FPN#:**	N10036
Mobilization Date:	4/27/2010	**Start Date:**	4/28/2010

2. Current Situation

- One EPA Representative is at Incident Command (Houma) and another EPA Representative is at Area Command (Robert), both are directly interfacing with Unified Command.

2.1 (USCG) Incident Command Post (Houma, LA)

- EPA requested SOW change and funding increase to $5 million.
- EPA Representative provided its Public/Environmental Sampling information to the Safety and Environmental units of Unified Command.
- EPA Representative coordinated with the Safety unit to provide sampling media for offshore near the drilling rig with SUMMA canisters and a tedlar bag. CTEH/USCG will transport and collect sample media and return to EPA.
- EPA Representative coordinated with USDA about Aquariums with intakes within the Gulf of Mexico and will provide those to command once obtained.
- In a meeting with the Environmental Unit, EPA was recognized for its efforts with Public/Environmental sampling/monitoring along with pushing the use of a GIS unit and ArcGIS Server installation.
- According to the Unified Command Ops Section, the 5/5 in-situ burn is scheduled to begin at approximately 1200. OSC Moore alerted and instructed ASPECT to conduct an over flight of the burn.

2.2 (USCG) Area Command Post (Robert, LA)

- The Subsurface Dispersant test application is now known to have extended beyond 1000 hrs.
- Communications between dispersant operations run from Houma and Area Command EU have proven to be poor.
- Samples collected from ROV in support of Dispersant test had still not been sent to LSU for analysis as of 1400 hrs on 5/4.
- Aerial observation by Aspect aircraft indicated heavy oiling in the rig area. Comparison with data collected on 4/28 will be necessary to determine if subsea dispersant application has impacted the surface slick.
- A commercial research vessel has been contracted by BP to support potential sampling and monitoring (Phase 1 plan) to support ongoing subsea dispersant application.
- NOAA is loading all available aerial imagery, booming strategy, SCAT data, and other data into ERMA.
- EPA Logistics Strike Team delivered LSV2 to Area Command at 1630 hrs on 5/4.

2.3 Air Monitoring/Sampling

- Air monitoring and sampling ongoing in Venice operations area (VOCs and Particulates):
  - Venice, LA - 29.25274 N, 89.35750 W - V02 - located at USCG (ongoing monitoring);
  - Boothville, LA - 29.31449 N, 89.38433 W - V03 - located at Welding Supply Co. (ongoing monitoring);
  - Fort Jackson, LA - 29.35714 N. 89.45605 W - V04 (Deactivated at approx. 0750 5/5 due to increased dirt road dust);
  - Fort Jackson, LA – 29.35699 N, 89.45487 W – V05 (Activated at approx. 0805; ongoing monitoring).
- Air monitoring and sampling ongoing in Chalmette operations area (VOCs and Particulates):
  - Chalmette, LA – 29.94562, -89.9721 – C01 - located at Fire Station number 3, near corner of Jackson Street and Judge Perez;
  - Poydras, LA – 29.86609, -89.89108 – C02 - located at Fire Station number 8;
  - Hopedale, LA – 29.82209, -89.60862 – C03 - located at the Emergency Operations Center.
- Each air monitoring location has 4 pieces of air equipment:
  - DataRAM - monitoring particulate matter;
  - AreaRae - monitoring VOCs;
  - PQ200 - samples for PM10 (particulates);
  - SUMMA Canisters per location - sample for VOCs.
- All air monitoring/sampling stations are monitored throughout the day (24 hours) for immediate reporting of any elevated VOC or particulate levels. The maximum reading is reported to the OSC at Area Command Post in Venice and Chalmette.
- Real-time air monitoring data from midnight to midnight each day is reviewed for field QA and uploaded into SCRIBE by 1200 each day and available to EPA Headquarters.
- Twelve SUMMA canisters (for VOC) were collected during this operational period. Samples will be shipped before noon today. Six PM2.5 (for particulate) samples were prepared for shipment. To ensure proper temperature the filter samples will held on ice and shipped Tuesday. Twelve SUMMA and 6 filter samples will be shipped Tuesday.

- Venice has relocated air sampling/monitoring location V04 due to increased traffic on road nearby causing dusty conditions. The new location is V05 at 29.35699 N, 89.45487 W.

- Chalmette operations had additional equipment delivered to conduct Benzene monitoring if the VOC levels exceed the 10 PPM action level.

- Venice operations reported that air monitoring data did not exceed action levels for VOCs or particulates (PM10). Chalmette air monitoring data is pending field QA.

- Air sampling conducted in Venice area on 4/28-4/30 had no exceedences for VOCs & particulates(PM2.5).

- **EPA summary of air monitoring/sampling activities:**

Air Monitoring & Samples	DataRAM (PM10)	AreaRae	SUMMA Canisters	PM2.5	TOTALS FOR 5/4
Venice	3 locs/24-hr	3 locs/24-hr	6	3	9
Chalmette	3 locs/24-hr	3 locs/24-hr	6	3	9
TOTAL TO DATE	6 locs/24-hr	6 locs/24-hr	67	24	

*QAQC samples not included in sample count

2.4 Water/Sediment Sampling

- EPA continues to conduct water and sediment sampling at locations provided by EPA Headquarters and selected through National Coastline Condition Assessment (NCCA) program. The NCCA sample locations are sampled every four years by state agencies with U.S. Coastlines. Sample parameters and locations were also selected in coordination with the EPA Region 6 Water Quality Division.

- Sample teams observed oil midway between sample locations T001-2363-100504 and T001-1347-100504 (between the delta and Chandeleur Islands).

- Venice operations were unable collect sediment samples on 5/4 due to the sediment being compacted. Venice operations launched one water and sediment sampling team on 5/5. Sample locations increased to include the Louisiana coastline west of the delta.

- Chalmette water operation teams deployed to Lake Borgne Area on 5/4. No oiled wildlife and no oil observed or odors detected. Water and sediment sampling teams are have been launched for 5/5.

- Representatives from the Water Division and the REOC Environmental Units from R6 and R4 conduct a conference call three times a week with the HQ EOC to discuss the coordination and consistency of water and sediment sampling across the Deepwater Horizon Incident Response.

- **EPA summary of water/sediment activities:**

Water/Sediment Samples	Water	Sediment	TOTALS FOR 5/4
Venice	2	0	12
Chalmette	3	3	6
TOTAL TO DATE	28	21	

*QAQC samples not included in sample count

2. 5 TAGA

- On 5/4, TAGA 1553 performed mobile monitoring for (BTEX) in Southeastern LA; from Slidell to Hopedale, to Delacroix to Poydras, to Boheman. No BTEX observed above low ppbv levels during any monitoring events - the concentrations observed were associated with vehicular traffic or isolated sources with the exception of a mile wide toluene plume of ~20 ppbv of toluene along US 90 east of Industrial Parkway.

- TAGA 1553 continues to perform mobile monitoring in Southeastern LA. TAGA 1554 continues to perform mobile monitoring in Southern LA and Mississippi.

2.6 ASPECT

- ASPECT plane is continuing to conduct over flights at the direction of Incident Command based on current conditions provided by field teams and BP operations. Specifically, overflights will occur during dispersant applications and in-situ burns.

- ASPECT conducted an overflight in afternoon of 5/4. Twelve runs of data collected just north of the rig site.

- On 5/5, ASPECT was tasked by OSC Moore to conduct an over flight of the in-situ burn. ASPECT departed airfield at 1130. ASPECT's ETA for the rig site is 1210. Data should be available by 1400-1430.

- At 1210 on 5/5, the description from the ASPECT crew is "tons of oil". Oil spotting report of heavy oil approximately 1 mile east of the northern Chandeleur Islands on the transit to the site. For all practical purposes ASPECT is on-station and looking for the burn to start.

2.7 Water Quality Protection Division Update

- The Region 6 Water Quality Protection Division provided a situation update including impact analysis, monitoring and assessment, and drinking water (see attached).

2.8 Summary of Air Quality Testing In Residential and Commercial Areas Along the Gulf Coast reported by CTEH (Center for Toxicology and Environmental Health) from 5/4

	# of Measurements	Avg Concentration (ppm)	Maximum Concentration (ppm)
VOCs	289	0.005	0.4
Hydrogen Sulfide	237	0	0
Sulfur Dioxide	137	0	0
Benzene	24	0	0
Total	687		

*Benzene and sulfur dioxide measured with detector tubes

	# of Measurements	Avg Concentration (mg/m3)	Maximum Concentration (mg/m3)
Particulate Matter (PM10)	162	0.0333	0.270
Total	68		

*PM10 – is particulate matter less than 10 microns

3. EPA Assets

3.1 Current Assets Deployed

- Activated in Dallas, TX
  - REOC is activated
  - SRICT activated
  - RRT activated

Deployed Personnel

Personnel	Dallas, TX	Venice, LA	Robert, LA	Houma, LA	New Orleans, LA	Chalmette, LA	Slidell, LA	TOTALS
EPA								
- OSC	6	1		2		1		10
- RSC	4		1	1				6
- PIO			3					3
- Other			2		1	1		4
START	4	14				12		30
ERT Contractor		1						1
TAGA Personnel							10	10
ASPECT Personnel							4	4
Other								
TOTALS	14	16	6	3	1	14	14	68

Deployed Equipment

Equipment	Dallas, TX	Venice, LA	Robert, LA	Houma, LA	New Orleans, LA	Chalmette, LA	Slidell, LA	TOTALS
Mobile Command Post		1						1
ASPECT							1	1
TAGA Bus							2	2
LRV			1			1		2
TOTALS		1	1			1	3	6

4. Daily Cost Estimates (as of 5/4)

	EPA Personnel Est. Spent	EPA Travel Est. Spent	EPA Contracts Est. Spent	TOTAL Est. Spent	TOTAL Obligations	TOTAL USCG PRFA Ceiling	Balance	Est. Daily Burn Rate
USCG PRFA FPN N10036	$72,600	$13,596	$399,300	$485,496	$916,696	$1,000,000	$514,504	$119,110
TOTAL EPA Funded	$72,600	$13,596	$399,300	$485,496	$916,696	$1,000,000	$514,504	$119,110

Louisiana Total	$72,600	$13,596	$399,300	$485,496	$916,696	$1,000,000	$514,504	$119,110

Figure 1 – US EPA personnel during boat operations in Venice, LA.

Monitoring/Sampling Locations

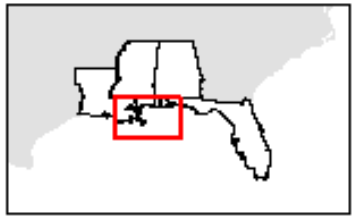
May 5, 2010

Situational Map

1400CST

Legend

- Asset Location
- Sample Locations
- Observed Oiling 5/5/2010 3:57 am (Partial dataset provided)
- Observed Oiling 5/4/2010 6:00 am



0 12.5 25 50
Miles

US EPA REGION 6
START-3
(For Official Use Only)

Situation Map

Date Created:	DCN:	SCALE:
5/5/2010	P560	

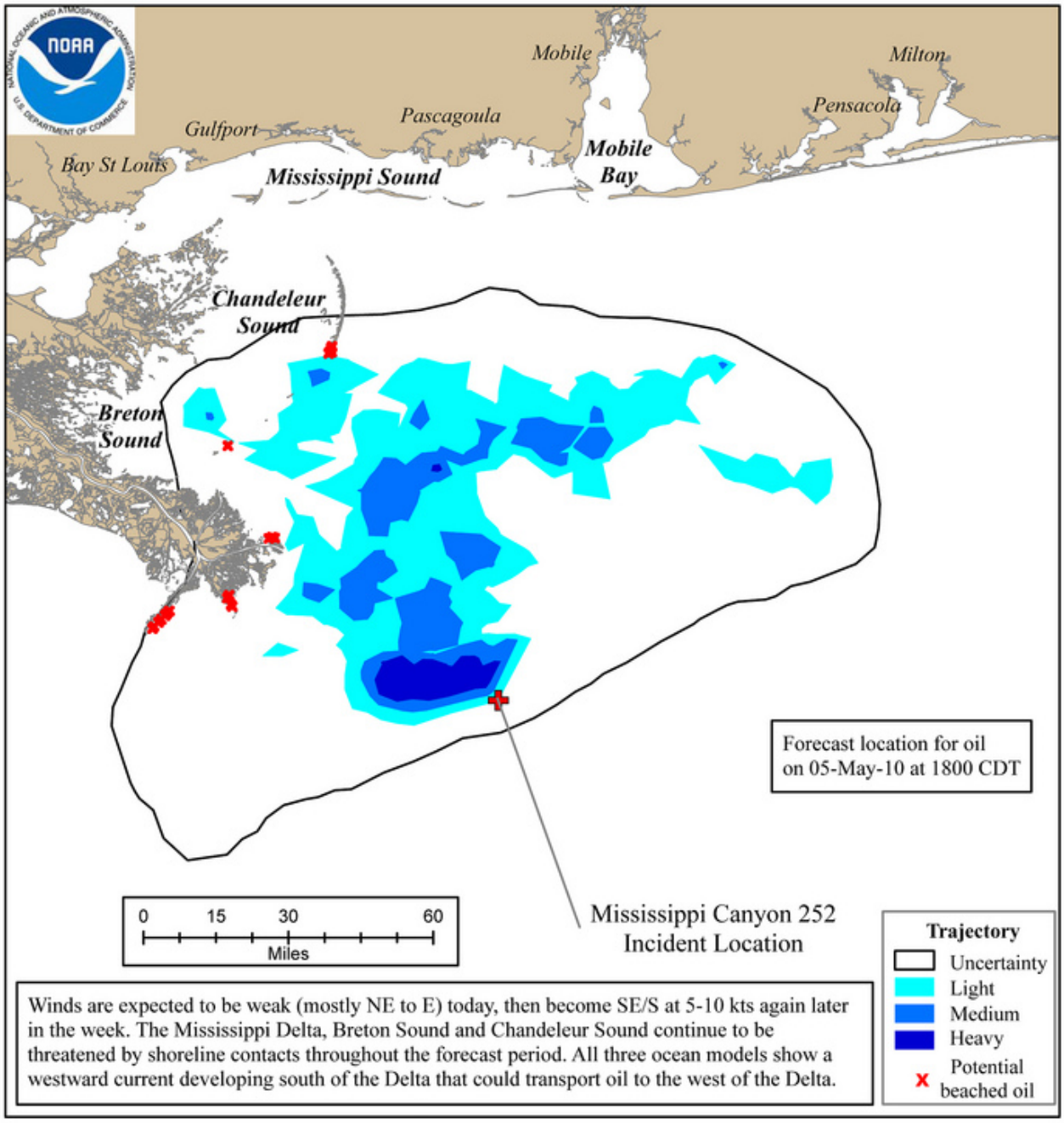
Trajectory Forecast Mississippi Canyon 252

NOAA/NOS/OR&R

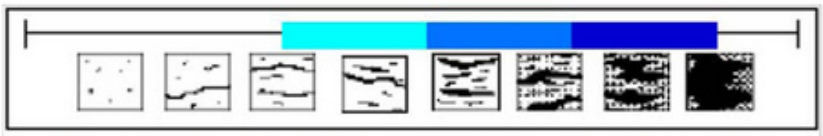
Estimate for: 1800 CDT, Wednesday, 5/05/10

Date Prepared: 2300 CDT, Monday, 5/03/10

This forecast is based on the NWS spot forecast from Monday, May 3 PM. Currents were obtained from the NOAA Gulf of Mexico model, Texas A&M/TGLO, and NAVO models. The model was initialized from SLAR data obtained during a Transport Canada overflight Monday AM. The leading edge may contain tarballs that are not readily observable from the imagery (hence not included in the model initialization).



Winds are expected to be weak (mostly NE to E) today, then become SE/S at 5-10 kts again later in the week. The Mississippi Delta, Breton Sound and Chandeleur Sound continue to be threatened by shoreline contacts throughout the forecast period. All three ocean models show a westward current developing south of the Delta that could transport oil to the west of the Delta.



this scale bar shows the meaning of the distribution terms at the current time

Next Forecast: May 4th PM