- The National Oceanic and Atmospheric Administration forecasts winds to be predominantly from the southeast over the next few days, becoming progressively weaker less than 5 kts by Monday.

Surface Operations:

- Total vessels assigned: 771 (Ships, Tugs & OSRV)
- 3 CG cutters and 3 commercial vessels are outfitted with VOSS/SORS system and are ready to conduct skimming operations. (Reported by NSF SIT Report 12 May).
- CGC OAK SORS Operations Pensacola, FL U/W from NAS Pensacola.
- CGC CYPRESS SORS Operations Pensacola, FL Staging. Moored homeport; Mobile, AL.
- 0 Air Sorties (NON CG) completed 16 May.
- No IN-SITU burn operations conducted in last 24 hours.
- Skimming operation completed in the past 24 with a total of 6987 gallons recovered.

	Past 24 hours	Total to Date
Oily water mixture recovered	6,987 bbls	158,378 bbls
Surface dispersants applied	6,600 gal	582,416 gals
Subsea dispersants applied	4,500 gal	42,313 gals

Resource Summary:

Total Response Personnel assigned: 19,163 (per UAC executive summary, 16 May)
Total Boom assigned: 1,300,110 ft
Sorbent Boom assigned: 418,390 ft
Total Fixed Wing Aircraft assigned: 17
Total Helo Aircraft assigned: 35
Unified Incident Commands: 3
Staging areas: 17

Environmental Impacts:

- Tar balls confirmed at Grand ISLE, LA and Long Beach, MS. Clean up is currently ongoing.
- Navy Cove, AL (Baldwin County Division 1): "Tens of thousands" of silver fingerling minnows 1 to 1.5 inches long found dead. Info was confirmed by Orange Beach Staging Area and witnessed onboard a vessel towing boom from the staging area. This area is inside the baseline area, where they have been no sighted tar balls or oil effects. Unknown if oil caused the kill whether the fish are being collected for testing.
- San Luis Pass, TX: Samples taken from tar balls on Bolivar Peninsular confirm tar balls are NOT associated with the Deepwater Horizon Oil Spill. (Source TX, SOC per 1800 EDT 14 May 2010 SLB)

Wildlife Impacts:

Past 24 Hours: 2 Total: 34
No specific information provided.

National Incident Commander Daily Situation Update
0630 – 18 May 2010
Deepwater Horizon Spill Response
(Updates in RED)

	Past 24 hours	Total to Date
Oily water mixture recovered	23,873 bbls	182,251 bbls
Surface dispersants applied	6,074 gal	588,490 gals
Subsea dispersants applied	7,280 gal	49, 593gals

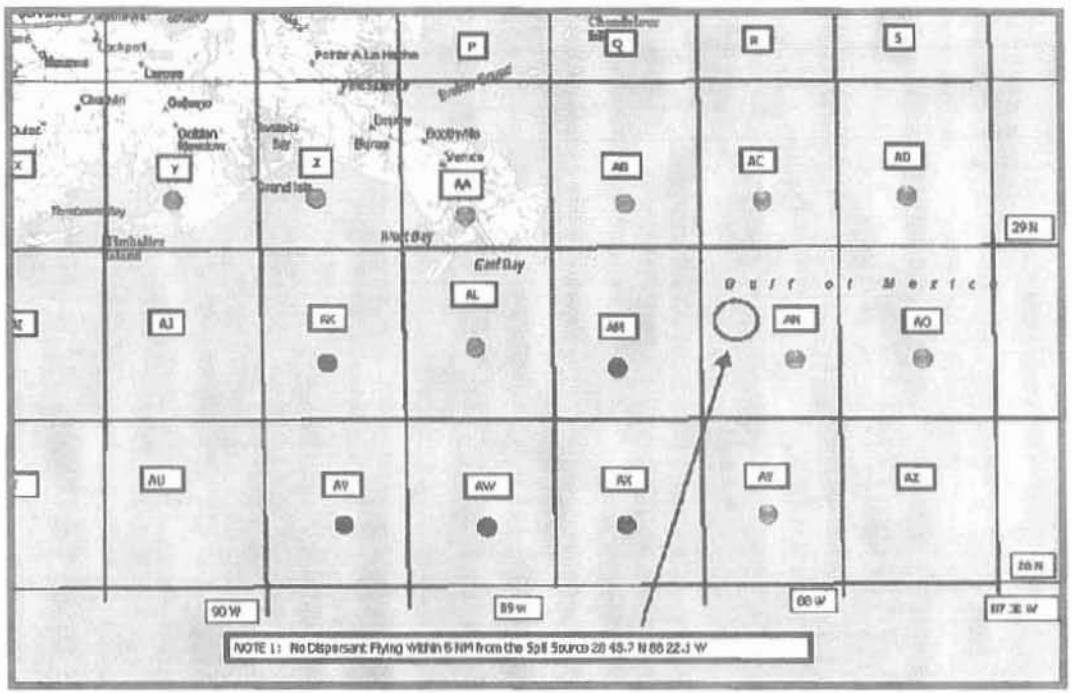
Resource Summary:
Total Response Personnel assigned: 19,163 (per UAC executive summary, 16 May)
Total Boom assigned: 1,364,510 ft
Sorbent Boom assigned: 418,390 ft
Total Fixed Wing Aircraft assigned: 17
Total Helo Aircraft assigned: 26
Unified Incident Commands: 3
Staging areas: 17

Environmental Impacts:
- Navy Cove, AL (Baldwin County Division 1): "Tens of thousands" of silver fingerling minnows 1 to 1.5 inches long found dead. Info was confirmed by Orange Beach Staging
- In Pass Christian, MS captured 01 egret covered in oil. MS wildlife has been dispatched
- Report of oil 3 miles of beach Pascagoula, MS. Report of oil in the beach, awaiting confirmation.
- Report of tar balls at West Ship Island, MS, awaiting confirmation.
- Report of tar balls at East Ship Island, MS, awaiting confirmation.
- Report of tar balls at Biloxi, MS, awaiting confirmation.
- Report of tar balls at East Dauphin Island, AL, awaiting confirmation.
- Report of tar balls at Little Lagoon, AL, awaiting confirmation.
- Report of tar balls at Panama City Beach, FL, awaiting confirmation.
- Department of Agriculture (USDA): Animal and plant Health Inspection Service supporting wildlife activities in LA.
- D7 reported Park Rangers found tar balls on the beach at Fort Zachary State Park, Key West, FL on 17 May. Samples of the tar balls were collected and will be shipped for analysis to determine the origin of the source.

Wildlife Impacts:
Past 24 Hours: 1 Total: 35
No specific information provided.

Marine Transportation System:
- All shipping channels and ports remain open in the Gulf Coast region.
- Mariners advised to avoid areas contaminated with oil.
- No vessels have required cleaning or de-contamination; teams are on standby if the need arises.

Aerial Dispersant Operations Divisions for June 25, 2010:



Red: Stennis
Blue: ASI Houma
Green: AT Houma

NO BURN BOX AT THIS TIME
Be alert for possible changes, we will notify.

June 25, 2010

START

Dispersant Spray Assets

Aircraft Information						
Type	**Owner/ Operator**	**Tail #**	**Payload (gal)**	**Airport**	**Purpose & Altitude**	**Comments**
Spotters						
King Air	MSRC (Dynamic)	N39Q		Houma	Spotter – 1,000' to 1,500'	Relocated for operational continuity
King Air	MSRC (Dynamic)	N89N		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N41J		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N37H		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N80Y		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N79W		Stennis	Spotter – 1,000' to 1,500'	Reassigned for required FAA maintenance
Aztec (PA 23)	ASI	N141183		Houma	Backup Spotter	
Turbo COMDR	ASI	N547GA		Houma	Spotter	
Sprayers						
King Air	MSRC (Dynamic)	N7198Y	240	Stennis	Spray: 75'	Available for both Spray and Spotter duties
King Air	MSRC (Dynamic)	N7199D	240	Stennis	Spray: 75'	Available for both Spray and Spotter duties
C-130	IAR	N117TG	3,000	Stennis	Spray: 75'	
C-130	MSRC (Lynden)	N403LC	5,000	Stennis	Spray: 75'	ADDS Pack (CCA)
C-130	MSRC (Lynden)	N401LC	5,000	Stennis	Spray: 75'	ADDS Pack (Alyeska)
C-130	OSR	EIJIV	5,000	Stennis	Spray: 75'	ADDS Pack (OSR)
AT-802	Lane (NRC)	N9002K	800	Stennis	Spray: 50'	2-Seater / Training
BT-67	ASI	N932H	1,800	Houma	Spray: 75'	
DC-3	ASI	N64766	1,000	Houma	Spray: 75'	
DC-3	ASI	N64767	1,000	Houma	Spray: 75'	Standby
Operational Spray Volume (1 load per plane) (gal)			23,880			
Total Operational Spray Maximum (gal) (4 sorties/ plane / day)			95,520			

Dispersant Application Totals

Dispersant Statistics Applied by Day						
Date	**Dispersant Type (gallons)**		**Daily Totals**	**# Sorties**	**Acres Covered** (5 gal/acre application rate)	**Square Miles covered**
	9500	**9527**				
21 April 2010	Initial Response Date					
22 April 2010	0	1,800	1,800	1	360	0.6
23 April 2010	0	0	0	0	0	0
24 April 2010	0	0	0	0	0	0
25 April 2010	0	11,604	11,604	9	2,321	3.7
26 April 2010	0	14,486	14,486	10	2,897	4.5
27 April 2010	11,191	15,887	27,078	5	5,416	8.5
28 April 2010	27,269	14,874	42,143	15	8,429	13.2
29 April 2010	36,913	4,000	40,913	13	8,183	12.8
30 April 2010	4,900	0	4,900	1	980	1.5
1 May 2010	3,550	8,103	11,653	4	2,331	3.6
2 May 2010	0	0	0	0	0	0
3 May 2010	0	0	0	0	0	0
4 May 2010	10,561	23,712	34,273	12	6,855	10.7
5 May 2010	30,905	18,670	49,575	18	9915	15.5
6 May 2010	13,032	15,738	28,770	11	5,754	9.0
7 May 2010	5,582	1,688	7,270	4	1,454	2.3
8 May 2010	17,813	23,877	41,690	17	8,338	13.0
9 May 2010	29,034	26,898	55,932	21	11,186	17.5
10 May 2010	29,240	26,980	56,220	22	11,244	17.6
11 May 2010	7,940	0	7,940	2	1,588	2.5
12 May 2010	39,710	0	39,710	12	7,942	12.4
13 May 2010	41,620	0	41,620	15	8,324	13.0
14 May 2010	44,031	0	44,031	14	8,806	13.8
15 May 2010	14,208	0	14,208	6	2,842	4.4
16 May 2010	0	0	0	0	0	0
17 May 2010	6,591	0	6,591	4	1,318	2.1
18 May 2010	209	0	209	1	42	0.1

Continued on next page...

Dispersant Statistics Applied by Day						
Date	Dispersant Type (gallons)		Daily Totals	# Sorties	Acres Covered (5 gal/acre application rate)	Square Miles covered
	9500	9527				
19 May 2010	0	0	0	0	0	0
20 May 2010	0	0	0	0	0	0
21 May 2010	25,233	4,659	29,892	14	5,978	9.3
22 May 2010	51,353	1,593	52,946	22	10,589	16.6
23 May 2010	18,104	0	18,104	11	3,621	5.7
24 May 2010	630	0	630	1	126	0.2
25 May 2010	200	0	200	1	40	0.1
26 May 2010	229	0	229	1	46	0.1
27 May 2010	200	0	200	1	40	0.1
28 May 2010	10,259	0	10,259	4	2,052	3.2
29 May 2010	0	0	0	0	0	0
30 May 2010	15,131	0	15,131	6	3,026	4.7
31 May 2010	11,676	0	11,676	7	2,335	3.7
1 June 2010	0	0	0	0	0	0
2 June 2010	0	0	0	0	0	0
3 June 2010	1,900	0	1,900	1	380	0.6
4 June 2010	0	0	0	0	0	0
5 June 2010	125	0	125	1	24	0
6 June 2010	0	0	0	0	0	0
7 June 2010	3,998	0	3,998	2	800	1.3
8 June 2010	5,505	0	5,505	3	1,101	1.7
9 June 2010	0	0	0	0	0	0
10 June 2010	4,506	0	4,506	2	901	1.4
11 June 2010	14,305	0	14,305	6	2,861	4.5
12 June 2010	6,996	0	6,996	2	1,399	2.2
13 June 2010	35,212	0	35,212	13	7,042	11.0
14 June 2010	12,703	0	10,703	7	2,141	3.3
15 June 2010	2,608	0	2,608	3	522	0.8
16 June 2010	13,380	0	13,380	7	2,676	4.2

Dispersant Statistics Applied by Day						
Date	**Dispersant Type (gallons)**		**Daily Totals**	**# Sorties**	**Acres Covered** (5 gal/acre application rate)	**Square Miles covered**
	9500	**9527**				
17 June 2010	12,123	0	12,123	6	2,425	3.8
18 June 2010	15,564	0	15,564	8	3,113	4.9
19 June 2010	2,604	0	2,604	2	521	0.8
20 June 2010	15,403	0	15,403	6	3,081	4.8
21 June 2010	10,355	0	10,355	4	2,071	3.2
22 June 2010	2,008	0	2,008	2	402	0.6
23 June 2010	5,099	0	5,099	3	1,020	1.6
24 June 2010	21,088	0	21,088	10	4,218	6.6
TOTALS	**690,799**	**214,569**	**905,368**	**372**	**181,074**	**282.9**

The map for the Spray Sorties conducted on 6.24.10 will be provided in the 6.25.10 status report.

DAILY AERIAL DISPERSANT APPLICATION PLAN

DATE: 6/24/10	TIME: 0600 local	STAGING AIRPORTS: Stennis Int'l / Houma	AIRPORT ID: KHSA / KHUM

DISP. STAGING APT SPVSR (Name & Phone #): (Stennis) Gerry Nielsen (b) (6) / (Houma) Mark Cochrane (b) (6)

SPILL SITE INFORMATION:

SPILL LOCATION:	Latitude:	28.55 N	N	Longitude:	88.21 W	W	Size:	40 mi radius
GEOGRAPHICAL REFERENCE:	112 nm SSE Stennis Airport							

SPILL SITE APPROACH INFORMATION:

ENTRY POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude:	See OPS Chart	ft.
EXIT POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude:	See OPS Chart	ft.
HOLDING AREA:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude:	See OPS Chart	ft.

SPILL SITE WX:	WIND: ESE 8-12	CLG: unlimited	VIS: 5 miles	SUNRISE: 0555	SUNSET: 1955
SEA STATE:	Swell: SE 2	Wind Waves: ESE 1.5 ft.		Combined Seas: 4.5 ft.	

(Attach Wilkon's Weather Report for weather at the spill site and the staging airport)

DOSAGE (GPA): 5	ADD'L INST: See required setbacks and no fly area's on operational plan

COMMS

PRIMARY VHF COM: 126.40 MHz, West of 89 | PRIMARY VHF COM: 132.6 MHz, East of 89 deg | SEC. VHF COM: 123.45 / EMERG COM: 121.5 MHz

PRIMARY VHF COM: Surface to Air 122. 9 MHz / SECONDARY VHF COM: Surface to Air 123.45 MHz / Marine primary VHF 81A

MARINE RADIO: Channel 16 then switch to Channel 9/ SATELLITE PHONE: Aircraft will contact through the Disp. Staging Airport Supervisor.

AIRCRAFT INFORMATION:

Type:	Tail #:	Call Sign:	Airport ETA:	Purpose & Altitude:	PIC/Crew:	Passengers:
King Air Dynamic	N7198Y	98Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N80Y	80Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N39Q	39Q	Houma	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N7199D	99D	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N89N	89N	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N41J	41J	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N79W	79W	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N37H	37H	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
C-130 IAR	N117TG	7TG	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 Lynden	N403LC	3LC	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N9002K	02K	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
C-130 Lynden	401LC	1LC	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 OSR	EIJIV	JIV	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
BT-67 ASI	N932H	32H	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
DC-3 ASI	N64767	767	Houma Standby	Spray: 75'	PIC: TBD Co-pilot: TBD	
DC-3 ASI	N64766	766	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
Aztec ASI	NI41183	183	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Turbo CMDRA ASI	N690XT	0XT	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Aircraft below are not directly part of the Dispersant Group / Cordination and assistance from the aircraft below is nessasary.						
King Air	N275	275	Houma Jet	Recon		
Helo PHI	759P		Houma	Recon		
NOAA	NOAA 46			Surveillance		
U.S. Customs	P-3	Omaha 99		Communications		
Canada	Transport 950		Houma	Surveillance		

DATE: June 24, 2010											
SORTIE	TYPE A/C	TAIL #	PURPOSE	FUEL LOAD (#/Hrs:Mins)	PAYLOAD GAL	PAYLOAD TYPE	TOTAL FLT TIME	DPT TIME EST/ACT	ENTRY EST/ACT	EXIT ETA EST/ACT	RETURN ETA EST/ACT
	BE90	39Q	Recon / Spotter	4	0			0600 / 0558			0945 / 1001
	BE90	98Y	Recon / Spotter	4	0			0610 / 0624			0950 / 0951
	Turbo Cmdr	N112EM	Recon / Spotter	5	0			0610 / 0608			0910 / 0823
	Aztec	183	Recon / Spotter	4	0			0620 / 0627			0920 / 1001
	BE90	80Y	Spotter	4	0			0800 / 0812			1200 / 1212
1	C -130	N117TG	Spray	4	3096			0830 / 1040			1030 / 1208
	BE90	79W	Spotter	4	0			1200 / 1206			1600 / 1433
2	BT-67	N932H	Spray	4	1601			1200 / 0941			1425 / 1137
3	AT - 802	02K	Spray	4	700			1245 / 1215			1500 / 1425
	Turbo Cmdr	N112EM	Recon / Spotter	5	0			1240 / 1252			1600 / 1556
4	DC-3	766	Spray	4	900			1230 / 1259			1432 / 1605
5	BT-67	N932H	Spray	4	1600			1200 / 0941			1425 / 1137
	BE90	89N	Spotter	4	0			0803 / 1326			1206 / 1647
6	C -130	403LC	Spray	4	4990			0834 / 1320			1035 / 1536
	BE90	**80Y**	**Spotter**	**4**	**0**			**1245**			**1545**
	C-130	**401LC**	**Spray**	**4**				**1300**			**1455**
	BE90	80Y	Spotter	4	0			1200 / 1256			1600 / 1644
7	C-130	JIV	Spray	4	5000			1303 / 1307			1457 / 1505
	BE90	79W	Spotter	4	0			1500 / 1525			1700 / 1740
8	AT - 802	02K	Spray	4	700			1245 / 1525			1800 / 1745
	Turbo Cmdr	N112EM	Recon / Spotter	5	0			1700 / 1717			1900 / 1939
9	BT-67	N932H	Spray	4	1601			1700 / 1722			1900 / 1925
10	DC-3	766	Spray	4	900			1730 / 1733			1930 / 2007
SSM #11	BE90	99D	Recon / Spotter	4	0			0610 / 0616			0950 / 0952
	BE90	79W	Spotter	4	0			0000 / 0646			0000 / 0912
SSM #12	BE90	89N	Spotter	4	0			0000 / 0832			0000 / 1238
	BE90	39Q	Spotter	4	0			0000 / 1053			0000 / 1423
	BE90	79W	Spotter	4	0			0000 / 1252			0000 / 1430
	BE90	99D	Spotter	4	0			0000 / 1212			0000 / 1454
					21088						

Combined SiteTotals	21,088	9500
	Stennis	13,086
	Houma	8,002

DAILY AERIAL DISPERSANT APPLICATION PLAN

DATE:	6/24/10	TIME:	0600 local	STAGING AIRPORTS:	Stennis Int'l / Houma	AIRPORT ID:	KHSA / KHUM

DISP. STAGING APT SPVSR (Name & Phone #): (Stennis) Gerry Nielsen (b) (6) / (Houma) Mark Cochrane (b) (6)

SPILL SITE INFORMATION:

SPILL LOCATION:	Latitude:	28.55 N	N	Longitude:	88.21 W	W	Size:	40 mi radius
GEOGRAPHICAL REFERENCE:	112 nm SSE Stennis Airport							

SPILL SITE APPROACH INFORMATION:

ENTRY POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude:	See OPS Chart ft.
EXIT POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude:	See OPS Chart ft.
HOLDING AREA:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude:	See OPS Chart ft.

SPILL SITE WX:	WIND:	ESE 8-12	CLG:	unlimited	VIS:	5 miles	SUNRISE:	0555	SUNSET:	1955
SEA STATE:	Swell: SE 2		Wind Waves: ESE 1.5 ft.				Combined Seas: 4.5 ft.			

(Attach Wilken's Weather Report for weather at the spill site and the staging airport)

DOSAGE (GPA): 5 ADD'L INST: See required setbacks and no fly area's on operational plan

COMMS

PRIMARY VHF COM: 126.40 MHz, West of 89 | PRIMARY VHF COM: 132.6 MHz, East of 89 deg | SEC. VHF COM: 123.45 / EMERG COM: 121.5 MHz

PRIMARY VHF COM: Surface to Air 122. 9 MHz / SECONDARY VHF COM: Surface to Air 123.45 MHz / Marine primary VHF 81A

MARINE RADIO: Channel 16 then switch to Channel 9/ SATELLITE PHONE: Aircraft will contact through the Disp. Staging Airport Supervisor.

AIRCRAFT INFORMATION:

Type:	Tail #:	Call Sign:	Airport ETA:	Purpose & Altitude:	PIC/Crew:	Passengers:
King Air Dynamic	N7198Y	98Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N80Y	80Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N39Q	39Q	Houma	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N7199D	99D	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N89N	89N	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N41J	41J	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N79W	79W	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N37H	37H	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
C-130 IAR	N117TG	7TG	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 Lynden	N403LC	3LC	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N9002K	02K	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
C-130 Lynden	401LC	1LC	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 OSR	EIJIV	JIV	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
BT-67 ASI	N932H	32H	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
DC-3 ASI	N64767	767	Houma Standby	Spray: 75'	PIC: TBD Co-pilot: TBD	
DC-3 ASI	N64766	766	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
Aztec ASI	N141183	183	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Turbo CMDRA ASI	N690XT	0XT	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Aircraft below are not directly part of the Dispersant Group / Cordination and assistance from the aircraft below is necessary.						
King Air	N275	275	Houma Jet	Recon		
Helo PHI	759P		Houma	Recon		
NOAA	NOAA 46			Surveillance		
U.S. Customs	P-3	Omaha 99		Communications		
Canada	Transport 950		Houma	Surveillance		

DATE: June 25, 2010											
SORTIE	TYPE A/C	TAIL #	PURPOSE	FUEL LOAD (#Hrs:Min)	PAYLOAD GAL	PAYLOAD TYPE	TOTAL FLT TIME	DPT TIME EST/ACT	ENTRY EST/ACT	EXIT ETA EST/ACT	RETURN ETA EST/ACT
	BE90	37H	Recon / Spotter	4	0			0600			0945
	BE90	98Y	Recon / Spotter	4	0			0610			0950
	Turbo Cmdr	N690XT	Recon / Spotter	5	0			0600			0900
	Turbo Cmdr	N112EM	Recon / Spotter	5	0			0610			0910
	Aztec	183	Recon / Spotter	4	0			0620			0920
	BE90	80Y	Spotter	4	0			0800			1200
1	C -130	N117TG	Spray	4	3000			0830			1030
	Turbo Cmdr	N690XT	Spotter	5	0			1205			1540
2	BT-67	N932H	Spray	4	2000			1200			1425
3	DC-3	766	Spray	4	1000			1230			1432
	BE90	89N	Spotter	4	0			0803			1206
4	C -130	403LC	Spray	4	5000			0834			1035
	BE90	80Y	Spotter	4	0			1245			1545
5	C-130	401LC	Spray	4	5000			1300			1455
	BE90	98Y	Spotter	4	0			1200			1600
6	C-130	JIV	Spray	4	5000			1303			1457
	BE90	39Q	Spotter	4	0			1200			1600
7	AT - 802	02K	Spray	4	800			1245			1500
					21800						

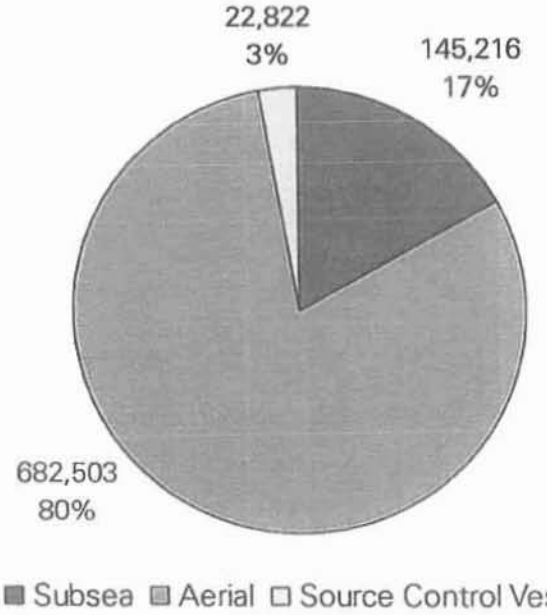
Combined SiteTotals		9500
	Stennis	0
	Houma	0

2010-2957

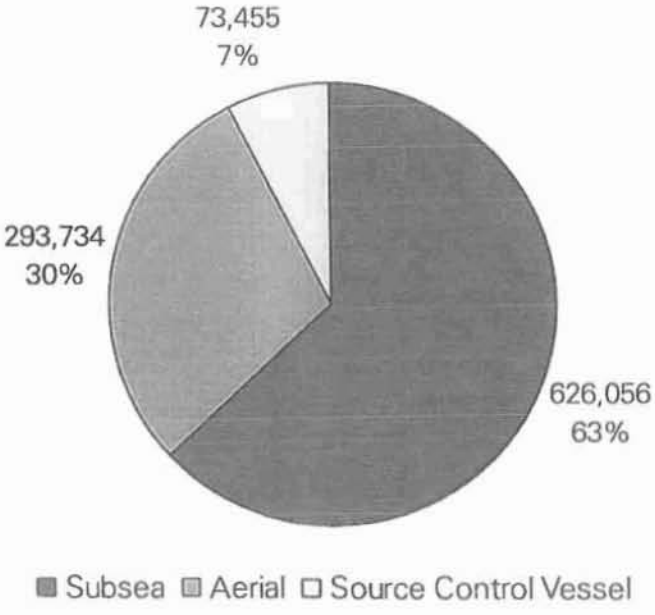
Dispersant Application over Time

Deepwater Horizon Response

April 21 - May 25 Dispersant Application (gallons)



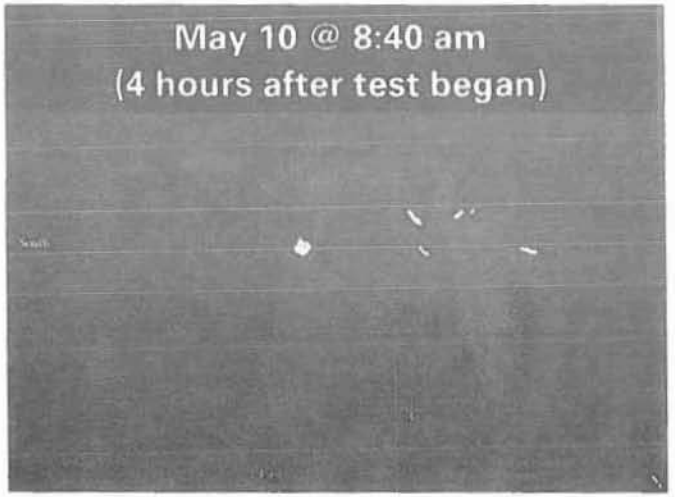
May 26 - July 19 Dispersant Application (gallons)



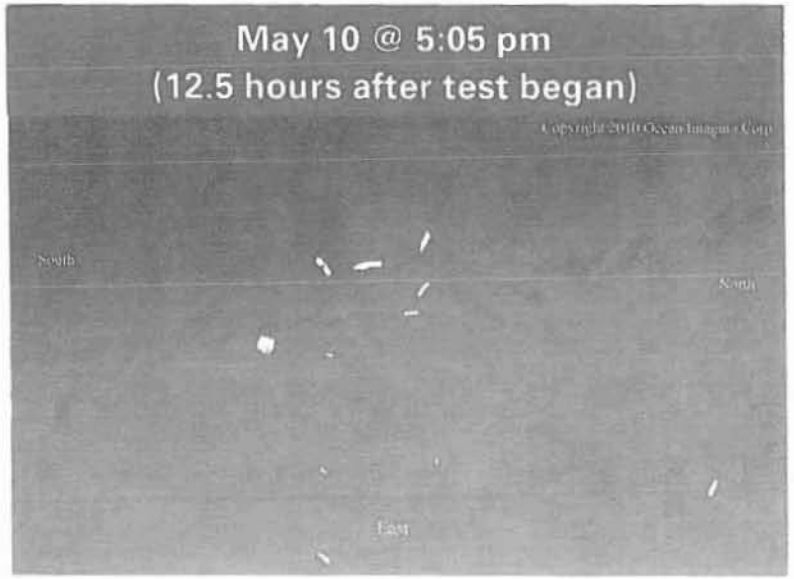
- Significant reduction in aerial dispersant application as a result of the May 26, 2010 Addendum III to the Dispersant Monitoring and Assessment Directive.

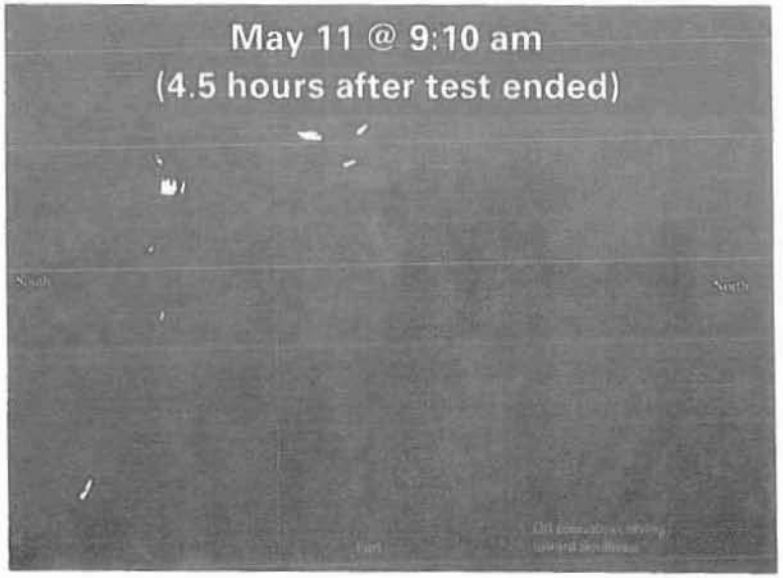
Effectiveness of Subsea Dispersant

Deepwater Horizon Response



- Visual images at the Source before and after the 3rd subsea dispersant test on May 10th
- Pumped 10 gpm of dispersant for 24 hours beginning May 10th at 4:30 am
- Total dispersant applied of 11,560 gallons

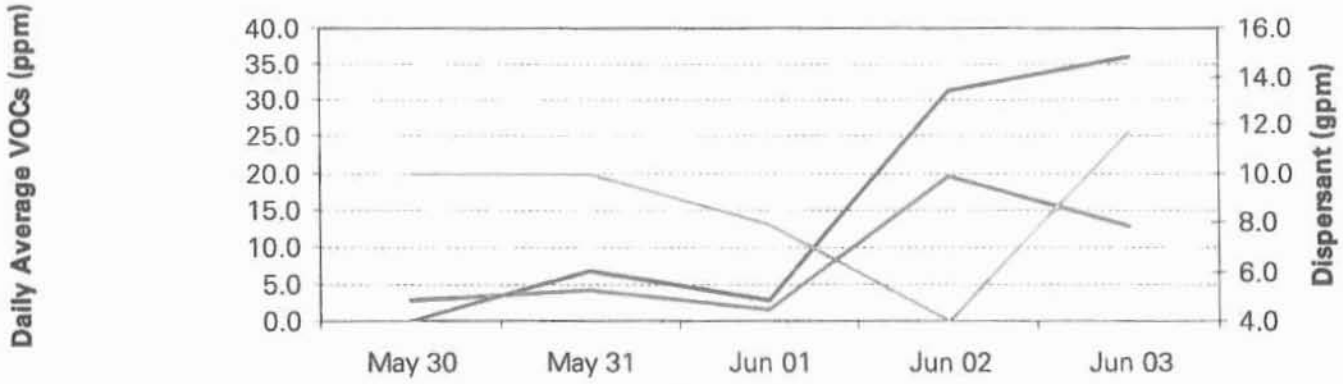




Effectiveness of Subsea Dispersant

Deepwater Horizon Response

Relationship Between VOCs and Subsea Dispersant



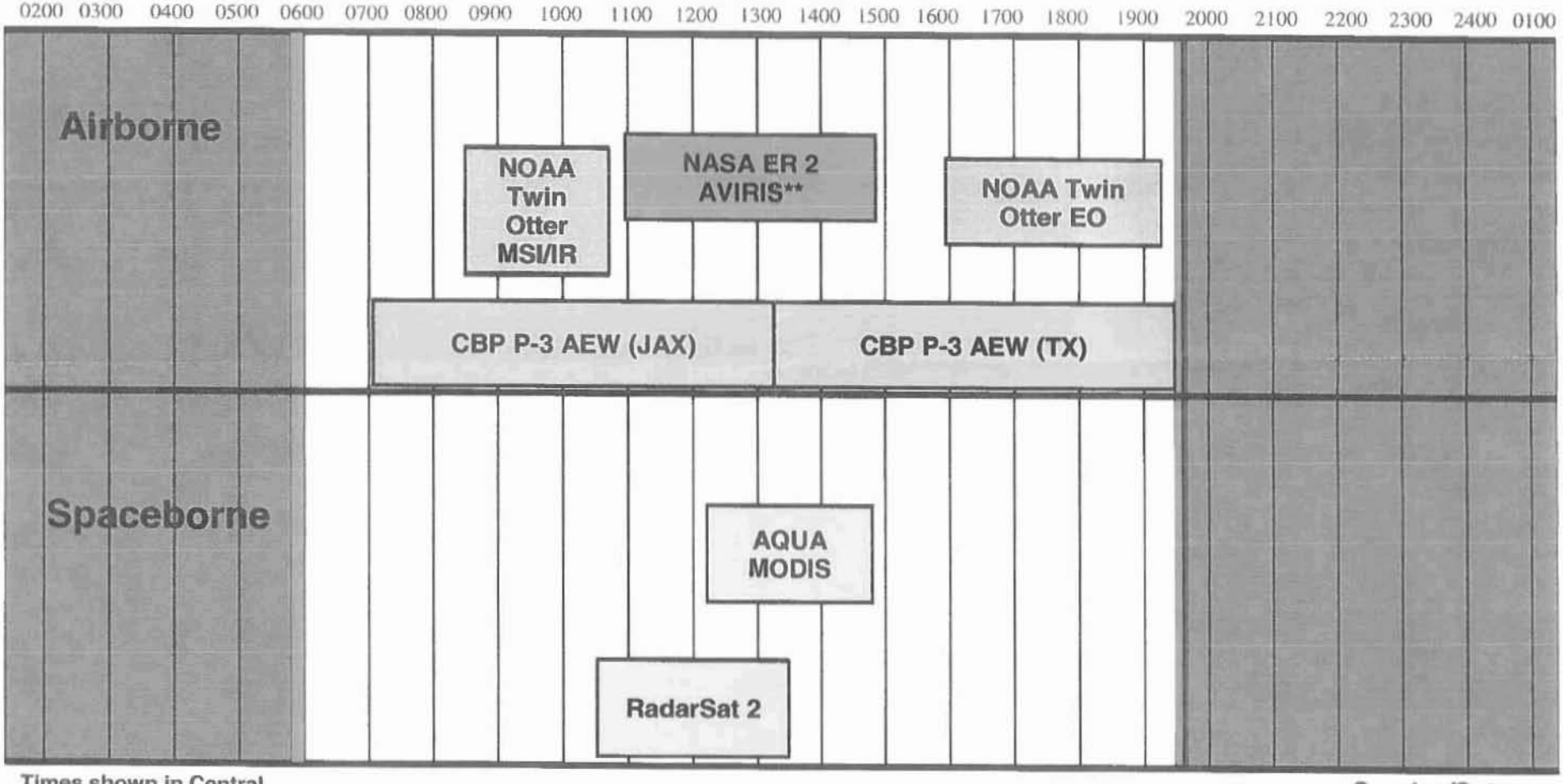
	5/30	5/31	6/1	6/2	6/3
Enterprise VOC (ppm)	0.0	6.8	2.8	31.3	36.1
Q4000 VOC (ppm)	2.9	4.3	1.5	19.6	12.7
Dispersant (gpm)	10.0	10.0	7.9	4.0	11.7

	Count	4 hr avg. dispersant rate (4 hrs prior)
Enterprise (<25 ppm)	106	9.1
Enterprise (25 - 70 ppm)	5	1.8
Enterprise (>70 ppm)	6	5.6
Total	117	8.7

	Count	4 hr avg. dispersant rate (4 hrs prior)
Q-4000 (<25 ppm)	106	9.1
Q-4000 (25 - 70 ppm)	5	1.8
Q-4000 (>70 ppm)	1	0.9
Total	112	8.7

- Dispersant application used to mitigate VOC concentration at surface
- Data from Enterprise and Q-4000; located at Source from May 30 to June 3 (pre LMRP cap)

Flight Schedule for 9 May 2010



Times shown in Central

• All times are subject to change

Sunrise/Set

Homeland Security

ICS 220 - Air Operations

Incident:	Mississippi Canyon 252	**Prepared By:**	Sanderson, Glen at 5/9/2010 15:03
Period:	Period 20 (5/10/2010 06:00 - 5/11/2010 06:00)	**Version Name:**	Period 20 - Houma - Air Operations

Planned Flight Information

Type Of Aircraft	Operating Base	Aircraft Company	Passenger Capacity	Purpose	Scheduled Flights
Aircraft: Fixed Wing - C-130 "N403LC"	Stennis	MSRC		Dispersant Aircraft MSRC	0500 - 1700
Aircraft: Fixed Wing - King Air "N7199D"	Stennis	MSRC		Spotter Aircraft C130	0500 - 1700
Aircraft: Fixed Wing - King Air "N98N"	Stennis	MSRC		Spotter Aircraft C130	0500 - 1700
Aircraft: Fixed Wing - King Air - N7189Y -Spotter	Stennis	MSRC		Spotter Aircraft C130	0500 - 1700
Aircraft: Fixed Wing - King Air - Spotter "N41J"	Stennis	MSRC		Dispersant Aircraft MSRC	0500 - 1700
Aircraft: Fixed Wing - C-130 (105)	Stennis	USAF		Air Force Dispersant Aircraft	0500 - 1700
Aircraft: Fixed Wing - C-130 (107)	Stennis	USAF		Air Force Dispersant Aircraft	0500 - 1700
Aircraft: Fixed Wing - BE-200 "N42FC"	Houma	Western Airways Inc.		Surveillance OBriens	0500 - 1700
Aircraft: Fixed Wing - BE-200 "N655BA"	Houma	Western Airways Inc.		Passenger Movements	0500 - 1700
Aircraft: Fixed Wing - Citation "275X"	Houma	Western Airways Inc.		Passenger Movement	0500 - 1700
Aircraft: Helo - EC-135 "323PH"	Houma	PHI Inc.		Shell Beach	0730 - 1700
Aircraft: Fixed Wing - BE-200 "N655BA"	Houma	Western Airways Inc.		Passenger Movements	0730 - 1700
Aircraft: Fixed Wing - Citation "N43FC"	Houma	Western Airways Inc.		Passenger Movements	0730 - 1700
Aircraft: Fixed Wing - Citation "N287CD"	Houma	Western Airways Inc.		Passenger Movements	0730 - 1700

ICS 220 - Air Operations

Incident:	Mississippi Canyon 252	Prepared By:	Sanderson, Glen at 5/9/2010 15:03
Period:	Period 20 (5/10/2010 06:00 - 5/11/2010 06:00)	Version Name:	Period 20 - Houma - Air Operations

Personnel and Communications

Title/Position	Name	Air/Air Frequency	Air/Ground Frequency	Phone
Operations Section Deputy	Benson, Nick			(b) (6)
CG Ops Sec Chief	(b) (6) LCDR			
CG Ops Sec Chief Deputy	(b) (6) LT			
Air Ops Branch Director	Verret, Brian			
CG Air Ops Branch Director	Austin, Scott			

Planned Flight Information

Type Of Aircraft	Operating Base	Aircraft Company	Passenger Capacity	Purpose	Scheduled Flights
Aircraft: Helo - S-76: "759P"	Houma	PHI Inc		Aerial Tier 1 - USCG / NOAA	0500 - 1700
Aircraft: Helo - S-76: "725P"	Houma	PHI Inc		Smart - USCG Venice USCG / NOAA	0630 - 17:00
Aircraft: Helo - S-76: "794P"	Houma	PHI Inc		Tactical Ops - O'Briens	0600 - 1700
Aircraft: Helo - S-76: "790P"	Houma	PHI Inc.		SCAT Survey	0500 - 1700
Aircraft: Helo - EC 135: "326PH"	Houma	PHI Inc		SCAT - Survey	0730 - 1700
Aircraft: Helo - EC 135: "327PH"	Boothville	PHI Inc.		Near Shore Supervisor	0500 - 1700
Aircraft: Fixed Wing - BT-67 "N932H"	Houma	NRC		Dispersant Aircraft NRC	0500 - 1700
Aircraft: Fixed Wing - Aero Cmndr Spotter "N38WA"	Houma	NRC		Spotter Aircraft NRC	0500 - 1700
Aircraft: Fixed Wing DC-3 "N64766"	Houma	NRC		Dispersant Aircraft NRC	0500 - 1700
Aircraft: Fixed Wing - C-130 "N117TG"	Stennis	MSRC		Dispersant Aircraft MSRC	0500 - 1700

ICS 220 - Air Operations

Incident:	Mississippi Canyon 252	**Prepared By:**	Sanderson, Glen at 5/9/2010 15:03
Period:	Period 20 (5/10/2010 06:00 - 5/11/2010 06:00)	**Version Name:**	Period 20 - Houma - Air Operations

Planned Flight Information

Type Of Aircraft	Operating Base	Aircraft Company	Passenger Capacity	Purpose	Scheduled Flights
Aircraft: Fixed Wing - King Air "N39Q"	Stennis	MSRC		Spotter Aircraft C130	0730 - 1700
Aircraft: Fixed Wing - Dash 8 "CF-CFJ"	Stennis	TC		Imaging and Photography	0730 - 1700
Aircraft: Helo - S-76 "877AL"	Mobile	Air Log		Near Shore Survey	
Aircraft: Helo - S-76 "871AL"	Mobile	Air Log		Near Shore Survey	
Aircraft Helo - EC135 "335BG"	Houma	Air Log		Grand Isle Near Shore	06:30 - 17:00
Aircraft Helo -S76 "5435V"	Houma	PHI		Alabama Near Shore	06:30 - 17:00
Aircraft Helo - EC135 -Helo "935AL"	Houma	Air Log		Whale Survey	
Aircraft Helo -S76 "868AL"	Houma	Air Log		Shoreline Mobile	06:30 - 17:00
Aircraft Helo - S76 "709P"	Houma	Air Log		SCAT	06:30 - 17:00
Aircraft Helo - S76 "718P"	Houma	PHI		Sampling	11:30 - 17:00

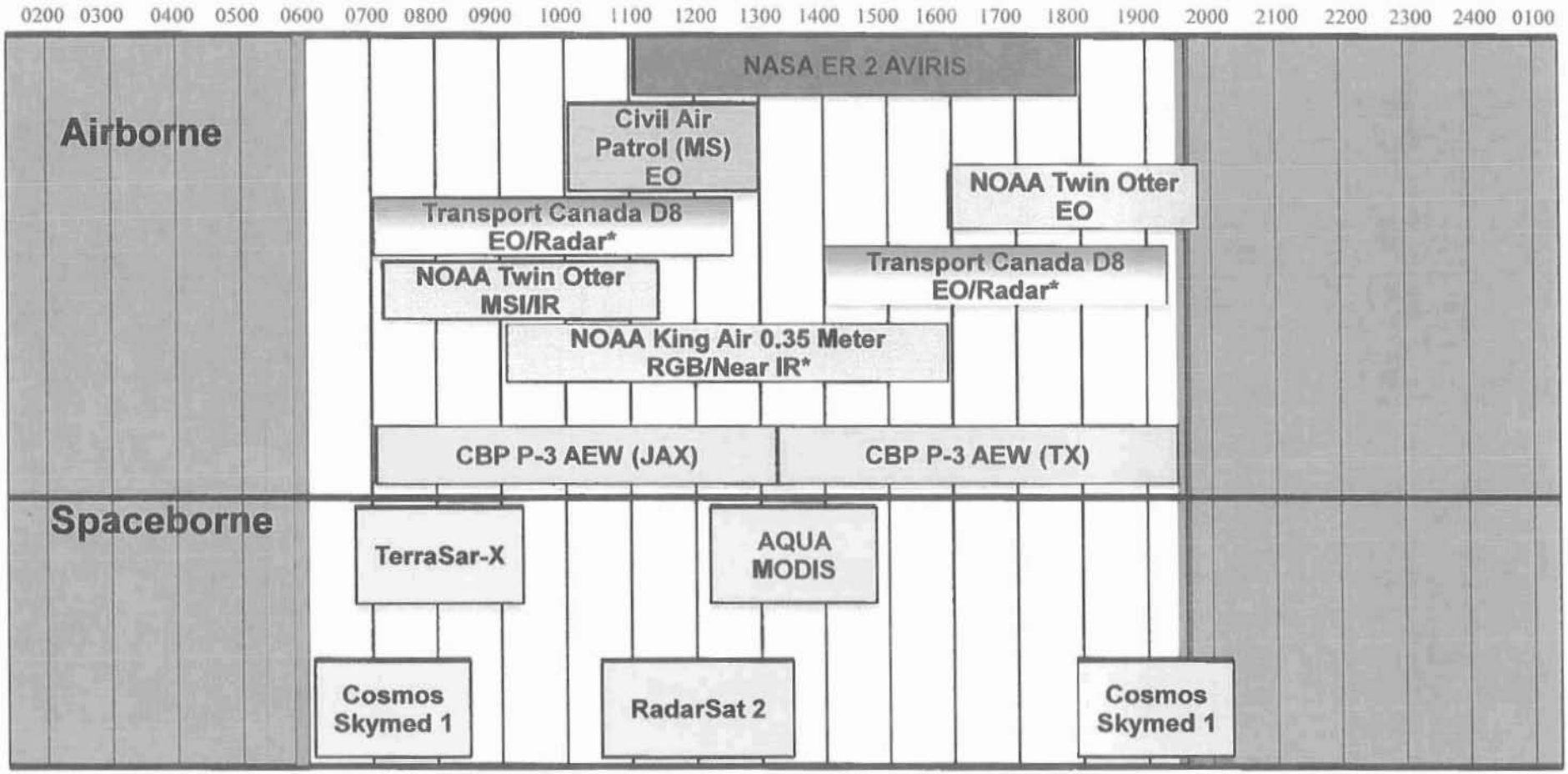
Notes (Special Instructions, Safety Notes, Hazards, Priorities)

DATE: May 11, 2010

Payload #	TYPE A/C	TAIL #	PURPOSE	FUEL LOAD (#/Hrs:Min)	PAYLOAD GAL & TYPE	TOTAL FLT TIME	DPT TIME EST/ACT	ENTRY ETA EST/ACT	EXIT ETA EST/ACT	RETURN ETA EST/ACT
	BE90	N7198Y	Spotter	6	0	2:50	0530	0615	0810	0850
1	C-130	N117TG	Spray	4	3000	2:10	0620	0640	0810	0830
2	C-130	N403LC	Spray	4	5000	2:10	0625	0645	0815	0835
	Aero Cmdr	N547GA	Spotter	5	0	2:10	0740	0815	0905	0950
3	BT-67	N932H	Spray	4	2000	2:15	0720	0820	0835	0935
4	DC-3	N64766	Spray	4	1000	2:30	0724	0824	0845	0945
	BE90	N7199D	Spotter	4	0	2:50	0815	0900	1015	1135
5	C-130	105	Spray	4	1675	2:30	0830	0900	0930	1001
	BE90	79W	Spotter	4	0	2:50	0820	0902	1017	1145
6	C-130	107	Spray	4	1750	2:30	0845	0915	0945	1015
	BE90	39Q	Spotter	6	0	2:35	0955	0925	1205	1240
7	C-130	N117TG	Spray	4	3000	2:30	1000	1030	1200	1230
8	C-130	N403LC	Spray	4	5000	2:30	1005	1035	1205	1235
	Aero Cmdr	N547GA	Spotter	5	0	2:10	1125	1205	1250	1335
9	BT-67	N932H	Spray	4	2000	2:05	1100	1205	1220	1305
10	DC-3	N64766	Spray	4	1000	2:30	1105	1110	1230	1330
	BE90	N7199D	Spotter	4	0	2:50	1150	1220	1345	1430
11	C-130	105	Spray	4	1675	2:30	1215	1245	1320	1400
	BE90	79W	Spotter	4	0	2:50	1140	1222	1345	1410
12	C-130	107	Spray	4	1750	2:30	1218	1247	1325	1355
	BE90	N7198Y	Spotter	6	0	2:40	1355	1425	1505	1540
13	C-130	N117TG	Spray	4	3000	2:30	1400	1430	1505	1540
14	C-130	N403LC	Spray	4	5000	2:30	1400	1430	1505	1535
	Aero Cmdr	N547GA	Spotter	5	0	2:20	1510	1605	1645	1730
15	BT-67	N932H	Spray	4	2000	2:25	1500	1605	1625	1725
16	DC-3	N64766	Spray	4	1000	2:30	1505	1605	1640	1740
	BE90	39Q	Spotter	6	0	1:55	1655	1725	1810	1845
17	C-130	N117TG	Spray	4	3000	2:30	1700	1730	1805	1835
18	C-130	N403LC	Spray	4	5000	2:40	1700	1735	1810	1840
	BE90	N7199D	Spotter	4	0	2:50	1745	1830	1907	2000
19	C-130	105	Spray	4	1675	2:30	1805	1835	1905	1945
	BE90	79W	Spotter	4	0	2:50	1750	1830	1907	2030
20	C-130	107	Spray	4	1750	2:30	1807	1835	1907	1937

CombinedTot.		9500	9527
	Stennis		
	Houma		

Flight Schedule for 11 May 2010



Times shown in Central

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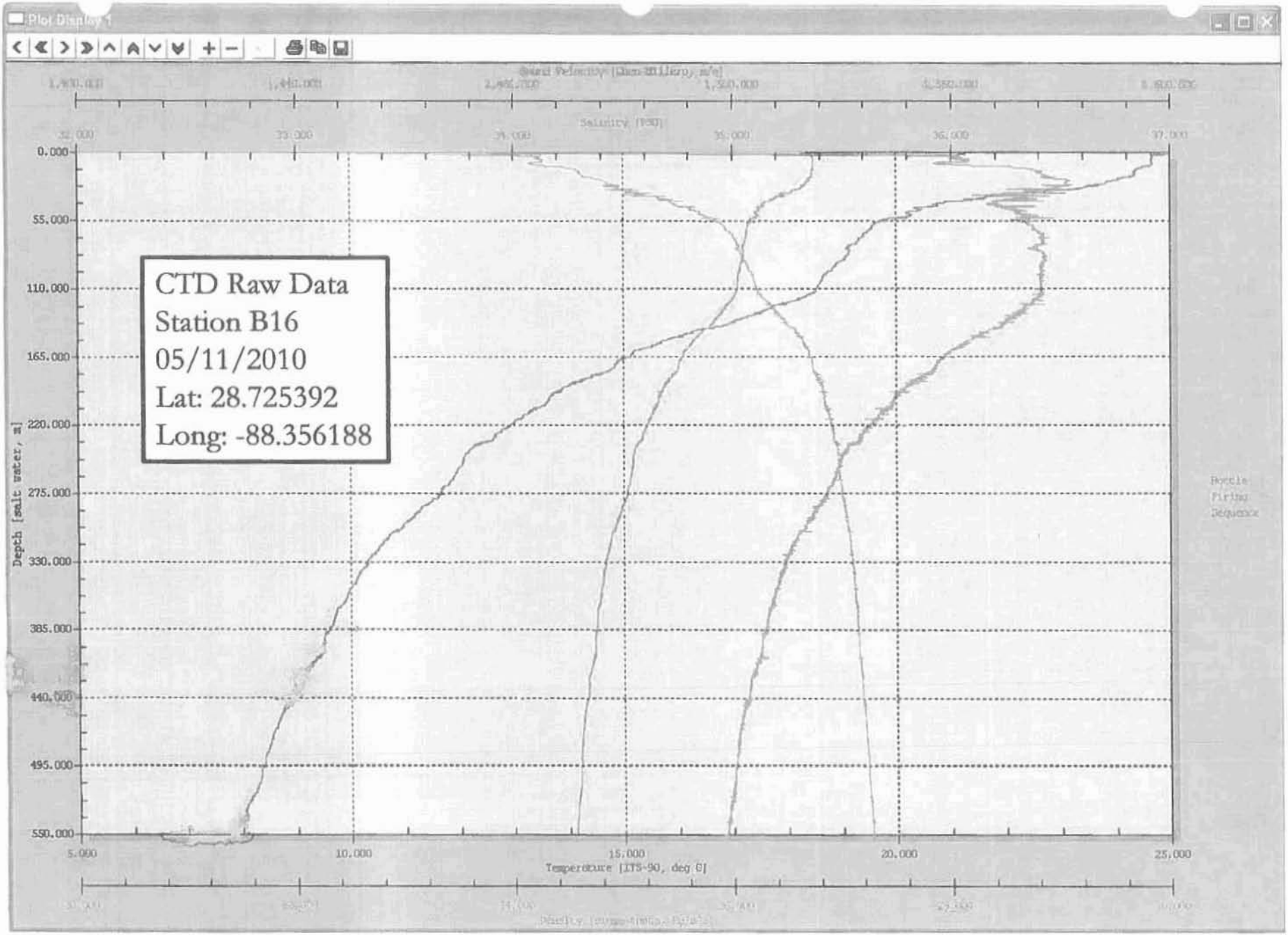
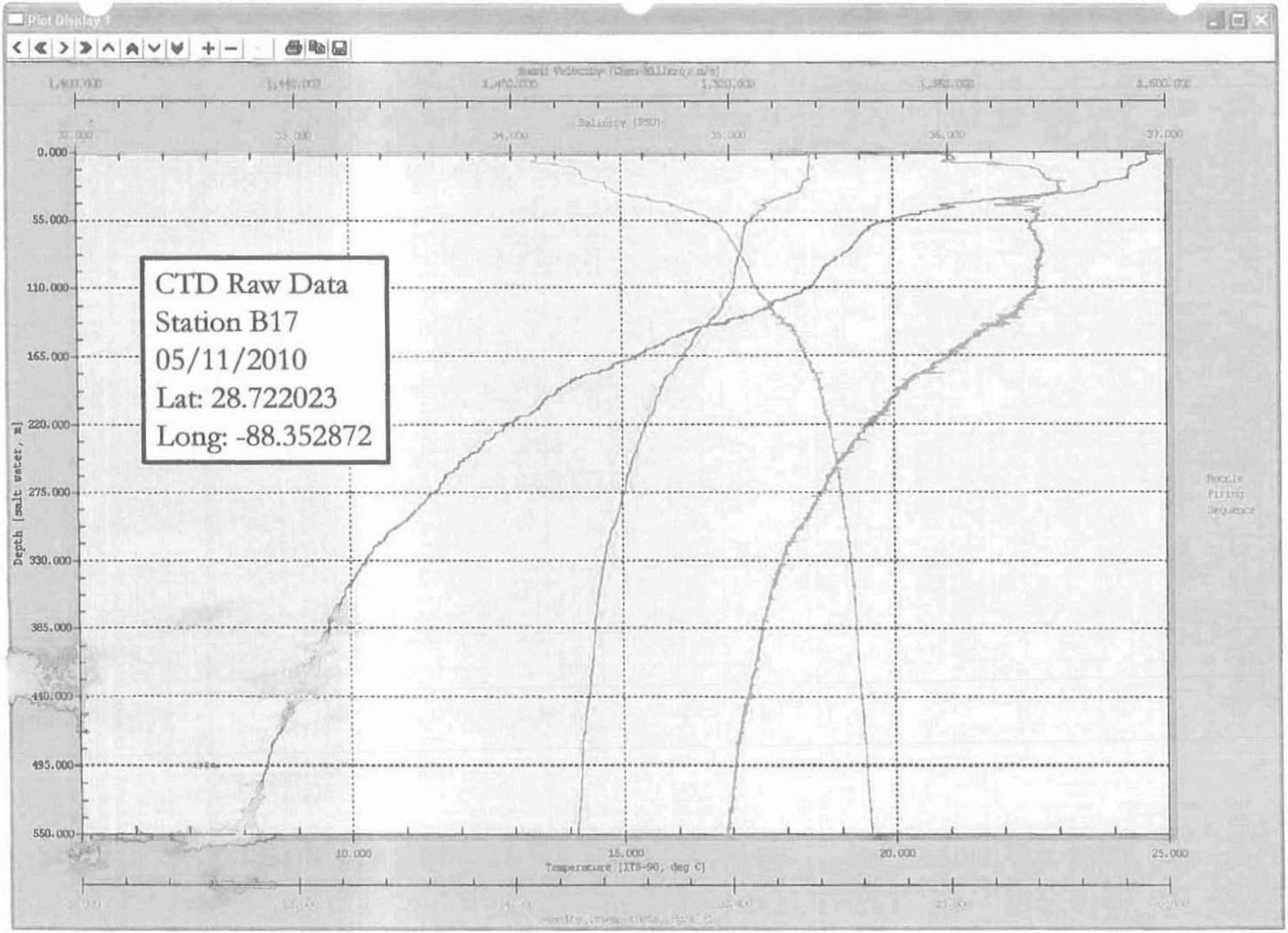
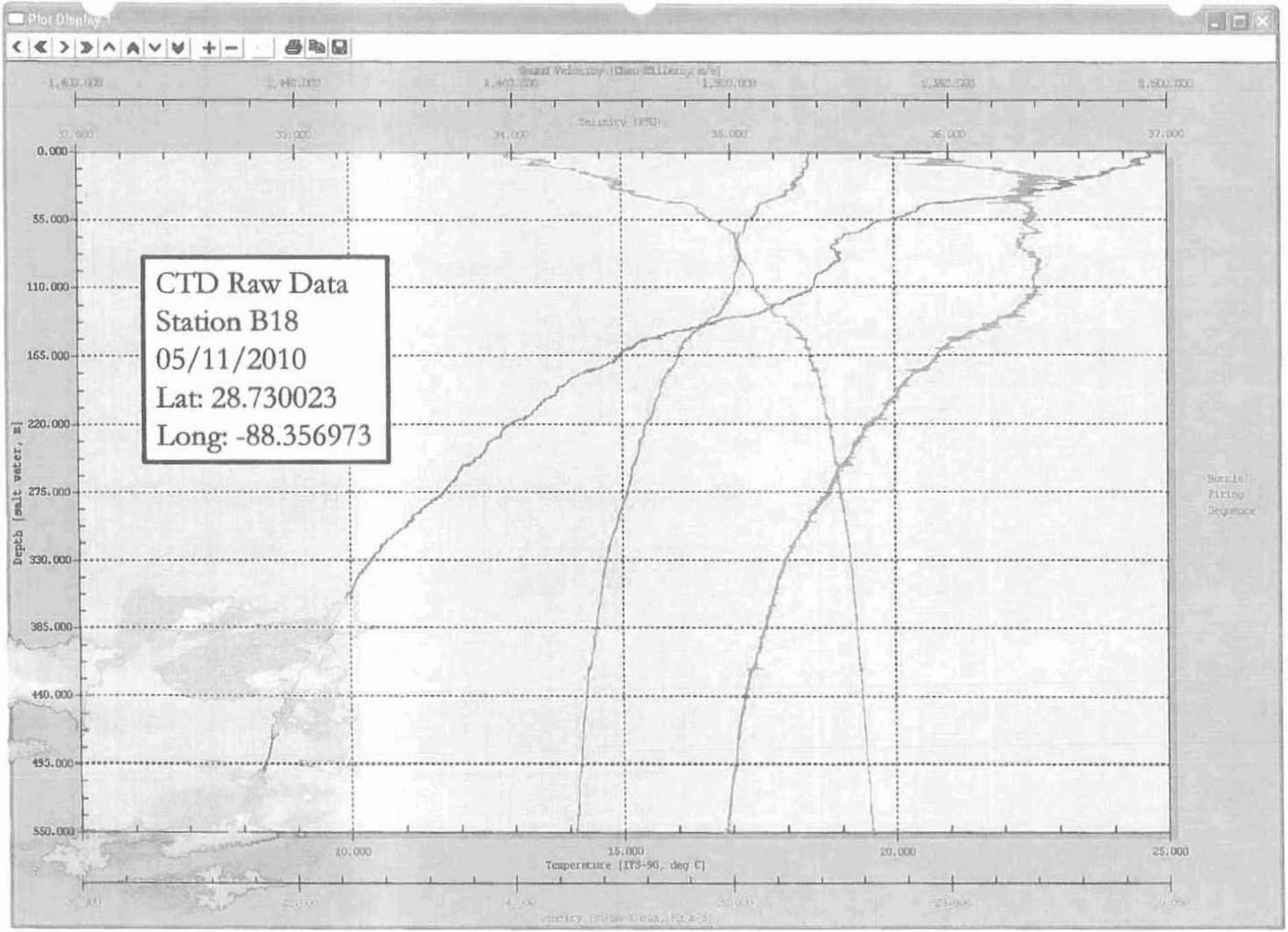
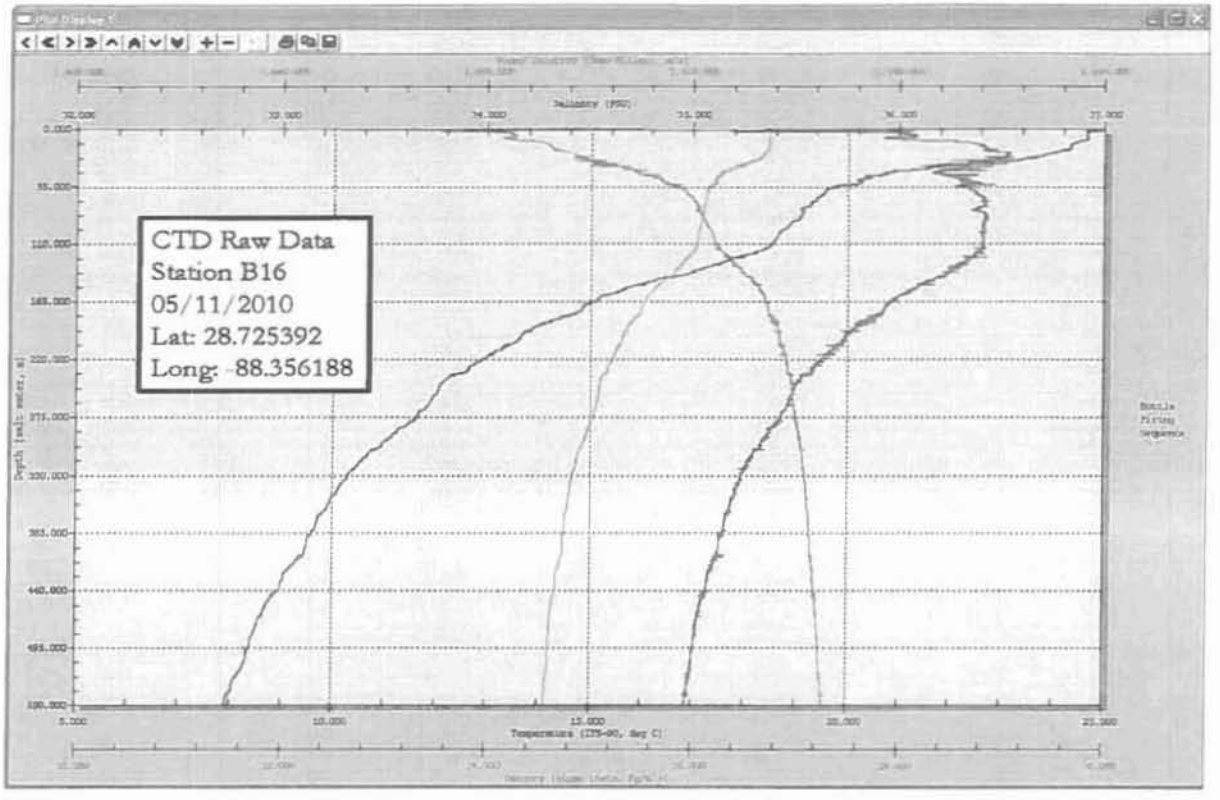
Sunrise/Set

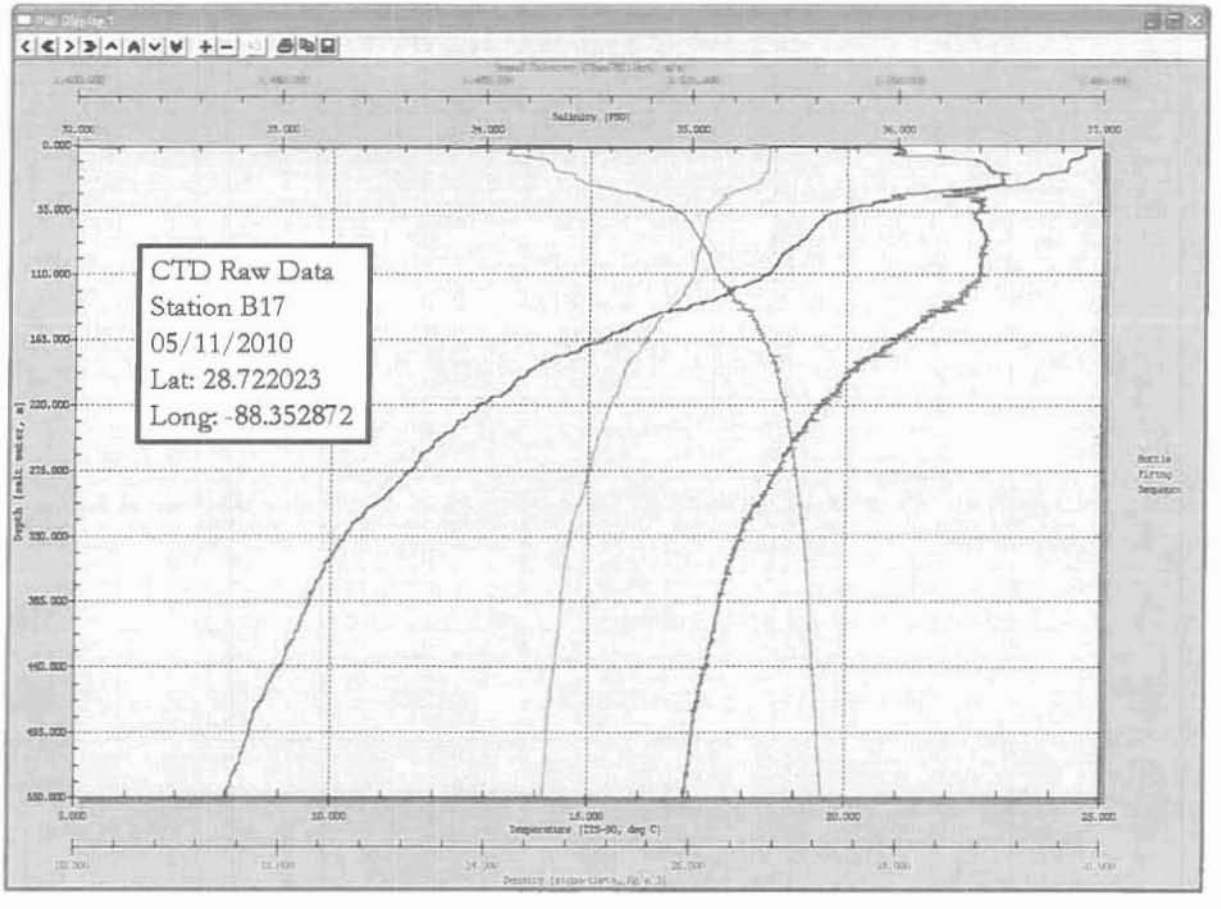
Homeland Security

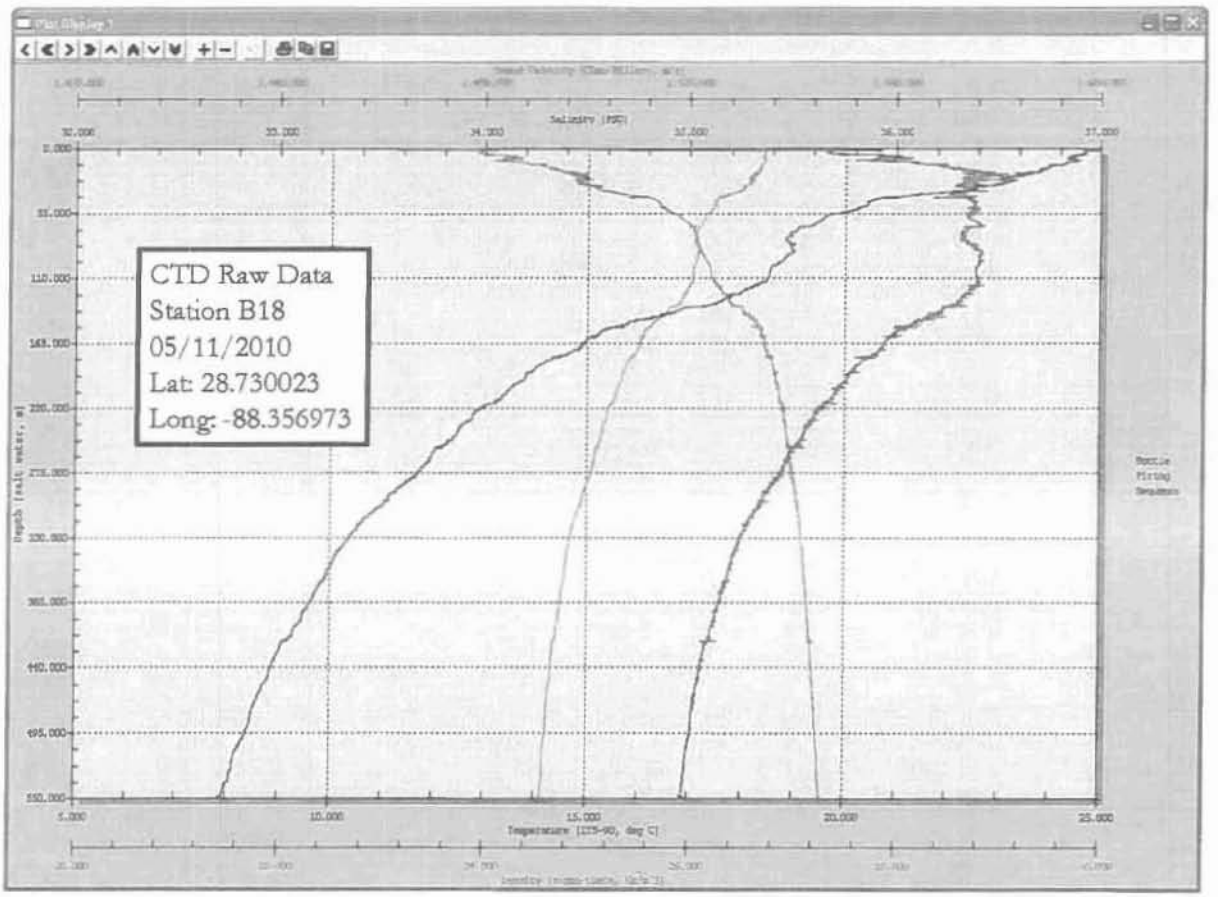

CTD Raw Data
Station B16
05/11/2010
Lat: 28.725392
Long: -88.356188
Depth [salt water, m]
0.000
55.000
110.000
165.000
220.000
275.000
330.000
385.000
440.000
495.000
550.000
5.000
10.000
15.000
20.000
25.000
Temperature [ITS-90, deg C]


Plot Display 1
Salinity [PSU]
32.000
33.000
34.000
35.000
36.000
37.000
0.000
55.000
110.000
165.000
220.000
275.000
330.000
385.000
440.000
495.000
550.000
Depth [salt water, m]
10.000
15.000
20.000
25.000
Temperature [ITS-90, deg C]
Bottle Firing Sequence
CTD Raw Data
Station B17
05/11/2010
Lat: 28.722023
Long: -88.352872


Plot Display
Salinity [PSU]
0.000
55.000
110.000
165.000
220.000
275.000
330.000
385.000
440.000
495.000
550.000
Depth [salt water, m]
CTD Raw Data
Station B18
05/11/2010
Lat: 28.730023
Long: -88.356973
10.000
15.000
20.000
25.000
Temperature [ITS-90, deg C]


CTD Raw Data
Station B16
05/11/2010
Lat: 28.725392
Long: -88.356188


CTD Raw Data
Station B17
05/11/2010
Lat: 28.722023
Long: -88.352872


CTD Raw Data
Station B18
05/11/2010
Lat: 28.730023
Long: -88.356973

DISPERSANTS IN OILL SPILL RESPONSE

When prevention efforts fail and oil spills on the water, spill responders face a difficult battle against a dynamic and ever-changing opponent. Dispersant use is one of several tools that may be employed, individually or in combination, minimize consequences of the spill. Only the Federal On-Scene Coordinator may approve dispersant use. Unauthorized use of dispersants or detergents on navigable waters is illegal.

What Are Dispersants?

Dispersants are specially designed oil spill products that are composed of detergent-like surfactants in low toxicity solvents. Dispersants do not remove oil from the water, but instead break the oil slick into small droplets. These droplets disperse into the water and are further broken down by natural processes. Dispersion of oil into the water column occurs naturally in untreated spills; dispersants speed up this process. Dispersants also prevent the oil droplets from coming back together as another surface slick. Dispersed oil is less likely to stick to birds and other animals, shoreline rocks, and vegetation. The effects of the rapidly diluted dispersed oil must be weighed against the effects of that oil if it were allowed to impact the shoreline and wildlife.

Dispersants may be applied to oil from airplanes, helicopters, or vessels. Spray systems are designed to provide the correct droplet size and dosage, as both are important factors in effective oil dispersal. The volume of dispersant applied is a fraction of the volume of oil treated, with a typical dispersant to oil ratio of 1:20.

Where the Oil Goes

When the oil is treated with dispersants, it initially disperses within approximately the upper so feet of the water column. The dispersed oil will be spread horizontally by tides and currents, rapidly decreasing the concentration of the oil. Many impacted water column populations will rapidly recover from the dispersed oil exposure because of their mobility. If these impacts are expected to be short term, these organisms are given a lower priority than bird and mammal populations and sensitive shoreline habitats, which when oiled recover quite slowly. Typically, dispersant use is reserved for deeper waters

to ensure sufficient dilution of the oil and to prevent impacts on bottom-dwelling organisms. There may be cases where use in shallower environments can be justified to minimize impact to highly sensitive areas that are difficult to otherwise protect. Like other spill response techniques, dispersants are not likely to be 100% effective, leaving a portion of the oil on the surface. Effectiveness will depend on the type of oil and environmental conditions.

Approval of Dispersant Use

Because of the tradeoffs involved (i.e., relative benefits and potential negative effects), the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) restricts dispersant use. Dispersants must be on a national list maintained by the Environmental Protection Agency. Federal and state agency agreements establish areas where rapid decisions on dispersants may be made by the Federal On-Scene Coordinator. Use outside these areas requires the approval of additional agencies identified in the NCP.

Studies of Dispersants

Evidence from spills treated with dispersants show that dispersion of oil can reduce overall environmental impacts by reducing damage at the sea surface and shore. The limited damage from the 1993 *Braer* spill in Scotland was due to near total natural dispersion, and dispersant use on the 1996 *Sea Empress* spill in Wales reduced impacts and the intrusiveness, duration, and cost of the cleanup.

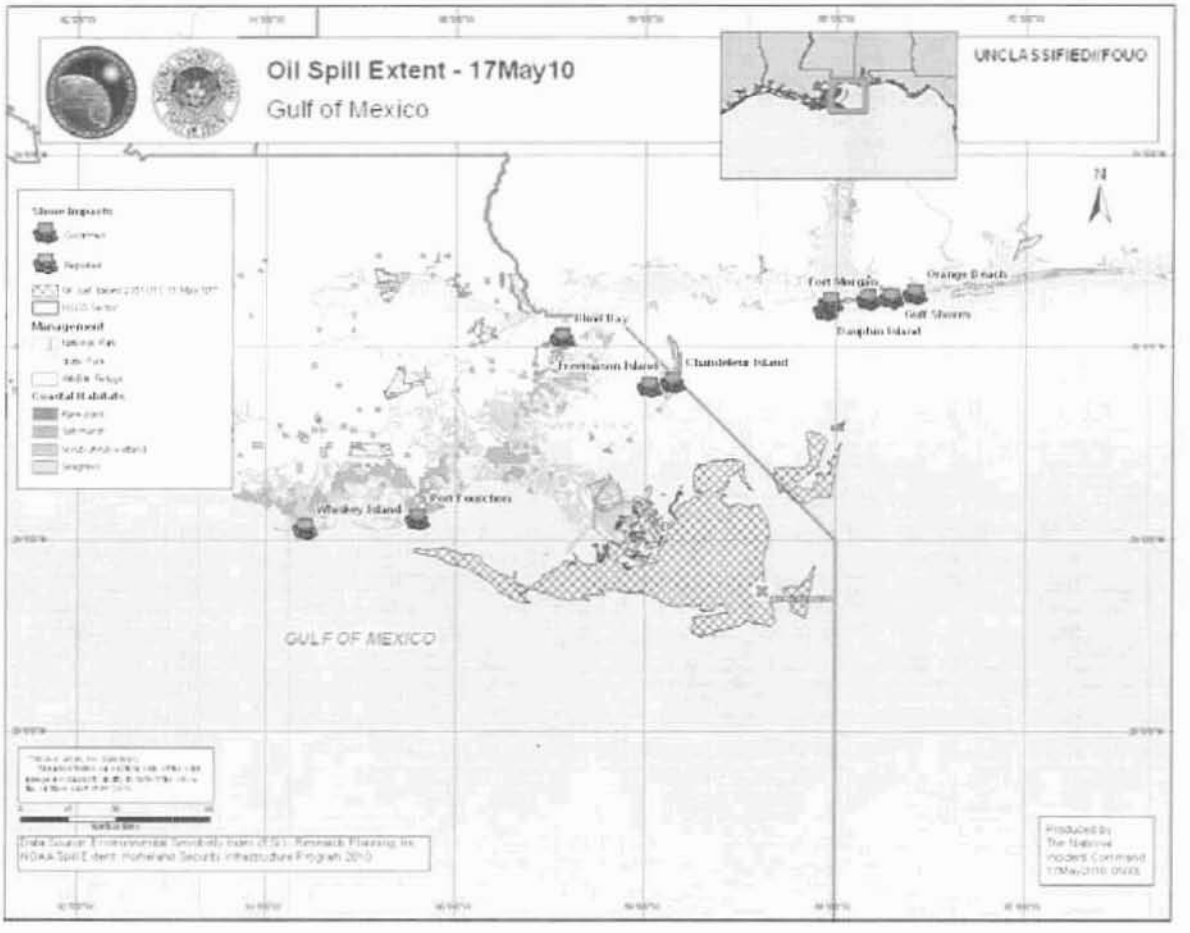
What Are the Potential Benefits?

- Reduces impact of oil on shorelines, sensitive habitats, birds, mammals, and other wildlife.
- Rapid treatment of large areas.
- Reduces oil storage and disposal problems.
- Accelerates natural degradation processes.
- Use in high seas and currents is feasible.

What Are the Potential Tradeoffs?

- Increased impacts in upper 80 feet of water column.
- Time frame for effective use may be short.
- Application may be restricted by equipment availability and time window for effective use.

National Incident Commander Daily Situation Update
0630 – 18 May 2010
Deepwater Horizon Spill Response
(Updates in RED)



National Incident Commander Objectives:

1. Establish and manage a coordinated interagency response effort to effectively employ all resources required to mitigate current and long term environmental and economic impacts of the incident.
2. Engage and inform the public, stakeholders and the media, keeping them apprised of response activities and plans.
3. Engage across all levels of government to develop courses of action for issues that span multiple agencies and departments.

Field Level Incident Commander Objectives:

1. Stop the leak
2. Fight the spill offshore
3. Protect sensitive areas
4. Mitigate the effects of the spill

National Incident Commander Daily Situation Update
0630 – 18 May 2010
Deepwater Horizon Spill Response
(Updates in RED)

Highlights of the Last Operational Period:

- Riser Insertion Tube Tool (RITT) inserted again with N2 in drill pipe. RITT in place all day with flow to rig. Recovering oil & gas, <1% water. Gas being flared, oil filling process equipment and surge tank, then to storage tank. No confirmation on rates yet. There is still oil & gas coming out of end of riser, continuing increasing trend of gas. Being conservative at the start on opening up choke on drill pipe.

Current Situation:

- Discharge is estimated at 5,000bbls per day; BP currently reevaluating discharge rate.
- During the first RITT insertion, gas began flowing to the surface around 1,400 psi. Initial pressure at the surface for this second insertion was around 1,600 psi, with pressure being bled off at 2.5-3 psi/minute.
- Pressure gauge successfully installed on BOP; BP reported the difference between the top and bottom pressure readings on the BOP indicates restricted flow.
- If BP is successful at connecting the RITT and gaining a good seal between the RITT and the discharge pipe, then it may not be necessary to execute the Top Hat option. If the RITT is not successful, then the RITT will be detached from the drill pipe and the Top Hat will be connected for deployment.
- Top Hat remains on the seabed and standing by pending effectiveness of the RITT. Top Kill equipment being staged; commencement of operation scheduled for 18 May. Installing Jumper Hoses from BOP to manifold with ROVs.
- On 16 May at 0803 (CT), DDII well drill penetrated the seafloor and drilling had progressed to 253 ft below the seafloor as of 1530. Drilling and casing operations continue on the DDIII relief well; depth remains at 3,537 ft below sea floor.
- Drill Rig DDIII is Testing BOP's; Next: Pull test tool, drill out cement in 22", FIT, continue drilling Tuesday/Wednesday.
- Drill Rig DDII Drill-in 36" conductor casing to 5329'; Next: Unlatch drilling assembly and pull out. Suspend to test BOP's.

On Scene Weather:

- Wind – S to SE winds 5-10 kts; Seas – 2-3 ft. Chance of showers and t-storms.

Surface Operations:

- Total vessels assigned: 771 (Ships, Tugs & OSRV)
- 3 CG cutters and 3 commercial vessels are outfitted with VOSS/SORS system and are ready to conduct skimming operations. (Reported by NSF SIT Report 12 May).
- 0 Air Sorties (NON CG) completed 16 May.
- No IN-SITU burn operations conducted in last 24 hours.
- Skimming operation completed in the past 24 with a total of 6987 gallons recovered.

	Past 24 hours	Total to Date
Oily water mixture recovered	6,987 bbls	158,378 bbls

Surface dispersants applied	6,600 gal	582,416 gals
Subsea dispersants applied	4,500 gal	42,313 gals

Resource Summary:
Total Response Personnel assigned: 19,163 (per UAC executive summary, 16 May)
Total Boom assigned: 1,300,110 ft
Sorbent Boom assigned: 418,390 ft
Total Fixed Wing Aircraft assigned: 17
Total Helo Aircraft assigned: 35
Unified Incident Commands: 3
Staging areas: 17

Environmental Impacts:
- Tar balls confirmed at Grand ISLE, LA and Long Beach, MS. Clean up is currently ongoing.
- Navy Cove, AL (Baldwin County Division 1): "Tens of thousands" of silver fingerling minnows 1 to 1.5 inches long found dead. Info was confirmed by Orange Beach Staging Area and witnessed onboard a vessel towing boom from the staging area. This area is inside the baseline area, where they have been no sighted tar balls or oil effects. Unknown if oil caused the kill whether the fish are being collected for testing.

Wildlife Impacts:
Past 24 Hours: 2 Total: 34
No specific information provided.

Marine Transportation System:
- All shipping channels and ports remain open in the Gulf Coast region.
- Mariners advised to avoid areas contaminated with oil.
- No vessels have required cleaning or de-contamination; teams are on standby if the need arises.

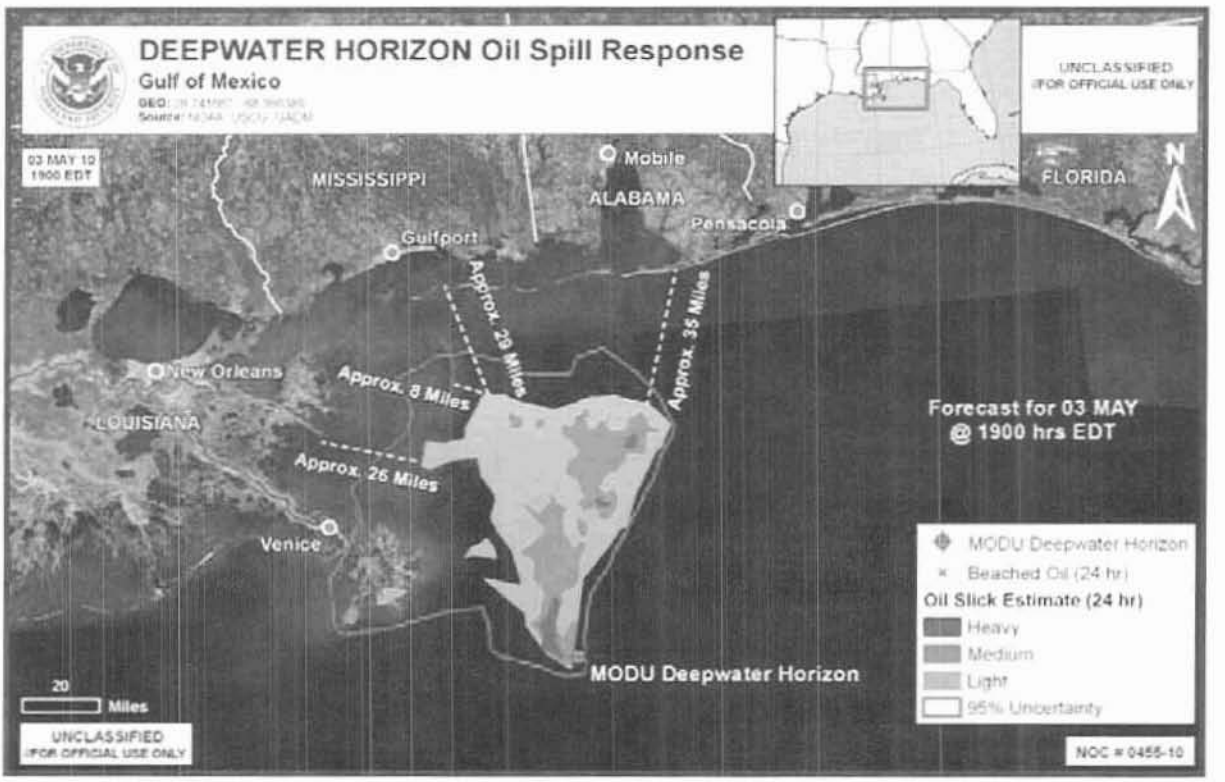
Financial Update: (From: NPFC Executive Summary Report 16 May 10)

OSLTF Remaining	$24,686,258.14
Fed Project Ceiling	$85,000,000.00
Obligated funds to Date	$52,571,424.63
Fed project Ceiling Remaining	$32,428,575.37
Estimated Daily Burn Rate	$2,021,977.87

Claims Summary:

	No of Claims	Dollars Dispersed	Claims Denied	Claims Closed
Texas	242	$36,700.00	0	
Louisiana	7490	$5,532,858.31	0	
Mississippi	1954	$1,355,000.00	0	

Incident Brief: Deepwater Horizon Oil Spill



National Incident Commander Objectives:

1. Effect a coordinated interagency national response in support of the Incident Commanders

Incident Commander Objectives:

1. Stop the leak
2. Fight the spill offshore
3. Protect sensitive areas
4. Mitigate the effects

Current Situation:

Uncontrolled release continues at 5,000 bbls of crude a day.

USCG has confirmed there is oil sheen .26 miles from Chandeluer Islands.
As of 03May10 1700, there is 10,250ft of protection boom that has been deployed in the Chandeluer Island area.

23,968 bbls (1,006,656 gal.) of oily-water have been collected to date.

Weather:

04 May – Tuesday forecast is for variable winds, seas 2 ft or less.

Source Control:

Drilling on the relief well by DDIII initiated 02 May; the drill bit 10:00 AM is reported at 6720 ft. At 6821 ft a 28" conductor will be inserted as the first tier protective casing.

Total surface dispersants used: 156,012 gal.

Sub-surface dispersant test concluded. There have been no definitive reports of dispersant effectiveness. Total sub-surface dispersants used: 13,000 gal.

The end of the drill pipe was successfully cut off, producing a clean cut. ROV has attached the valve fitting and is currently tightening, which should secure lead #3 today. This valve will close off 1 of 3 identified leaks.

Pollution control dome complete – Pollution dome is scheduled to be loaded on boat at Port Fouchon on 4 May.

OSRO (Oil Spill Response Organization) Assets:

145 vessels assigned
486,940 feet boom deployed
156,012 gallons surface dispersant applied
5,900 gallons subsea dispersant applied
20 fixed wing aircraft assigned
14 rotary wing aircraft assigned

Wildlife Impact:

Sperm whales have been observed within the slick.

NOAA restricted fishing in federal waters of the Gulf of Mexico threatened by the BP oil spill – from the mouth of the Mississippi to Pensacola Bay. Closure will be in effect for at least 10 days to protect consumers and the seafood industry.

Marine Transportation System:

There are no reported delays or closures to shipping. Mariners advised to avoid areas contaminated with oil.

Port	Status Note
Morgan City	Open
MSU Houma	Open
New Orleans	Open
Panama City	Open
Pensacola	Open
Pascagoula	Open
Gulfport	Open
Mobile	Open

National Infrastructure Coordinating Center (NICC) reports the oil spill has not affected petroleum refinery operations in the region.

Future Outlook (24 hours):

1. Assessing weather impact on response activities
2. Projecting shoreline impact
3. Fully exploring an integrated claims process
4. Integrate & coordinate process control over interagency issues

Priorities (48-72 hours):

1. Community outreach within the affected areas
2. Optimize critical resources
3. Minimize economic impact

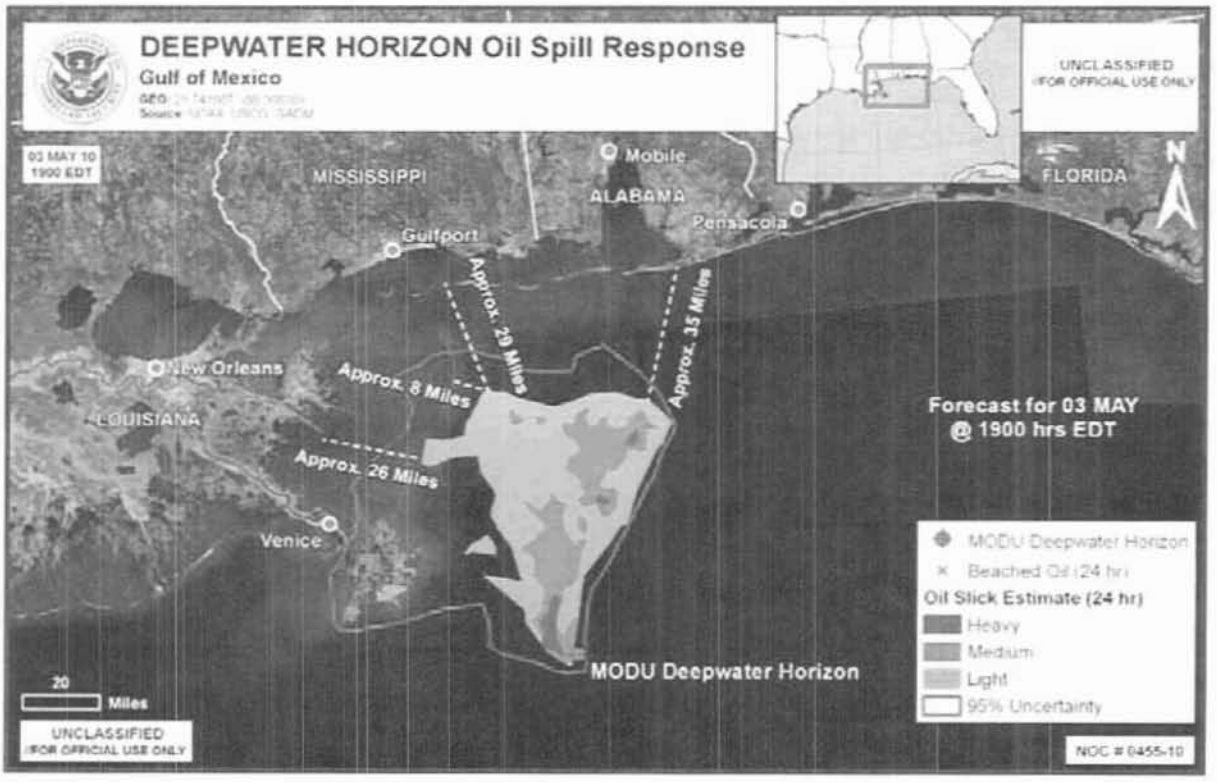
External Affairs / Government Affairs

1. Focus on Louisiana Governor

Issue of the day:

1. Deceased turtles on the shoreline

Incident Brief: Deepwater Horizon Oil Spill



National Incident Commander Objectives:

1. Effect a coordinated interagency national response in support of the Incident Commanders
2. Stop the leak
3. Fight the spill offshore
4. Protect sensitive areas
5. Mitigate the effects

Current Situation:

Uncontrolled release continues at 5,000 bbls of crude a day.

Weather:
04 May – Tuesday forecast is for variable winds, seas 2 ft or less.

Source Control:
Drilling on the relief well by DDIII initiated 02 May; the drill bit is at 100 ft.

Sub-surface dispersant test concluded. There have been no definitive reports of dispersant effectiveness.

The end of the pipe riser was successfully cut off, producing a clean cut. The ROV with the valve was unable to deploy due to weather. Once weather permits, the ROV will install the valve. This evolution is expected to take between 6-10 hours to complete. This valve will close off 1 of 3 identified leaks.

Pollution control dome complete – Work continues on the piping system that brings the oil to the surface for collection. Anticipate completion within 7-10 days.

Sea bottom conditions were rough at Blow-Out Preventer (BOP). At 1800 02 May, pressure was relieved for approx 2 mins.

Total surface dispersants used: 156,012 gal.

Deployed Boom to date: 274,260 ft.

OSRO (Oil Spill Response Organization) Assets:
145 vessels assigned
274,260 feet boom deployed
156,012 gallons surface dispersant applied
5,900 gallons subsea dispersant applied
20 fixed wing aircraft assigned
14 rotary wing aircraft assigned

Wildlife Impact:
Sperm whales have been observed within the slick.

NOAA restricted fishing in federal waters of the Gulf of Mexico threatened by the BP oil spill – from the mouth of the Mississippi to Pensacola Bay. Closure will be in effect for at least 10 days to protect consumers and the seafood industry.

Marine Transportation System:

There are no reported delays or closures to shipping. Mariners advised to avoid areas contaminated with oil.

Port	Status Note	
Morgan City	Whiskey	Open
MSU Houma	Recovery	Open
New Orleans	Recovery	Open
Panama City	Recovery	Open
Pensacola	Recovery	Open
Pascagoula	Recovery	Open
Gulfport	Recovery	Open
Mobile	Recovery	Open

National Infrastructure Coordinating Center (NICC) reports the oil spill has not affected petroleum refinery operations in the region.

Future Outlook (24 hours):

1. Assessing weather impact on response activities
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Issue of the day:

1. Deceased turtles on the shoreline

Outline for Surface Dispersant Justification Packages

Describe the specific request with justification which includes a presentation of the following and how it impacts the need for surface dispersion application:

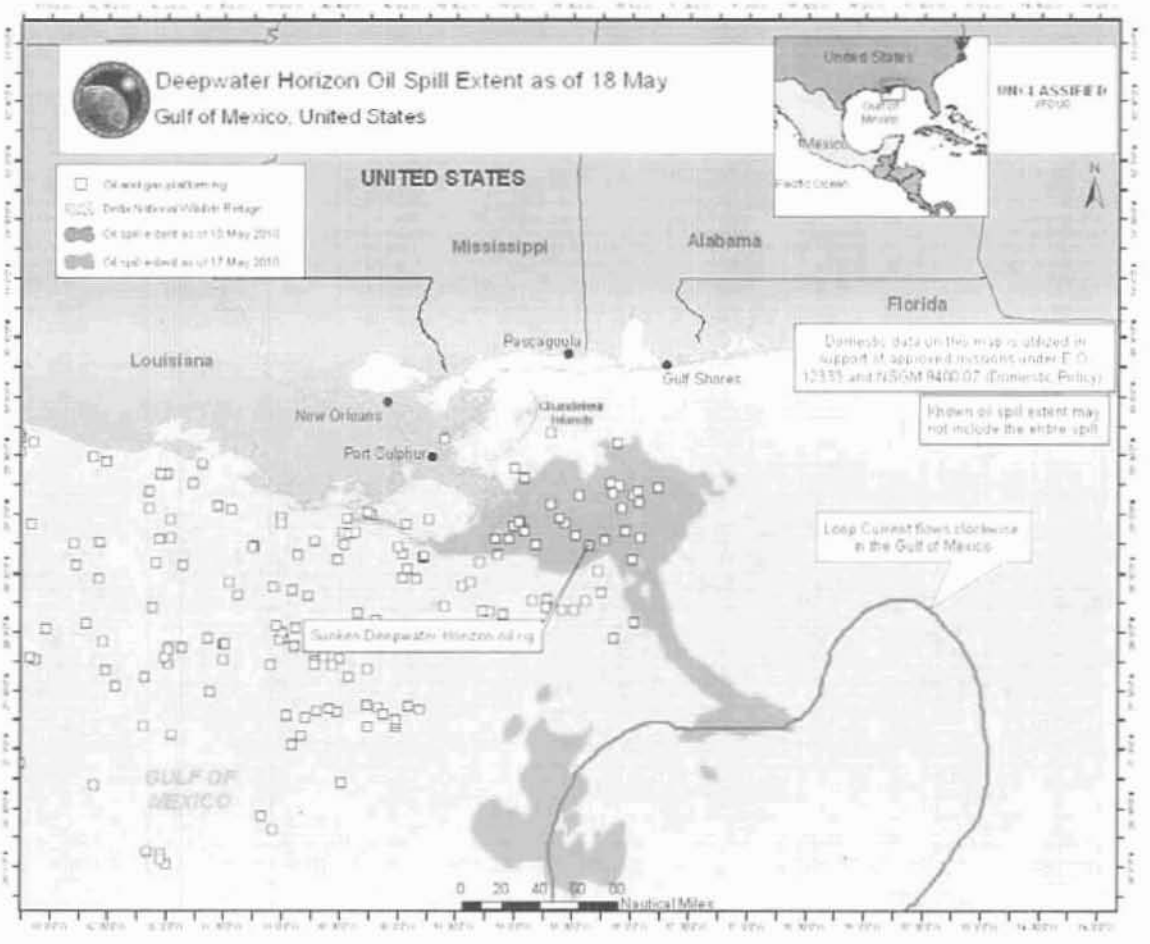
- Proposed date(s) of application
- Oil trajectory for day(s) of application
- Estimated target size along with location with an estimation of amount of dispersant required
- Weather predictions (winds, wave height)
- Skimming resources and areas assigned (include why skimmers are not available for target areas)
- In-situ burning areas (include why burning is not available for target areas)
- Type of SMART monitoring planned for the proposed surface dispersant application (i.e., what monitoring will occur at each target)

Outline for Surface Dispersant Report Packages

Describe the surface dispersant application activities. This dispersant report should include the following items:

- Targets addressed
- Dispersant volume applied
- SMART Report (Type of monitoring, synthesized data, e.g., SMART Posters, qualitative evaluation of effectiveness) {FTP site is preferable - Hard copy is backup}

National Incident Commander Daily Situation Update
0630 – 18 May 2010
Deepwater Horizon Spill Response
(Updates in RED)



National Incident Commander Objectives:

1. Establish and manage a coordinated interagency response effort to effectively employ all resources required to mitigate current and long term environmental and economic impacts of the incident.
2. Engage and inform the public, stakeholders and the media, keeping them apprised of response activities and plans.
3. Engage across all levels of government to develop courses of action for issues that span multiple agencies and departments.

Field Level Incident Commander Objectives:

1. Stop the leak
2. Fight the spill offshore
3. Protect sensitive areas
4. Mitigate the effects of the spill

National Incident Commander Daily Situation Update
0630 – 18 May 2010
Deepwater Horizon Spill Response
(Updates in RED)

Highlights of the Last Operational Period:

- Riser Insertion Tube Tool (RITT) inserted again with N2 in drill pipe. RITT in place all day with flow to rig. Recovering oil & gas, <1% water. Gas being flared, oil filling process equipment and surge tank, then to storage tank. No confirmation on rates yet. There is still oil & gas coming out of end of riser, continuing increasing trend of gas. Being conservative at the start on opening up choke on drill pipe.
- New date for commencement of operations is no sooner than 23-25 MAY. (Source: "RFI Top Kill Commencement Date"). D7 reported Park Rangers found tar balls on the beach at Fort Zachary State Park, Key West, FL on 17 May. Samples of the tar balls were collected and will be shipped for analysis to determine the origin of the source.

Current Situation:

- If BP is successful at connecting the RITT and gaining a good seal between the RITT and the discharge pipe, then it may not be necessary to execute the Top Hat option. If the RITT is not successful, then the RITT will be detached from the drill pipe and the Top Hat will be connected for deployment.
- Top Hat remains on the seabed and standing by pending effectiveness of the RITT. Top Kill equipment being staged; commencement of operation scheduled for 18 May. Installing Jumper Hoses from BOP to manifold with ROVs.
- On 16 May at 0803 (CT), DDII well drill penetrated the seafloor and drilling had progressed to 253 ft below the seafloor as of 1530. Drilling and casing operations continue on the DDIII relief well; depth remains at 3,537 ft below sea floor.
- Drill Rig DDIII is Testing BOP's; Next: Pull test tool, drill out cement in 22", FIT, continue drilling Tuesday/Wednesday.
- Drill Rig DDII Drill-in 36" conductor casing to 5329'; Next: Unlatch drilling assembly and pull out. Suspend to test BOP's.
- Department of Defense (DoD):2 Vessel Skimming Systems being shipped from AK; ETA 22 May.
- Ocean Survey Vessels (OSV), OSV WES BORDELON remains loaded with 4,000 ft of boom in port of Venice, LA due to weather.
- OSV JOHN COGHILL continues supporting boom deployment to protect Mobile Bay.
- OSV VANGARD underway; conducting skimming operations in vicinity of leak site.

On Scene Weather:

- On-scene weather: Wind NW 5-10kts; seas 2-3 ft, Chance of showers and t-storms

Surface Operations:

- Total vessels assigned: 771 (Ships, Tugs & OSRV)
- 3 Air Sorties (NON CG) completed 17 May.
- 4 IN-SITU burn operations conducted in last 24 hours.
- Skimming operation completed in the past 24 with a total of 23,873 gallons recovered.

National Incident Commander Daily Situation Update
0630 – 18 May 2010
Deepwater Horizon Spill Response
(Updates in RED)

	Past 24 hours	Total to Date
Oily water mixture recovered	23,873 bbls	182,251 bbls
Surface dispersants applied	6,074 gal	588,490 gals
Subsea dispersants applied	7,280 gal	49, 593gals

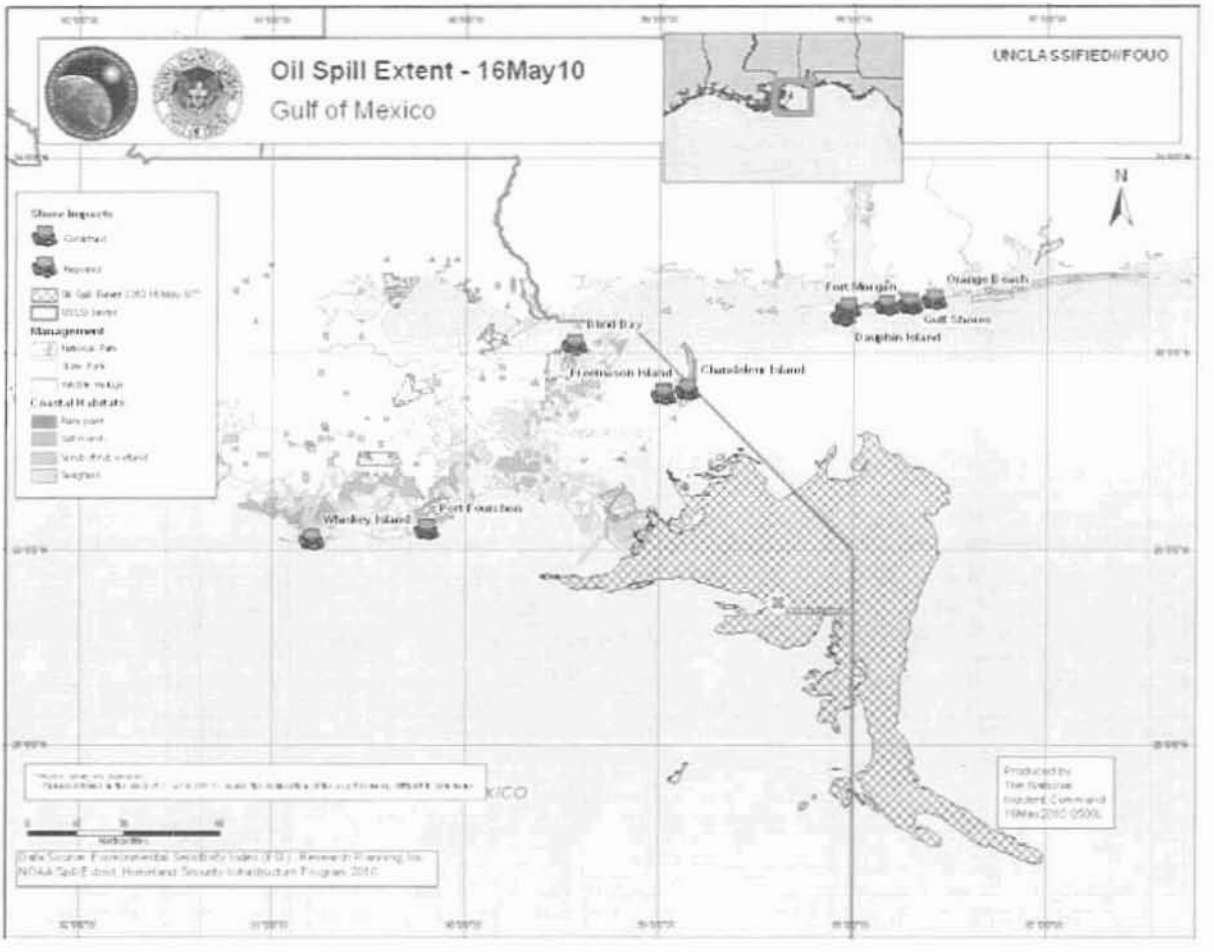
Resource Summary:
Total Response Personnel assigned: 19,163 (per UAC executive summary, 16 May)
Total Boom assigned: 1,364,510 ft
Sorbent Boom assigned: 418,390 ft
Total Fixed Wing Aircraft assigned: 17
Total Helo Aircraft assigned: 26
Unified Incident Commands: 3
Staging areas: 17

Environmental Impacts:
- Navy Cove, AL (Baldwin County Division 1): "Tens of thousands" of silver fingerling minnows 1 to 1.5 inches long found dead. Info was confirmed by Orange Beach Staging
- In Pass Christian, MS captured 01 egret covered in oil. MS wildlife has been dispatched
- Report of oil 3 miles of beach Pascagoula, MS. Report of oil in the beach, awaiting confirmation.
- Report of tar balls at West Ship Island, MS, awaiting confirmation.
- Report of tar balls at East Ship Island, MS, awaiting confirmation.
- Report of tar balls at Biloxi, MS, awaiting confirmation.
- Report of tar balls at East Dauphin Island, AL, awaiting confirmation.
- Report of tar balls at Little Lagoon, AL, awaiting confirmation.
- Report of tar balls at Panama City Beach, FL, awaiting confirmation.
- Department of Agriculture (USDA): Animal and plant Health Inspection Service supporting wildlife activities in LA.
- D7 reported Park Rangers found tar balls on the beach at Fort Zachary State Park, Key West, FL on 17 May. Samples of the tar balls were collected and will be shipped for analysis to determine the origin of the source.

Wildlife Impacts:
Past 24 Hours: 1 Total: 35
No specific information provided.

Marine Transportation System:
- All shipping channels and ports remain open in the Gulf Coast region.
- Mariners advised to avoid areas contaminated with oil.
- No vessels have required cleaning or de-contamination; teams are on standby if the need arises.

Incident Brief: Deepwater Horizon Oil Spill
(Updates in RED)



National Incident Commander Objectives:

1. Establish and manage a coordinated interagency response effort to effectively employ all resources required to mitigate current and long term environmental and economic impacts of the incident.
2. Engage and inform the public, stakeholders, and the media, keeping them apprised of response activities and plans.
3. Engage across all necessary levels of government to develop courses of action for issues that span multiple agencies and departments.

Area Command/Incident Commander Objectives:

1. Stop the leak
2. Fight the spill offshore
3. Protect sensitive areas
4. Mitigate the effects

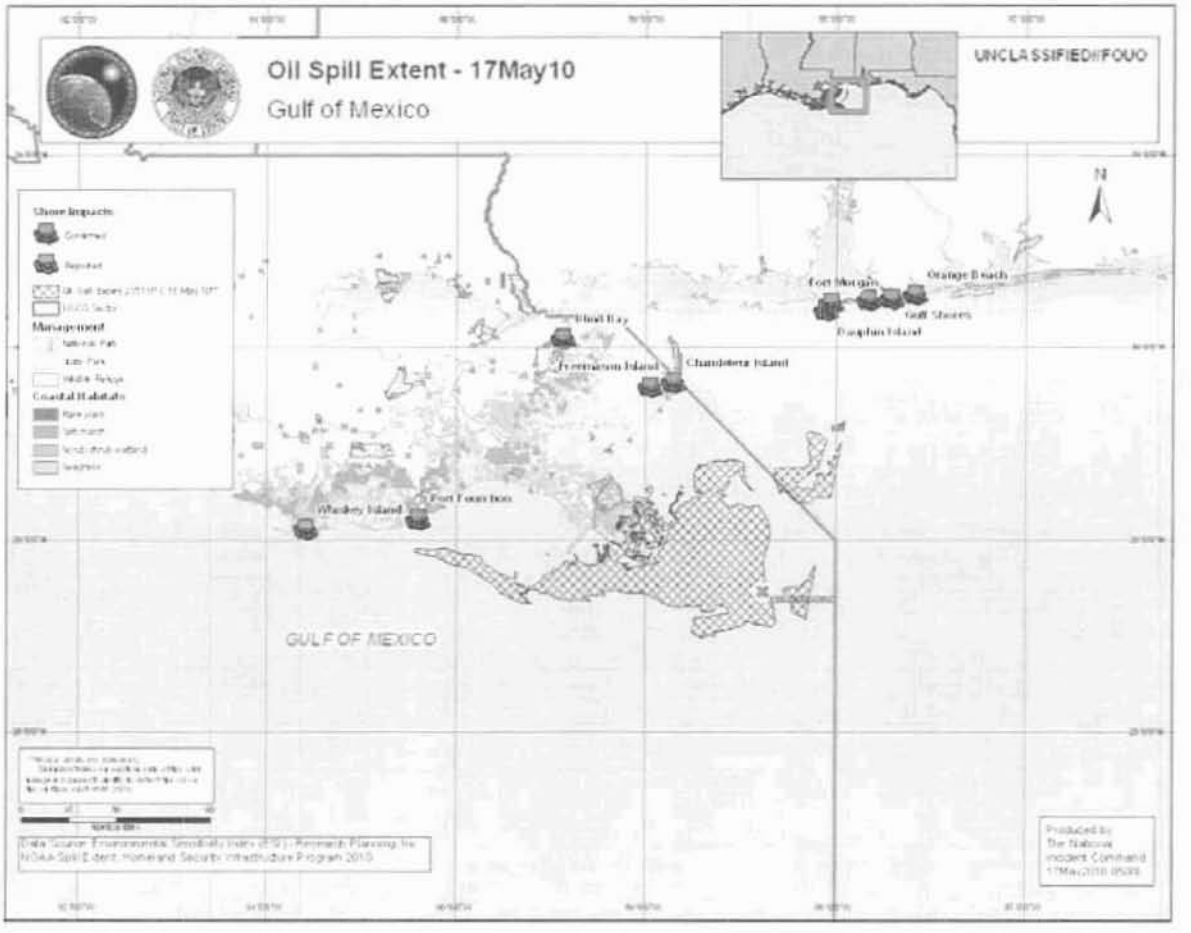
Response/ Clean-up

- 06 Air Sorties (NON CG) completed 15 May. 14,208 gallons of Dispersant (9500) applied. Sorties completed by US Air Force Reserve, International Air Response, MSRC.
- 3 CG cutters and 3 commercial vessels are outfitted with VOSS/SORS system and are ready to conduct skimming operations. (Reported by NSF SIT Report 12 May).
- All shipping channels and ports remain open in the Gulf Coast Region.

Numerical Summaries of Response

Total Boom assigned: 1,294,910 ft
Sorbent Boom assigned: 418,390 ft
Oily water mixture recovered: 0 bbls Total: 151,391bbls
Surface dispersants applied: 14,208 gal Total: 575, 816 gal
Subsea dispersants applied: 7,222 gal Total: 35,931 gal
Wildlife Impact: 07 Total: 31
Total vessels assigned: 2,106
Total Fixed Wing Aircraft assigned: 17
Total Helo Aircraft assigned: 35
Total Response Personnel assigned: 11,039
On-scene weather: Wind – SE winds 10-15 kts: Seas – 3-5 ft choppy. Chance of showers and t-storms.
Unified Incident Commands: 3
Staging areas: 17

National Incident Commander Daily Situation Update
0630 – 17 May 2010
Deepwater Horizon Spill Response
(Updates in RED)



National Incident Commander Objectives:

1. Establish and manage a coordinated interagency response effort to effectively employ all resources required to mitigate current and long term environmental and economic impacts of the incident.
2. Engage and inform the public, stakeholders and the media, keeping them apprised of response activities and plans.
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Field Level Incident Commander Objectives:

1. Stop the leak
2. Fight the spill offshore
3. Protect sensitive areas
4. Mitigate the effects of the spill

National Incident Commander Daily Situation Update
0630 – 17 May 2010
Deepwater Horizon Spill Response
(Updates in RED)

Highlights of the Last Operational Period:

- Riser Insertion Tube Tool (RITT) inserted again with N2 in drill pipe. RITT in place all day with flow to rig. Recovering oil & gas, <1% water. Gas being flared, oil filling process equipment and surge tank, then to storage tank. No confirmation on rates yet. There is still oil & gas coming out of end of riser, continuing increasing trend of gas. Being conservative at the start on opening up choke on drill pipe.

Current Situation:

- Discharge is estimated at 5,000bbls per day; BP currently reevaluating discharge rate.
- During the first RITT insertion, gas began flowing to the surface around 1,400 psi. Initial pressure at the surface for this second insertion was around 1,600 psi, with pressure being bled off at 2.5-3 psi/minute.
- The RITT was inserted into the riser around 2300 on 16 May. Initially they were getting gas back to the ENTERPRISE and 4 ½ hours later they got the first oil back to the ENTERPRISE. A second ROV, being used for subsea dispersant activities, accidentally ran into the RITT and pulled it out of the riser. They noticed the tool had some damage to the rubbers rings used to seal the RITT inside the riser.
- Pressure gauge successfully installed on BOP; BP reported the difference between the top and bottom pressure readings on the BOP indicates restricted flow.
- The result of sonic scan on the Blow Out Preventer (BOP) was inconclusive. The scan was unable to confirm the location of the drill pipe and whether it was in the riser between the kink and the BOP.
- If BP is successful at connecting the RITT and gaining a good seal between the RITT and the discharge pipe, then it may not be necessary to execute the Top Hat option. If the RITT is not successful, then the RITT will be detached from the drill pipe and the Top Hat will be connected for deployment.
- Top Hat remains on the seabed and standing by pending effectiveness of the RITT. Top Kill equipment being staged; commencement of operation scheduled for 18 May. Installing Jumper Hoses from BOP to manifold with ROVs.
- BP is currently conducting analysis to reevaluate discharge rate from source after some in the scientific community disputed the previously established 5,000 bbls per day estimate.
- On 16 May at 0803 (CT), DDII well drill penetrated the seafloor and drilling had progressed to 253 ft below the seafloor as of 1530. Drilling and casing operations continue on the DDIII relief well; depth remains at 3,537 ft below sea floor.
- Drill Rig DDIII is Testing BOP's; Next: Pull test tool, drill out cement in 22", FIT, continue drilling Tuesday/Wednesday.
- Drill Rig DDII Drill-in 36" conductor casing to 5329'; Next: Unlatch drilling assembly and pull out. Suspend to test BOP's.

On Scene Weather:

- Wind – S to SE winds 5-10 kts; Seas – 2-3 ft. Chance of showers and t-storms.

- The National Oceanic and Atmospheric Administration forecasts winds to be predominantly from the southeast over the next few days, becoming progressively weaker less than 5 kts by Monday.

Surface Operations:

- Total vessels assigned: 771 (Ships, Tugs & OSRV)
- 3 CG cutters and 3 commercial vessels are outfitted with VOSS/SORS system and are ready to conduct skimming operations. (Reported by NSF SIT Report 12 May).
- CGC OAK SORS Operations Pensacola, FL U/W from NAS Pensacola.
- CGC CYPRESS SORS Operations Pensacola, FL Staging. Moored homeport; Mobile, AL.
- 0 Air Sorties (NON CG) completed 16 May.
- No IN-SITU burn operations conducted in last 24 hours.
- Skimming operation completed in the past 24 with a total of 6987 gallons recovered.

	Past 24 hours	Total to Date
Oily water mixture recovered	6,987 bbls	158,378 bbls
Surface dispersants applied	6,600 gal	582,416 gals
Subsea dispersants applied	4,500 gal	42,313 gals

Resource Summary:

Total Response Personnel assigned: 19,163 (per UAC executive summary, 16 May)
Total Boom assigned: 1,300,110 ft
Sorbent Boom assigned: 418,390 ft
Total Fixed Wing Aircraft assigned: 17
Total Helo Aircraft assigned: 35
Unified Incident Commands: 3
Staging areas: 17

Environmental Impacts:

- Tar balls confirmed at Grand ISLE, LA and Long Beach, MS. Clean up is currently ongoing.
- Navy Cove, AL (Baldwin County Division 1): "Tens of thousands" of silver fingerling minnows 1 to 1.5 inches long found dead. Info was confirmed by Orange Beach Staging Area and witnessed onboard a vessel towing boom from the staging area. This area is inside the baseline area, where they have been no sighted tar balls or oil effects. Unknown if oil caused the kill whether the fish are being collected for testing.
- San Luis Pass, TX: Samples taken from tar balls on Bolivar Peninsular confirm tar balls are NOT associated with the Deepwater Horizon Oil Spill. (Source TX, SOC per 1800 EDT 14 May 2010 SLB)

Wildlife Impacts:

Past 24 Hours: 2 Total: 34
No specific information provided.

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UNIFIED AREA COMMAND EXTERNAL AFFAIRS SUMMARY
SATURDAY, MAY 15

FLOW

As said by USCG COMDT Admiral Allen, National Incident Commander, 14May10

- Whether it's one, five, 10 or 15, our mobilization of resources is far beyond that. We're always prepared for a catastrophic event.

- We have not been contained in our resources or our tactics by flow estimates. I urge us all to remember we're operating in environment where there's no human access.

- The only parameters we have are two-dimensional video presentation and any remote sensing we can do down there.

- While all that goes on, ultimately we're going to have to know the extent of the spill to natural resources and economy.

- As far as the current response we're doing a great deal to break this slick up offshore. We're attacking it as if it were a much larger spill.

SUBSEA DISPERSANTS

- The Coast Guard and Environmental Protection Agency (EPA) announced they have authorized BP to use dispersants underwater, at the source of the Deepwater Horizon leak. The use of the dispersant at the source of the leak represents a novel approach to addressing the significant environmental threat posed by the spill.

- Oil spill dispersants are chemicals that attempt to break down the oil into small drops and prevent it from reaching the surface or the U.S. shoreline. While they are not a silver bullet, dispersants are generally less harmful than the highly toxic oil leaking from the source and they biodegrade in a much shorter time span.

- Preliminary testing results indicate that subsea use of the dispersant is effective at reducing the amount of oil from reaching the surface – and can do so with the use of less dispersant than is needed when the oil does reach the surface. This is an important step to reduce the potential for damage from oil reaching fragile wetlands and coastal areas.

- This course of action was decided upon with thorough evaluation and consideration of many factors as well as consultation with stakeholders. Because subsea use of dispersants is a novel approach, several tests were done to determine if the dispersant would be effective in breaking up the oil and helping to control the leaks.

- While BP pursues the use of subsea dispersants, the federal government will require regular analysis of its effectiveness and impact on the environment, water and air quality, and human health through a rigorous monitoring program. EPA's directive to BP, including the monitoring plan the company must adhere to in order to ensure the protection of the environment and public health, is publicly available at www.epa.gov/bpspill/dispersants.

- The federal government will work with caution and strong oversight and reserves the right to discontinue the use of this dispersant method if any negative impacts on the environment outweigh the benefits.

RISER INSERTION TUBE

- BP will attempt to install a riser insertion tube, which can capture the oil before it mixes with the water and carry it to the drillship.

- BP is also prepared to attempt to install a "top hat" dome over the main source of the leak. The "top hat" is a smaller containment dome, designed to mitigate the formation of hydrates, which prevented the success of the first containment dome. The "top hat" currently sits on the sea floor and remains an alternative choice to stop the flow.

- We said from the beginning that there is no silver bullet to stop this leak. We were moving forward from the beginning under the assumption this tactic may not be successful.

- BP will continue to drill the relief well to permanently stop the leak.

- BP and industry partners have a team of experts from across the private sector working around the clock in Houston with one responsibility: discover alternative solutions to permanently stop this leak.

- DOI Secretary Ken Salazar dispatched U.S. Geological Survey Director Marcia McNutt to oversee this process.

- On May 12, at the request of the President, Secretary Salazar and Secretary Chu traveled to Houston to participate in meetings with DOE and national lab staff, industry officials and other engineers and scientists involved in finding solutions to cap the flow of oil and contain the spill.

- Secretary Salazar and Secretary Chu conferred at the BP Command Center in Houston with teams of federal and industry scientists and engineers who are using cutting-edge technological resources and innovative ideas to find solutions to containing the oil spill and protecting Gulf Coast communities.

- They will continue to work hard to provide BP with alternative ideas.

BOOM

- As of the end of May 14, more than 1.25 million feet of containment boom has been deployed and nearly 200,000 feet of containment boom available that will continue to be strategically deployed.

- As of last night, more than 415,000 feet of sorbent boom has been deployed and more than 870,000 feet of sorbent boom available that will continue to be strategically deployed.

- We continue to work to identify additional sources of boom for delivery.

- The Coast Guard is aggressively overseeing BP efforts to ensure the appropriate type of boom is available for approved deployments as dictated by this dynamic situation.

- The Unified Command will continue to work with state, local and community leadership to ensure that needs are met and that appropriate steps are taken to stop the source of the leak, mitigate the spill and deploy the necessary resources in the Gulf.

If asked about boom shortage:
"As of last night there was more than 1.6 million feet of boom deployed and more than 1 million feet available that will continue to be strategically deployed. The Unified Command is aggressively overseeing BP efforts to ensure the appropriate type of boom is available for approved deployments as dictated by this dynamic situation. The Coast Guard will continue to work with state, local, and community leadership to ensure that needs are met and urge BP to take the appropriate steps to stop the source of the leak, mitigate the spill and deploy the necessary resources in the gulf."

FRIDAY, MAY 14 STATISTICS
Total response vessels: 627
Containment Boom deployed: more than 1.25 million feet
Containment boom available: more than 270,000 feet
Sorbent boom deployed: more than 415,000 feet
Sorbent boom available: more than 870,000 feet
Boom deployed: more than 1.65 million feet (regular plus sorbent boom)
Boom available: nearly 1.15 million feet (regular plus sorbent boom)
Oily water recovered: more than 6.3 million gallons
Dispersant used: more than 560,000 gallons
Dispersant available: more than 260,000 gallons
Overall personnel responding: nearly 17,500

SATURDAY, MAY 15 EVENTS (all times CST)
0815 Governors' teleconference – RADM Landry

1100	Louisiana officials – U.S. Representative Melancon, State Senators Gautreaux and Chabert, and State Representative St. Germain—will go on an overflight with CAPT Stanton
1300	DOI Secretary Salazar will visit Robert UAC and hold press conference with ADM Landry
1400	Local Official's teleconference – CAPT Hanzalik
1400	Congressional teleconference
TBD	U.S. Representative Taylor (MS) will go on an overflight
TBD	Senate Homeland Security Staff will visit Houma ICP

METRICS

- 19,500 Facebook followers the Deepwater Horizon Response Facebook page.
- Twitter has 3,953 followers.
- The www.deepwaterhorizonresponse.com site has over 19 million hits since it was initiated.
- Top Topics via website:
    - Jobs
    - Booming
    - Dispersants
    - 1193 media queries; 4 fact sheets; 3 media advisories; 1 press release; 2 image releases, 2 images uploaded.

FRIDAY, MAY 14 EVENTS

Engagement with Government Officials

- Governors' Call: Governors Jindal and Riley participated
    - Monica Medina of NOAA provided an update on observations trajectory projections, and fisheries closures
    - ADM Allen provided an update on the situation and leak stabilization efforts
    - ADM Allen provided an update on operations
    - FWS Deputy Asst. Secretary Sobeck provided an update on wildlife impacts
- Governor Jindal, New Orleans Mayor Landrieu, and St. Tammany Parish President Davis held a press conference in Slidell, LA
- Governor Jindal visited St. Tammany Parish and met with local, state, and BP officials to discuss operations within the parish
- Governor Jindal spoke with the USCG liaison and requested additional boom for St. Tammany and Terrebonne parishes
- New Orleans Mayor Landrieu and St. Tammany Parish President Davis visited the BP Community Outreach Center in New Orleans
- Florida Attorney General McCollum visited the St. Petersburg ICP
- The Louisiana State Department of Fish and Wildlife offered vessels and personnel in support of oil spill response operations

- State of Louisiana filed a permit request with the Army Corps of Engineers to dredge areas and build a berm in front of the Chandeleur Islands
- USCG and BP briefed elected officials of Mobile and Baldwin Counties (AL) regarding shore clean-up plans
- Mobile and Baldwin County, AL mayors visited the Mobile ICP
- Local Official's teleconference: CAPT Hanzalik provided an update on operations
- Houma ICP Louisiana Parish Presidents' Call—report out provided on operations, including:
    - Tarball landfall and cleanup efforts in Whiskey Island, Trinity Island, and South Pass
- Congressional teleconference: Congressman Bill Cassidy (LA) and staff from the offices of Senator Landrieu, Senator Sessions (AL), Congressman Hastings (FL), the House Transportation and Infrastructure Committee, the Senate Environment and Public Works Committee, and the House Appropriations Committee asked questions asked questions
- Senate Homeland Security Staff visited Robert UAC
- Congressman Miller (FL) and State Representative Gaetz (FL) visited USCG Station Destin
- Representative Castor's (FL) DC staff visited St. Petersburg ICP
- Mobile ICP sent BP requests submitted by Senator Shelby (AL) and Congressman Bonner (AL) regarding companies seeking consideration for providing services in the response effort

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FUTURE EVENTS AND ISSUES (all times CST)

Monday, May 17

0830	Congressman Cummings (MD), Chairman of Subcommittee on Coast Guard and Maritime Transportation briefing in New Orleans, LA
1430	Congressman Meek (Florida) visit to Mobile ICP
TBD	Governor Riley visit to Mobile ICP
1600	Congressman Young (FL) to visit St. Petersburg ICP

Thursday, May 20

TBD	DOI Deputy Secretary Hayes and DHS Deputy Secretary Lute visit to Robert UAC and Houma IPC

June

TBD	House Natural Resources STAFFDEL

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UNIFIED AREA COMMAND EXTERNAL AFFAIRS SUMMARY
FRIDAY, MAY 14

DISPERSANTS

There is a list of dispersants authorized for use as part of what is called the "National Contingency Plan Product Schedule" which is overseen by EPA. The dispersant being used on-site at the BP spill is on that approved list.

There are two ways dispersants can be used: (1) on the water's surface, dropped by planes and (2) below the water's surface, through injections using remote-control devices (sub-surface).

- When this crisis occurred, Coast Guard and EPA gave BP immediate authorization to move forward with the use of this approved dispersant on the affected water's surface in an effort to mitigate the impact of the spill.

- This authorization included specific conditions to ensure the protection of the health of residents in the affected areas and the environment.

- With our approval, BP continues to use this dispersant on the surface of the water (BP will have to provide further information about how effective the dispersant has been).

The Coast Guard and EPA also authorized BP to conduct three tests of a novel approach to use this dispersant sub-surface, at the source of the leak. The tests were done to determine if the dispersant would be effective in breaking up the oil and helping to control the leaks, as well as to monitor any adverse effects this tactic may have on the environment.

- We are awaiting from BP the complete results of the tests.

- No further use of the dispersant sub-surface will take place until the results of these tests are provided to us and reviewed.

- If the tests demonstrate that the sub-surface dispersant was effective, we may authorize its use along with ongoing monitoring of its effects on the environment.

- We also reserve the right to withdraw our approval of its use sub-surface at any time if we determine that the negative impacts on the environment outweigh the benefits.

The federal government is constantly monitoring air quality in the area to ensure that nearby residents are informed and protected. EPA is conducting air monitoring through the use of aircraft as well as fixed and mobile air monitoring stations on land, and our procedure are regularly reevaluated so we can make any necessary adjustments. EPA has

a dedicated Web site providing daily updates of its air monitoring data (www.epa.gov/bpspill).

At any time, we reserve the right to stop BP from continuing to use the dispersant on the water's surface if we determine air quality is being adversely affected.

TOP HAT

- BP will attempt to install a "top hat" dome over the main source of the leak. The "top hat" is a smaller containment dome, designed to mitigate the formation of hydrates, which prevented the success of the first containment dome.

- We said from the beginning that there is no silver bullet to stop this leak. We were moving forward from the beginning under the assumption this tactic may not be successful.

- BP will continue to drill the relief well to permanently stop the leak.

- BP and industry partners have a team of experts from across the private sector working around the clock in Houston with one responsibility: discover alternative solutions to permanently stop this leak.

- DOI Secretary Ken Salazar dispatched U.S. Geological Service Director Marcia McNutt to oversee this process.

- On May 12, at the request of the President, Secretary Salazar and Secretary Chu traveled to Houston to participate in meetings with DOE and national lab staff, industry officials and other engineers and scientists involved in finding solutions to cap the flow of oil and contain the spill.

- Secretary Salazar and Secretary Chu conferred at the BP Command Center in Houston with teams of federal and industry scientists and engineers who are using cutting-edge technological resources and innovative ideas to find solutions to containing the oil spill and protecting Gulf Coast communities.

- They will continue to work hard to provide BP with alternative ideas.

BOOM

- As of the end of May 13, over X.X million feet of boom deployed and nearly X million feet available that will continue to be strategically deployed.

- We continue to work to identify additional sources of boom for delivery.

- The Coast Guard is aggressively overseeing BP efforts to ensure the appropriate type of boom is available for approved deployments as dictated by this dynamic situation.

TBD	Representative Miller visit to CG STA Destin
TBD	Ms. Birnbaum, MMS Director visit to UAC Robert

Saturday, May 15

TBD	Congressman Melancon (LA) overflight
TBD	DOI visit UAC Robert

Monday, May 17

1430	Congressman Meek (Florida) visit to Mobile ICP

June

TBD	House Natural Resources STAFFDEL

30 Apr 10 (1500EDT)
USCG Response to DEEPWATER HORIZON
(*new)

BLUF:

Containment and in situ burn efforts are in an operational pause due to weather. Land-side pre-deployment of containment boom continues. Preparations for further in-situ burning continue, but in situ burn operations have been halted by deteriorating on scene conditions, which are forecast to continue worsening. USCG over-flights continue to monitor the spread of the oil plume. Land fall is anticipated to have already occurred, but no *confirmed* reports have been received by IC. Rapid Response Teams are enroute to confirm reports of oil on the beach. Boom is being deployed at this time. Completion of "Relief Well" drilling is still anticipated at approx 90 days. The pollution control dome has been constructed and could be deployed as early as May 7th or 9th. Responders were partly successful, momentarily, in using Remotely Operated Vehicles (ROVs) to trigger the blowout preventer. Well head continues to discharge approximately 5,000 bbls (210,000 gallons)/day.

Situation Bullets:

- *There have been no significant injuries to date.
- * Booms are in place along coastline, approximately 222,000 ft of boom have been deployed thus far.
- *Anticipating increased/heavy weather this weekend, expected to negatively impact all surface operations through at least 5 May.
- *Continue to deploy dispersants. Increased surface weather should not significantly impact aerial dispersant ops.
- *Preparation continues to pump subsurface dispersant to the riser leak 5000ft below the surface. (2) Air Force C-130s on scene for dispersant ops; RFA sent to CG-532 & JDOMS.
- *Booms and dispersant remain available.
- *All skimmers are staging out of Pt. Fouchon.
- *An ICP has been set up in Mobile, AL to oversee beach clean-up in MS, AL, FL.
- *The ICP in Houma, LA will oversee beach clean-up in LA.
- *There are 70 vessels, and 1700 people onsite, actively engaged (not counting people on the two involved rigs).
- *Results from the previous in situ burns were very successful, and further burns should be similarly successful, once weather improves.
- *There are 3 known leaks: 1 at the riser, and 2 others.
- *4 ROVs are currently operating. 3 are working on the well-head, and one is monitoring the riser leak.
- *Drilling on the relief well is nearly ready to begin; expected to begin tomorrow.
- Continue building and expanding shoreline connections and pre-staged boom.

- BP has identified new BOP in Italy and is working to purchase and ship to the US.
- APR29; 139,459 gallons of dispersant applied to date. Approximately 75,000 gallons available within 24 hours. Another 108,400 gallons staged; 922,548 ordered.
- Predicted Weather: **Friday...**Winds from SE, 20 kts increasing to 20-25 kts Saturday Night; choppy; 7-8 ft seas building to 10 ft. **Saturday**…SE Winds 20-25 kts; seas building to 11ft.
- MARAD Advisory drafted.
- NOAA trajectories complete for 29, 30 Apr – 01 May, 2010
- Temporary Flight Restriction (FDC 0/7326) centered over the incident site, surface to 4000' MSL, 35-nm radius. It was issued 27APR and is in effect until further notice.
- 09 flights conducted 28APR; 42,143 gal of dispersant applied
- Oily-water collected 28APR 5,566bbls (233,772 gal.)
- Pollution Dome has been built and could be deployed as earlier as 7-9 May
- Edge of area with visible oil is now 16 miles from the nearest point of land- SW Pass at the tip of the Mississippi River Delta.
- Weather forecast to be SE winds 20+ kts.
- Protective booms are being deployed in sensitive areas. The effects of oil on sensitive habitats and shorelines in four states (LA, MS, AL, and FL) are being evaluated should oil from the incident make landfall in appreciable quantities
- Staging equipment to place protective boom around near shore sensitive areas with priority focus on Chandelier Island.
- Attempts to actuate BOP middle rams and blind shears were ineffective due to hydraulic leak on the valve; Failure of actuation due to lack of necessary pressure to operate. Planning to install coil pipe to provide pressure needed to operate rams.
- The sheens and slicks now cover and area measuring 42 miles by 100 miles.
- 6 staging areas with boom have been set up in:
  Venice, LA – Staged: 160,300' Deployed: 29,500
  Biloxi, MS – Staged: 111,400' Deployed: 23,000'
  Pascagoula, MS– Staged: 61,200'
  Theodore, AL– Staged: 89,400'
  Pensacola, FL – Staged: 69,900' Deployed: 20,000'
  Fourchon, LA – Staged: 2,000' Fire boom
- 03 BP boom staging areas stood up Venice, Biloxi, Pensacola; 65,940 feet of various boom types are available at the three staging areas. 57,000 feet of various boom type on order.
- 10,000 feet of 18" boom is assigned to the Breton Island protection task force. 11,340 feet of 67" ocean boom is assigned to the skimming vessels.
- Reports of odors reported in Florida and MS. Coordinating to develop response.
- New air emissions are a concern due to the smell of the product in the coastal areas of Florida panhandle. DEQ and state testing air quality.

- *2 Drill ships/rigs ENTERPRISE and DDIII are on scene, 1 ROV boat (SKANDI NEPTUNE) en route, 2 survey vessels en route to assist with survey of drill rig location and necessary site preparation.
- MODU located upside down on sea floor 1,500' NW of BOP. No transfer pipelines in area damaged or endangered.

Other Concerns:

- *The number of calls from volunteers is rapidly increasing. The Incident Command is developing a system to connect volunteers with volunteer opportunities.
- *Winds from the SE and high tides are resulting in waves 10-15' higher than typical high tide. This will push oil further inland than under normal conditions.

Possible Courses of Action:

- Continue attempts to try to activate the blow-out preventer (BOP) using ROVs – could stop leaks in several days, if successful.
- An underwater oil collection device that would trap escaping oil near the seafloor and funnel it for collection is being designed and fabricated. Estimated completion is 2-4 weeks.
- Activate BOP – ongoing, could stop leak in several days.
- Use an undersea dome to contain leaking oil, rigged by ROV's – has not been attempted at this depth before.
- Drill relief wells which could then be plugged – this process could take several months.

***Current Operations:**

Coast Guard		Non Coast Guard	
Surface:	CGC HARRIET LANE O/S	Surface:	Task Force MSRC 1, 2 and AMPOL will be working with the HOSS barge near the source location. Task Force MSRC 3 (OSRV FLORIA RESPONDER) working the eastern finger of the oil slick. Total of 15 skimming vsls, 4 barges & 11 support vsls on scene.
Air:	NTR	Air:	Overflights: 3 helicopter flights, - 0630 Houma: O'brien personnel all day observation - Sunrise: CG personnel, all day observation

			- 0800 Houma: CG personnel, all day observation Dispersant flights: 3 aircraft spraying dispersant with one spotter plane will conduct morning and afternoon flights.

Future Operations/Assets:

- SLG – Friday 30 APR, 0900
- SLG Conference call will convene at 1700 EDT
- NRT Conference call will convene at 1800 EDT
- Plan for, prevent, and/or mitigate environmental impacts.
- Make preparations to begin drilling relief wells.
- Monitor MODU to ensure it is stationary & stable.
- Monitor BOP for pressure buildup.
- Continue joint CG/MMS investigation.

Personnel:

Location	Personnel
BP IMT, Houston	2 MSU Morgan City Personnel (Marine Inspectors) 2 MSU Port Arthur Personnel to relieve MC personnel 1 GST IC Liaison to Houma
Dispersant Staging Area, Venice, LA	5 GST Personnel
Unified Area Command Roberts, LA	51 USCG personnel (including D8 IMT), MMS, Trans Ocean, BP, NOAA & LA
Unified Incident Command Houma, LA	76 USCG personnel, Trans Ocean, BP & NOAA

The Coast Guard is supporting HITRAC development and analysis of actual and prospective economic effects to maritime commerce of the BP oil spill.

30 Apr 10 (0300Z)
USCG Response to DEEPWATER HORIZON
(*new)

BLUF:

* At the direction of the Secretary, the Commandant classified the discharge related to the DEEPWATER HORIZON Incident as a Spill of National Significance (SONS) pursuant to 40 CFR 300.323. Containment/dispersion/control burn efforts continue. Pre-deployment of containment boom continues. Surface cleanups are ongoing; updated total recovery numbers from 29APR are as follows: 20,313bbls (853,146 gal.). Preparations for further in-situ burning continue, but in situ burn operations have been negatively impacted by deteriorating on scene conditions, which are forecast to worsen. USCG overflights continue to monitor the spread of the oil plume. Land fall is anticipated late Friday night in the outer reaches of the Mississippi Delta. Well head continues to discharge approximately 5,000 bbls (210,000 gallons)/day.

Situation Bullets:

- Booms are in place along coastline, approximately 180,000 ft of boom have been deployed thus far.
- BP has identified new BOP in Italy and is working to purchase and ship to the US.
- Anticipating increased/heavy weather this weekend, expected to negatively impact in-situ burns.
- Continue to skim and deploy dispersants. Increased weather will not impact dispersant ops.
- Continue building and expanding shoreline connections and pre-staged boom.
- Potential for employing subsurface dispersants, 5000ft below the surface. This has never been done before.
- (2) Air Force C-130s for dispersant ops; request pends.
- MARAD Advisory drafted.
- NOAA trajectories complete for 29, 30 Apr – 01 May, 2010
- Temporary Flight Restriction (FDC 0/7326) centered over the incident site, surface to 4000' MSL, 35-nm radius. It was issued 27APR and is in effect until further notice.
- 09 flights conducted 28APR; 42,143 gal of dispersant applied
- 98,361 gals total dispersants applied to date.
- Pollution Dome has been built and could be deployed as earlier as 7-9 May
- Skimming and dispersant operations are on-going.
- Edge of area with visible oil is now 16 miles from the nearest point of land- SW Pass at the tip of the Mississippi River Delta.
- Weather forecast to be SE winds 20+ kts.
- Protective booms are being deployed in sensitive areas. The effects of oil on sensitive habitats and shorelines in four states (LA, MS, AL, and FL) are being evaluated should oil from the incident make landfall in appreciable quantities

- Staging equipment to place protective boom around near shore sensitive areas with priority focus on Chandelier Island.
- The sheens and slicks now cover and area measuring 42 miles by 100 miles.
- 6 staging areas with boom have been set up in:
  Venice, LA – Staged: 160,300' Deployed: 29,500
  Biloxi, MS – Staged: 111,400' Deployed: 23,000'
  Pascagoula, MS– Staged: 61,200'
  Theodore, AL– Staged: 89,400'
  Pensacola, FL – Staged: 69,900' Deployed: 20,000'
  Fourchon, LA – Staged: 2,000' Fire boom
- 03 BP boom staging areas stood up Venice, Biloxi, Pensacola; 65,940 feet of various boom types are available at the three staging areas. 57,000 feet of various boom type on order.
- 10,000 feet of 18" boom is assigned to the Breton Island protection task force. 11,340 feet of 67" ocean boom is assigned to the skimming vessels.
- Reports of odors reported in Florida and MS. Coordinating to develop response.
- New air emissions are a concern due to the smell of the product in the coastal areas of Florida panhandle. DEQ and state testing air quality.
- 2 Drill ships/rigs ENTERPRISE (ETA **29** APR) en route and DDIII (on scene), 1 ROV boat (SKANDI NEPTUNE) en route, 2 survey vessels en route to assist with survey of drill rig location and necessary site preparation.
- MODU located upside down on sea floor 1,500' NW of BOP. No transfer pipelines in area damaged or endangered.
- Predicted Weather:
  Friday.... Southeast winds 15 to 25 knots. Seas 7 to 9 feet. Chance of showers and thunderstorms.

Other Concerns:

- *Associated air quality concerns with in-situ burning ops.

Possible Courses of Action:

- Continue attempts to try to activate the blow-out preventer (BOP) using ROVs – could stop leaks in several days, if successful
- An underwater oil collection device that would trap escaping oil near the seafloor and funnel it for collection is being designed and fabricated. Estimated completion is 2-4 weeks.
- Use an undersea dome to contain leaking oil, rigged by ROV's – has not been attempted at this depth before.
- Drill relief wells which could then be plugged – this process could take several months.

***Current Operations:**

Coast Guard		Non Coast Guard	
Surface:	CGC HARRIET LANE	Surface:	Task Force MSRC 1, 2 and AMPOL

01 May 10 (0400 EDT)
USCG Response to DEEPWATER HORIZON
(*new)

BLUF:

Drill permit for relief well has been approved; BP is requesting permit for second location. Coil tubing unit deployed for sub-sea application of dispersant. Test of additional dispersants completed; evaluation is pending. Volunteer plan is pending approval. Mr. Gary Wills of BP at Houma's ICP is volunteer coordinator.

Situation Bullets:

- *There are 68 vessels and 1700 people onsite, actively engaged (not counting people on the two involved rigs)
- *APD (drill permit) for relief well approved, BP is requesting permit for second drill location.
- *Coil tubing unit deployed for sub-sea application of dispersant. Test of dispersants completed approx 2230 local time on 30 April. Evaluation is pending.
- *Volunteer Plan is pending approval. Need BP legal & USCG legal review. Mr. Gary Wills of BP in Houma's ICP is volunteer coordinator.
- *Wildlife impact: 1 bird recovered. To date, 5 sperm whales have been observed within the slick.
- *1 flight 30 APR applied 4,900 gal of dispersant. Total of 142,914 gal of dispersant applied to date.
- *Oily-water collected 30 APR: 0 bbls (due to weather)
- *Deep water dispersant released 13,000 gallons.
- *Predicted Weather: Saturday 01 May: Winds from SE, 20-25 kts; choppy; 6-9 ft seas; Additional winds & rain/thunderstorm potential expected thru Tuesday.
- *2 new staging areas with boom have been set up; total of 8 staging areas.
- *2 Drill ships/rigs ENTERPRISE and DDIII are on scene, 1 ROV boat (SKANDI NEPTUNE) en route, 2 survey vessels en route to assist with survey of drill rig location and necessary site preparation.
- Well head continues to discharge approximately 5,000 bbls (210,000 gallons)/day.
- Booms are in place along coastline, approximately 222,000 ft of boom have been deployed thus far.
- Anticipating increased/heavy weather this weekend, expected to negatively impact all surface operations through at least 5 May.
- Preparation continues to pump subsurface dispersant to the riser leak 5000ft below the surface. (2) Air Force C-130s on scene for dispersant ops; RFA sent to CG-532 & JDOMS.
- There are 3 known leaks: 1 at the riser, and 2 others.
- 4 ROVs are currently operating. 3 are working on the well-head, and one is monitoring the riser leak.

***Current Operations:**

Coast Guard		Non Coast Guard	
Surface:	CGC HARRIET LANE O/S CGC OAK enroute ETA May 3rd	Surface:	Task Force MSRC 1, 2 and AMPOL will be working with the HOSS barge near the source location. Task Force MSRC 3 (OSRV FLORIA RESPONDER) working the eastern finger of the oil slick. Total of 15 skimming vsls, 4 barges & 11 support vsls on scene.
Air:	NTR	Air:	Overflights: 3 helicopter flights, - 0630 Houma: O'brien personnel all day observation - Sunrise: CG personnel, all day observation - 0800 Houma: CG personnel, all day observation Dispersant flights: 3 aircraft spraying dispersant with one spotter plane will conduct morning and afternoon flights.
COMMS	Enhanced Mobile Incident Command Post (EMICP) & Communications Vehicle (MCV) enroute Robert, LA ETA 1200 May 3rd		

Future Operations/Assets:

- SLG – Saturday 01 May, 0930
- NRT Conference call will convene at 1000 & 1800 EDT Saturday 01 May
- Plan for, prevent, and/or mitigate environmental impacts.
- Make preparations to begin drilling relief wells.
- Monitor MODU to ensure it is stationary & stable.
- Monitor BOP for pressure buildup.
- Continue joint CG/MMS investigation.
- Congressional Overflights supported by USCG ATC Mobile aircraft:
  - 01 May Flight (1200)
    - REP Bonner and (2) staff
    - REP Taylor and (1) staff, Chris Lafarde
    - REP Scalise
  - 03 May Flight
    - REP Miller

- Senator LeMieux and (1) staff
- Senator Sessions and (2) staff
- Senator Shelby (possible)

Personnel:

Location	Personnel
BP IMT, Houston	2 MSU Morgan City Personnel (Marine Inspectors) 2 MSU Port Arthur Personnel to relieve MC personnel 1 GST IC Liaison to Houma
Dispersant Staging Area, Venice, LA	5 GST Personnel
Unified Area Command Roberts, LA	55 USCG personnel (including D8 IMT), MMS, Trans Ocean, BP, NOAA & LA
Unified Incident Command Houma, LA	81 USCG personnel, Trans Ocean, BP & NOAA

23 Apr 10 (1600ET) – USCG Response to MODU DEEPWATER HORIZON

(Red is new)

BLUF:

District 8 (D8) continues to respond to the explosion of the MODU DEEPWATER HORIZON. Earlier report that the ROV had confirmed the blowout preventer valve was closed is incorrect. CORRECTION: ROV has observed no visible oil flow from the well. There is a fully manned D8 Incident Management Team (IMT); it will be moving to Robertsdale, LA tonight. Search and Rescue (SAR) efforts are ongoing for the remaining eleven missing. CGC COHO, ATC MOBILE C-144 and AIRSTA NOLA HH-65 are conducting searches at this time. Safety Zone of 500 meters remains in effect around the MODU's position and the flight restrictions remain at 7NM and a 4,000 ft altitude. Currently six Oil skimming vessels and one High Volume Open Sea Skimming (HOSS) barge on-scene. BP and TRANSOCEAN have stood-up an Incident Command Post in Houston, TX. A Unified Command has been established at the BP Facility in Houma, LA. An Area Command is being established at the Shell Facility outside of New Orleans.

Situation Bullets:

- Search for the remaining 11 crewmembers continues; CGC COHO is on scene. Twenty sorties have been conducted for survivors (15 aerial and 05 surface).
- HC-144 and HH-65 (CG 6540) are conducting over flights of surrounding area.
- 1500 gallons of dispersants applied via 5 sorties
- 7602 gallons oily water mix recovered by surface skimmers.
- ROV survey shows visible confirmation that the blowout preventer valve is closed and no visible flow from the well. Correction: ROV has observed no visible oil flow from the well. BP continues to seek affirmation of blowout preventer by ROV visual inspections and Sonar surveys.
- No current threat to shoreline, no sign of crude oil.
- 94 of the 115 survivors have been drug tested; results are pending. No alcohol testing was conducted due to lack of equipment on scene and length of time between rescue and arrival onshore. The investigators are working to get the remaining survivors drug tested.
- Interviews: Received witness statements from 102 survivors, plus conducted joint MMS/CG in-depth interviews with 12 crewmembers based on watch position/status at time of incident. Investigators are waiting for opportunity to interview hospitalized survivors.

The NCP requires Regional Response Teams and Area Committees to plan for the use or non-use of dispersants in advance of spills, to ensure that the tradeoff decisions between water column and surface/shoreline impacts are deliberated. The magnitude and source location of the DWH spill has warranted use of dispersants at quantities, rates, and locations not contemplated in these plans. While the application locations and rates of dispersant applied has been adjusted during the response based upon expert input and a specific workshop on the topic, the long-term consequences of this scale and location of dispersant use are not fully known and are being studied.

The EPA, affected states, and natural resource trustees on the RRT have specific dispersant and chemical countermeasure decision authority for both preauthorization plans and incident-specific decisions per 40 CFR 910. Because of the unprecedented nature of the dispersant operations, the monitoring and constraints on application volumes and methodologies are being closely managed. In particular, EPA has specified effectiveness and impact monitoring plans, application parameters, and action thresholds. Any changes to specific DWH dispersant plans require the concurrence of EPA and other RRT decision agencies under the NCP (40 CFR 300.910(b)). An adaptive management strategy is in place to ensure that information from monitoring efforts is reflected in adjustments to dispersant use while the discharge continues.

To provide a context for the preceding discussion, there must be no ambiguity regarding the relative use of dispersant. The natural weathering of discharged oil, combined with mechanical recovery and in-situ burning are the preferred methods of removing discharged oil from the environment. Utilizing an "all means possible" approach to discharged oil recovery implies the maximum resources to recover oil are being employed in the form of boom, skimmers, and vessels of opportunity. The use of surface dispersant should be considered as a least desired line of defense when discharged oil exceeds the capability of those previously mentioned methods to collect the oil. It furthermore should be understood that dispersant does not remove oil from the environment, but rather prevents the environmental impact from occurring on the beach and sensitive shoreline areas. Current directives support the optimum removal of oil using mechanical means with the controlled and monitored application of dispersants to minimize shoreline impacts.

Severe weather such as a hurricane will also impact the ability to use mechanical means for recovery of oil and similarly impact the ability to use surface dispersant. The impact of severe weather shifts the carefully constructed balance of using all means possible to recover oil and may temporarily require additional surface dispersant use to achieve the same level of minimal shoreline impact as prior to the severe weather event. Protocols regarding these scenarios and impacts are being explored. (*See Addendum X for additional details*)

Comparative Toxicity of Eight Oil Dispersant Products on Two Gulf of Mexico Aquatic Test Species

U.S. Environmental Protection Agency
Office of Research and Development

U.S.EPA/ORD Contributors

National Health and Environmental Effects Research Laboratory
Michael J. Hemmer, Mace G. Barron and Richard M. Greene

1. Introduction

Large quantities of Louisiana sweet crude oil have been released into the Gulf of Mexico since the explosion of the Deepwater Horizon oil exploration platform on April 20, 2010. As part of the integrated response effort to mitigate the impact of the oil in the environment, the decision was made to use dispersants listed on the U.S. Environmental Protection Agency's (EPA) National Contingency Plan (NCP) Product Schedule (EPA 2010a). Dispersants are being applied offshore on the surface as well as underwater at the source of the leak. The EPA conducted independent studies to assess the relative acute toxicity of eight dispersants on the NCP Product Schedule.

This report summarizes results of the first phase of testing obtained from acute toxicity tests conducted with eight oil dispersants using two Gulf of Mexico aquatic species: (1) the mysid shrimp, *Americamysis bahia*, an aquatic invertebrate, and (2) the inland silverside, *Menidia beryllina*, a small estuarine fish. These species are standard test organisms used in a variety of EPA toxicity test methods. The eight dispersants tested were Corexit 9500A, Dispersit SPC1000, JD-2000, Nokomis 3-AA, Nokomis 3-F4, Saf-Ron Gold, Sea Brat #4 and ZI-400. The tests were conducted using an established contract testing laboratory and in compliance with the Good Laboratory Practice regulations as provided in EPA 40CFR160 (USEPA, 40CFR Part 160). The approach described herein utilized consistent test methodologies within a single laboratory which provided a means to assess acute toxicity estimates across dispersants and independently evaluate the NCP Product schedule toxicity information. The next phases of this study will examine the acute toxicity of Louisiana sweet crude oil and dispersant-sweet crude oil mixtures on mysids and *Menidia* – the results will be reported separately at a later date.

2. Test Methods

The acute toxicity test methods followed, with slight modification, the requirements specified in U.S. Environmental Protection Agency's 62 FR 15576, Appendix C of Part 300 – *Swirling Flask Dispersant Effectiveness Test, Revised Standard Dispersant Toxicity Test and Bioremediation Agent Effectiveness Test* (USEPA, 1997) and the EPA Test Method 821-R-02-012, *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms* (USEPA, 2002). Specific modifications are shown in Appendix A.

The exposure concentration range for each dispersant was chosen to bracket the estimated median lethal concentration (LC50) values reported in the NCP Product Schedule. The LC50 is defined as the concentration of a substance causing mortality in 50% of test organisms for a specified time interval, in this case, 48-hours for the mysid test and 96-hours for the silverside test. The commercially available statistical software package, CETIS® was used for the calculation of LC50 values using an automated decision tree adapted from EPA for selection of the appropriate statistical method (CETIS, 2009; USEPA, 1994). Point estimate procedures used to calculate LC50 values included linear regression methods, the non-parametric Spearman-Karber method and the binomial method. A qualitative comparison was made between LC50 values for the eight dispersants tested as well as with those available in the NCP Product Schedule. Note that the reproducibility of static acute tests among laboratories using the same species/toxicant combination has been reported to generally fall within a factor of 3.5 among laboratories when using nominal concentrations (unmeasured treatment concentrations) for both freshwater and marine species (USEPA, 1981). Given the use of whole organisms in these tests, some variation in response attributable to differences in parameters such as culture and acclimation conditions, stock populations or variable water quality is expected and acceptable.

3. Results - Mysid Toxicity Tests

3.1 Mysid Testing Schedule

Following the first round of eight acute toxicity tests, dispersant LC50s were greater than the highest concentration tested for four of the eight dispersants. Definitive acute toxicity tests were repeated using higher test concentrations for JD-2000, Saf-Ron Gold, Sea Brat #4 and ZI-400.

3.2 Mysid Test Acceptability

Control performance (without dispersant) met all criteria for an acceptable exposure in each test (≥90% survival). All water quality parameters were within ranges specified in the protocol with the exception of dissolved oxygen for the high test concentration (56 ppm) in the Nokomis 3-AA exposure at 24 hours, which was measured at 56% of saturation. As dissolved oxygen levels were >60% at other time points in the test and the toxicity was clearly dose

related, the departure observed in the 56 ppm concentration at 24 hours was not considered to have had a negative impact on the exposure with Nokomis 3-AA.

3.3 Mysid Toxicity Results

In the first series of acute toxicity tests, LC50 values and 95% confidence intervals were successfully determined for Corexit 9500A, Dispersit SPC 1000, Nokomis 3-AA and Nokomis 3-F4 and in the second series of acute tests, LC50s were calculated for JD-2000, Saf-Ron Gold, Sea Brat #4 and ZI400. Test results are summarized in Table 1.

The LC50 values for dispersant acute tests with mysids ranged from 12 ppm for Dispersit SPC1000 to 788 ppm for JD-200 (Table 1). EPA uses a five-step scale of toxicity categories to classify pesticides based on their acute toxicity to aquatic organisms: LC50 values of >100 ppm are considered practically nontoxic; >10 to 100 ppm as slightly toxic; > 1 to 10 ppm as moderately toxic; LC50s of 0.1 to 1 ppm as highly toxic and LC50s < 0.1 ppm as very highly toxic (USEPA, 2010b). Using this toxicity classification, Corexit 9500A, Dispersit SPC1000, Nokomis-3AA, Nokomis 3-F4, Sea Brat #4 and ZI-400 would be classified as slightly toxic whereas JD-2000 and Saf-Ron Gold would be classified as practically non-toxic to mysids (Table 1).

Based on comparison of LC50 values and 95% confidence intervals across the eight dispersants tested in the present study, the rank order toxicity (most to least toxic) of the dispersants to mysids was: (1) Dispersit SPC1000, (2) Nokomis 3-AA, (3) Nokomis 3-F4, Corexit 9500A, (4) ZI-400, Sea Brat #4, (5) Saf-Ron Gold, and (6) JD-2000.

Factor ratios were used to compare LC50s derived for the same species/dispersant combination from different laboratories. The factor ratios between LC50 values determined in this study and NCP reported LC50 values were calculated as a ratio by dividing the higher of the two LC50 values by the lower LC50 value for each of the eight dispersants, respectively (Table 1). As an example, using information from Table 1, the factor ratio for Corexit 9500A was determined as 42/32.2 = 1.3. The factor ratios calculated for Corexit 9500A, Dispersit SPC1000, Nokomis 3-AA, Nokomis 3-F4, Saf-Ron Gold and ZI-400 were less than or equal to 2.6 which

was considered within normal inter-laboratory variability (USEPA, 1981). Results for JD-2000 and Sea Brat #4 showed lower toxicities (i.e., higher LC50s) with factor ratios of 8.7 and 4.6, respectively, compared to their reported NCP LC50 values.

3.4 Mysid Reference Toxicant Test

A 48-hr acute toxicity test was conducted with the standard reference toxicant, sodium dodecyl sulfate (SDS), to evaluate the relative sensitivity of the mysids used in the series of dispersant toxicity tests. The mysids tested with SDS were from the same population and age range used for dispersant testing. The 48-hr LC50 and 95% confidence interval calculated for SDS was 23 ppm [19-26 ppm] which was consistent with the reported NCP LC50 values for SDS.

4. Results - *Menidia* Toxicity Tests

4.1 *Menidia* Testing Schedule

Following the first round of acute toxicity tests, dispersant LC50s were determined to be greater than the highest concentration tested for two of the eight dispersants. Definitive acute toxicity tests were repeated using higher test concentrations for Corexit 9500A and JD-2000.

4.2 *Menidia* Test Acceptability

Control performance met all criteria for an acceptable exposure in each of the eight dispersant tests conducted ($\geq$ 90%). All water quality parameters were within ranges specified in the test protocol for *Menidia beryllina*.

4.3 *Menidia* Toxicity Results

In the first series of acute tests, LC50 values and 95% confidence intervals were successfully determined for Dispersit SPC 1000, Nokomis 3-AA, Nokomis 3-F4, Saf-Ron Gold, Sea Brat #4 and ZI-400. In the second series of repeat acute tests, an LC50 was calculated for Corexit 9500A but not for the dispersant JD-2000. These data are summarized in Table 2. In the case of JD-2000, 20% mortality was observed in the highest concentration tested of 5,600 ppm, followed by no mortality observed in the next two highest exposure concentrations which indicated an LC50 > 5,500 ppm. At the highest concentration, solid material was observed at the

bottom of the replicate test vessels suggesting saturation of the dispersant may have been achieved.

The LC50 values for dispersant acute toxicity tests with *Menidia* ranged from 2.9 ppm for Dispersit SPC1000 to 130 ppm for Corexit 9500A; the LC50 for JD 2000 exceeded the highest test concentration of 5,600 ppm. Using the EPA toxicity classification, Dispersit SPC1000 would be considered moderately toxic whereas Nokomis-3AA, Nokomis 3-F4, Saf-Ron Gold, Sea Brat #4 and ZI-400 would be classified as slightly toxic, and Corexit 9500A and JD-2000 as practically non-toxic to inland silversides.

Based on comparison of LC50 values and 95% confidence intervals, the rank order toxicity (most to least toxic) of the dispersants to *Menidia* were: (1) Disersit SPC1000, (2) Nokomis 3-F4, Nokomis 3-AA, ZI-400, (3) Saf-Ron Gold, (4) Sea Brat #4, (5) Corexit 9500A, and (6) JD-2000.

The factor ratios calculated for Dispersit SPC1000, Nokomis 3-AA, Nokomis 3-F4, Saf-Ron Gold, Sea Brat #4 and ZI-400 were less than or equal to 1.83 which was considered within normal inter-laboratory variability. The factor ratios of 5.2 and 13.8 for Corexit 9500A and JD-2000 indicate that the LC50 values reported for Corexit 9500A and JD-200 in the NCP Product Schedules would be considered different (i.e., lower) from the LC50 values determined in the present study.

Possible explanations for the 13.8 fold difference between the reported NCP LC50 for JD-2000 and the highest exposure concentration tested in the present study may be attributable to batch-to-batch variability in the manufacturing process, instability of the stored product over time, or a change in the product formulation.

4.4 *Menidia* Reference Toxicant Test

A 96-hr acute toxicity test was conducted with the reference toxicant SDS to evaluate the relative sensitivity of the *Menidia* used in the series of dispersant toxicity tests. The *Menidia* tested with SDS were from the same population and age range used for dispersant testing. The

96-hr LC50 and 95% confidence interval calculated for SDS was 9.5 ppm [8.7-10 ppm] which was consistent with the reported NCP LC50 values for SDS. It should be noted that during the last 24 hours of the test, the temperature dropped to 22°C, which was 2 degrees below the acceptable criteria and thus invalidated the test. However, there was no difference in mortality counts between the 72-hour and the 96-hour observations suggesting the temperature change had no negative impact on the test or the final calculated LC50.

5.0 Conclusions

The present study provided an independent, quantitative assessment of acute toxicities of eight dispersants to two aquatic species inhabiting Gulf of Mexico waters. Toxicity was determined as the LC50 derived from standard short term acute tests using standard test species, specifically the Gulf mysid, *Americamysis bahia*, and the inland silverside, *Menidia beryllina*. In general, the toxicity values (i.e., LC50s) for mysids ranged over nearly two orders of magnitude and for *Menidia* over three orders of magnitude. Given the expected range of inter-laboratory variability, the results of the present study were consistent with test results reported in the NCP Product Schedule, with the exception of two dispersants for each test species which yielded higher LC50s (i.e., lower toxicity) than reported in the NCP. The rank order toxicity of the eight dispersants was generally similar to the information provided in the NCP Product Schedule. For both test species, Dispersit SPC1000 was the most toxic and JD-2000 the least toxic. The other six dispersants varied in relative toxicity to mysids and *Menidia*, with LC50 values ranging from 20 to 130 ppm. Overall, the dispersants were classified as being slightly toxic to practically non-toxic to both test species, with the exception that Dispersit SPC1000 would be considered moderately toxic to *Menidia*. Corexit 9500A, the dispersant currently applied offshore at the surface and underwater, falls into the slightly toxic category for mysids and the practically non toxic category for *Menidia*.

Short-term acute toxicity tests using consistent methodologies and test organisms provide important and fundamental information on oil spill dispersants and other toxicants. The next phase of testing will examine the acute toxicity of Louisiana sweet crude oil and dispersant-sweet crude oil mixtures on mysids and *Menidia*. The comparative toxicity analysis of dispersants, sweet crude oil and dispersant-sweet crude oil mixtures on standard aquatic test

species will provide improved understanding of potential toxicological effects associated with this oil spill.

6.0 References

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USEPA. 2010a. http://www.epa.gov/emergencies/content/ncp/product_schedule.htm

USEPA. 2010b. http://www.epa.gov/oppefed1/ecorisk_ders/toera_analysis_eco.htm#Ecotox. Accessed June 23, 2010.

Table 1. Results of mysid 48-hr static acute toxicity tests with eight dispersants. LC50 values (ppm), 95% confidence intervals [in brackets] and the toxicity classification of dispersant LC50s derived in the present study. NCP Product Schedule listing of dispersant LC50s and 95% confidence intervals [in brackets] shown in right column for comparison.

Dispersant	This Study LC50 (ppm) [95% CI]	Toxicity Category[1]	NCP Product Schedule LC50 (ppm) [95% CI][d]
Dispersit SPC 1000	12 [10-14][a]	Slightly Toxic	16.6 [14.1-19.6]
Nokomis 3-AA	30 [27-34][b]	Slightly Toxic	20.2 [17.4-22.8]
Corexit 9500A	42 [38-47][c]	Slightly Toxic	32.2 [26.5-39.2]
Nokomis 3-F4	42 [38-47][c]	Slightly Toxic	32.2 [28.4-36.5]
ZI -400	55 [50-61][b]	Slightly Toxic	21.0 [17.9-24.5]
Sea Brat #4	65 [57-74][a]	Slightly Toxic	14.0 [±10.4]
Saf-Ron Gold	118 [104-133][b]	Practically Non-Toxic	63.0[e] [52.9-75.1]
JD-2000	788 [627-946][a]	Practically Non-Toxic	90.5[e] [76.1-108]

[1]Toxicity classification per USEPA 2010 applied to results of present study
[a]Estimated by linear regression method
[b]Estimated by Spearman-Karber method
[c]Estimated by binomial method
[d]Values as reported in NCP Product Schedule documentation by manufacturer
[e]Classified as slightly toxic according to values provided in NCP Product Schedule

Table 2. Results of *Menidia* 96-hr static acute toxicity tests with eight dispersants. LC50 values (ppm), 95% confidence intervals [in brackets] and the toxicity classification of dispersant LC50s derived in the present study. NCP Product Schedule listing of dispersant LC50s and 95% confidence intervals [in brackets] shown in right column for comparison.

Dispersant	This Study LC50 (ppm) [95% CI]	Toxicity Category[1]	NCP Product Schedule LC50 (ppm) [95% CI][d]
Dispersit SPC 1000	2.9 [2.5-3.2][b]	Moderately Toxic	3.5 [3.1-4.0]
Nokomis 3-F4	19 [16-21][b]	Slightly Toxic	29.8 [24.0-35.4]
Nokomis 3-AA	19 [17-21][b]	Slightly Toxic	34.2 [29.2-37.95]
ZI -400	21 [18-23][b]	Slightly Toxic	31.8 [28.7-35.1]
Saf-Ron Gold	44 [41-47][b]	Slightly Toxic	29.4 [25.2-34.3]
Sea Brat #4	55 [49-62][b]	Slightly Toxic	30.0 [±16.2]
Corexit 9500A	130 [122-138][b]	Practically Non-Toxic	25.2[e] [13.6-46.6]
JD-2000	>5,600	Practically Non-Toxic	407 [330-501]

[1]Toxicity classification per USEPA 2010 applied to results of present study
[b]Estimated by Spearman-Karber method
[d]Values as reported in NCP Product Schedule documentation by manufacturer
[e]Classified as slightly toxic according to values provided in NCP Product Schedule

Appendix A

Test parameter	**Specified in SubPart J Appendix C (USEPA 1997)**	**Method used in present study, and specified in USEPA 2002**
Photoperiod and light intensity	*24 hr light *higher intensity light	*16 hr light/8 hr dark *Moderate intensity light
Glassware cleaning	*Hexane immersion	*Acetone rinse
Reference toxicant test	*Two species simultaneously	*Staggered tests
Rangefinder tests	*Prior to definitive test	*Use NCP data to define test concentrations
Mysid age	*5-7 day old larvae	*1 to 6 day old; all within 24 hr same age
Toxicant stock solution preparation for mysid test	*Blender 10,000 rpm *gas tight syringes	*Top stirring at 70% vortex *graduated glass pipettes
Mysid test solution mixing	*no specification	*short term gentle mixing following stock addition
Mysid additions to test chambers	*no specification	*impartial, two at a time
Menidia age	*7 day old larvae	*9-14 day old, all within 24 hr same age
Menidia test solution mixing	*test jars on shaker platform	*same procedure as for mysids
Dilution Water	*Natural Seawater Prefered	*Salinity adjusted, 20 μm filtered natural seawater

NALCO

SAFETY DATA SHEET

PRODUCT

COREXIT(R) EC9527A

EMERGENCY TELEPHONE NUMBER(S)

(800) 424-9300 (24 Hours) CHEMTREC

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : **COREXIT(R) EC9527A**

APPLICATION : OIL SPILL DISPERSANT

COMPANY IDENTIFICATION : Nalco Company
1601 W. Diehl Road
Naperville, Illinois
60563-1198

EMERGENCY TELEPHONE NUMBER(S) : (800) 424-9300 (24 Hours) CHEMTREC

NFPA 704M/HMIS RATING
HEALTH : 2 / 2 FLAMMABILITY : 1 / 1 INSTABILITY : 0 / 0 OTHER :
0 = Insignificant 1 = Slight 2 = Moderate 3 = High 4 = Extreme

2. COMPOSITION/INFORMATION ON INGREDIENTS

Our hazard evaluation has identified the following chemical substance(s) as hazardous. Consult Section 15 for the nature of the hazard(s).

Hazardous Substance(s)	CAS NO	% (w/w)
2-Butoxyethanol	111-76-2	30.0 - 60.0
Organic sulfonic acid salt	Proprietary	10.0 - 30.0
Propylene Glycol	57-55-6	1.0 - 5.0

3. HAZARDS IDENTIFICATION

****EMERGENCY OVERVIEW****

WARNING
Eye and skin irritant. Repeated or excessive exposure to butoxyethanol may cause injury to red blood cells (hemolysis), kidney or the liver. Harmful by inhalation, in contact with skin and if swallowed.
Do not get in eyes, on skin, on clothing. Do not take internally. Use with adequate ventilation. Wear suitable protective clothing. Keep container tightly closed. Flush affected area with water. Keep away from heat. Keep away from sources of ignition - No smoking.
May evolve oxides of carbon (COx) under fire conditions.

PRIMARY ROUTES OF EXPOSURE :
Eye, Skin

HUMAN HEALTH HAZARDS - ACUTE :

EYE CONTACT :
Can cause moderate irritation.

SKIN CONTACT :
Can cause moderate irritation. Harmful if absorbed through skin.

INGESTION :
May be harmful if swallowed. May cause liver and kidney effects and/or damage. There may be irritation to the gastro-intestinal tract.

INHALATION :
Harmful by inhalation. Repeated or prolonged exposure may irritate the respiratory tract.

SYMPTOMS OF EXPOSURE :
Acute :
Excessive exposure may cause central nervous system effects, nausea, vomiting, anesthetic or narcotic effects.
Chronic :
Repeated or excessive exposure to butoxyethanol may cause injury to red blood cells (hemolysis), kidney or the liver.

AGGRAVATION OF EXISTING CONDITIONS :
Skin contact may aggravate an existing dermatitis condition.

HUMAN HEALTH HAZARDS - CHRONIC :
Contains ethylene glycol monobutyl ether (butoxyethanol). Prolonged and/or repeated exposure through inhalation or extensive skin contact with EGBE may result in damage to the blood and kidneys.

4. FIRST AID MEASURES

EYE CONTACT :
Flush affected area with water. Get medical attention.

SKIN CONTACT :
Flush affected area with water. Get medical attention.

INGESTION :
Do not induce vomiting without medical advice. If conscious, washout mouth and give water to drink. Get medical attention.

INHALATION :
Remove to fresh air, treat symptomatically. If symptoms develop, seek medical advice.

NOTE TO PHYSICIAN :
Based on the individual reactions of the patient, the physician's judgement should be used to control symptoms and clinical condition.

5. FIRE FIGHTING MEASURES

FLASH POINT : 163 °F / 72.7 °C (TCC)

This product does not sustain combustion per the method outlined in 49 CFR Appendix H.

EXTINGUISHING MEDIA :
This product would not be expected to burn unless all the water is boiled away. The remaining organics may be ignitable. Use extinguishing media appropriate for surrounding fire.

FIRE AND EXPLOSION HAZARD :
May evolve oxides of carbon (COx) under fire conditions.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE FIGHTING :
In case of fire, wear a full face positive-pressure self contained breathing apparatus and protective suit.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS :
Restrict access to area as appropriate until clean-up operations are complete. Stop or reduce any leaks if it is safe to do so. Do not touch spilled material. Ventilate spill area if possible. Use personal protective equipment recommended in Section 8 (Exposure Controls/Personal Protection).

METHODS FOR CLEANING UP :
SMALL SPILLS: Soak up spill with absorbent material. Place residues in a suitable, covered, properly labeled container. Wash affected area. LARGE SPILLS: Contain liquid using absorbent material, by digging trenches or by diking. Reclaim into recovery or salvage drums or tank truck for proper disposal. Contact an approved waste hauler for disposal of contaminated recovered material. Dispose of material in compliance with regulations indicated in Section 13 (Disposal Considerations).

ENVIRONMENTAL PRECAUTIONS :
Do not contaminate surface water.

7. HANDLING AND STORAGE

HANDLING :
Avoid eye and skin contact. Do not take internally. Ensure all containers are labeled. Keep the containers closed when not in use.

STORAGE CONDITIONS :
Store the containers tightly closed.

SUITABLE CONSTRUCTION MATERIAL :
Stainless Steel 316L, Hastelloy C-276, MDPE (medium density polyethylene), Nitrile, Plexiglass, Kalrez, TFE, Alfax, Teflon, HDPE (high density polyethylene), Neoprene, Aluminum, Polypropylene, Polyethylene, Carbon Steel C1018, Stainless Steel 304, Compatibility with Plastic Materials can vary; we therefore recommend that compatibility is tested prior to use., FEP (encapsulated), Perfluoroelastomer, PVC

UNSUITABLE CONSTRUCTION MATERIAL :
Copper, Mild steel, Brass, Nylon, Buna-N, Natural rubber, Polyurethane, Hypalon, Viton, Ethylene propylene, EPDM

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OCCUPATIONAL EXPOSURE LIMITS :
Exposure guidelines have not been established for this product. Available exposure limits for the substance(s) are shown below.

ACGIH/TLV :
Substance(s)
2-Butoxyethanol TWA: 20 ppm , 97 mg/m3

Propylene Glycol
OSHA/PEL :
Substance(s)
2-Butoxyethanol TWA: 50 ppm , 240 mg/m3 (Skin)

Propylene Glycol
AIHA/WEEL :
Substance(s)
For propylene glycol, an 8 hour TWA of 10 mg/m3 (aerosol) and 50 ppm (total).

ENGINEERING MEASURES :
General ventilation is recommended.

RESPIRATORY PROTECTION :
Where concentrations in air may exceed the limits given in this section, the use of a half face filter mask or air supplied breathing apparatus is recommended. A suitable filter material depends on the amount and type of chemicals being handled. Consider the use of filter type: Multi-contaminant cartridge. with a Particulate pre-filter. In event of emergency or planned entry into unknown concentrations a positive pressure, full -facepiece SCBA should be used. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.

HAND PROTECTION :
Neoprene gloves, Nitrile gloves, Butyl gloves, PVC gloves

SKIN PROTECTION :
Wear standard protective clothing.

EYE PROTECTION :
Wear chemical splash goggles.

HYGIENE RECOMMENDATIONS :
Keep an eye wash fountain available. Keep a safety shower available. If clothing is contaminated, remove clothing and thoroughly wash the affected area. Launder contaminated clothing before reuse.

HUMAN EXPOSURE CHARACTERIZATION :
Based on our recommended product application and personal protective equipment, the potential human exposure is: Low

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE	Liquid
APPEARANCE	Clear Amber
ODOR	Mild
SPECIFIC GRAVITY	0.98 - 1.02
DENSITY	8.2 - 8.5 lb/gal
SOLUBILITY IN WATER	Complete
pH (100 %)	6.1
VISCOSITY	160 cst @ 32 °F / 0 °C
POUR POINT	ASTM D-97 -66.9 °F / -55 °C
POUR POINT	< -40 °F / < -40 °C
BOILING POINT	340 °F / 171 °C
VAPOR PRESSURE	< 5 mm Hg @ 100 °F / 38 °C Same as water
EVAPORATION RATE	0.1

Note: These physical properties are typical values for this product and are subject to change.

10. STABILITY AND REACTIVITY

STABILITY :
Stable under normal conditions.

HAZARDOUS POLYMERIZATION :
Hazardous polymerization will not occur.

CONDITIONS TO AVOID :
Extremes of temperature

MATERIALS TO AVOID :
Contact with strong oxidizers (e.g. chlorine, peroxides, chromates, nitric acid, perchlorate, concentrated oxygen, permanganate) may generate heat, fires, explosions and/or toxic vapors.

HAZARDOUS DECOMPOSITION PRODUCTS :
Under fire conditions: Oxides of carbon

11. TOXICOLOGICAL INFORMATION

No toxicity studies have been conducted on this product.

SENSITIZATION :
This product is not expected to be a sensitizer.

CARCINOGENICITY :
None of the substances in this product are listed as carcinogens by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP) or the American Conference of Governmental Industrial Hygienists (ACGIH).

HUMAN HAZARD CHARACTERIZATION :
Based on our hazard characterization, the potential human hazard is: High

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL EFFECTS :

No toxicity studies have been conducted on this product.

ACUTE FISH RESULTS :

Species	Exposure	LC50	Test Descriptor
Turbot	96 hrs	50 mg/l	

MOBILITY :
The environmental fate was estimated using a level III fugacity model embedded in the EPI (estimation program interface) Suite TM, provided by the US EPA. The model assumes a steady state condition between the total input and output. The level III model does not require equilibrium between the defined media. The information provided is intended to give the user a general estimate of the environmental fate of this product under the defined conditions of the models.
If released into the environment this material is expected to distribute to the air, water and soil/sediment in the approximate respective percentages;

Air	Water	Soil/Sediment
<5%	10 - 30%	70 - 90%

The portion in water is expected to be soluble or dispersible.

BIOACCUMULATION POTENTIAL
Component substances have a low potential to bioconcentrate.

ENVIRONMENTAL HAZARD AND EXPOSURE CHARACTERIZATION
Based on our hazard characterization, the potential environmental hazard is: Moderate
Based on our recommended product application and the product's characteristics, the potential environmental exposure is: Low

If released into the environment, see CERCLA/SUPERFUND in Section 15.

13. DISPOSAL CONSIDERATIONS

If this product becomes a waste, it is not a hazardous waste as defined by the Resource Conserv ation and Recovery Act (RCRA) 40 CFR 261, since it does not hav e the characteristics of Subpart C, nor is it listed under Subpart D.

As a non-hazardous waste, it is not subject to federal regulation. Consult state or local regulation for any additional handling, treatment or disposal requirements. For disposal, contact a properly licensed waste treatment, storage, disposal or recycling facility.

14. TRANSPORT INFORMATION

The information in this section is for reference only and should not take the place of a shipping paper (bill of lading) specific to an order. Please note that the proper Shipping Name / Hazard Class may vary by packaging, properties, and mode of transportation. Typical Proper Shipping Names for this product are as follows.

LAND TRANSPORT :

Proper Shipping Name : PRODUCT IS NOT REGULATED DURING TRANSPORTATION

AIR TRANSPORT (ICAO/IATA) :

Proper Shipping Name : PRODUCT IS NOT REGULATED DURING TRANSPORTATION

MARINE TRANSPORT (IMDG/IMO) :

Proper Shipping Name : PRODUCT IS NOT REGULATED DURING TRANSPORTATION

15. REGULATORY INFORMATION

This section contains additional information that may have relevance to regulatory compliance. The information in this section is for reference only. It is not exhaustive, and should not be relied upon to take the place of an individualized compliance or hazard assessment. Nalco accepts no liability for the use of this information.

NATIONAL REGULATIONS, USA :

OSHA HAZARD COMMUNICATION RULE, 29 CFR 1910.1200 :
Based on our hazard evaluation, none of the substances in this product are hazardous.

CERCLA/SUPERFUND, 40 CFR 117, 302 :
Notification of spills of this product is not required.

SARA/SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (TITLE III) - SECTIONS 302, 311, 312, AND 313 :

SECTION 302 - EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355) :
This product does not contain substances listed in Appendix A and B as an Extremely Hazardous Substance.

SECTIONS 311 AND 312 - MATERIAL SAFETY DATA SHEET REQUIREMENTS (40 CFR 370) :
Our hazard evaluation has found this product to be hazardous. The product should be reported under the following indicated EPA hazard categories:

X	Immediate (Acute) Health Hazard
X	Delayed (Chronic) Health Hazard
X	Fire Hazard
	Sudden Release of Pressure Hazard
	Reactive Hazard

Under SARA 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are: 500 pounds or the threshold planning quantity (TPQ), whichev er is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

SECTION 313 - LIST OF TOXIC CHEMICALS (40 CFR 372) :
This product contains the following substance(s), (with CAS # and % range) which appear(s) on the List of Toxic Chemicals

Hazardous Substance(s)	CAS NO	% (w/w)
Glycol Ethers		30 - 60

TOXIC SUBSTANCES CONTROL ACT (TSCA) :
The substances in this preparation are included on or exempted from the TSCA 8(b) Inventory (40 CFR 710)

FEDERAL WATER POLLUTION CONTROL ACT, CLEAN WATER ACT, 40 CFR 401.15 / formerly Sec. 307, 40 CFR 116.4 / formerly Sec. 311 :
None of the substances are specifically listed in the regulation.

CLEAN AIR ACT, Sec. 112 (40 CFR 61, Hazardous Air Pollutants), Sec. 602 (40 CFR 82, Class I and II Ozone Depleting Substances) :
None of the substances are specifically listed in the regulation.

CALIFORNIA PROPOSITION 65 :
This product does not contain substances which require warning under California Proposition 65.

MICHIGAN CRITICAL MATERIALS :
None of the substances are specifically listed in the regulation.

STATE RIGHT TO KNOW LAWS :
The following substances are disclosed for compliance with State Right to Know Laws:

2-Butoxyethanol	111-76-2
Propylene Glycol	57-55-6

NATIONAL REGULATIONS, CANADA :

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS) :
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS CLASSIFICATION :
D2B - Materials Causing Other Toxic Effects - Toxic Material

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) :
The substances in this preparation are listed on the Domestic Substances List (DSL), are exempt, or hav e been reported in accordance with the New Substances Notification Regulations.

AUSTRALIA
All substances in this product comply with the National Industrial Chemicals Notification & Assessment Scheme (NICNAS).

CHINA
All substances in this product comply with the Chemical Control Law and are listed on the Inventory of Existing Chemical Substances China (IECSC).

EUROPE
The substance(s) in this preparation are included in or exempted from the EINECS or ELINCS inventories

JAPAN
All substances in this product comply with the Law Regulating the Manufacture and Importation Of Chemical Substances and are listed on the Ministry of Intern ational Trade & industry List (MITI).

KOREA
All substances in this product comply with the Toxic Chemical Control Law (TCCL) and are listed on the Existing Chemicals List (ECL)

PHILIPPINES
All substances in this product comply with the Republic Act 6969 (RA 6969) and are listed on the Philippines Inventory of Chemicals & Chemical Substances (PICCS).

16. OTHER INFORMATION

Due to our commitment to Product Stewardship, we have evaluated the human and environmental hazards and exposures of this product. Based on our recommended use of this product, we hav e characterized the product's general risk. This information should provide assistance for your own risk management practices. We have evaluated our product's risk as follows:

* The human risk is: Low

* The environmental risk is: Low

Any use inconsistent with our recommendations may affect the risk characterization. Our sales representative will assist you to determine if your product application is consistent with our recommendations. Together we can implement an appropriate risk management process.

This product material safety data sheet provides health and safety information. The product is to be used in applications consistent with our product literature. Individuals handling this product should be informed of the recommended safety precautions and should have access to this information. For any other uses, exposures should be evaluated so that appropriate handling practices and training programs can be established to insure safe workplace operations. Please consult your local sales representative for any further information.

REFERENCES

Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices, American Conference of Governmental Industrial Hygienists, OH., (Ariel Insight™™ CD-ROM Version), Ariel Research Corp., Bethesda, MD.

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Annual Report on Carcinogens, National Toxicology Program, U.S. Department of Health and Human Services, Public Health Service.

Title 29 Code of Federal Regulations, Part 1910, Subpart Z, Toxic and Hazardous Substances, Occupational Safety and Health Administration (OSHA), (Ariel Insight™™ CD-ROM Version), Ariel Research Corp., Bethesda, MD.

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The Teratogen Information System, University of Washington, Seattle, WA (TOMES CPS™™ CD-ROM Version), Micromedex, Inc., Englewood, CO.

Prepared By : Product Safety Department
Date issued : 10/15/2008
Version Number : 1.7

Dispersant Monitoring and Assessment Directive – Addendum 1

This is an addendum (Addendum 1) to the Dispersant Monitoring and Assessment Directive issued on May 10, 2010, by the U.S. Coast Guard (USCG) and the Environmental Protection Agency (EPA) to BP. The requirements in this Addendum 1 apply to Part 2 of the May 10, 2010 Directive and are in addition to the requirements of that Directive. BP shall commence Part 2 requirements before subsurface application of dispersant is initiated and continue the Part 2 requirements and this Addendum 1 until cancelled or modified by the USCG and EPA.

Additional Requirements:

1. Sampling of dispersant/oil and oil-only waters must be continued per the Directive, and in addition, baseline data of waters without direct application of dispersant or oil shall also be collected by BP.
2. BP shall allow EPA/NOAA scientists flexibility within the sampling plan to direct the collection of additional data based on field observations (at times and locations of their choice). For example, EPA may request to recast the station if the CDOM fluorometer indicates a large increase in signal after data review. EPA/NOAA staff must be allowed to be in constant communication with staff on shore.
3. BP shall use Turner Designs C3 fluorometer (e.g., SMART protocol) to distinguish between oil impacted surface waters and those not impacted by oil.
4. BP shall use a CTD rosette package equipped with CDOM fluorometer and a 2-way communication wire to ensure that EPA/NOAA scientists can view profile data as the rosette package is deployed to 1500 meters. In addition, the CDT rosette package must be capable of collecting discrete samples in the water column using the live feed data stream. The requirement must be met within 7 days for the RV Brooks McCall. All other vessels must immediately meet this requirement.
5. BP shall deploy LISST from the vessel for continuous sampling of surface waters during transits, in order to provide particle size counts information which potentially distinguishes between dispersed and non-dispersed oil.
6. Discrete water samples shall be taken by BP at predetermined depths as specified or directed by EPA/NOAA scientists for UV fluorescences.
7. BP shall provide 48 hour advanced notice for departure and trip duration timelines to the FOSC and the EPA RRT Co-chair.
8. Data reporting shall be conducted by BP on a daily basis. This reporting shall include a sample tracking table. Data reporting shall be provided by BP to the FOSC and the EPA RRT Co-chair.

(b) (6)

Date: 5/14/2010

Mary E. Landry
Rear Admiral, USCG
Federal On-Scene Coordinator

(b) (6)

Date: 5/14/2010

Samuel Coleman, P.E.
Director
Superfund Division
U.S. EPA Region 6
Dallas, TX 75202

bp

Doug Suttles
Chief Operating Officer

Exploration & Production
BP America Inc.
501 WestLake Park Boulevard
Houston, TX 77079

May 21, 2010

Rear Admiral Mary Landry
Commander, Eighth Coast Guard District
Hale Boggs Federal Building
500 Poydras Street
New Orleans, LA 70130

Samuel Coleman, P.E.
Director, Superfund Division
U.S. EPA Region 6
Dallas, TX 75202

Direct (b) (6)
Fax (b) (6)
(b) (6) bp.com

Request for Temporary Waiver of Dispersant Monitoring

Dear Admiral Landry and Mr. Coleman:

In compliance with the May 9, 2010 Dispersant Monitoring and Assessment Directive (the "Directive"), BP Exploration & Production Inc. ("BP") has been monitoring the application of subsurface dispersant with the RV Brooks McCall. As discussed in detail below, BP requests a waiver of the requirement of dispersant monitoring for the period of time required for RV Brooks McCall to return to port, for BP to install required equipment, and return to its station and resume monitoring.

Under Addendum 1 to the Directive, to continue application of subsurface dispersant after midnight of May 21, 2010, BP must install additional equipment on the RV Brooks McCall that requires it to return to port. In addition, to assure the RV Brooks McCall will be available to apply subsurface dispersant during the entire anticipated time period for the "Top Kill" operation, it will need to return to port for resupply.

BP plans to bring the RV Brooks McCall to port, departing 1830 Friday, May 21 and arriving Port Fourchon at 0600 Saturday, May 22, and it anticipates that the RV Brooks McCall will be able to return on station and resume monitoring by approximately 0900 hrs on Sunday, May 23. BP requests a waiver of the requirement of dispersant monitoring for the period of time required for RV Brooks McCall to return to port, for BP to install required equipment, and return to its station and resume monitoring.

Sincerely,

(b) (6)

Douglas J. Suttles

U.S. Department of Homeland Security

United States Coast Guard

Commander
Eighth Coast Guard District

Hale Boggs Federal Building
500 Poydras Street
New Orleans, LA 70130
Staff Symbol (dl)
Phone: (504) 671-2331

16480
May 21, 2010

Doug Suttles
Chief Operating Officer
Exploration & Production
BP America Inc.
501 WestLake Park Boulevard
Houston, Texas 77079

Re: Request for Temporary Waiver of Dispersant Monitoring

I received your letter request dated May 21, 2010, in which you requested a waiver of the requirement of dispersant monitoring for the period of time required for RV Brooks McCall to return to port, for BP to install required equipment, and return to its station and resume monitoring.

Your request is approved, subject to the estimated schedule outlined in your request, and subject to the following terms: You shall continue to use an integrated management approach to control the oil, including prioritization of offshore response efforts that focuses on mechanical recovery, skimming, and burning on the surface, as well as subsurface dispersant application. If mechanical recovery and other surface efforts are not feasible, you will employ surface application of dispersant. You must minimize, to the maximum extent feasible, application of surface and subsurface dispersants. In coordination with the Coast Guard, you shall immediately comply with the monitoring provisions of the May 9, 2010 Directive, Section II "Special Monitoring of Applied Response Technologies ("SMART") Protocol for Surface Application of Dispersants" to determine efficiency and short term impacts of dispersant application.

Separately, EPA and the Coast Guard will pursue the use of less toxic dispersants with you if feasible.

(b) (6)

MARY E. LANDRY
Rear Admiral, U.S. Coast Guard
Federal On-Scene Coordinator

NALCO

SAFETY DATA SHEET

PRODUCT

COREXIT(R) EC9527A

EMERGENCY TELEPHONE NUMBER(S)
(800) 424-9300 (24 Hours) CHEMTREC

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : **COREXIT(R) EC9527A**

APPLICATION : OIL SPILL DISPERSANT

COMPANY IDENTIFICATION : Nalco Company
1601 W. Diehl Road
Naperville, Illinois
60563-1198

EMERGENCY TELEPHONE NUMBER(S) : (800) 424-9300 (24 Hours) CHEMTREC

NFPA 704M/HMIS RATING
HEALTH : 2 / 2 FLAMMABILITY : 1 / 1 INSTABILITY : 0 / 0 OTHER :
0 = Insignificant 1 = Slight 2 = Moderate 3 = High 4 = Extreme

2. COMPOSITION/INFORMATION ON INGREDIENTS

Our hazard evaluation has identified the following chemical substance(s) as hazardous. Consult Section 15 for the nature of the hazard(s).

Hazardous Substance(s)	CAS NO	% (w/w)
2-Butoxyethanol	111-76-2	30.0 - 60.0
Organic sulfonic acid salt	Proprietary	10.0 - 30.0
Propylene Glycol	57-55-6	1.0 - 5.0

3. HAZARDS IDENTIFICATION

****EMERGENCY OVERVIEW****

WARNING
Eye and skin irritant. Repeated or excessive exposure to butoxyethanol may cause injury to red blood cells (hemolysis), kidney or the liver. Harmful by inhalation, in contact with skin and if swallowed.
Do not get in eyes, on skin, on clothing. Do not take internally. Use with adequate ventilation. Wear suitable protective clothing. Keep container tightly closed. Flush affected area with water. Keep away from heat. Keep away from sources of ignition - No smoking.
May evolve oxides of carbon (COx) under fire conditions.

PRIMARY ROUTES OF EXPOSURE :
Eye, Skin

HUMAN HEALTH HAZARDS - ACUTE :

EYE CONTACT :
Can cause moderate irritation.

SKIN CONTACT :
Can cause moderate irritation. Harmful if absorbed through skin.

INGESTION :
May be harmful if swallowed. May cause liver and kidney effects and/or damage. There may be irritation to the gastro-intestinal tract.

INHALATION :
Harmful by inhalation. Repeated or prolonged exposure may irritate the respiratory tract.

SYMPTOMS OF EXPOSURE :
Acute :
Excessive exposure may cause central nervous system effects, nausea, vomiting, anesthetic or narcotic effects.
Chronic :
Repeated or excessive exposure to butoxyethanol may cause injury to red blood cells (hemolysis), kidney or the liver.

AGGRAVATION OF EXISTING CONDITIONS :
Skin contact may aggravate an existing dermatitis condition.

HUMAN HEALTH HAZARDS - CHRONIC :
Contains ethylene glycol monobutyl ether (butoxyethanol). Prolonged and/or repeated exposure through inhalation or extensive skin contact with EGBE may result in damage to the blood and kidneys.

4. FIRST AID MEASURES

EYE CONTACT :
Flush affected area with water. Get medical attention.

SKIN CONTACT :
Flush affected area with water. Get medical attention.

INGESTION :
Do not induce vomiting without medical advice. If conscious, washout mouth and give water to drink. Get medical attention.

INHALATION :
Remove to fresh air, treat symptomatically. If symptoms develop, seek medical advice.

NOTE TO PHYSICIAN :
Based on the individual reactions of the patient, the physician's judgement should be used to control symptoms and clinical condition.

5. FIRE FIGHTING MEASURES

FLASH POINT : 163 °F / 72.7 °C (TCC)

This product does not sustain combustion per the method outlined in 49 CFR Appendix H.

EXTINGUISHING MEDIA :
This product would not be expected to burn unless all the water is boiled away. The remaining organics may be ignitable. Use extinguishing media appropriate for surrounding fire.

FIRE AND EXPLOSION HAZARD :
May evolve oxides of carbon (COx) under fire conditions.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE FIGHTING :
In case of fire, wear a full face positive-pressure self contained breathing apparatus and protective suit.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS :
Restrict access to area as appropriate until clean-up operations are complete. Stop or reduce any leaks if it is safe to do so. Do not touch spilled material. Ventilate spill area if possible. Use personal protective equipment recommended in Section 8 (Exposure Controls/Personal Protection).

METHODS FOR CLEANING UP :
SMALL SPILLS: Soak up spill with absorbent material. Place residues in a suitable, covered, properly labeled container. Wash affected area. LARGE SPILLS: Contain liquid using absorbent material, by digging trenches or by diking. Reclaim into recovery or salvage drums or tank truck for proper disposal. Contact an approved waste hauler for disposal of contaminated recovered material. Dispose of material in compliance with regulations indicated in Section 13 (Disposal Considerations).

ENVIRONMENTAL PRECAUTIONS :
Do not contaminate surface water.

7. HANDLING AND STORAGE

HANDLING :
Avoid eye and skin contact. Do not take internally. Ensure all containers are labeled. Keep the containers closed when not in use.

STORAGE CONDITIONS :
Store the containers tightly closed.

SUITABLE CONSTRUCTION MATERIAL :
Stainless Steel 316L, Hastelloy C-276, MDPE (medium density polyethylene), Nitrile, Plexiglass, Kalrez, TFE, Alfax, Teflon, HDPE (high density polyethylene), Neoprene, Aluminum, Polypropylene, Polyethylene, Carbon Steel C1018, Stainless Steel 304, Compatibility with Plastic Materials can vary; we therefore recommend that compatibility is tested prior to use., FEP (encapsulated), Perfluoroelastomer, PVC

UNSUITABLE CONSTRUCTION MATERIAL :
Copper, Mild steel, Brass, Nylon, Buna-N, Natural rubber, Polyurethane, Hypalon, Viton, Ethylene propylene, EPDM

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OCCUPATIONAL EXPOSURE LIMITS :
Exposure guidelines have not been established for this product. Available exposure limits for the substance(s) are shown below.

ACGIH/TLV :
Substance(s)
2-Butoxyethanol TWA: 20 ppm , 97 mg/m3

Propylene Glycol
OSHA/PEL :
Substance(s)
2-Butoxyethanol TWA: 50 ppm , 240 mg/m3 (Skin)

Propylene Glycol
AIHA/WEEL :
Substance(s)
For propylene glycol, an 8 hour TWA of 10 mg/m3 (aerosol) and 50 ppm (total).

ENGINEERING MEASURES :
General ventilation is recommended.

RESPIRATORY PROTECTION :
Where concentrations in air may exceed the limits given in this section, the use of a half face filter mask or air supplied breathing apparatus is recommended. A suitable filter material depends on the amount and type of chemicals being handled. Consider the use of filter type: Multi-contaminant cartridge. with a Particulate pre-filter. In event of emergency or planned entry into unknown concentrations a positive pressure, full-facepiece SCBA should be used. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.

HAND PROTECTION :
Neoprene gloves, Nitrile gloves, Butyl gloves, PVC gloves

SKIN PROTECTION :
Wear standard protective clothing.

EYE PROTECTION :
Wear chemical splash goggles.

HYGIENE RECOMMENDATIONS :
Keep an eye wash fountain available. Keep a safety shower available. If clothing is contaminated, remove clothing and thoroughly wash the affected area. Launder contaminated clothing before reuse.

HUMAN EXPOSURE CHARACTERIZATION :
Based on our recommended product application and personal protective equipment, the potential human exposure is: Low

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE	Liquid
APPEARANCE	Clear Amber
ODOR	Mild

SPECIFIC GRAVITY	0.98 - 1.02
DENSITY	8.2 - 8.5 lb/gal
SOLUBILITY IN WATER	Complete
pH (100 %)	6.1
VISCOSITY	160 cst @ 32 °F / 0 °C
POUR POINT	ASTM D-97 -66.9 °F / -55 °C
POUR POINT	< -40 °F / < -40 °C
BOILING POINT	340 °F / 171 °C
VAPOR PRESSURE	< 5 mm Hg @ 100 °F / 38 °C Same as water
EVAPORATION RATE	0.1

Note: These physical properties are typical values for this product and are subject to change.

10. STABILITY AND REACTIVITY

STABILITY :
Stable under normal conditions.

HAZARDOUS POLYMERIZATION :
Hazardous polymerization will not occur.

CONDITIONS TO AVOID :
Extremes of temperature

MATERIALS TO AVOID :
Contact with strong oxidizers (e.g. chlorine, peroxides, chromates, nitric acid, perchlorate, concentrated oxygen, permanganate) may generate heat, fires, explosions and/or toxic vapors.

HAZARDOUS DECOMPOSITION PRODUCTS :
Under fire conditions: Oxides of carbon

11. TOXICOLOGICAL INFORMATION

No toxicity studies have been conducted on this product.

SENSITIZATION :
This product is not expected to be a sensitizer.

CARCINOGENICITY :
None of the substances in this product are listed as carcinogens by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP) or the American Conference of Governmental Industrial Hygienists (ACGIH).

HUMAN HAZARD CHARACTERIZATION :
Based on our hazard characterization, the potential human hazard is: High

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL EFFECTS :

No toxicity studies have been conducted on this product.

ACUTE FISH RESULTS :

Species	Exposure	LC50	Test Descriptor
Turbot	96 hrs	50 mg/l	

MOBILITY :
The environmental fate was estimated using a level III fugacity model embedded in the EPI (estimation program interface) Suite TM, provided by the US EPA. The model assumes a steady state condition between the total input and output. The level III model does not require equilibrium between the defined media. The information provided is intended to give the user a general estimate of the environmental fate of this product under the defined conditions of the models.
If released into the environment this material is expected to distribute to the air, water and soil/sediment in the approximate respective percentages;

Air	Water	Soil/Sediment
<5%	10 - 30%	70 - 90%

The portion in water is expected to be soluble or dispersible.

BIOACCUMULATION POTENTIAL
Component substances have a low potential to bioconcentrate.

ENVIRONMENTAL HAZARD AND EXPOSURE CHARACTERIZATION
Based on our hazard characterization, the potential environmental hazard is: Moderate
Based on our recommended product application and the product's characteristics, the potential environmental exposure is: Low

If released into the environment, see CERCLA/SUPERFUND in Section 15.

13. DISPOSAL CONSIDERATIONS

If this product becomes a waste, it is not a hazardous waste as defined by the Resource Conserv ation and Recovery Act (RCRA) 40 CFR 261, since it does not hav e the characteristics of Subpart C, nor is it listed under Subpart D.

As a non-hazardous waste, it is not subject to federal regulation. Consult state or local regulation for any additional handling, treatment or disposal requirements. For disposal, contact a properly licensed waste treatment, storage, disposal or recycling facility.

14. TRANSPORT INFORMATION

The information in this section is for reference only and should not take the place of a shipping paper (bill of lading) specific to an order. Please note that the proper Shipping Name / Hazard Class may vary by packaging, properties, and mode of transportation. Typical Proper Shipping Names for this product are as follows.

LAND TRANSPORT :

Proper Shipping Name : PRODUCT IS NOT REGULATED DURING TRANSPORTATION

AIR TRANSPORT (ICAO/IATA) :

Proper Shipping Name : PRODUCT IS NOT REGULATED DURING TRANSPORTATION

MARINE TRANSPORT (IMDG/IMO) :

Proper Shipping Name : PRODUCT IS NOT REGULATED DURING TRANSPORTATION

15. REGULATORY INFORMATION

This section contains additional information that may have relevance to regulatory compliance. The information in this section is for reference only. It is not exhaustive, and should not be relied upon to take the place of an individualized compliance or hazard assessment. Nalco accepts no liability for the use of this information.

NATIONAL REGULATIONS, USA :

OSHA HAZARD COMMUNICATION RULE, 29 CFR 1910.1200 :
Based on our hazard evaluation, none of the substances in this product are hazardous.

CERCLA/SUPERFUND, 40 CFR 117, 302 :
Notification of spills of this product is not required.

SARA/SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (TITLE III) - SECTIONS 302, 311, 312, AND 313 :

SECTION 302 - EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355) :
This product does not contain substances listed in Appendix A and B as an Extremely Hazardous Substance.

SECTIONS 311 AND 312 - MATERIAL SAFETY DATA SHEET REQUIREMENTS (40 CFR 370) :
Our hazard evaluation has found this product to be hazardous. The product should be reported under the following indicated EPA hazard categories:

X	Immediate (Acute) Health Hazard
X	Delayed (Chronic) Health Hazard
X	Fire Hazard
	Sudden Release of Pressure Hazard
	Reactive Hazard

Under SARA 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are: 500 pounds or the threshold planning quantity (TPQ), whichev er is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

SECTION 313 - LIST OF TOXIC CHEMICALS (40 CFR 372) :
This product contains the following substance(s), (with CAS # and % range) which appear(s) on the List of Toxic Chemicals

Hazardous Substance(s)	CAS NO	% (w/w)
Glycol Ethers		30 - 60

TOXIC SUBSTANCES CONTROL ACT (TSCA) :
The substances in this preparation are included on or exempted from the TSCA 8(b) Inventory (40 CFR 710)

FEDERAL WATER POLLUTION CONTROL ACT, CLEAN WATER ACT, 40 CFR 401.15 / formerly Sec. 307, 40 CFR 116.4 / formerly Sec. 311 :
None of the substances are specifically listed in the regulation.

CLEAN AIR ACT, Sec. 112 (40 CFR 61, Hazardous Air Pollutants), Sec. 602 (40 CFR 82, Class I and II Ozone Depleting Substances) :
None of the substances are specifically listed in the regulation.

CALIFORNIA PROPOSITION 65 :
This product does not contain substances which require warning under California Proposition 65.

MICHIGAN CRITICAL MATERIALS :
None of the substances are specifically listed in the regulation.

STATE RIGHT TO KNOW LAWS :
The following substances are disclosed for compliance with State Right to Know Laws:

2-Butoxyethanol	111-76-2
Propylene Glycol	57-55-6

NATIONAL REGULATIONS, CANADA :

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS) :
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS CLASSIFICATION :
D2B - Materials Causing Other Toxic Effects - Toxic Material

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) :
The substances in this preparation are listed on the Domestic Substances List (DSL), are exempt, or hav e been reported in accordance with the New Substances Notification Regulations.

AUSTRALIA
All substances in this product comply with the National Industrial Chemicals Notification & Assessment Scheme (NICNAS).

CHINA
All substances in this product comply with the Chemical Control Law and are listed on the Inventory of Existing Chemical Substances China (IECSC).

EUROPE
The substance(s) in this preparation are included in or exempted from the EINECS or ELINCS inventories

JAPAN
All substances in this product comply with the Law Regulating the Manufacture and Importation Of Chemical Substances and are listed on the Ministry of Intern ational Trade & industry List (MITI).

KOREA
All substances in this product comply with the Toxic Chemical Control Law (TCCL) and are listed on the Existing Chemicals List (ECL)

PHILIPPINES
All substances in this product comply with the Republic Act 6969 (RA 6969) and are listed on the Philippines Inventory of Chemicals & Chemical Substances (PICCS).

16. OTHER INFORMATION

Due to our commitment to Product Stewardship, we have evaluated the human and environmental hazards and exposures of this product. Based on our recommended use of this product, we hav e characterized the product's general risk. This information should provide assistance for your own risk management practices. We have evaluated our product's risk as follows:

* The human risk is: Low

* The environmental risk is: Low

Any use inconsistent with our recommendations may affect the risk characterization. Our sales representative will assist you to determine if your product application is consistent with our recommendations. Together we can implement an appropriate risk management process.

This product material safety data sheet provides health and safety information. The product is to be used in applications consistent with our product literature. Individuals handling this product should be informed of the recommended safety precautions and should have access to this information. For any other uses, exposures should be evaluated so that appropriate handling practices and training programs can be established to insure safe workplace operations. Please consult your local sales representative for any further information.

REFERENCES

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The Teratogen Information System, University of Washington, Seattle, WA (TOMES CPS™™ CD-ROM Version), Micromedex, Inc., Englewood, CO.

Prepared By : Product Safety Department
Date issued : 10/15/2008
Version Number : 1.7

Analysis of Eight Oil Spill Dispersants Using *In Vitro* Tests for Endocrine and Other Biological Activity

June 30, 2010

U.S. Environmental Protection Agency
Office of Research and Development

Executive Summary

The U.S. Environmental Protection Agency's Office of Research and Development was asked to evaluate the cytotoxicity and potential for interaction with the androgen and estrogen receptors (AR, ER) of eight oil spill dispersants being used, or could be considered for use, in the Gulf of Mexico. These are Corexit 9500 (the current product being used), DISPERSIT SPC 1000, JD 2000, Nokomis 3-F4, Nokomis 3-AA, SAF-RON GOLD, Sea Brat #4, and ZI-400. To address this request, ORD staff and outside collaborators carried out a number of separate studies that were run using *in vitro* (cell-based) assays. A total of 8 cytotoxicity assays, 3 AR agonist assays, 1 AR antagonist assay and 4 ER agonist assays were run on the 8 dispersants, plus reference compounds. Tests were run across a wide range of dispersant concentrations (0.001 to 10,000 parts per million, or ppm). Two dispersants showed a weak signal in one of the four ER assays, but integrating over all of the ER and AR results these data do not indicate that any of the eight dispersants display biologically significant endocrine activity via the androgen or estrogen signaling pathways. All of the dispersants showed cytotoxicity in at least one cell type at concentrations between 10 and 1000 ppm. Both JD 2000 and SAF-RON GOLD tend to be less cytotoxic than the other dispersants. Likewise, DISPERSIT SPC 1000 tends to be more cytotoxic than the other dispersants in the cell-based assays.

Contents

Contributors

U.S. EPA Office of Research and Development

National Center for Computational Toxicology
David Dix, Keith Houck, Richard Judson, Robert Kavlock, Thomas Knudsen, Stephen Little, Matthew Martin, David Reif, Daniel Rotroff

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National Health and Environmental Effects Research Laboratory
Vickie S. Wilson, Phillip Hartig, L. Earl Gray Jr., Christy Lambright, Mary Cardon, Nicola Wrench, Johnathan Furr, Nathan Jeffay, Barbara Collins, Carol Mitchell

National Institutes of Health

NIH Chemical Genomics Center, Menghang Xia, Srilatha Sakamuru, Ruili Huang, Paul Shinn, Christopher P. Austin

Introduction / Background

The Deepwater Horizon oil spill has led to the use of large amounts of dispersant as part of the integrated approach dealing with the oil spill. Given this fact, questions have arisen about the toxicity of the chemicals used as dispersants themselves. EPA's Office of Research and Development (ORD) was asked to carry out rapid studies to provide information on the potential for toxicity of eight commercially available dispersants. Because some of the dispersants reportedly include nonylphenol ethoxylates (NPEs) that can degrade to isomers of nonylphenol (NP), some of which are proven estrogenic compounds, the potential endocrine effects of the dispersants are of particular concern. For example, NPEs and NPs have been demonstrated to be endocrine disruptors in fish [1]. In response to the request ORD has undertaken a series of short-term *in vitro* studies to determine if any of the dispersants displayed estrogenic, androgenic or other endocrine activity.

ORD developed a strategy to address the questions of endocrine activity and relative toxicity as rapidly as possible. ORD scientists initiated several complementary studies of eight oil spill dispersants being used or considered for use in the Gulf. The issue was to provide some targeted information on the dispersants as quickly as possible. *In vitro* assays are well suited for that purpose. This work complements a study of whole animal toxicity in small fish and brine shrimp also being carried out by ORD. The results of that study are being simultaneously released with this report.

One set of studies used a set of mammalian *in vitro* reporter gene assays in estrogen-responsive and androgen-responsive cells [2, 3] run in-house at ORD laboratories in RTP, NC. Additional studies were conducted by two external labs (NIH Chemical Genomics Center [NCGC] and Attagene Inc.) to run mammalian *in vitro* reporter gene assays to measure androgen and estrogen-response activity. A panel of 74 assays against non-endocrine molecular targets was also included in the Attagene assays. The NCGC and Attagene assays are part of the EPA ToxCast program [4, 5]. All assays evaluated the eight dispersants Corexit® 9500, JD 2000™, DISPERSIT SPC 1000™, Sea Brat #4, Nokomis 3-AA, Nokomis 3-F4, ZI-400 and SAF-RON

GOLD. The performance of the assays was characterized by simultaneously running positive and negative control chemicals. Quantitative cytotoxicity measurements were carried out on each of the cell types used. All data analyses and interpretation were carried out by ORD staff.

It is important to note that positive results *in vitro* only demonstrate that a chemical is a potential endocrine disruptor and that follow-up tests will likely be needed in order to refine or confirm the endocrine activity. For example, effects seen *in vitro* may not be expressed *in vivo*, so additional studies would need to be conducted to verify the *in vitro* results and determine if the potential activity was displayed in whole animals and the dosage levels required to affect organisms.

Project Goals

1. Determine if any of the eight dispersants displayed estrogenic, androgenic or antiandrogenic activity *in vitro* using a variety of well characterized *in vitro* cell-based assays that utilize different approaches for detecting endocrine driven gene expression changes
2. Determine the dispersant concentration that induced cytotoxicity in multiple cell lines and derive an aggregate measure of cytotoxicity that could be use to rank order the chemicals and to compare with *in vivo* toxicity data obtained in aquatic test species.

Study Summary:

One part of the project was carried out by ORD researchers in partnership with the NIH Chemical Genomics Center [NCGC] and Attagene Inc. Two high throughput assay sets were run on the dispersants, a collection of reference chemicals for ER and AR activity, plus nonylphenol compounds. In addition to assays for AR and ER, this phase of the project produced data on a battery of other transcription factor assays which are part of multiplexed panels including AR and ER assays. Cytotoxicity was evaluated in three cell lines over a range of concentrations.

The other phase of the study was carried out in-house by ORD researchers using multiple assays [2, 3] to measure interaction between the eight dispersants plus reference chemicals and ER or AR. In particular, this work evaluated the eight dispersants for estrogen agonist activity in an estrogen-responsive transcriptional activation assays (ER-TA), for androgen agonist activity in two androgen-responsive transcriptional activation assays (AR-TA), MDA-kb2 and CV-1 assays and for androgen antagonist activity in the MDA-kb2 assay in competition with 1 nM Dihydrotestosterone (DHT). Cytotoxicity was evaluated in each assay at every concentration by both a biochemical assay which assessed metabolic perturbation and by a visual assessment of cytopathic effect on cell viability and morphology.

Chemicals

All assays evaluated eight commercially available oil spill dispersants that were obtained directly from the respective manufacturers. EPA chose these eight dispersants from the dispersants listed on the National Contingency Plan Product Schedule based on three criteria: 1) lower toxicity of the dispersant or of the dispersant when mixed with oil; 2) availability of sufficient quantities to respond to the Gulf spill; and 3) immediate availability of samples for testing. These included Corexit® 9500 (Nalco Inc., Sugarland TX), JD 2000™ (GlobeMark Resources Ltd., Atlanta, GA), DISPERSIT SPC 1000™ (U.S. Polychemical Corp., Chestnut Ridge, NY), Sea Brat #4 (Alabaster Corp., Pasadena, TX), Nokomis 3-AA (Mar-Len Supply, Inc., Hayward, CA), Nokomis 3-F4 (Mar-Len Supply, Inc., Hayward, CA), ZI-400 (Z.I. Chemicals, Los Angeles, CA) and SAF-RON GOLD (Sustainable Environmental Technologies, Inc., Mesa, AZ). All are liquid solutions. Further information on the dispersants, including the limited publicly available information on the composition of dispersants is given in **Appendix A.1**. The oil spill dispersants were tested *in vitro* at concentrations ranging from 0.01 to 1000 ppm in water (vol:vol).

The assays run by NCGC and Attagene included reference compounds recommended for validating ER /AR assays by ICCVAM (Interagency Coordination Committee on the Validation of Alternative Methods)[6] and the U.S. EPA[7]. A preliminary set of reference compounds was obtained from stocks at EPA facilities in RTP NC. Subsequently, additional samples were obtained from Sigma-Aldrich (St. Louis MO). Included in the reference chemicals are both straight chain and branched NP isomers and corresponding example NPEs. The reference chemicals are 17β-Trenbolone (10161-33-8), 17β-Estradiol (50-28-2), Atrazine (1912-24-9), Bisphenol A (80-05-7), Butylbenzyl phthalate (85-68-7), Dibutyl phthalate (84-74-2), Flutamide (13311-84-7), Linuron (330-55-2), 4–Nonylphenol (linear) (104-40-5), p,p' –DDE (72-55-9), p,p'- Methoxychlor (72-43-5), Procymidone (32809-16-8), Vinclozolin (50471-44-8), 2,4,5-T (93-76-5), Bicalutamide (90357-06-5), Cyproterone acetate (427-51-0), Genistein (446-72-0), 4-(tert-octyl), Phenol (140-66-9), 4-Hydroxytamoxifen (68392-35-8), 5α-androstan-17β-ol-3-one (521-18-6) and 4-Nonylphenol, (branched) (84852-15-3). The two nonylphenol ethoxylates are Tergitol NP-9 (127087-87-0) and Igepal CO-210 (68412-54-4). Reference chemicals (powder

form) were solubilized in DMSO to a final concentration of 20 mM. Further information, including lot and batch are given in **Appendix A.2**.

In the in-house ORD assays, a 17β-Estradiol (E2; 50-28-2) dose response was included on every plate in the ER-TA assay as a positive control. 4-Nonylphenol (branched) (84852-15-3; Fluka) and 17α-Trenbolone (Osaka Hayashi Pure Chemical Industries Ltd., CAS no. 80657-17-6, purity 99.9%) were also tested in the estrogen mediated assays. A dihydrotestosterone (DHT; Sigma Chemical; CAS 55206-14-9) dose response was included as a positive control on every plate in the AR-TA assays. The potent androgen, 17α-Trenbolone, was also tested in the androgen agonist assays. Dosing solutions of dispersants and reference compounds were prepared on-site under observation of a Quality Assurance manager. The assays used in the NHEERL assays have been demonstrated [2, 8] to give appropriate responses to known estrogenic or androgenic compounds.

Results

More detailed assay protocols and statistical analysis methods can be found in the Appendices, as well as a Quality Assurance (QA) Statement.

Androgen Receptor Agonist Activity

AR Agonist Assay 1 - Multiplexed reporter transcription unit (RTU) assay

Method Summary: This assay is part of a multiplexed reporter gene panel run by Attagene Inc. (RTP, NC), under contract to the U.S. EPA (Contract Number EP-W-07-049). This assay consists of 48 human transcription factor DNA binding sites transfected into the HepG2 human liver hepatoma cell line as previously described[9]. This *trans* assay employs a mammalian one-hybrid assay consisting of an additional 25 RTU library reporting the activity of nuclear receptor (NR) superfamily members. The human ligand-binding domain of each nuclear receptor was expressed as a chimera with the yeast GAL4 DNA-binding domain that activated in trans a 5XUAS-TATA promoter, which regulated the transcription of a reporter sequence unique to each NR RTU. To ensure the specificity of detection, each individual trans-RTU system including both receptor and reporter gene was separately transfected into suspended cells followed by pooling and plating of the transfected cells prior to screening. The *trans* assay evaluates changes in activities of exogenous, chimeric NR-Gal4 proteins. This particular assay evaluated transcription for the Androgen receptor, and uses the code ATG_AR_TRANS. Additional detail of the method is provided in the **Appendix B.1**. Concentration-response titration points for each compound were fitted as described in **Appendix C.** For this analysis, there were either 4 replicates in 16 concentrations, except for SAF-RON GOLD which was only tested in 2 replicates and 8 concentrations.

Results: No activity was seen for any of the dispersants

AR Agonist Assay 2 - AR beta-lactamase Assay

Method Summary: This assay was run at the NIH Chemical Genomics Center (NCGC; Rockville, MD) in collaboration with EPA as part of the Tox21 collaboration[10]. A beta-lactamase reporter-gene cell-based assay [GeneBLAzer® AR-UAS-bla-GripTite™ assay developed by Invitrogen] was used to measure AR ligand signaling. AR-UAS-bla-GripTite™ HEK 293 cells (AR *bla* cells) were used with assay medium containing 10% dialyzed FBS, 0.1 mM NEAA and 1 mM sodium pyruvate. The assay was performed in clear bottom black Greiner 1536-well plates. R1881, a synthetic androgen agonist, was used as a positive control in the screen. Library compounds were measured for their ability to either stimulate or inhibit the reporter gene activity. Compounds were screened in a titration series in 1536-well format. The fluorescence intensity (405 nm excitation, 460/530 nm emission) was measured using an EnVision plate reader. Data was normalized relative to R1881 control (40 nM, 100%, for agonist mode and 10 nM, 0%, for antagonist mode), and DMSO only wells (basal, 0% for agonist mode and -100% for antagonist mode). Additional detail of the method is provided in the **Appendix B.2**. Concentration-response titration points for each compound were fitted as described in **Appendix C**. For this analysis, there were 8-10 replicates in 24 concentrations.

Results: The only dispersant that showed any activity in any of the AR assays was JD 2000, which was active in both the NCGC ER and AR agonist and antagonist assays in all runs with AC50 values ranging from 100-270 ppm (AR) and 82-120 ppm (ER). There was no apparent cytotoxicity in any of the cell line for JD 2000 (see results below). The EMax values for JD 2000 in all of these assays were significantly greater than the values for positive control chemicals, and in the antagonist assays, this dispersant looked like a "super-activator" rather than an antagonist. All of this data taken together indicates strongly that some non-specific activation is occurring that is independent of ER or AR. We have found previously that compounds identified as promiscuous "super-activators" in multiple beta-lactamase reporter gene assays with a narrow potency range (a <3-fold difference in potency is within the experimental variations of these assays) are mostly auto fluorescent (R Huang, unpublished data). Thus, the activity observed for JD 2000 is likely an artifact of the beta-lactamase assay format. Preliminary results from three additional beta-lactamase assays for non-steroid receptor targets all showed the JD 2000 "super-

activation". Considering the totality of the data, we conclude that JD 2000 does not exhibit ER or AR transactivation activity. To further confirm that this JD 2000 activity is non-specific and not due to ER or AR activation, we are running several follow-up assays with NCGC: known antiestrogens and antiandrogens are being used to show that JD 2000 activity is not suppressed; and we will complete our analysis of results for the the three non-steroid receptor beta-lactamase assays are being run with JD 2000 to show that this non-specific activity occurs independent of ER and AR.

AR Agonist Assay 3 - MDA-kb2 Androgen-responsive transcriptional activation assay

Method Summary: This assay, run in-house by NHEERL researchers, utilized MDA-kb2 cells[2]. These cells contain endogenous human androgen receptor capable of inducing transcription of an androgen responsive gene (AR-TA). This assay employs a luciferase gene driven by the androgen responsive MMTV promoter which has been stably integrated into the cells. When androgen mimicking compounds (i.e. compounds that act as androgen agonists) are present, these cells produce luciferase in a concentration proportionate to the efficacy of the androgen mimic. Nine concentrations of each dispersant were tested for agonist activity. Each concentration was evaluated in a total of eight replicates (two independent evaluations with four replicates per assay). The first dilution of each sample was a 1:100 dilution (i.e. 0.01 dilution or 10,000 ppm) of the dispersant in cell culture medium followed by eight additional 10-fold serial dilutions. Additional detail of the method is provided in the **Appendix F**.

Results: The ability of the eight dispersants to stimulate luciferase expression in this cell line was compared to DHT. The DHT positive control dose induced luciferase expression in MDA Kb2 cells in a precise and reproducible manner within and among the plates (**Figure 1**. DHT and 17 α-Trenbolone data in MDA Kb2 cells). None of the eight dispersants displayed any potential androgenicity (i.e. did not simulate luciferase induction) at any concentration in the MDA Kb2 cell line (**Figure 2** dispersant results in MDA Kb2 cells). In fact, all the dispersants displayed significantly reduced luciferase levels due to cytotoxicity at high dispersant concentrations. The synthetic androgen 17α-Trenbolone acted as a full androgen agonist at relatively low concentrations.

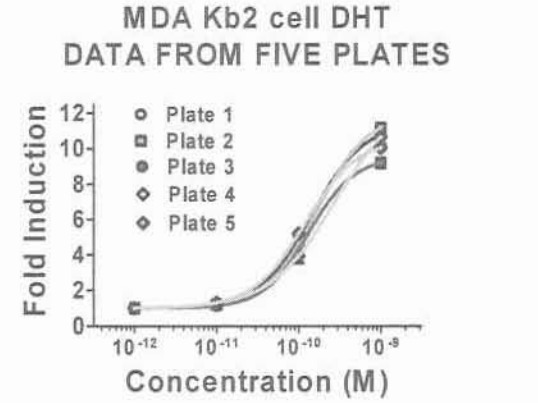


	Plate 1	Plate 2	Plate 3	Plate 4	Plate 5
LogEC50	-9.843	-9.776	-9.871	-9.553	-9.923

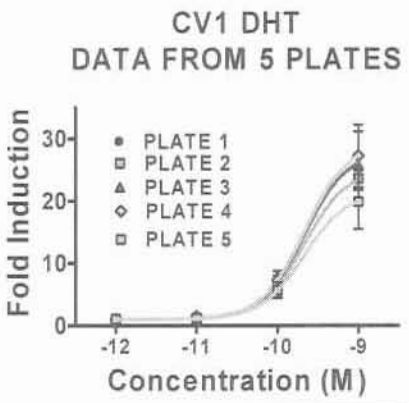
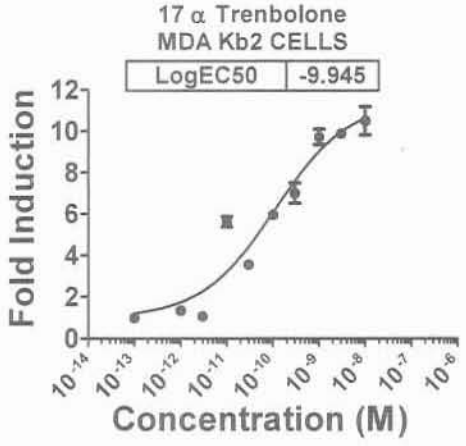


	PLATE 1	PLATE 2	PLATE 3	PLATE 4	PLATE 5
LogEC50	-9.667	-9.558	-9.726	-9.663	-9.678



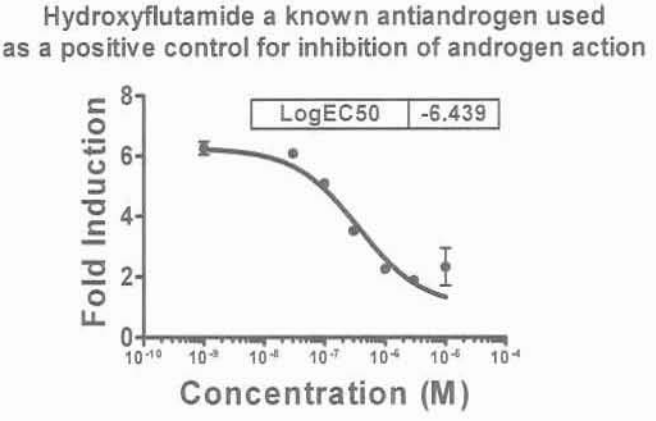


Figure 1: Included are, nonlinear regression plots of the effects of the reference androgen dihydrotestosterone (DHT) in two androgen sensitive cell lines (MDA Kb2 upper left and CV1 upper right), stimulatory effects of the synthetic androgen found in some aquatic systems in MDA Kb2 cells (lower left) and antagonism of the 1 nM DHT by the antiandrogenic drug hydroxyflutamide in MDA Kb2 cells. Data are expressed as fold over the media plus the ethanol control value. The X axis is in log scale. Values are means plus or minus standard errors of the mean.

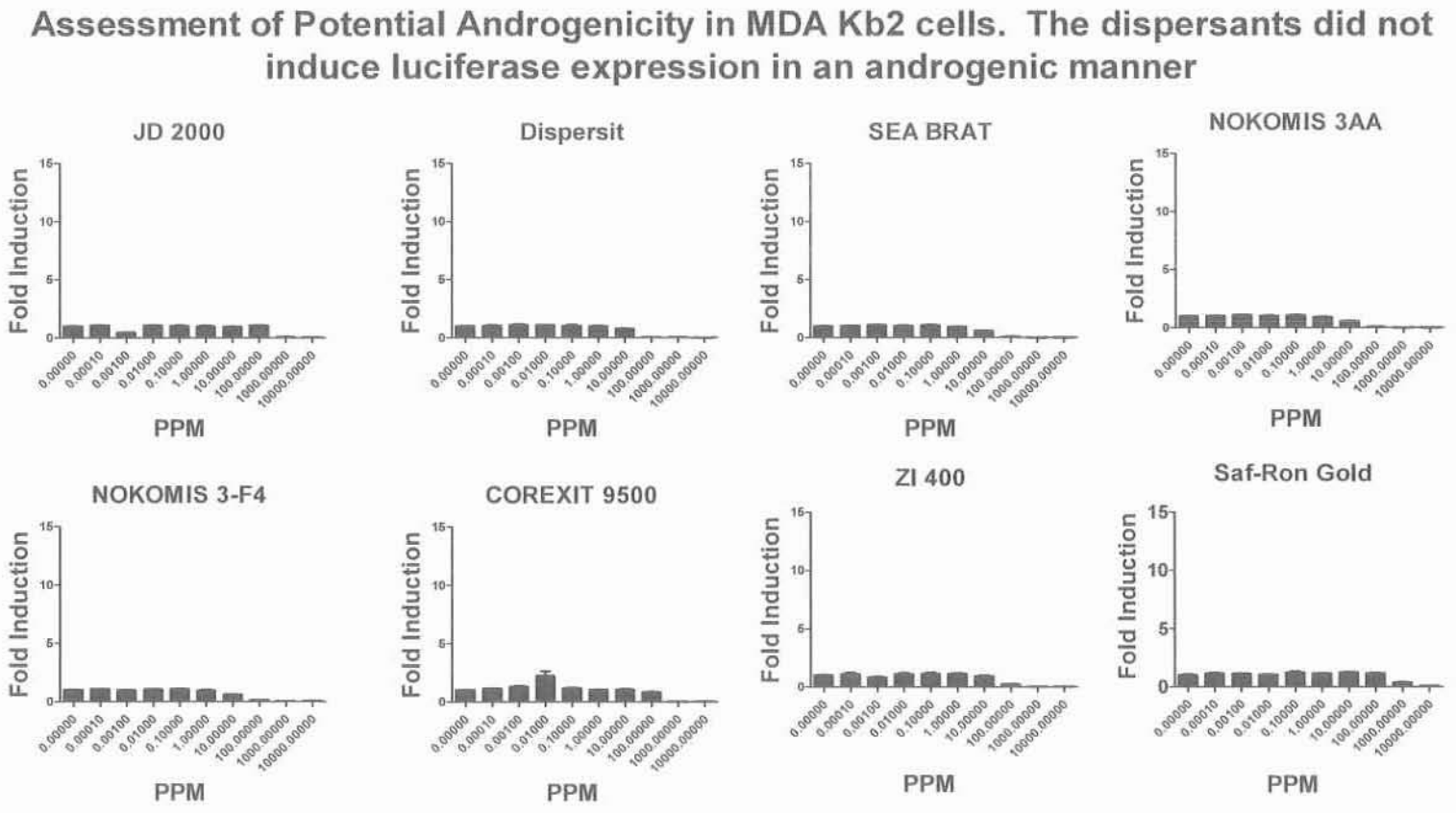


Figure 2: Assessment of the potential androgenic activity of the eight dispersants in MDA Kb2 cells. Data are expressed as fold over the media plus ethanol vehicle control. Values are means plus or minus standard errors of the mean. Dispersants did not stimulate luciferase induction over the control fold value (control fold =1).

AR Agonist Assay 4 - CV-1 transient transcription assay

Method Summary: This assay run in-house by NHEERL is similar to the MDA-kb2 in that it also assesses the ability of a compound to mimic an androgen. This assay, however, uses CV-1 cells which do not express either endogenous androgen or estrogen receptors. In contrast to the MDA-kb2 assay, both the androgen receptor and the androgen responsive MMTV promoter- luciferase reporter constructs are introduced into the CV-1 cells for each assay via transient transfection. Nine concentrations of each dispersant were tested for agonist activity in both AR-TA assays. Each concentration was tested in quadruplicate. The first dilution of each sample was a 1:100 dilution (i.e. 0.01 dilution or 10,000 ppm) of the dispersant in cell culture medium followed by eight additional 10-fold serial dilutions. Method details are provided in the **Appendix F**.

Results: Similar to the results of the MDA-kb assays, DHT induced precise and reproducible effects on luciferase expression within and among the plates (Figure 1) and none of the eight dispersants displayed any potential androgenicity (i.e. did not simulate luciferase induction) at any concentration in the CV-1 assay (**Figure 3**). In fact, all the dispersants significantly reduced luciferase level due to cytotoxicity at high concentrations.

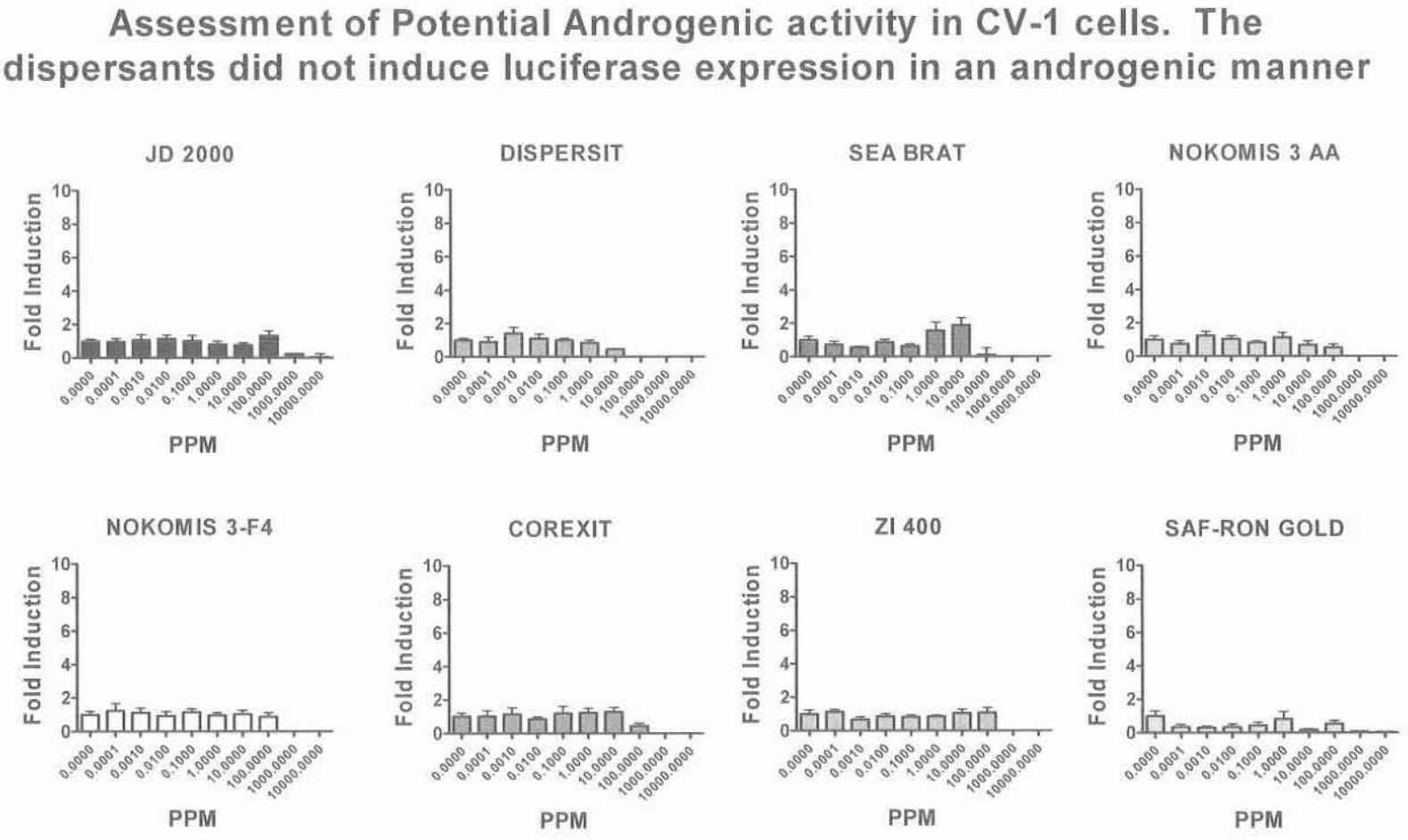


Figure 3: Assessment of the potential androgenic activity of the eight dispersants in CV-1 cells. Data are expressed as fold over the media plus ethanol vehicle control. Values are means plus or minus standard errors of the mean. Dispersants did not stimulate luciferase induction over the control fold value (control fold =1).

Androgen Receptor Antagonist Activity

AR Antagonist Assay 1 - MDA-kb2 Androgen-responsive transcriptional activation assay in antagonist mode

Method Summary: The eight dispersants were also evaluated for antagonist activity in the MDA-kb2 cell line, run in-house by NHEERL researchers, by testing each dispersant in the presence of a near maximally stimulating concentration dihydrotestosterone (1 nM DHT). In the presence of an anti-androgen, the luciferase activity induced by DHT would be reduced proportionally to the concentration of the anti-androgen. A DHT concentration-response curve was included on each 96-well plate with the dispersants. The well-characterized antiandrogen hydroxyflutamide (CAS 80657-17-6) was run as a positive control (**Figure 1**). Six concentrations of each dispersant ranging from 0.0001 ppm to 10 ppm were tested for antagonist activity. Higher concentrations were not evaluated due to cytotoxicity seen in both MTT and CPE assays (discussed later in this document). Each concentration was tested in quadruplicate. Additional detail of the method is provided in the **Appendix F**.

Results: None of the eight dispersants displayed any potential antiandrogenicity (i.e. did not inhibit DHT-induced luciferase induction) at concentrations below 10 ppm (1E-5 dilution). At 10 ppm several of the dispersants reduced DHT induced luciferase activity, but the effects were significant (by ANOVA followed by a post hoc Dunnett's test) for the dispersants SPC 1000 and Nokomis 3-AA (**Figure 4**). As shown in **Figure 5a**, these two dispersants were the most toxic of the dispersants to MDA Kb2 cells so it is extremely unlikely that these effects represent competitive inhibition of DHT binding to the ligand binding domain of the androgen receptor. In contrast, hydroxyflutamide, used as a positive control, completely inhibited androgen-induced luciferase induction at concentrations about 1000 fold higher than of the concentration of DHT used in this assay.

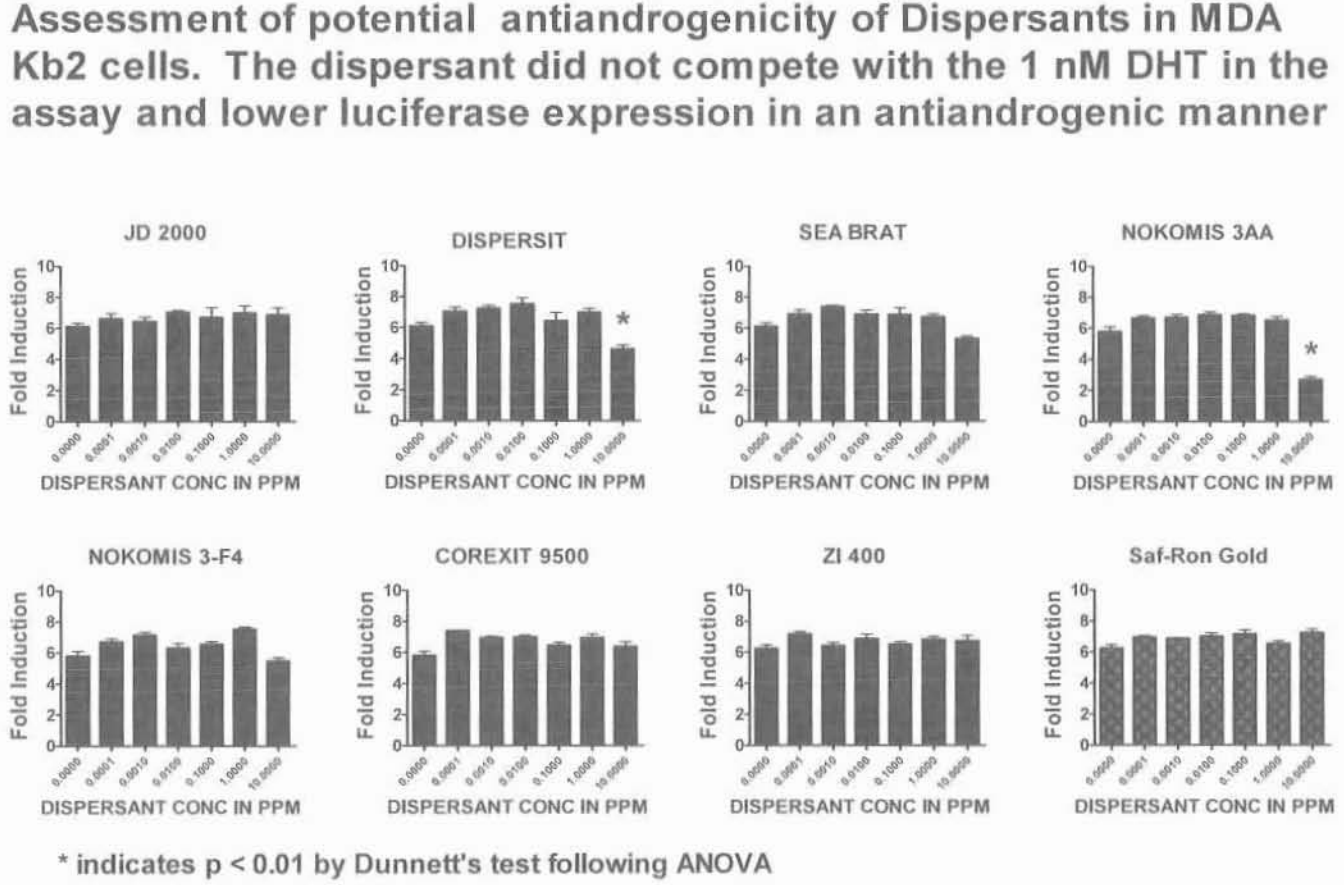
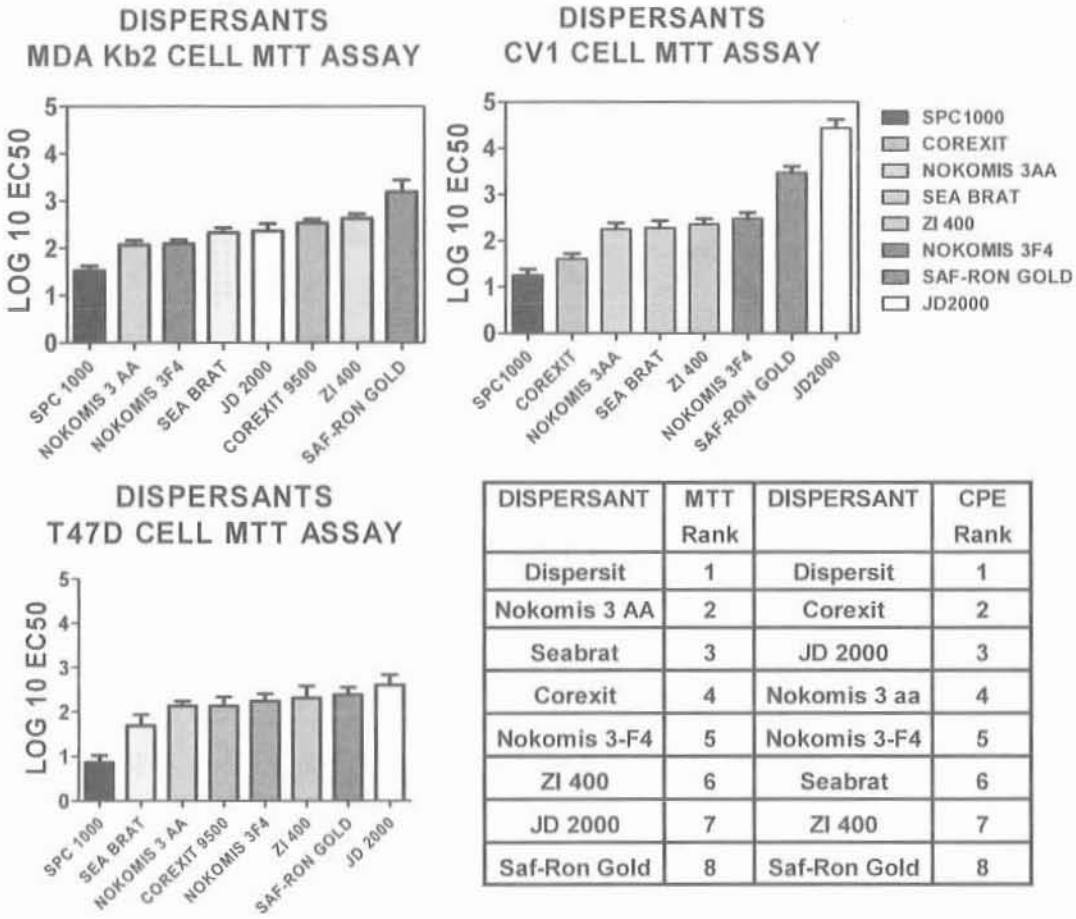


Figure 4: Assessment of the potential antiandrogenic activity of the eight dispersants in MDA Kb2 cells. Data are expressed as fold over the media plus ethanol vehicle control. Values are means plus or minus standard errors of the mean. DISPERSIT SPC 1000 and Nokomis 3-AA were the only dispersants that significantly reduced DHT-stimulated luciferase induction (DHT control fold about 6) an effect which we interpreted to result from cytotoxicity at 10 ppm, the highest concentration used in this assay.



DISPERSANT	MTT Rank	DISPERSANT	CPE Rank
Dispersit	1	Dispersit	1
Nokomis 3 AA	2	Corexit	2
Seabrat	3	JD 2000	3
Corexit	4	Nokomis 3 aa	4
Nokomis 3-F4	5	Nokomis 3-F4	5
ZI 400	6	Seabrat	6
JD 2000	7	ZI 400	7
Saf-Ron Gold	8	Saf-Ron Gold	8

Figure 5: Summary of the Cytotoxic effects of the eight dispersants in the MTT and visual cytopathic examinations (CPE) in three cell lines. The histograms display the EC50 values for a reduction in MTT levels (determined by nonlinear regression on Prism 5.0) for the MDA Kb2 (upper right panel), CV1 (upper right panel) and T47D Kbluc

(lower left panel) cells. In the table in the lower right panel, the overall potency of the dispersants in the MTT and CPE assays is shown, with a ranking of 1 being the most potent in inducing cytotoxicity and 8 being the least cytotoxic dispersant. DISPERSIT SPC 1000 was ranked as the most cytotoxic by both methods and SAF-RON GOLD is the least toxic of the eight dispersants. (The appendices contain additional details on this and the EC50 values are compared using a multiple range test).

Estrogen Receptor Agonist Activity

ER Agonist Assay 1 - Multiplexed reporter transcription unit (RTU) *trans* assay

Method Summary: This assay is part of a multiplexed reporter gene panel run by Attagene Inc. (RTP, NC), under contract to the U.S. EPA (Contract Number EP-W-07-049). This assay consists of 48 human transcription factor DNA binding sites transfected into the HepG2 human liver hepatoma cell line as previously described[9]. This *trans* assay employs a mammalian one-hybrid assay consisting of an additional 25 RTU library reporting the activity of nuclear receptor (NR) superfamily members. The human ligand-binding domain of each nuclear receptor was expressed as a chimera with the yeast GAL4 DNA-binding domain that activated in trans a 5XUAS-TATA promoter, which regulated the transcription of a reporter sequence unique to each NR RTU. To ensure the specificity of detection, each individual trans-RTU system including both receptor and reporter gene was separately transfected into suspended cells followed by pooling and plating of the transfected cells prior to screening. The *trans* assay evaluates changes in activities of exogenous, chimeric NR-Gal4 proteins. This particular assay evaluated transcription for the Estrogen receptor alpha, and uses the code ATG_ERa_TRANS. This assay was run in twice in separate weeks, and in each case, run in duplicate. For this analysis, there were either 4 replicates in i6 concentrations, except for SAF-RON GOLD which was only tested in 2 replicates and 8 concentrations. Additional detail of the method is provided in the **Appendix B.1**. Concentration-response titration points for each compound were fitted as described in **Appendix C.**

Results: We observed statistically significant ER activity in two of the dispersants in the Attagene *trans*-ERα assay (Nokomis 3-F4 and ZI-400), detailed in **Table 1**. **Figure 6** (bottom panels) shows the concentration-response curves for the two active dispersants, which have EMax (maximum efficacy) values of between 3 and 4. This is in contrast to 17β-Estradiol (top left panel, blue curve), which has an EMax value of 20. The top right panel of the figure shows the corresponding reference curve for the *cis*-ERE assay, showing that 17β-Estradiol only elicits a response about half of that seen in the *trans* assay. To help interpret these results, we

simultaneously analyzed their performance on a set of 19 reference chemicals recommended by ICCVAM[6] and EPA OPPT[7]. This analysis (detailed in **Appendix E**) shows that these assays perform well for both positive and negative predictive value. The *trans*-ERα assay correctly matched ICCVAM expectation for 15 of 17 reference chemicals, with one false positive and one false negative. A comparison of the *cis* and *trans* assays shows that the reference chemicals in the *cis* assay consistently produce EMax values about half of that seen in the trans assay. This would explain the absence of observable activity for these dispersants in the *cis* assay, because we do not consider curves with EMax values below 2. The other curves in the bottom panels of **Figure 6** show data for NP and NPE compounds, described below.

Chemical	AC50 (ppm)	EMax	R^2	p-value
Nokomis 3-F4	16	3.9	0.65	0.00017
ZI-400	25	3.4	0.68	0.0041

Table 1: Summary results for the Attagene *trans*-ERα assay for the positive dispersants. EMax: maximal fold change. AC50: concentration at which 50 of maximal activity is seen.

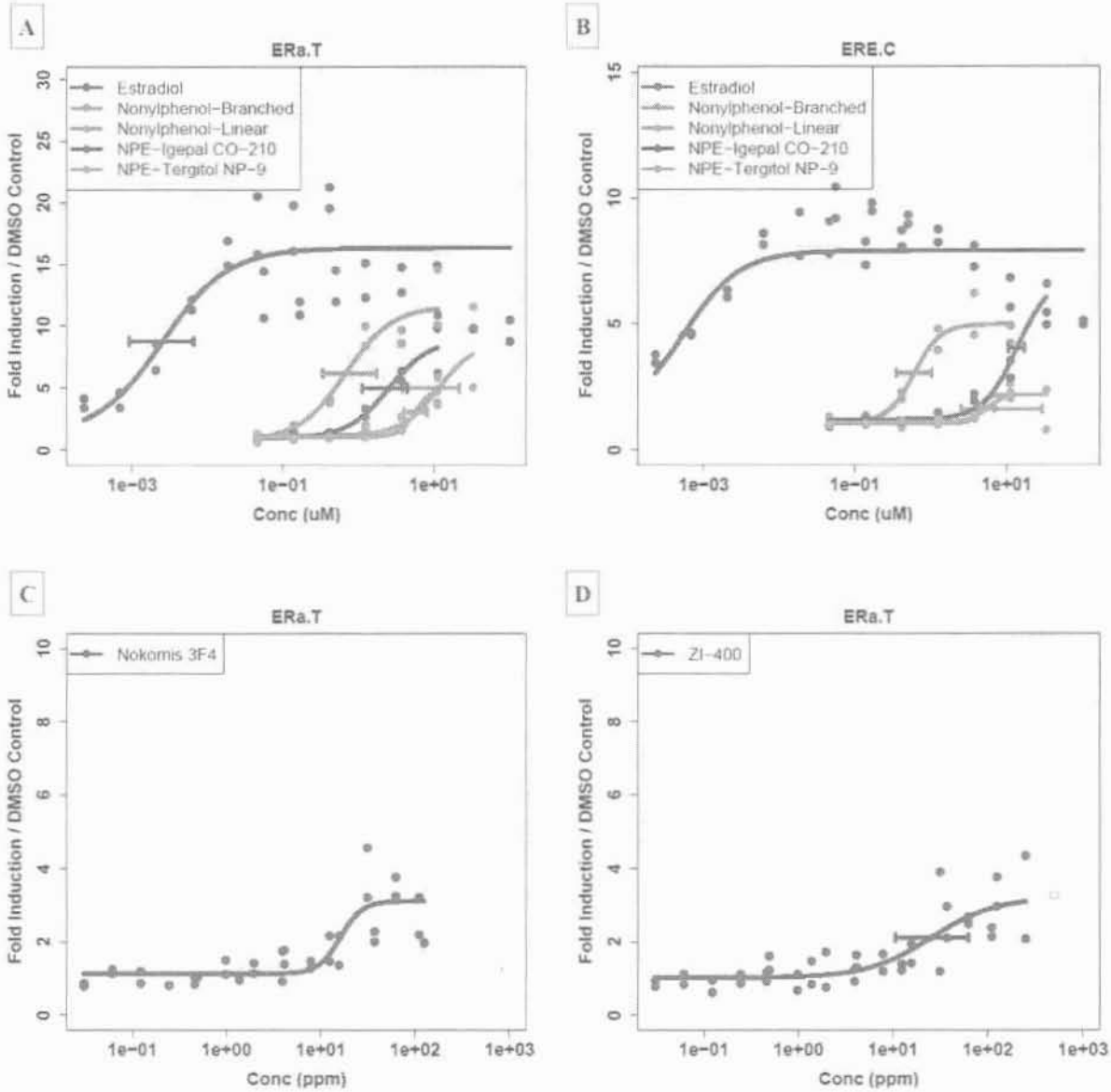


Figure 6: Concentration-response curves for the E2, NP and NPE compounds, and the two dispersants showing activity in Attagene *trans*-ERα assay. Top: E2 and the 4 NP / NPE compounds in the Attagene *trans*-ERα assay (left) and the Attagene *cis*-ERE assay (right). Bottom: ZI-400 and Nokomis 3-F4 in the Attagene *trans*-ERα assay. For the nonylphenol compounds, only two replicates were run.

Nonylphenol-related activity: It is known that some of the dispersants contain NPEs. Our initial hypothesis was that any estrogenic activity detected for the complex mixtures could be due to the

NPEs or to NP itself generated by *in situ* degradation of the NPE, or residual contamination from synthesis of the NPE. Consequently, we tested two nonylphenols (one linear and one branched, technical grade) and two commercial NPEs in the Attagene assays. **Table 2** shows the results of this analysis, and **Figure 6** shows the corresponding dose-response curves for the Attagene ER assays. From these data, one can see that these cell-based assays show ER activity for both the NPs and the NPEs. The branched, technical grade NP is the most potent, but the second most potent is the NPE Igepal CO-210. These data indicates that the presence of an NP or NPE in a mixture could give rise to ER activity such as was seen for the dispersants Nokomis 3-F4 and ZI-400. Public information (given in **Appendix A**) indicates that ZI-400 does in fact contain an NPE.

Chemical Assay		AC50 (μM)	R^2	EMax	p-value
4-Nonylphenol (linear) 104-40-5	*trans* -ERα	11	0.77	8.3	0.29
	cis-ERE	4.3	0.55	2.7	0.096
4-Nonylphenol (branched) 84852-15-3	*trans* -ERα	0.68	0.91	12	0.0049
	cis-ERE	0.61	0.092	5.4	4.9E-5
Tergitol NP-9 127087-87-0	*trans* -ERα	5.7	0.86	4.8	0.18
	cis-ERE	5.6	0.96	2.1	0.042
Igepal CO-210 68412-54-4	*trans* -ERα	2.5	0.89	8.5	0.19
	cis-ERE	14	0.96	6.5	2.1E-11

Table 2: Results of ER assays on NPs and NPEs.

To summarize this section, estrogen receptor (ER) activity was observed in two of the dispersants in the Attagene *trans*-ERα assay (ZI-400 and Nokomis 3-F4), although at relatively high concentrations and with low efficacy (EMax). We have also shown that NPs and NPEs are also active in the *trans*-ERα assay. Therefore, the activity in ZI-400 and Nokomis 3-F4 is suggestive of the presence of an NP or NPE as part of the mixture. We know that this is the case with ZI-400. The ER effect seen for these dispersants is weak, which is also suggestive of there being only a relatively small amount of NPE or some other estrogenic substance in the total mixture.

ER Agonist Assay 2 - Multiplexed reporter transcription unit (RTU) *cis* assay

Method Summary: This assay is part of a multiplexed reporter gene panel run by Attagene Inc. (RTP, NC), under contract to the U.S. EPA (Contract Number EP-W-07-049). This assay consists of 48 human transcription factor DNA binding sites transfected into the HepG2 human liver hepatoma cell line as previously described[9]. A major difference between the *cis* and *trans* system is that in *cis* activities of endogenous transcription factors are measured. This particular assay evaluated transcription for the Estrogen receptor element (ERE), and uses the code ATG_ERE_CIS. For this analysis, there were either 4 replicates in i6 concentrations, except for SAF-RON GOLD which was only tested in 2 replicates and 8 concentrations. Additional detail of the method is provided in the **Appendix B.1**. Concentration-response titration points for each compound were fitted as described in **Appendix C.**

Results: No statistically significant activity was seen for any of the dispersants

ER Agonist Assay 3 – ER-alpha beta-lactamase Assay

Method Summary: This assay was run at the NIH Chemical Genomics Center (NCGC; Rockville, MD) in collaboration with EPA as part of the Tox21 collaboration[10]. A beta-lactamase reporter-gene cell-based assay [ERα-UAS-bla GripTite^{TM} cell-Based Assay from Invitrogen] was used to measure ERα signaling pathway both in agonist and antagonist modes. ERα-UAS-bla-GripTite™ HEK 293 cells (ERα *bla* cells) were used with assay medium containing 2% charcoal/dextran treated FBS, 0.1 mM NEAA and 1 mM sodium pyruvate. Cells were cultured in this assay medium overnight in the flasks before the assay. The assay was performed in clear bottom black Greiner 1536-well plates. 17β-estradiol was used as a positive control in the screen. Library compounds were measured for their ability to either stimulate or inhibit the reporter gene activity. Compounds were screened in a titration series in 1536-well format. The fluorescence intensity (405 nm excitation, 460/530 nm emission) was measured using an EnVision plate reader. Data was normalized relative to 17β-estradiol control (20 nM, 100%, for agonist mode and 0.5nM, 0%, for antagonist mode), and DMSO only wells (basal, 0% for agonist mode and -100% for antagonist mode). Concentration-response titration points for

each compound were fitted to the Hill equation yielding concentrations of half-maximal stimulation (EC_{50}), half-maximal inhibition (IC_{50}) and maximal response (efficacy) values. For this analysis, there were 8-10 replicates in 24 concentrations. Additional detail of the method is provided in the **Appendix B.3**. Concentration-response titration points for each compound were fitted as described in **Appendix C.**

Results: No biologically relevant results were seen for any of the dispersants. See the description above under the corresponding AR assay for JD 2000.

ER Agonist Assay 4 - T47D-KBluc estrogen-responsive transcriptional activation assay

Method Summary: T47D-KBluc, is an estrogen receptor-mediated transcriptional activation assay (ER-TA) that detects the ability of chemicals to mimic estrogen[8]. This assay was run in-house by NHEERL researchers. The cells contain endogenous human estrogen receptors alpha and beta and are stably integrated with an engineered luciferase reporter gene controlled by triplet estrogen response elements. When the cells are exposed to hormone mimics, the mimicking chemical binds the estrogen receptor and activates production of the luciferase reporter gene. The luciferase product is measured in a light emitting reaction. Additional detail of the method is provided in the **Appendix F**.

Results: The ability of the eight dispersants to stimulate luciferase expression in this cell line was compared to 17β-Estradiol (CAS 50-28-2: a concentration-response curve to E2 was included on each 96 well plate with the dispersants) and to 4-Nonylphenol (branched) (CAS 84852-15-3) (**Figure 7 a,b**). 17α-Trenbolone (CAS 80657-17-6) was run as a negative control herein (**Figure 7d**) and as a positive control in the assessment of androgenicity. None of the eight dispersants displayed any potential estrogenicity (i.e. did not simulate luciferase induction) at any concentration in the current investigation (**Figure 8**). In fact, all the dispersants significantly reduced luciferase levels at high concentrations due to cytotoxicity.

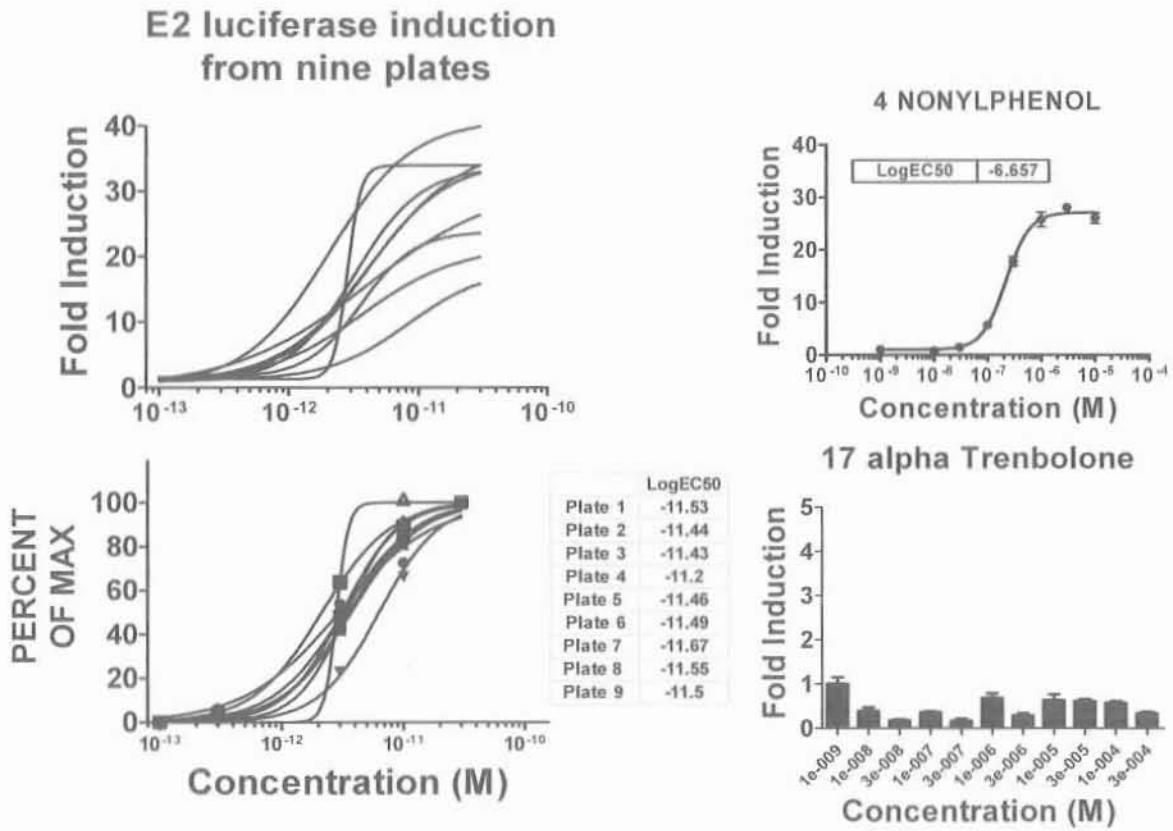


Figure 7: Estradiol 17β-induced (E2) luciferase expression in the nine plates used in the current study with T47D Kbluc cells, expressed as fold over media plus ethanol vehicle control (upper left) and percent of the maximal E2 stimulation (lower left). The

effects of the xenoestrogen 4-Nonlyphenol (Branched) are shown in the upper right and the lack of estrogenicity of the synthetic androgen 17α-Trenbolone are shown in the lower right panels. Values are means plus or minus standard errors of the mean.

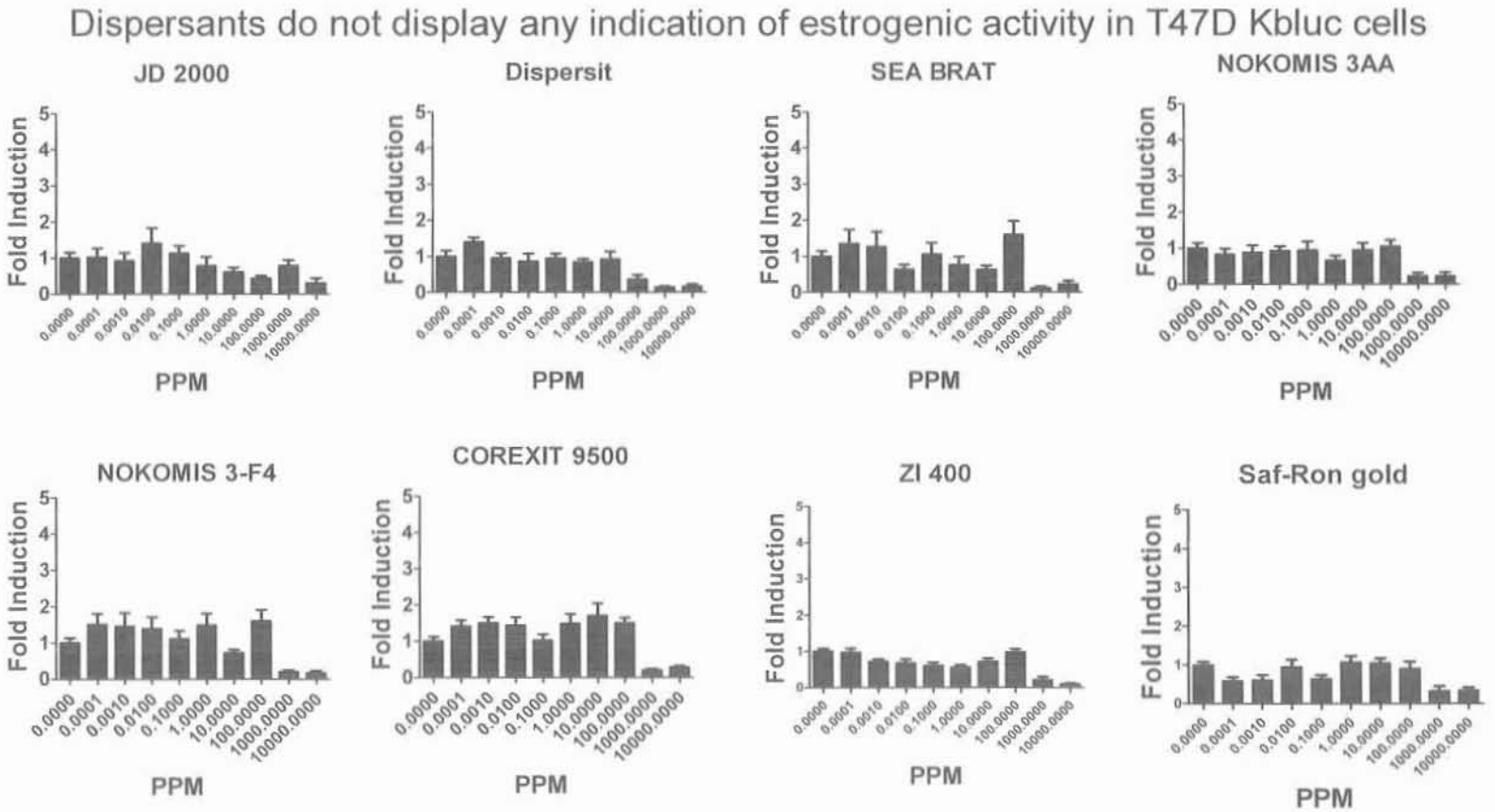


Figure 8: Assessment of the potential estrogenic activity of the eight dispersants in T47D Kbluc cells. Data are expressed as fold over the media plus ethanol vehicle control. Values are means plus or minus standard errors of the mean. Dispersants did not stimulate luciferase induction over the control fold value (control fold =1).

Cytotoxicity

Cytotoxicity Assay 1 –HepG2 Cells

Method Summary: Dispersants were tested for cytotoxicity against HepG2 cells in the MTT (3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyltetrazolium bromide) tetrazolium assay (15) following 24 h chemical exposure to 16 concentrations with an upper concentration of 1000 ppm. All concentrations were run in triplicate. This assay was run by Attagene Inc. LC50 values were determined by fitting curves as described in **Appendix C**. Results of cytotoxicity assessment are shown below. For this analysis, there were either 4 replicates in 16 concentrations, except for SAF-RON GOLD which was only tested in 2 replicates and 8 concentrations.

Cytotoxicity Assay 2 –AR *bla* Cells

Method Summary: Cell viability after compound treatment was measured in these AR *bla* cells using a luciferase-coupled ATP quantitation assay (CellTiter-Glo viability assay, Promega). This assay was run by the NIH Chemical Genomics Center. The change of intracellular ATP content indicates the number of metabolically competent cells after compound treatment. The cells were dispensed at 2,000 cells/5 μL/well for AR *bla* cells in 1,536-well white/solid bottom assay plates using an FRD. The cells were incubated for 5 hrs at 37°C, followed by the addition of compounds using the pin tool. The final concentration range for reference compounds was 11 pM to 92 μM, and 0.000144 ppm to 1209.8 ppm for dispersants. The assay plates were incubated for 16 hrs at 37°C, followed by the addition of 5 μL/well of CellTiter-Glo reagent. After 30 min incubation at room temperature, the luminescence intensity of the plates was measured using a ViewLux plate reader (PerkinElmer). Data was normalized relative to DMSO only wells (0%), and tetra-n-octylammonium bromide (92 μM, -100%). LC50 values were determined by fitting curves as described in **Appendix C**. Results of cytotoxicity assessment are shown below. For this analysis, there were 8-10 replicates in 24 concentrations.

Cytotoxicity Assay 3 –ER *bla* Cells

Method Summary: Cell viability after compound treatment was measured in these ER *bla* cells using a luciferase-coupled ATP quantitation assay (CellTiter-Glo viability assay, Promega). This assay was run by the NIH Chemical Genomics Center. The change of intracellular ATP content indicates the number of metabolically competent cells after compound treatment. The cells were dispensed at 5,000 cells/5 μL/well for ERα *bla* cells in 1,536-well white/solid bottom assay plates using an FRD. The cells were incubated a 5 h at 37°C, followed by the addition of compounds using the pin tool. The final concentration range for reference compounds was 11 pM to 92 μM, and 0.000144 ppm to 1209.8 ppm for dispersants. The assay plates were incubated for 18 hrs at 37°C, followed by the addition of 5 μL/well of CellTiter-Glo reagent. After 30 min incubation at room temperature, the luminescence intensity of the plates was measured using a ViewLux plate reader (PerkinElmer). Data was normalized relative to DMSO only wells (0%), and tetra-n-octylammonium bromide (92 uM, -100%). LC50 values were determined by fitting curves as described in **Appendix C.** Results of cytotoxicity assessment are shown below. For this analysis, there were 8-10 replicates in 24 concentrations.

Cytotoxicity Results (Assays 1-3)

Results of Cytotoxicity Assays 1-3 are summarized below the description of Assays 4-6.

Cytotoxicity Assays 4 THRU 9: measurements in T47D-KBluc, MDA-kb2, and CV-1 cells (MTT and CPE assessments) (5 independent assessments).

Methods summary: The ability of the dispersants to produce a general toxic effect on each of the cell lines used in the in the NHHERL in-house assays was assessed by both observational and biochemical methods. First, each well of cells in every assay was evaluated by visual microscopic examination utilizing a five point cytopathic effect (CPE) criteria scale ranging from 0 (no visual toxicity) to 4 (total cell death). CPE assessment criteria were as follows: 0 = no observed effect; 1= subtle changes suggesting effect; 2 = definite effects or death in a at least 25% of cells; 3 = 50 to 75% of cells effected; 4 = 100% of cells effected/cell death.

Second, an assessment of the metabolic perturbation of cell health was quantitated by monitoring the ability of cells to metabolize 3-[4,5-Dimethylthiazol-2-yl]-2,5-diphenyltetrazolium bromide (MTT)[11]. In this biochemical assay, healthy cells are capable of converting a yellow MTT solution into a blue dye. The healthier the cell the more blue dye produced. This biochemical assay is an indicator that the cells are metabolically active and is a measurement of general cell health. The MTT assay is a quantitative evaluation of mitochondrial function of the cells whereas the first method was a qualitative microscopic cytopathological evaluation (CPE) of cell viability and morphology

Cytotoxicity Results (Assays 4-9)

All eight dispersants disrupted cell function and caused cell death in all three cell lines in the two highest concentrations (0.01 and 0.001, or 10,000 and 1,000 ppm, respectively). Furthermore, none of the dispersants produced any sign of cytotoxicity at concentrations below 1 ppm (**Figures 9-12**).

Cytopathological evaluation of dispersant cytotoxicity (eight plates/dispersant, four replicate wells/plate/conc) in MDAKb2, CV 1 and T47D Kbluc cells. Figures are ranked from top left to bottom right in cytotoxic potency at 1, 10 and 100 ppm. At higher concentrations CPE scores were 3-4 for all dispersants and no CPE was observed at concentrations below 1 ppm. The maximum total CPE score is 12, 4 per assay

	cytopathic effect: defined
no CPE	none observed
CPE +1	subtle changes suggesting effect
CPE+2	definite changes in more than 25 % of cells
CPE+3	50-75 % of cells effected
CPE+4	100% cells effected/dead

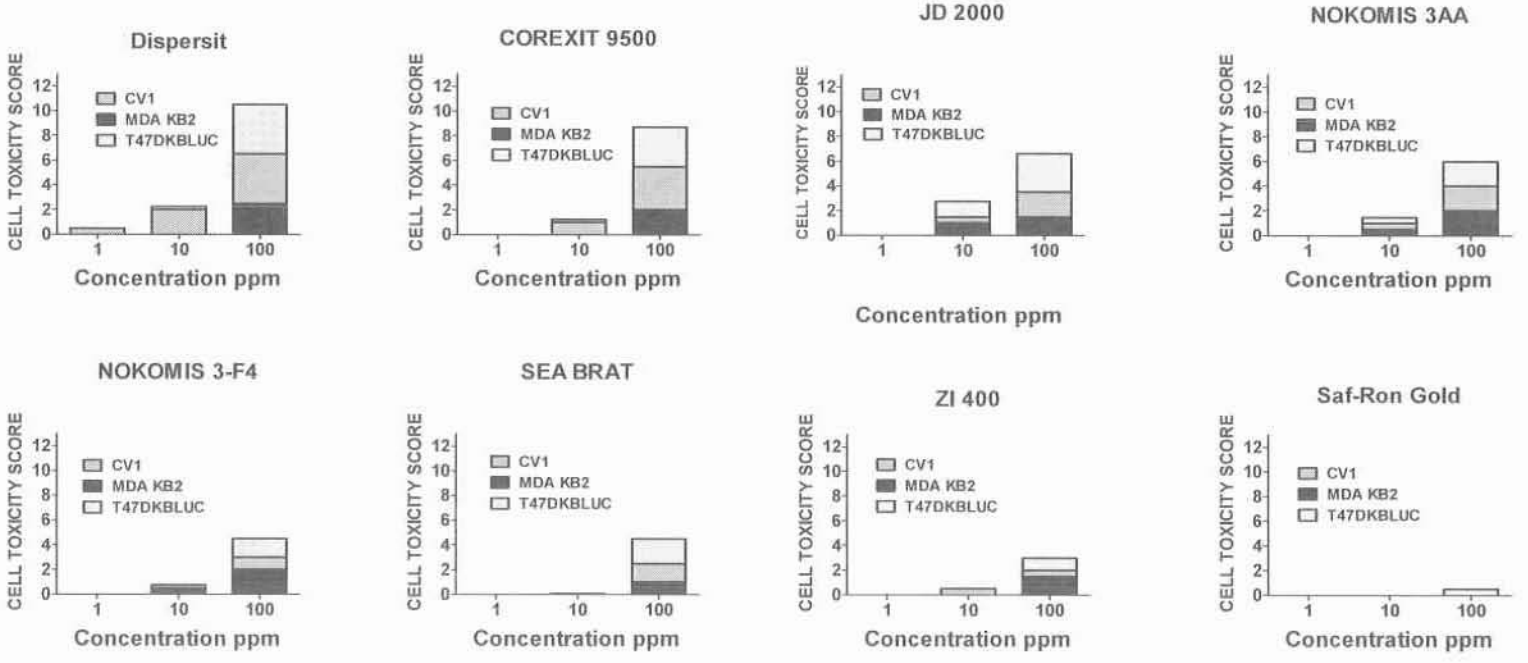


Figure 9:

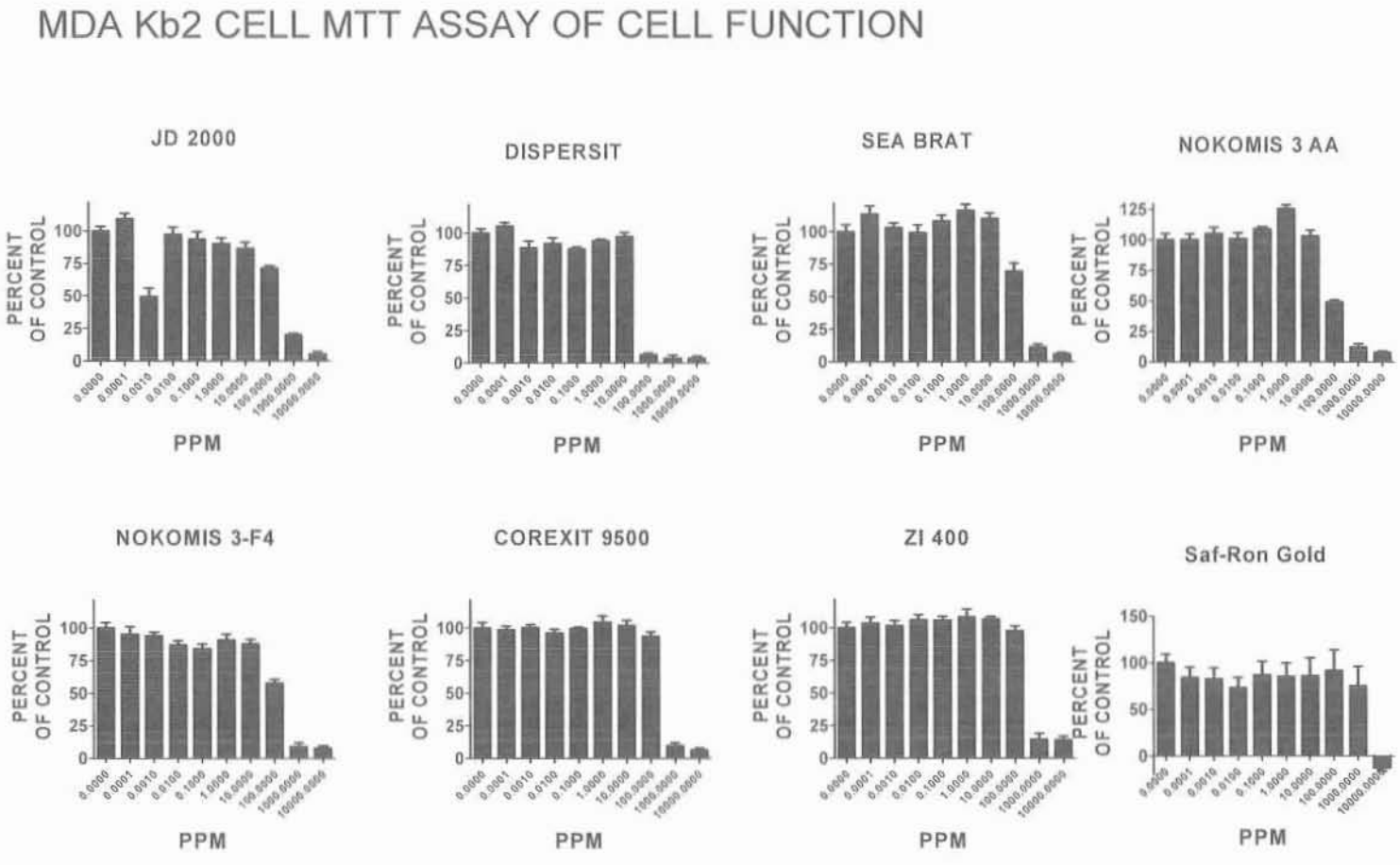


Figure 10: Toxic effects of the eight dispersants on MMT levels in MDA Kb2 cells. A reduction in MTT levels is an indicator of cytotoxcity, seen with all dispersants at the two higher concentrations (1000 and 10,000 ppm) and at 100 ppm with several of the dispersants. Data are expressed as percent of control (media).

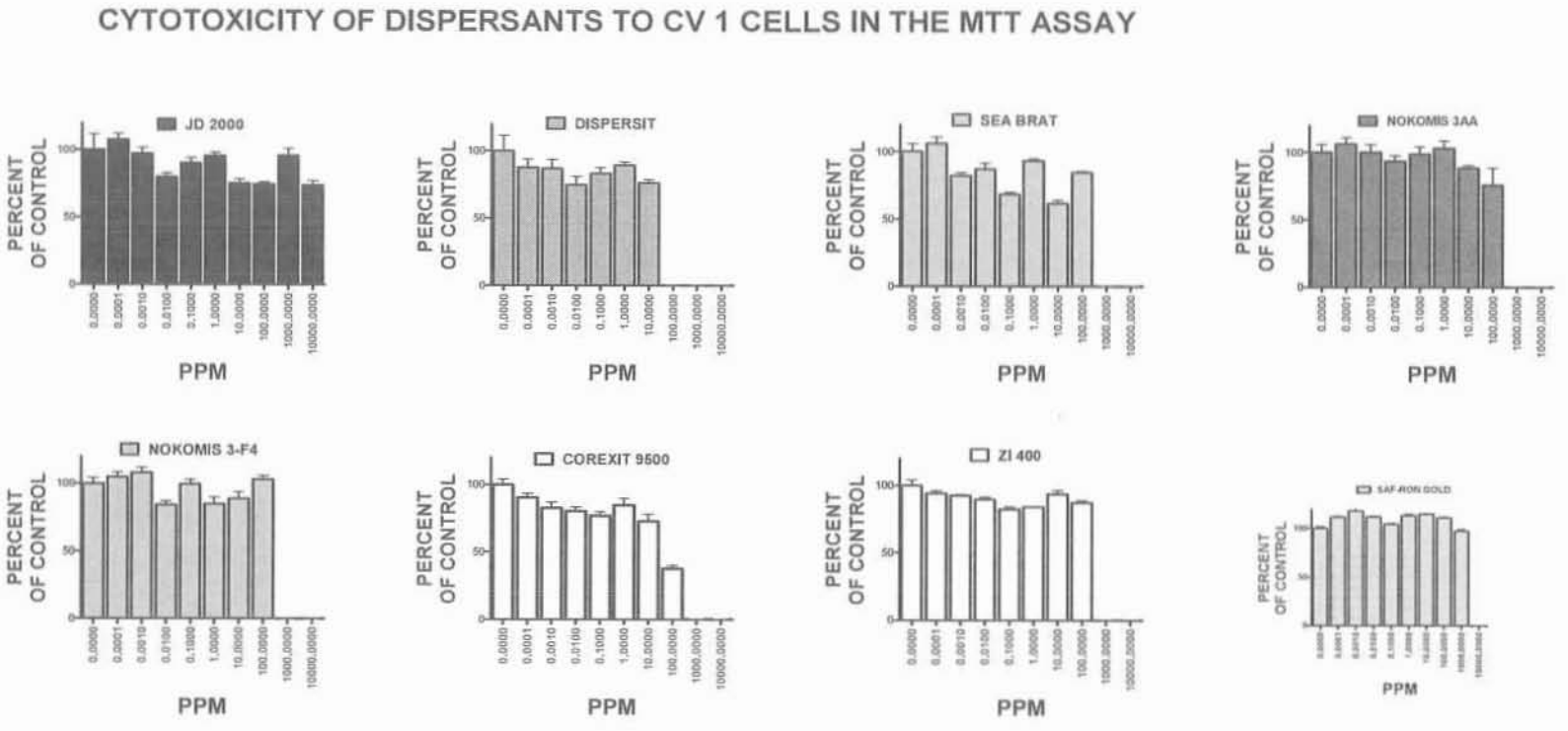


Figure 11: Toxic effects of the eight dispersants on MMT levels in CV-1 cells. A reduction in MTT levels is an indicator of cytotoxcity, seen with all dispersants at the two higher concentrations (1000 and 10,000 ppm) except JD 2000 (no toxicity was seen at any concentration) and SAF-RON GOLD (toxicity was seen only at the highest concentration of 10,000 ppm). DISPERSIT SPC 1000 and Corexit also induced cytotoxicity at 100. Data are expressed as percent of control (media).

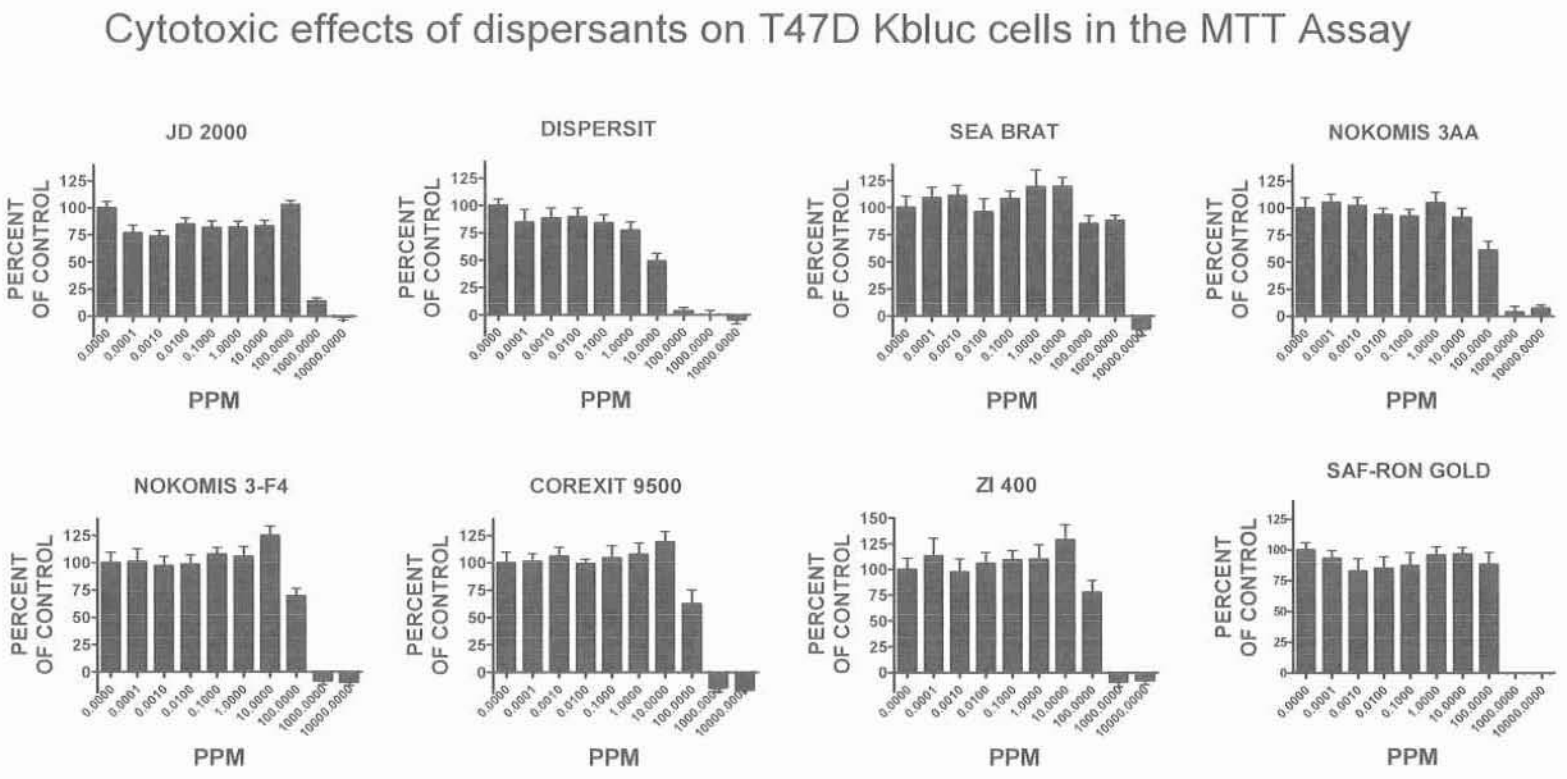


Figure 12: Toxic effects of the eight dispersants on T47D Kbluc cells. A reduction in MTT levels is an indicator of cytotoxicity, seen with all dispersants at the two higher concentrations (1000 and 10,000 ppm) and at 100 ppm with several of the dispersants. Data are expressed as percent of control (media).

The lowest observed effective concentration (LOEC) for dispersant-induced reductions in MTT, estrogen, androgen and antiandrogen assays are reported in **Table 3**. In the table, the noted changes in the two androgen and the estrogen agonist assays do not result from hormone-like increases in luciferase activity but rather represent significant reductions in luciferase expression that likely result from the cytotoxic effects of the dispersants. Statistical significance was determined using analysis of variance followed by t-tests (LSMEANS) using PROC GLM on SAS 9.1 ($p < 0.01$ was used as the critical value to determine statistical significance).

Dispersant	MDA Kb2 cells			CV1 cells		T47D Kbluc cells	
	MTT Cytotoxicity	Androgen Antagonist Assay***	Androgen Agonist Assay	MTT Cytotoxicity	Androgen Agonist Assay	MTT Cytotoxicity	Estrogen Agonist Assay
	LOEC* (ppm)	LOEC (ppm)	LOEC (ppm)	LOEC (ppm)	LOEC (ppm)	LOEC (ppm)	LOEC (ppm)
JD 2000	100	>10	1,000	10,000**	1,000	1,000**	10,000**
DISPERSIT SPC 1000	100	10	100	10	100	10	100
Sea Brat #4	100	>10	100	1,000**	1,000	10,000	1,000
Nokomis 3-AA	100	10	10	1,000	1,000	100	1,000
Nokomis 3-F4	100	>10	10	1,000	1,000	1,000	1,000
Corexit 9500	1,000	>10	1,000	100	1,000	100	1,000
ZI-400	1,000	>10	100	1,000	1,000	1,000	1,000
SAF-RON GOLD	10,000	>10	1,000	10,000	1,000	1,000	10,000

*LOEC (ppm) represents the lowest concentration at which the dispersant consistently reduced the MTT value. Statistical significance was using $p<0.01$ as determined using LSMEANS option of PROC GLM available on SAS 9.1.
** LOEC concentration was equivocal (nonmonotonic response)
*** Antagonist assay for antiandrogens was not run the three highest concentrations (10,000, 1000 and 100 ppm) to avoid most the confounding effects of cell death. The highest concentration was 10 ppm, Dispersants that did not reduce luciferase expression in this assay at any concentration were scored as >10 ppm.

Table 3: Summary table of the Lowest Observed Effect Concentration (LOEC) of the eight dispersants in the MTT cytotoxicity in three cell lines, the estrogen agonist assay in T47D Kbluc cells, the agonist assays in CV-1 and MDA K2 cells and the antagonist assay in MDA Kb2 cells. Since none of the dispersants displayed any effect interpreted as result of the dispersant displaying

endocrine activity we interpret all the results as indications of disruption of cell function and cell death. Since the androgen antagonist assay for antiandrogens did not include the three dispersant highest concentrations (10,000, 1000 and 100 ppm) to avoid most the confounding effects of overt toxicity (seen in the MTT assay with MDA Kb2 cells), the highest concentration in this assay was 10 ppm, Dispersants that did not reduce luciferase expression in this assay at any concentration were scored as >10 ppm. In spite of this precaution, the two most cytotoxic dispersants still reduced luciferase expression in this assay, an effect we attribute to less overt cell toxicity.

The EC_{50} values for the dispersant dose response curves were determined using nonlinear regression procedures with GraphPad Prism 5.0 software (**Figure 5 a,b,c**). Ranking the eight dispersants in order of highest to lowest potency in the MTT assays and the CPE assessment in three cells lines indicates that there are some consistent differences among dispersants in their ability to disrupt the function and viability of these cell lines (**Figure 5 d**). Dispersant SPC 1000 appears to be more toxic in both MTT (below) and CPE assessments.

Cytotoxicity Summary

For comparison to all of the *in vitro* cytotoxicity assays, we also include LC50 values from whole animal, aquatic species lethality assays for the mysid, *Americamysis bahia*, in a 48-hr static acute toxicity test and an inland silverside, *Menidia beryllina*, 96-hr static acute toxicity test[12]. All LC50 values are plotted in **Figure 13** and the numerical values are listed in **Appendix D**. One can see that the cell-based LC50 values overall vary by about two orders of magnitude, and that the values for any given chemical span about one order of magnitude. The rank order of cytotoxicity varied between the various cell types, a not unexpected finding [13]. There is overlap in the range of cytotoxicity for all of the dispersants.

In order to assess, statistically, differential cytotoxicity across the eight dispersants we performed an ANOVA to determine pairwise if any two dispersants were more cytotoxic than the other. We performed this statistical test with and without multiple test correction (Bonferroni). For any dispersant and assay combination that did not achieve an LC50, a default value of 3000 ppm was used; three-fold higher than the highest concentration tested in the relevant assays. LC50 values

greater than 3000 ppm were also set to this default value to prevent large extrapolated LC50 values from biasing the results. All six cell-based quantitative cytotoxicity assays were used for this analysis. The resulting p-values, raw and corrected, are provided in **Table 4**. Both JD 2000 and SAF-RON GOLD tend to be less cytotoxic than the other dispersants. Likewise, DISPERSIT SPC 1000 tends to be more cytotoxic than the other dispersants in the cell-based assays.

The aquatic species LC50 values are almost always lower than the cell-based LC50 values. As with the cell-based assays, JD 2000 is the least toxic in the whole animal assay.

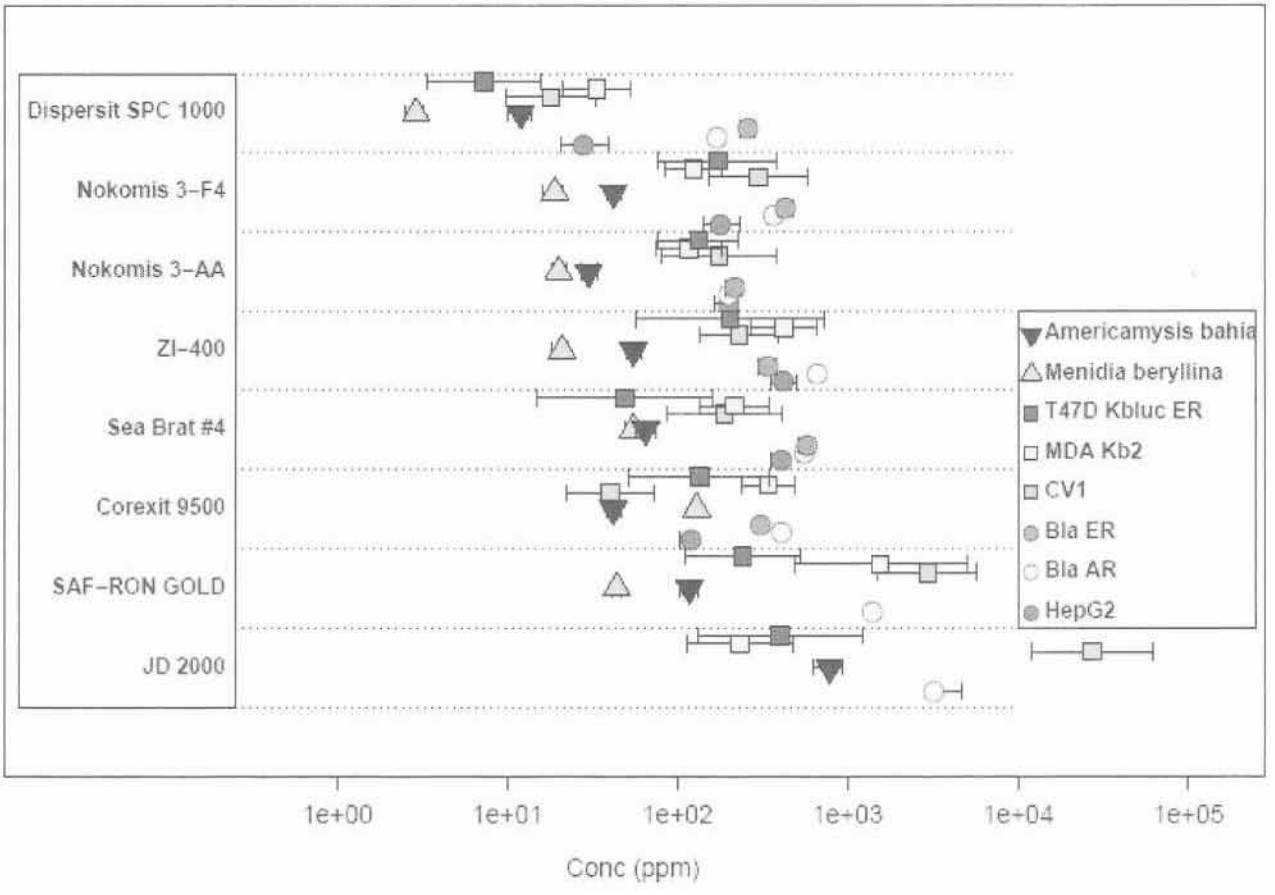


Figure 13: Toxicity data for the dispersants, combining data from cell-based assays in this report with data on aquatic species from a concurrent EPA report [12]. Each horizontal band shows the data for one dispersant. Results are presented from all 6 quantitative cytotoxicity assays. Cell-based LC50 values (concentration at which 50% lethality or effect is observed) are indicated by circles and

squares. Aquatic species LC50 values are indicated by triangles. Note that all dispersants were tested in all assays, and missing data points indicate that no toxicity was seen in that assay at the highest concentration tested. 95% confidence intervals are shown for all assays.

	JD 2000	Dispersit SPC 1000	Sea Brat 4	Nokomis 3-AA	Nokomis 3-F4	Corexit 9500	ZI-400	SAF-RON GOLD
JD 2000		0.1456	0.308	0.1876	0.2464	0.224	0.364	1
Dispersit SPC 1000	0.0052		0.84	1	0.644	1	0.126	0.056
Sea Brat 4	0.011	0.03		1	1	1	1	0.1456
Nokomis 3-AA	0.0067	0.082	0.11		1	1	0.42	0.0756
Nokomis 3-F4	0.0088	0.023	0.5	0.12		1	1	0.1036
Corexit 9500	0.008	0.086	0.34	0.42	0.65		1	0.0952
ZI-400	0.013	0.0045	0.68	0.015	0.19	0.12		0.1652
SAF-RON GOLD	0.92	0.002	0.0052	0.0027	0.0037	0.0034	0.0059	

Raw P-Value

Bonferroni Corrected P-Value

Table 4: Statistical comparison of LC50 cytotoxicity values from cell-based assays across the eight dispersants. All dispersants combinations with a p-value less <0.05 are shaded pink. All values below the diagonal are raw p-values derived from the ANOVA, while all values above the diagonal swere adjusted for multiple testing.

Other Molecular Targets

In addition to ER and AR, we also analyzed the chemical collection (dispersants plus reference chemicals) using a multiplexed reporter gene assay battery that evaluates activity against a panel of transcription factors including nuclear receptors[5, 9]. These assays were run by Attagene Inc. These data also provide a measure of quality control related to the specificity of any endocrine-related activity caused by the dispersants. The description of the assay and a complete list of targets is given in **Appendix B.2**. All of these assays were carried out twice, one week apart, and in each week, duplicate runs were performed. **Figure 14** summarize all of the results for the dispersants. This plot helps illustrate several key points about the data.

First, as the concentration of a chemical approaches the cytotoxic level, generalized cell stress occurs, accompanied by broad misregulation of transcription. When this threshold is reached, many assays in this system simultaneously activate, but this activity is assumed to be non-specific. One sentinel of this cell stress behavior is NRF2, which is an indicator of generalized oxidative stress. Therefore, if we see many assays become active at about the same concentration, especially if NRF2 is among them, we can discount any target specificity above that concentration. We see this behavior for Corexit 9500 (~50 ppm), JD 2000 (~500 ppm), Nokomis 3-AA (~75 ppm), Nokomis 3-F4 (~75 ppm), Sea Brat #4 (~90 ppm) and ZI-400 (~50 ppm).

The ER activity for Nokomis 3-F4 occurs at a concentration well below where this non-specific behavior is indicated. For ZI-400, the confidence intervals for ER and NRF2 overlap, indicating a possibility that the ER result is non-specific.

The lowest activity that is generally seen is for PXR (Pregnane-X-receptor), which is a xenosensor. This behavior is entirely expected, is common across many classes of organic chemicals, and is not in itself an indicator of toxicity. PXR has been reported to be a xenosensor that acts to protect against endocrine active chemicals[14]. PPAR (peroxisome proliferator activating receptor[15-19]) activity is observed for a number of the dispersants, at higher concentrations than is seen for the PXR assays. There is an extensive literature on PPAR activity

associated with disease in rodents, although the human relevance is unclear [15-18, 20-23]. However, only for Corexit 9500 and Nokomis 3-AA (and potentially for SAF-RON GOLD) is the PPAR signal well below the level of non-specific activity. Vitamin D receptor (VDR) activity is seen for Sea Brat #4 and Nokomis 3-AA below but near the concentration of non-specific behavior.

The activity of JD 2000 cannot necessarily be dismissed as being all non-specific, despite it occurring at the same concentration as NRF2 activity. This is because there are only two target families being activated – PXR and PPAR. A similar observation can be made about DISPERSIT SPC 1000. At the concentration of NRF2 activity, we only see activation of two PXR assays and one for SREBP (SREBF1 sterol regulatory element binding transcription factor 1) which is involved in fatty acid synthesis regulation.

The largest effect (in terms of EMax) of any dispersant and assays is for ZI-400 and AhR (Aryl hydrocarbon receptor), with EMax >30. The AhR is well-known for its role in mediating the adaptive metabolism of xenobiotics, and also in the toxicity that follows exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin (dioxin). This indicates the potential for the presence of a dioxin-like compound, which would be cause for concern. In the ToxCast Phase I data set[4, 5] of 309 chemicals, we saw only three with AhR efficacy higher than is seen with ZI-400. It is not clear though that this effect is specific, given that it occurs in the same concentration range as activity in a number of other targets, and above the NRF2 AC50.

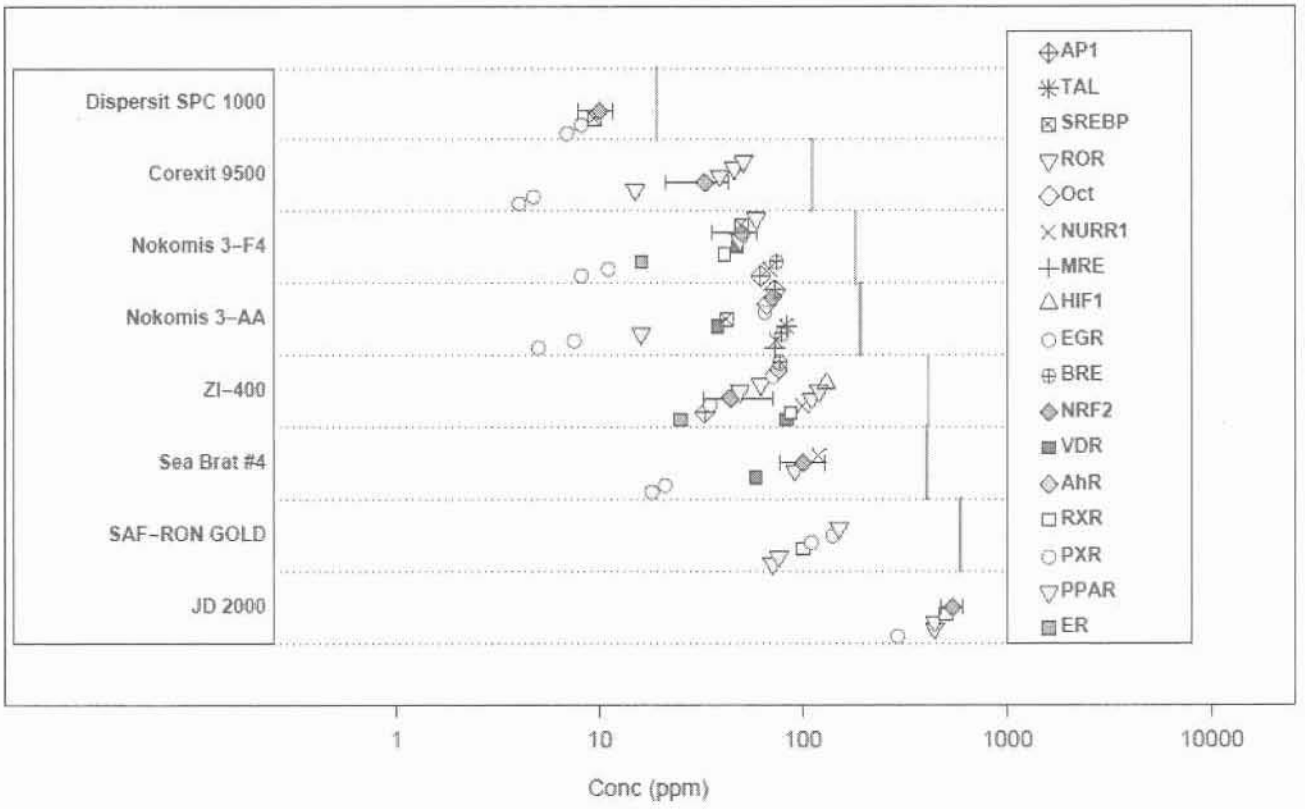


Figure 14: Summary plot of all Attagene *cis* and *trans* assays for dispersants with AC50 values below cytotoxicity levels. Each horizontal band displays data for a single dispersant. The x-value is the AC50. Points are staggered in the y-direction to make overlapping points visible. Where there were multiple assays for a given gene target (e.g. PPARα, PPARδ, PPARγ) were given a single symbol. For illustration, 95% confidence intervals are shown on assays for NRF2. The vertical red lines indicate the LC50 for cytotoxicity in the HepG2 cells. Dispersants are ordered by decreasing cytotoxicity LC50 values.

The major conclusions of this section are that several of the dispersants display PXR and PPAR activity at concentrations below where cell stress and cytotoxicity occur. These are expected responses in hepatocytes to xenobiotics. The ordering of dispersants by lowest concentration at which bioactivity occurs is consistent with the ordering based on cytotoxicity. One observation of more general interest is that we are able to detect specific target-based bioactivity in complex mixtures such as these. This is observation is relevant to the challenges of real world chemical toxicity testing, wherein humans and other organisms are often exposed to

complex mixtures rather than the pure single compounds that are the subject of typical toxicity testing.

Conclusions

The primary conclusions are as follows:

For six of the eight dispersants tested we found no evidence that they would be capable of interacting with estrogen or androgen receptor function from testing in multiple *in vitro* systems. For the other two dispersants, there was a weak ER signal in one assay. However, integrating over all of the ER and AR results, these data do not indicate that any of the eight dispersants will display biologically significant endocrine activity via the androgen or estrogen signaling pathways. As mentioned previously, NPEs (and their breakdown product NPs) can be endocrine disruptors in fish[1], so the risk of using NPE-containing dispersants should be carefully weighed against the expected benefits. One limitation of the present study is that there are other routes by which chemicals can cause endocrine disruption, as well as other types of toxicity that have not been tested for here. Most importantly though, there were no indications of estrogenic activity for Corexit 9500, the dispersant currently being used in the Gulf of Mexico.

All of the dispersants showed cytotoxicity in at least one cell type at concentrations between 10 and 1000 ppm. Both JD 2000 and SAF-RON GOLD tend to be less cytotoxic than the other dispersants. Likewise, DISPERSIT SPC 1000 tends to be more cytotoxic than the other dispersants in the cell-based assays. The aquatic species LC50 values tend to be lower than the cell-based LC50 values. As with the cell-based assays, JD 2000 is the least toxic in the whole animal assay.

Supplementary Information

Supplemental information, including a QA Statement, is included in the referenced Appendices.

QA Summary

All research described in this report was conducted under a comprehensive and rigorous program of quality assurance (QA), as documented in the QA supplemental file. The overall goal of the QA program was to ensure research data were of known and acceptable quality. QA staff surveillance of critical research activities was an important feature of the overall QA approach and ensured quick and effective resolution of any problems. The conclusion of the QA review process is that results presented in this report accurately reflect the raw data obtained during the course of the research and are scientifically valid and defensible.

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Legislative Affairs Update

Concerns from the Congressional Hearings this week

- Liability – Members wanted assurances from BP that they would pay claims
- Prevention – need to review and put in place system to prevent future problems
- BP's emergency response plan
- BP's corporate culture and history of accidents and safety lapses
- Limited access and supply of boom
- Impact of spill on wildlife
- MMS Corruption

Concerns from the Daily Congressional Calls

- Status of subsea dispersant testing
- NOAA's fisheries notices – effects on local economy
- Are permits for new drilling rigs being issued?
- Availability and amount of boom
- Containment Dome – why it did not work and what is next

Pending legislation

President's Legislative Package: Ensure that the Administration can continue assisting BP with the response to the oil spill and help the individuals and committees affected by the oil spill. The Package does the following:

- Permit USCG to obtain advances of up to $100 million from the Oil Spill Liability Trust Fund
- Raising the liability caps from $1 billion to $1.5 billion on natural resource damage assessments and $500 to $750 million for claims
- Increase the tax to finance the Oil Spill Liability Trust Fund from 8 cents to 9 cents per barrel
- $2 million to FDA to monitor and respond to impact of oil on seafood from the gulf
- $29 million for Interior for additional inspections, enforcement, and studies for off shore oil exploration
- $2 million for EPA and $5 million for NOAA for environmental studies
- Provides for unemployment assistance, nutrition assistance and employment assistance for individuals affected by the oil spill.
- Provide assistance to communities with a $5 million for grants to state, local, and non-profit entities, $15 million to provide compensation to fisherman who have lost their earnings, and the SBA will make low-interest loans with generous forbearance options.

Kerry/Lieberman Energy reform and Climate Change Bill: While offshore drilling remains a cornerstone of the bill, the introduced legislation allows for state officials to restrict drilling within 75 miles off their coastline.

Intergovernmental Affairs Update

Intergovernmental Engagement

The interagency has taken a multi-faceted approach to reaching out to state and local officials:

- Separate daily conference calls with Governors and locals. (Facilitated by the White House)
- Daily updates of the ongoing operations and spill trajectory via email from the Unified Area Command to state and local officials
- Dedicated government affairs staff and telephone lines at all three Joint Command Posts, as well as the Unified Area Command
- Direct outreach from Admiral Allen (NIC) Admiral Neffenger (Deputy NIC), Admiral Landry (Area Commander) on response efforts
- Roundtable meetings with senior administration officials and stakeholders in the region

Interagency Coordination

Interagency coordination takes place at each level of command in this incident.

- Within the NIC, the Interagency Solutions Group (IASG) is tasked with devising solutions that represent the whole of government for issues that reside outside of the immediate response efforts.
- The IASG is purposefully modeled after the subcommittees formed under the Deepwater Horizon Deputies' Committee and includes representatives from 17 federal departments/agencies: DHS (USCG, FEMA), DOD, DOC (NMFS, NOAA), DOI (MMS, OEPC), EPA, USDA, DOT (MARAD), DOL (OSHA), and the US Army Corps of Engineers. The goal is to provide transparency of ongoing operations to the Deputies' Committee subcommittees.
- Requests for information and policy proposals not rising to the level of Deputies' Committee should be submitted to the IASG. The IASG provides Open and continuous transparency for each agency with respect to NIC activities, plans, strategies and request for information. Examples of these issues include: the long term impact of dispersants, marine transportation system recovery, metrics for measuring the response, claims and claims management, and labor issues.

Issues Raised

- The Parish Presidents and Governors have been pushing for an expansion of boom deployment beyond what is called for in the Area Contingency Plans.
    - The UAC has been working through these requests as they arise, but they have the potential to become powder kegs as the requests drift further and further away from the pre-approved plans.
    - These requests typically include deployment of boom outside of the previously identified areas, double, or triple booming of sensitive areas, but have recently gone on to call for alternative response methodologies such as dredging, sand bagging and the construction of barrier islands.
- Several of the Governors have complained that BP has outsourced jobs and procurement from outside of the region.

- State and local officials have called for more information on claims and other forms of remediation for themselves and their constituencies. These concerns run the full gambit from loss of employment to habitat restoration to reimbursement for lost tax revenue.
- For the most part, local officials want to know how and when the spill will affect their jurisdiction. This has been a challenge given the inherent uncertainty of oil spill trajectory for a spill this far off-shore.

Contact: A/S Juliette Kayyem (b) (6) @hq.dhs.gov & CDR (b) (6) (b) (6) @uscg.dhs.gov

bp

Douglas J. Suttles
Chief Operating Officer

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Houston, TX 77079
Direct (b) (6)
Fax (b) (6)
(b) (6) @bp.com

July 11, 2010

Rear Admiral James A. Watson
Federal On-Scene Coordinator
United States Coast Guard

Exemption to Dispersant Monitoring and Assessment Directive – Addendum 3

Dear Admiral Watson,

BP respectfully requests an exemption to the Directive's maximum daily application of subsea dispersant for Sunday, July 11, 2010. Consistent with the Capping Stack Installation Plan sent to Admiral Allen on July 9, 2010, we are currently injecting 12 gallons per minute of subsea dispersant into the exiting oil stream. This is to ensure safe working conditions for the +1400 people on vessels working near the source. While we will continue to adjust the dispersant injection rate based upon winds, observed VOCs and oil capture volume, if we maintain 12 gpm, we will exceed 15,000 gallons for July 11.

An increase in subsea dispersant use is consistent with the Guidance on Subsea Dispersant Application you signed on June 23, which states, "For the purpose of VOC control, increases in the application rate of subsurface dispersants will be limited to conditions where winds are weak (< 10 knots) or VOC readings indicate potential health concerns. While this authority is granted to the OSC in the National Contingency Plan, all attempts will be made to maintain the 15,000 gallon per day subsurface cap outlined in Addendum 3 of the Dispersant Monitoring and Assessment Directive." The increase in subsea dispersant is also consistent with the Source Control Subsea Dispersant Forward Plan signed by Doug Suttles on July 6 and awaiting your signature. Assuming a flow rate of 53,000 bbls/day, a capture rate of 8,000 bbls/day, and a dispersant to oil ratio of 75 as stipulated by the USCG and EPA, the target daily dispersant volume would be 25,200 gallons or 17.5 gallons/minute.

The amount of subsea dispersant needed for VOC control has many controlling factors, including oil containment volume, wind conditions, and ocean currents. As you are aware, the amount of oil being captured decreased by ~18,000 barrels yesterday when the previous cap was removed. While we continue to bring the Helix Producer on line as quickly as is safely and operationally prudent, until it is operational, the amount of oil coming to the surface is greater than it has been recently. Additionally, winds are less than 10 knots today and the NOAA forecast is for winds to continue to be light. Finally, while ocean currents are currently bringing the oil to the surface to the southeast of the central operational area, if this current shifts or dissipates, the oil could revert to coming up directly under the main operational area, increasing the risk of VOCs.

Consistent with all of the above, we are requesting an exemption from the 15,000 gallon limit for July 11, 2010. Unless we see an increase in VOCs, we intend to hold our subsea dispersant rate at approximately 12 gpm, which would result in a total volume for today of less than 20,000 gallons. Further, the Helix Producer should begin capturing oil today, and thus we expect we will only need a one day exemption to proactively prevent dangerous VOC conditions during this time of crucial operations near the source.

Sincerely,

(b) (6)

Douglas J. Suttles

Approval granted subject to the above:

(b) (6)

Date: 7-11-10

Rear Admiral James A. Watson
Federal On-Scene Coordinator
United States Coast Guard

James A. Watson
Rear Admiral, USCG
Federal On-Scene Coordinator

July 2, 2010

Dear Admiral Watson:

In compliance with the May 26, 2010, Dispersant Monitoring and Assessment Directive - Addendum 3 (the "Directive"), BP Exploration & Production Inc. ("BP") has eliminated the surface application of dispersants, except in cases where an exemption is requested and justified, and approved by the Federal On-Scene Coordinator.

Houma Unified Command had 6 spotter visual reports on 2 July from aircraft out of both Stennis and Houma Bases. These spotters were able to identify oil slicks that were estimated to require 65,000 gallons of dispersant. Today aerial dispersant operations applied the 10,000 gallons that was initially approved and another 10,000 gallons that was approved approved by FOSC. Actual applied yesterday was 12,737 gals.

Weather will be a significant issue tomorrow. The Saturday forecast calls for flying conditions that may preclude aerial spraying with rain and thundershowers, winds of 20-28 knots from the N-NE-ENE, significant wave height over 7.5 feet, ceilings of 500 feet or less, visibility of 2 nm with a 80% chance of rain.

The NOAA Surface Oil Forecast for July 3rd shows extensive areas of heavy and medium oil (Attachment 2) that are or may adversely impact the shoreline, including sensitive wetlands.

Houma Unified Command anticipates that due to the weather, if oil slicks are identified, the most viable means of response will be the use of dispersants to reduce the risk of oil land fall, since tomorrow will be the 5th straight day of no skimming or ISB activities taking place.

Prior to spray operations tomorrow morning, the spotter aircraft will identify the high value targeted slicks and we will prepare a report of the location and dispersant volumes needed for application as soon as practicable tomorrow. It is anticipated that the forecasted weather pattern consisting of low ceilings and rain/thunderstorms will make it difficult to execute reconnaissance or dispersant spray missions.

Pursuant to a request this date from Unified Command, the following information is provided.

- Estimated size of identified dispersible oil slick targets proposed in designated zones: Today there were several air reconnaissance flights observing dispersible oil slicks in Zone AC & AM as shown Table 1.

- Explicit justification for why these targets can't be skimmed or addressed by other mechanical means: The weather is forecast to exceed the capability to skim and conduct ISB operations.

Source Skimming Assets:	All vessels in port
Non-Source Skimming Assets:	All vessels in port
ISB Assets:	All vessels in port
A Whale	Operating offshore for testing of system

- Consequently, source and non-source skimming vessels as well as ISB will not be in action tomorrow.
- Today, all offshore recovery assets (skimmers, etc.) are ***in port or at anchor due to inclement weather*** and ISB operations did not take place.
- It is planned to conduct Tier 1 helicopter SMART over flights to observe dispersant operations tomorrow should they be conducted and if weather permits helicopter operations.
- M/V *International Peace* is currently in port waiting on better seas and weather. It is not anticipated that she will be operating tomorrow due to continued adverse weather conditions. No SMART Tier 2 or Tier 3 monitoring will be conducted.
- No SMART Team Tier 1 flights were conducted on June 30; therefore, no QA/QC reports are attached.
- No burn box is shown at this time, since the ISB fleet will be in port tomorrow.
- The A Whale operating box is shown.
- Forecast sea state through Sunday showing skimming and ISB limitations is provided as Attachment 5.
- ***ALL RESPONSE OPERATIONS MAY BE CANCELED DUE TO WEATHER TOMORROW***

It should be noted, that due to the adverse weather, there has been no skimming, ISB or dispersant activities for the past five (5) days. Skimming and ISB operations are not scheduled for tomorrow. It is anticipated that significant quantities of dispersible oil will be observed, if flight operations are conducted.

Accordingly, in accordance with the Directive, the Houma Unified Command respectfully requests an exemption to apply EC9500A in volumes on dispersible oil slicks located today as shown in Table 1 not to exceed ~~60,000~~ 20,000 gallons for a period not to exceed 12 hours. As aerial dispersant is the primary response tool for tomorrow, we have mobilized the reconnaissance and deployment resources and request an initial 10,000 gallons for early opportunistic targets. This will be coupled with further reconnaissance and target identification. A subsequent request will be forwarded later in the day based on the full set of spotter reports.

Sincerely,

Houma Unified Command

Exemption approved subject to the above:

(b) (6)

Date: 7-3-10

James A. Watson
Rear Admiral, USCG

Attachment 1

Federal On-Scene Coordinator

Dispersant Zone Map for 3 July 2010 with Oil Targets from Spotter Operations on 2 July

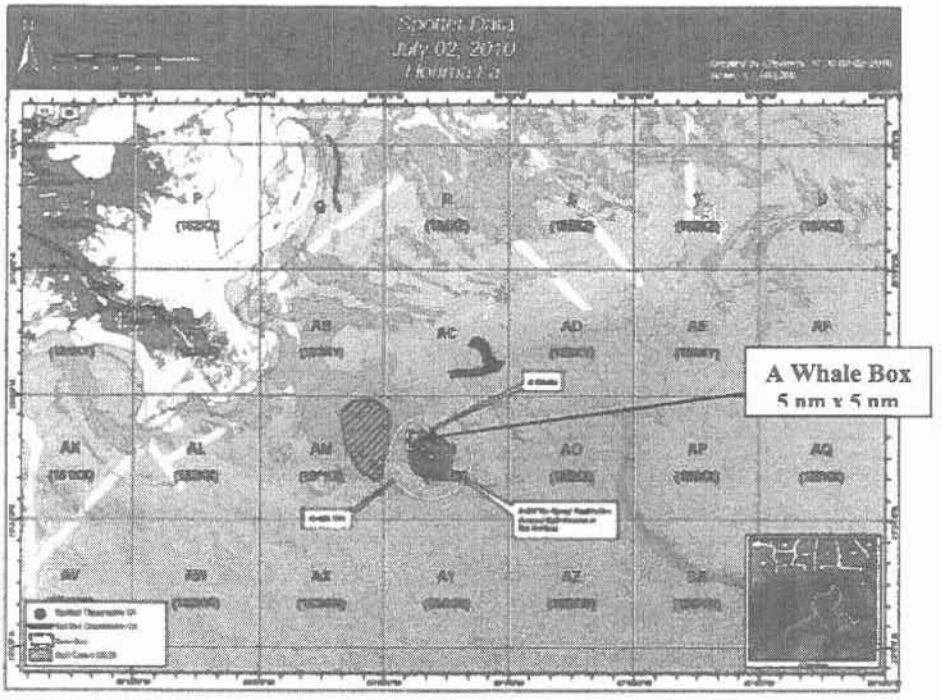


TABLE 1* Dispersible Oil Report July 2, 2010

Zone	# of slicks reported	Area in acres	Estimated percentage dispersible oil	Dispersant Needed** (1/20 DOR)
AC	1	20,480	25	25,600
AC	1	24,320	10	12,160
AM	1	141,000	5	35,250
Q	1	Found not suitably responsive to dispersant application		---
				73,010
Dispersant Sprayed Today The requested amount for 7/3/10 will be based on tomorrow mornings reconnaissance with an initial request for 10,000 gals. Estimated Dispersant Needed 7/03/2010				**12,737** **60,273**

***Note: Table 1 shows our intentions based upon our observations the day before these actions take place. Size and location of slicks will change. Activities within slick areas e.g., skimming operations, in-situ burning, etc., or weather conditions may require revisions to the actual operational plan implemented.**

****Note: Dispersant needed is based upon area in acres x % dispersible oil x 5 gallons per acre**

Attachment 2

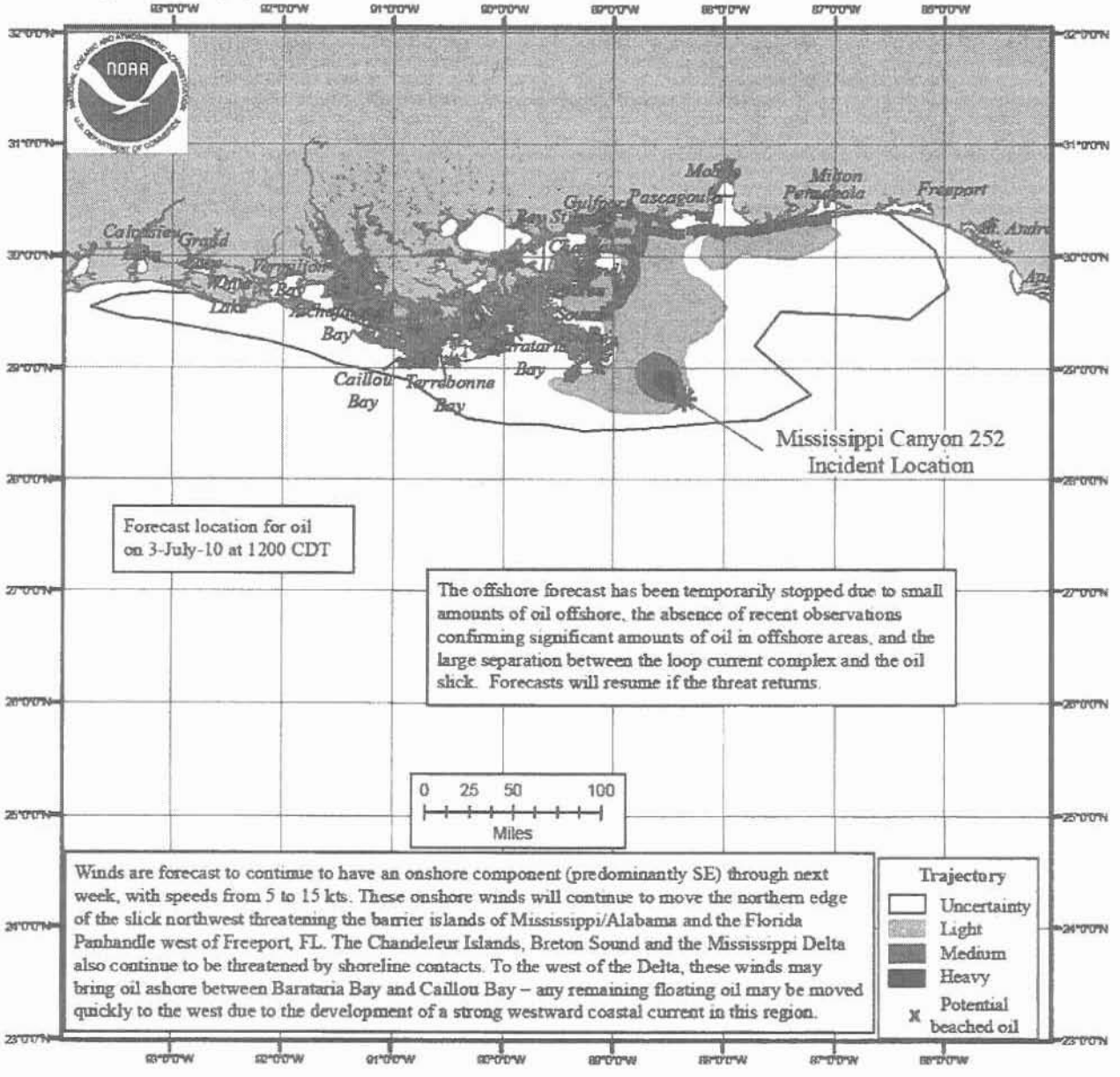
Nearshore Surface Oil Forecast Deepwater Horizon MC252

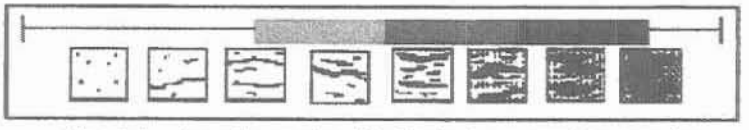
NOAA/NOS/OR&R

Nearshore

Estimate for: 1200 CDT, Saturday, 7/03/10
Date Prepared: 2100 CDT, Thursday, 7/01/10

This forecast is based on the NWS spot forecast from Thursday, July 1 PM. Currents were obtained from several models (NOAA Gulf of Mexico, West Florida Shelf/USF, TGLO/TAMU, NAVO/NRL) and HFR measurements. The model was initialized from Wednesday-Thursday satellite imagery analysis (NOAA/NESDIS). The leading edge may contain tarballs that are not readily observable from the imagery (hence not included in the model initialization). Oil near bay inlets could be brought into that bay by local tidal currents.





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

Next Forecast:
July 2nd PM

Attachment 3

Vessel Status Board

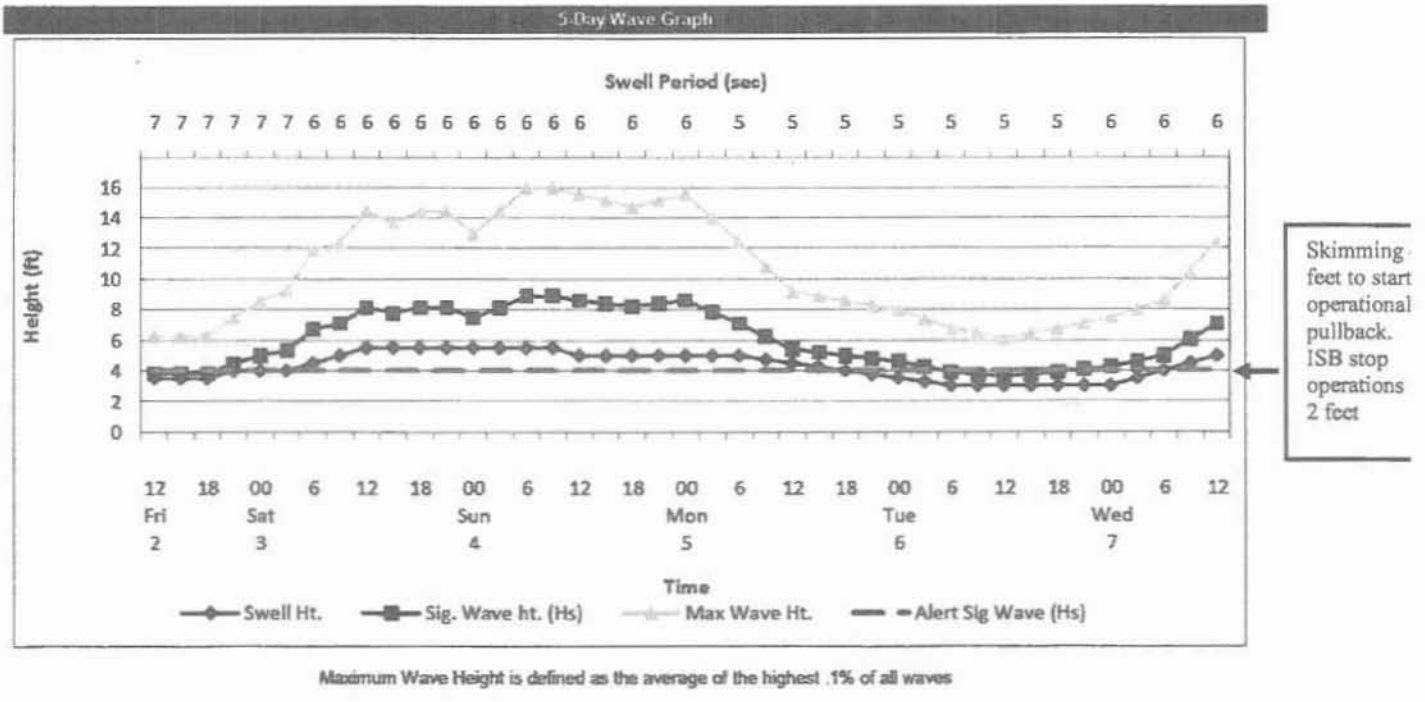
All Vessels Are Currently In Port Due To Inclement Weather And The Anticipation Is That Skimming Capacity Will Remain In Port Tomorrow

Attachment 4

QA / QC Reports

No spraying, No SMART Flights and No Reports on June 30th.

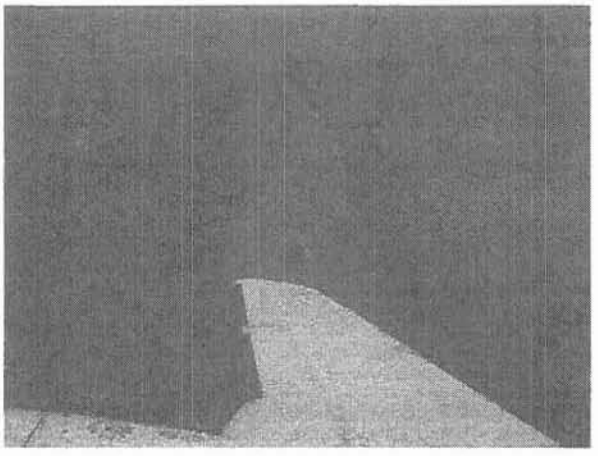
Attachment 5



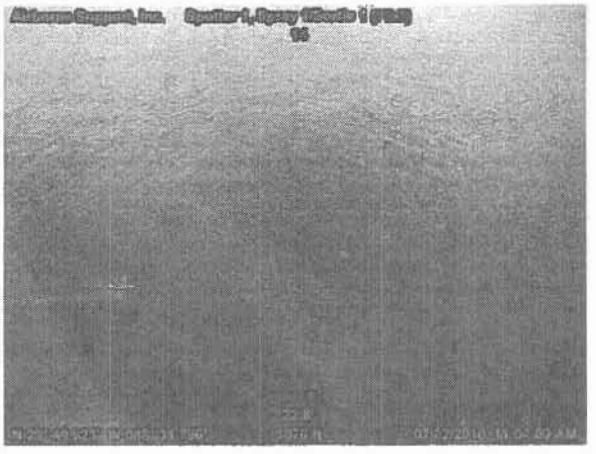
Maximum Wave Height is defined as the average of the highest .1% of all waves

PHOTOGRAPHS

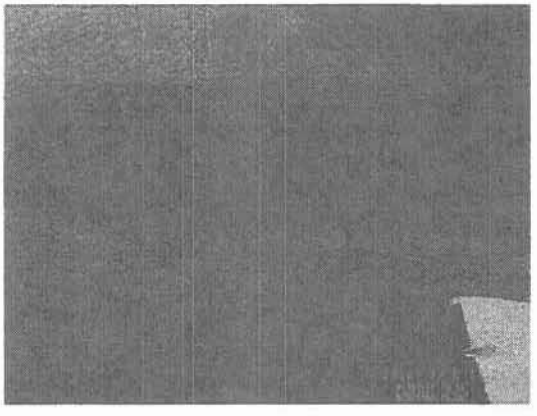
Zone AC (8 nm x 4 nm)



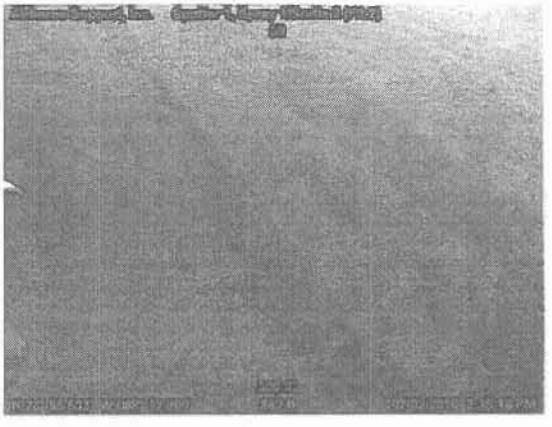
Zone AM (20 nm x 11 nm)



Zone AC (8 nm x 4 nm)



Zone AM (20 nm x 11 nm)



James A. Watson
Rear Admiral, USCG
Federal On-Scene Coordinator

July 3, 2010

Dear Admiral Watson:

In compliance with the May 26, 2010, Dispersant Monitoring and Assessment Directive - Addendum 3 (the "Directive"), BP Exploration & Production Inc. ("BP") has eliminated the surface application of dispersants, except in cases where an exemption is requested and justified, and approved by the Federal On-Scene Coordinator.

Houma Unified Command had nine (9) spotter visual reports on 3 July from aircraft out of both Stennis and Houma Bases. These spotters were able to identify oil slicks, however, in the opinion of the spotters and the Aerial Dispersant Group, these oil slicks were not of sufficient thickness to warrant aerial dispersant application. Today's aerial dispersant operations did not apply the 10,000 gallons that was initially approved by the FOSC; therefore, no additional amounts of dispersants were requested.

Weather will be a significant issue tomorrow for both surface and air operations. The Sunday forecast calls for flying conditions that may negatively impact both aerial spraying and reconnaissance flights. The forecast calls for an 80% probability of rain/thunderstorms, winds of 17-29 knots out of the E-ESE, wind waves averaging over 6 feet, significant wave height over 7 feet, with maximum wave height averaging 13.5 feet, ceilings of 500 feet or less and visibility of 4-7 nm.

The NOAA Surface Oil Forecast for July 4th shows extensive areas of heavy and medium oil (Attachment 2) that are or may adversely impact the shoreline, including sensitive wetlands.

Houma Unified Command anticipates that due to the weather, if oil slicks are identified, the most viable means of response will be the use of dispersants to reduce the risk of oil land fall, since tomorrow will be the 6th straight day of no skimming or ISB activities taking place.

Prior to spray operations tomorrow morning, the spotter aircraft will identify the high value targeted slicks and we will prepare a report of the location and dispersant volumes needed for application as soon as practicable tomorrow. It is anticipated that the forecasted weather pattern will consist of low ceilings and rain/thunderstorms which will make it difficult to execute reconnaissance or dispersant spray missions.

Pursuant to a request this date from Unified Command, the following information is provided.

- Estimated size of identified dispersible oil slick targets proposed in designated zones: Today air reconnaissance flights observed oil but none of the slicks were in our opinion of sufficient thickness to warrant expenditure of dispersant, therefore no dispersant was applied on the observed slicks. Please note that we have added Attachment 6 which is a spotter report describing and depicting the typical oil structure that has been observed today.

- Explicit justification for why these targets can't be skimmed or addressed by other mechanical means: The weather is forecast to exceed the capability to skim and conduct ISB operations.

Source Skimming Assets:	2 vessels offshore not skimming, other assets in port
Non-Source Skimming Assets:	All vessels in port
ISB Assets:	All vessels in port
A Whale	Operating offshore for testing of system.

Note: With the A Whale offshore there is the potential for conflicts in both surface skimming, burning and aerial dispersant operating areas.

- Consequently, source and non-source skimming vessels as well as ISB will not be in action tomorrow.
- Today, most offshore recovery assets (skimmers, etc.) are ***in port or at anchor due to inclement weather*** and ISB operations did not take place.
- It is planned to conduct Tier 1 helicopter SMART over flights to observe dispersant operations tomorrow should they be conducted and if weather permits helicopter operations.
- M/V *International Peace* is currently in port waiting on better seas and weather. It is not anticipated that she will be operating tomorrow due to continued adverse weather conditions. No SMART Tier 2 or Tier 3 monitoring will be conducted.
- SMART Team Tier 1 flights on July 1 were unable to go offshore due to weather; therefore, no QA/QC reports are attached.
- No burn box is shown at this time, since the ISB fleet will be in port tomorrow.
- The A Whale operating box is shown and is subject to change.
- Forecast sea state through Sunday showing skimming and ISB limitations is provided as Attachment 5.
- ***ALL RESPONSE OPERATIONS MAY BE CANCELED DUE TO WEATHER TOMORROW***

It should be noted, that as of today, due to the adverse weather, there has been no skimming, ISB or dispersant activities for the past five (5) days. Skimming and ISB operations are not scheduled for tomorrow.

In accordance with the Directive, the Houma Unified Command respectfully requests an exemption to apply EC9500A. As aerial dispersant is the primary response tool for tomorrow, we have mobilized the reconnaissance and deployment resources and request an initial 10,000 gallons for early opportunistic targets. This will be coupled with further reconnaissance and target identification tomorrow morning. A subsequent request will be forwarded later in the day based on the full set of spotter reports.

Sincerely,

Houma Unified Command

Exemption approved subject to the above:

(b) (6)

Date: 7/4/10

James A. Watson
Rear Admiral, USCG
Federal On-Scene Coordinator

Attachment 1

Dispersant Zone Map for 3 July 2010 with Oil Targets from Spotter Operations on 2 July

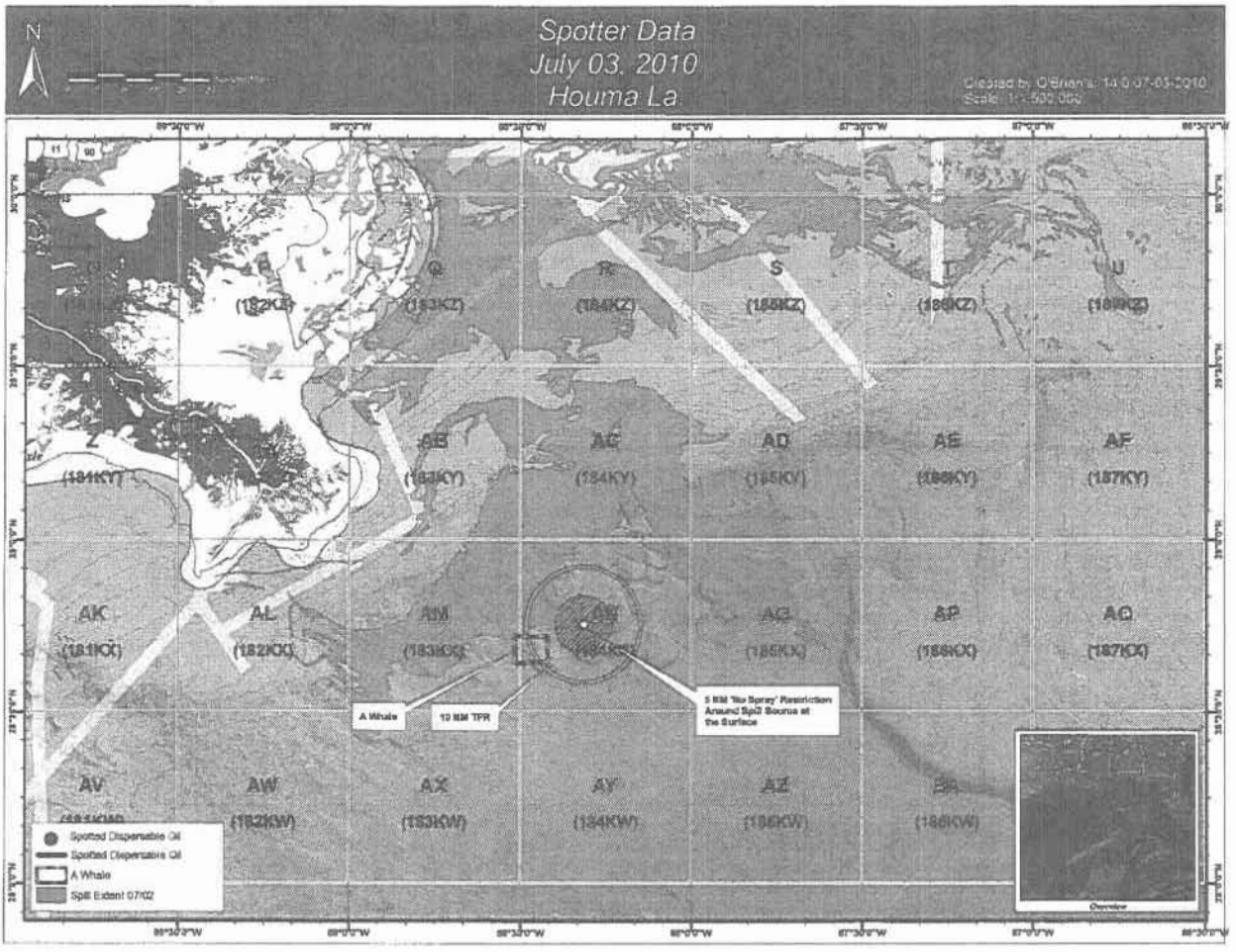


TABLE 1* Dispersible Oil Report July 3, 2010

Zone	# of slicks reported	Area in acres	Estimated percentage dispersible oil	Dispersant Needed** (1/20 DOR)
Dispersant Sprayed Today 0 Gallons The requested amount for 7/4/10 will be based on tomorrow mornings reconnaissance An initial request for 10,000 gals. is being made Estimated Dispersant Needed 7/04/2010				

Minimal Dispersible Oil Observed

***Note: Table 1 shows our intentions based upon our observations the day before these actions take place. Size and location of slicks will change. Activities within slick areas e.g., skimming operations, in-situ burning, etc., or weather conditions may require revisions to the actual operational plan implemented.**

****Note: Dispersant needed is based upon area in acres x % dispersible oil x 5 gallons per acre**

Attachment 2

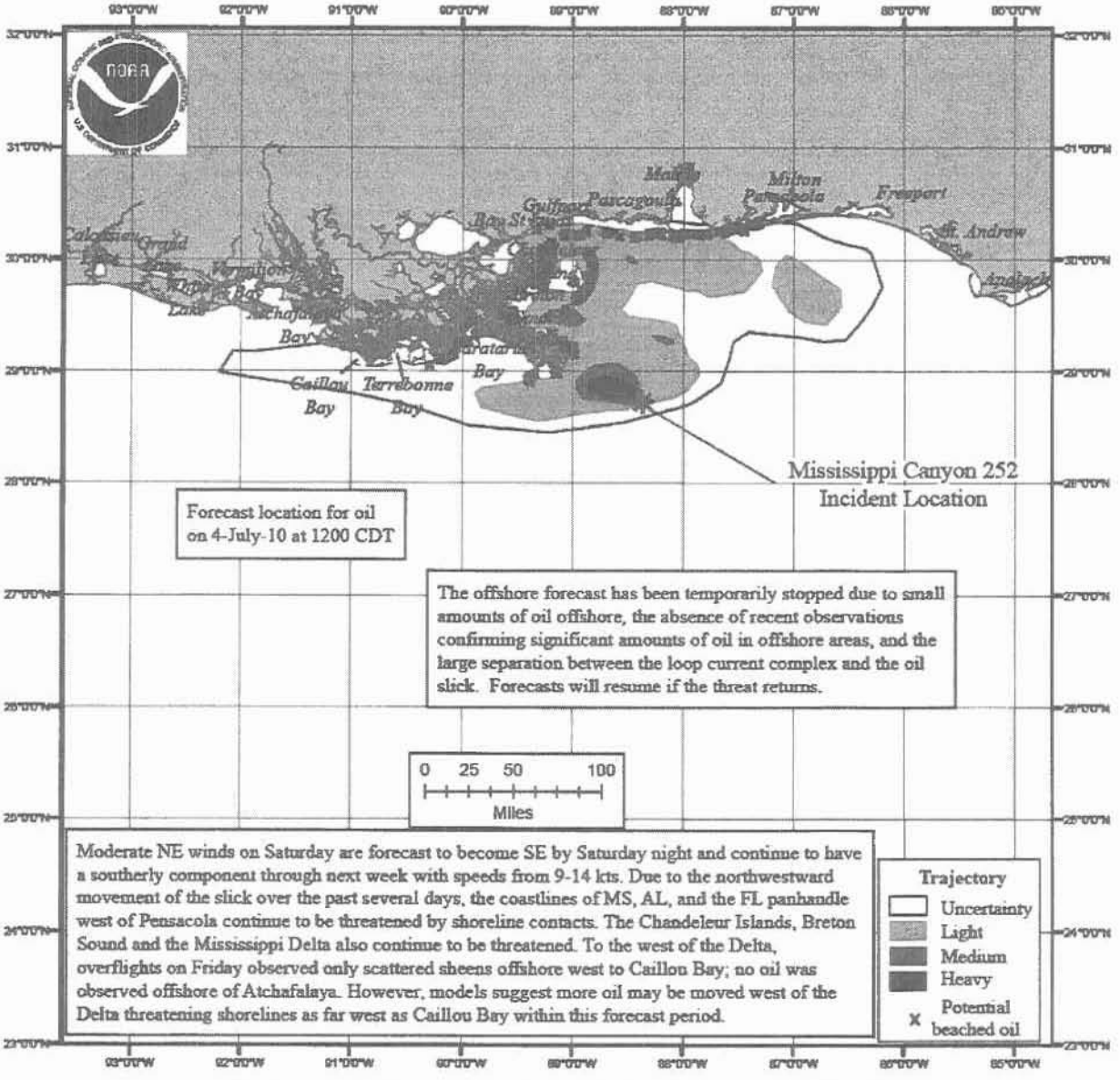
Nearshore Surface Oil Forecast Deepwater Horizon MC252

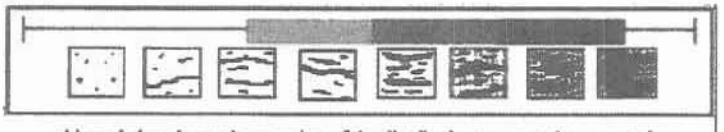
NOAA/NOS/OR&R

Nearshore

Estimate for: 1200 CDT, Sunday, 7/04/10
Date Prepared: 2100 CDT, Friday, 7/02/10

This forecast is based on the NWS spot forecast from Friday, July 2 PM. Currents were obtained from several models (NOAA Gulf of Mexico, West Florida Shelf/USF, TGLO/TAMU, NAVO/NRL) and HFR measurements. The model was initialized from Friday satellite imagery analysis (NOAA/NESDIS) and overflights. The leading edge may contain tarballs that are not readily observable from the imagery (hence not included in the model initialization). Oil near bay inlets could be brought into that bay by local tidal currents.





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

Next Forecast:
July 3rd PM

Attachment 3

Vessel Status Board

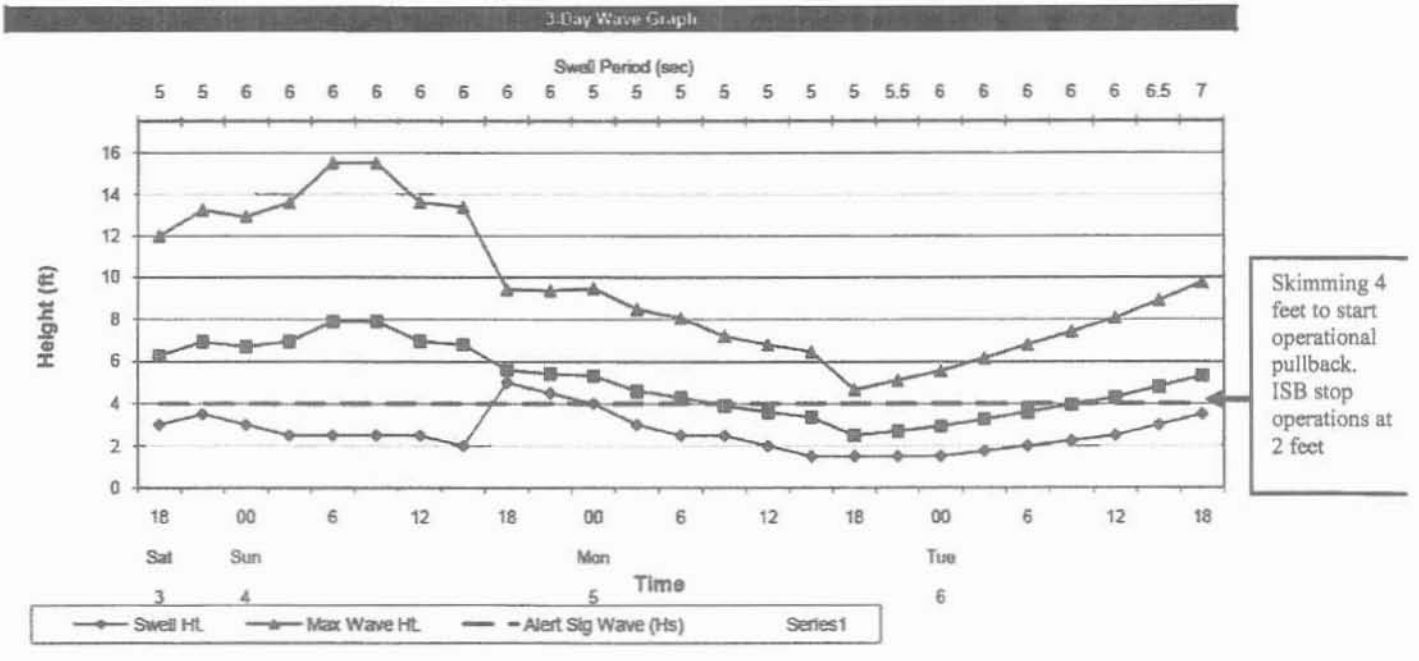
All Vessels Are Currently In Port Due To Inclement Weather And The Anticipation Is That Skimming Capacity Will Remain In Port Tomorrow

Attachment 4

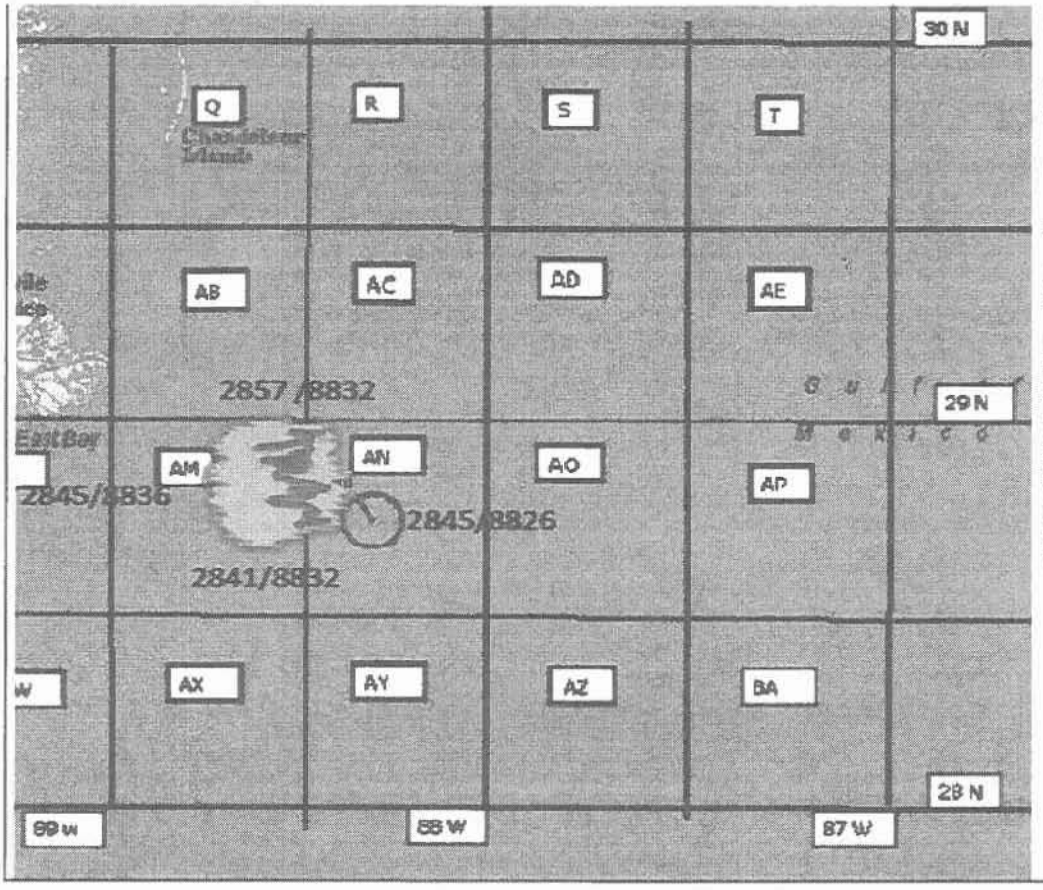
QA / QC Reports

Weather prevented SMART Flights on July 1st.

Attachment 5



Attachment 6



Date: 03JUL10

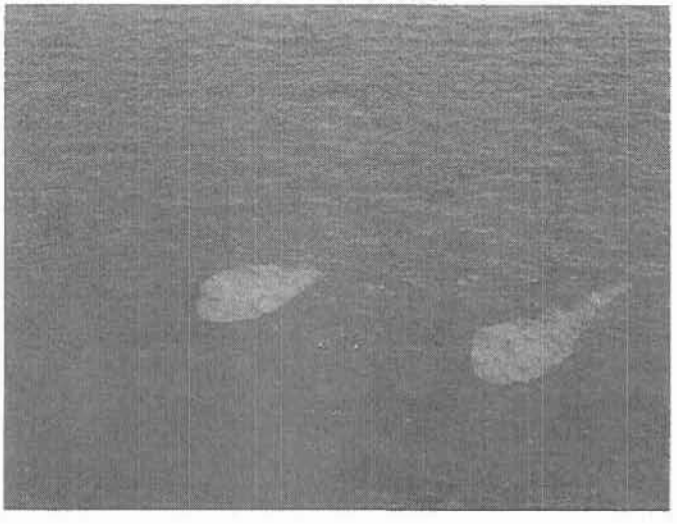
Time: 0630/0900
(start/end)

Flight #: 1

Zones Observed: AM

Large area of sheen located between coordinated on map.

Narrow embedded streamers of reddish emulsified oil north to south along the eastern border of the sheen. Very few streamers of reddish brown oil. Streamers are unorganized. Within the coordinates given, Metallic Sheen coverage 95%
Visible water (no sheen) 4%
Non-dispersible oil 1%



Emusified oil patties in Zone AL Not dispersible

bp

Douglas J. Suttles
Chief Operating Officer

BP Exploration & Production Inc.
501 WestLake Park Boulevard
Houston, TX 77079
Direct (b) (6)
Fax (b) (6)
(b) (6) @bp.com

July 5, 2010

Rear Admiral James A. Watson
Federal On-Scene Coordinator
United States Coast Guard

Weekly Source Control Surface Dispersant Plan
(July 8 through July 14, 2010)

Dear Admiral Watson,

In compliance with the May 26, 2010, Dispersant Monitoring and Assessment Directive - Addendum 3 (the "Directive"), BP Exploration & Production Inc. ("BP") submitted a weekly Source Control Surface Dispersant Plan for the week July 1 to July 7, which you approved on June 30. The plan allowed for a maximum daily application volume (calendar day) of 6,000 gallons, unless more was required to control VOCs. From July 1 through July 5, the average daily volume applied was ~487 gallons. The maximum daily application was 1,473 gallons on July 2.
The current offshore air monitoring plan for source control (2200-T2-DO-PN-4002-4 signed May 25, 2010) identifies air monitoring instrumentation, location and action levels to respond to VOC excursions. In addition, vapor suppression guidelines (attachment 1) were put in place May 29, 2010 to provide additional granularity for action requirements. The air monitoring data is transparent to USCG and EPA.

BP respectfully requests approval of the Weekly Source Control Dispersant Plan for July 8 though July 14, as follows

Date	Expected Maximum Volume per calendar day (gals)
July 8	6000
July 9	6000
July 10	6000
July 11	6000
July 12	6000
July 13	6000
July 14	6000

Should VOC monitoring dictate further deployment in accordance with the Air Monitoring Plan for Source Control, BP also respectfully requests to exceed these volumes as required.

Sincerely,

(b) (6)

Douglas J. Suttles

THE EXPECTED MAXIMUM APPLICATION OF DISPERSANT OF 4,000 GALLONS PER DAY WILL SERVE TO MITIGATE EXPECTED VOC EXCURSIONS ASSOCIATED WITH CAPPING ACTIVITIES PURSUANT TO REDUCING THE FLOW FROM THE WELL OVER A SEVERAL DAY PROCESS

(b) (6)

Approval granted subject to the above:

(b) (6)

Date: 7/7/2010

ROY A. NASH
Rear Admiral ~~James A. Watson~~
Federal On-Scene Coordinator
United States Coast Guard

Attachment 1
Vapor Suppression Guidelines
May 29, 2010

These guidelines pertain to deployment and use of dispersant vessels and fire fighting vessels in Source Control Operations. The guidance provides additional detail around action levels specified in the Offshore Air Monitoring Plan for Source Control (2200-T2-DO-PN-4002-4). In addition, this guidance aligns with Dispersant Procedures for Vessels Adriatic and HOS Super H (2200-T2-LC-RP-4091) and Fire Fighting Vessels Operating (Priorities and Procedures (2200-T2-DO-PR-4057).

All vessels experiencing VOC levels exceeding 50PPM are directed to report it to Source Control SimOps Branch Director. Application of dispersant should be coordinated through the Source Control SimOps Branch Director.

Recommended actions for VOC management:

- VOC levels of 20 to 70ppm
  - Use Rem Forza and Kay Marine 5 vessels for wide spray water pattern to suppress and redirect vapors

- VOC over 70ppm
  - Notify Source Control SimOps Branch Director to coordinate dispersant use
  - Use HOS Super H and Adriatic as primary dispersant vessels
  - Use Rem Forza and Kay Marine 5 vessels to apply dispersant when wide spray water pattern is not effective

Addendum to Weekly Source Control Surface Dispersant Plan
(July 8 through July 14, 2010)

The approval of the referenced surface dispersant plan granted on July 7, 2010 is amended as follows:

The maximum 6,000 gallon daily surface dispersant application rate is only authorized during active well-cap replacement operations. The expected maximum application of dispersant of 6,000 gallons per day during the top cap removal procedures will mitigate expected VOC excursions associated with capping activities pursuant to reducing the increased flow from the well over this several day process.

Thanks to the diligent efforts of all involved parties, the daily surface dispersant application rate to control VOCs has been reduced to under 200 gallons over the past two weeks. Prior to commencing the well-cap replacement operation and once it is completed the maximum daily surface dispersant application rate is not expected to exceed 3,000 gallons daily unless a spike in VOC monitoring dictate further deployment.

(b) (6)

Date: 7/8/2010

Rear Admiral Roy A. Nash
Deputy, Federal On-Scene Coordinator
United States Coast Guard

bp

Douglas J. Suttles
Chief Operating Officer

BP Exploration & Production Inc.
501 WestLake Park Boulevard
Houston, TX 77079
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(b) (6) @bp.com

July 6, 2010

Rear Admiral James A. Watson
Federal On-Site Coordinator
United States Coast Guard

Re: Source Control Subsea Dispersant Forward Plan

Dear Admiral Watson,

This letter is in response to your request that BP Exploration & Production Inc. ("BP") provide a high-level description of its plans going forward with regard to the use of dispersants. Specifically, you asked that we describe BP's planned dispersant use after the improvements to the containment system by the implementation of the Helix producer concept.

BP is moving forward with the installation of the Free Standing Riser 1 system that BP projects will have the capacity to contain an additional 20 - 25 MMBOPD from the MC252 well (the "Well") to the Helix Producer. The current weather conditions make the timing for the start-up of the Helix Producer system uncertain. The earliest projected date for the start-up is July 7, 2010, with it being more likely that the date will be around July 10, 2010. BP anticipates it will take approximately 5 days after the start-up of the Helix Producer system for it to stabilize to the point that we will know how effective it will be at containing the flow from the Well.

As a general principle, (under all conditions the use of subsea dispersant will be held under the 15,000 gallon limit in accordance with the May 26, 2010, Dispersants Monitoring and Assessment Directive) the more effective the Helix Producer system is in containing the flow from the Well, the less subsea dispersant it will be used. If the addition of the Helix Producer system virtually eliminates the escape of oil into the sea, BP will be able to suspend the application of subsea dispersant altogether. However, under this circumstance, BP believes it is critical that we maintain the capability to apply subsea dispersant to meet unforeseen contingencies such as weather disruptions or equipment failures.

If there is still flow from the Well escaping into the sea after installation of the Helix Producer system at a significantly reduced rate, BP will continue to apply subsea dispersant at a proportionately reduced rate. The attached table updates our 6 June 2010 document entitled GoM Drilling, Completions and Interventions- MC252: Guidance on Subsea Dispersants Application OPS Note #3 based on the monitoring and performance data that has been collected. For safety reasons, in accordance with current practices, BP plans to maintain the ability to apply surface dispersant capability as required for prompt VOC control in the case of operational difficulty.

Please let me know if there is any additional information we can provide regarding BP's planned dispersant use.

Sincerely,

(b) (6)

Douglas J. Suttles

Approval granted subject to the above:

(b) (6)

Date: 7-11-10

Jim Watson
Rear Admiral, USCG
Federal On-Scene Coordinator

Attachment 1

- Assume flow rate of 53,000 bbls/day
- Calculate oil escaping by subtracting oil captured by containment system from 53,000 bbls/day
- Apply dispersant at dispersant to oil ratio of 1:75
- Line shows not to exceed 15,000 gallons

Estimated Volume of Oil Captured by Containment Systems (000s barrels per day)	Target EC9500A Subsea Dispersant Application Rate (gallons per minute)[1]
Total Containment	0
> 45	3
40 to 45	4
35 to 40	6
30 to 35	8
25 to 30	10

[1]Averaged over 24-hour period

James A. Watson
Rear Admiral, USCG
Federal On-Scene Coordinator

July 7, 2010

Dear Admiral Watson:

In compliance with the May 26, 2010, Dispersant Monitoring and Assessment Directive - Addendum 3 (the "Directive"), BP Exploration & Production Inc. ("BP") has eliminated the surface application of dispersants, except in cases where an exemption is requested and justified, and approved by the Federal On-Scene Coordinator.

Houma Command had eleven (11) spotter/recon flights on 7 July from aircraft out of both Stennis and Houma Base.

Oil slicks were observed but mostly sheen. One small 400 acre slick with dispersible oil located in Zone AN with estimates of up to 50% dispersible oil was located and targeted. Since the dispersible oil calculation required approximately 1,000 gallons of dispersant, Zone AN was switched from Stennis and given to Houma to apply with a more appropriately sized aircraft the BT-67. SMART 1 did observe the spray mission today and they were pleased with the data/observations.

Weather may again be a factor tomorrow for skimming and ISB operations. Both skimming and ISB activities will attempt to recommence recovery/response operations as the weather and sea states continue to rapidly moderate. Most skimming and ISB resources will be transiting back out to the site tomorrow and some resources may not have a full day of daylight operations due to their transit back to operational areas.

The Thursday forecast calls for 10% precipitation, winds of 11-15 knots out of the SE-ESE, wind waves of 3 feet, significant wave height of approximately 5 feet, with maximum wave heights less than 8.5 feet, unlimited ceilings and visibility of 12-15 nm.

The NOAA Surface Oil Forecast for July 8th shows extensive areas of heavy and medium oil (Attachment 2) that are or may adversely impact the shoreline, including sensitive wetlands.

Houma Unified Command continues to anticipate the most viable means of response will be the use of dispersants to reduce the risk of shoreline impact. The heavy weather and significant sea state over the past week enhanced the natural dispersion of the oil and also made it very difficult for spotter aircraft to see surface oil. Aerial Dispersants believes that with the moderating sea state, surface oil may become more visible than it has been for the past week as well as the reduction in the natural wave generated dispersion activity which will require mechanical/burn/dispersant removal actions versus natural dispersion.

Prior to spray operations tomorrow morning, the recon/spotter aircraft will identify the high value targeted slicks and we will prepare a report of the location and dispersant volumes needed for application as soon as practicable.

Pursuant to a request this date from Unified Command, the following information is provided.

1-Estimated size of identified dispersible oil slick targets proposed in designated zones: Today air reconnaissance flights observed dispersible oil located in Zone AN. The relatively small slick was approximately 400 acres with estimates of up to 50% dispersible oil.

2-Explicit justification for why these targets can't be skimmed or addressed by other mechanical means: The significant wave height is forecasted to exceed maximums to conduct ISB & could adversely impact

skimming operations. The weather forecast should be extremely suitable for dispersant operations so aerial dispersants may be the most effective and viable response tool.

- **Skimming units:** Transiting to operating areas- Recommencement of skimming operations
- **ISB Assets:** Transiting to operating areas- Recommencement of burn operations
- **A Whale:** Operating offshore for testing of system.

3-Today, offshore recovery assets, skimmers, etc. were in port due to adverse weather and it is anticipated that these vessels will recommence skimming operations sometime during tomorrows daylight hours. ISB operations did not take place today and they are anticipated to attempt to recommence burn operations tomorrow late in the day.

4-It is planned to conduct Tier 1 helicopter SMART over flights to observe dispersant operations tomorrow should they be conducted and if weather permits helicopter operations.

5-M/V *International Peace* is currently in port waiting on better seas and weather. It is anticipated that she will be operating tomorrow. No SMART Tier 2 or Tier 3 monitoring will be conducted.

6-SMART Team Tier 1 QA/QC checklists are not available due to no spraying activities having taken place where SMART 1 was involved.

7-The A Whale is subject to the 2 NM no spray criteria.

8-Forecast sea state through Friday showing skimming and ISB limitations is provided as Attachment 5.

9-***ALL AERIAL DISPERSANT RESPONSE OPERATIONS MAY BE CANCELED DUE TO WEATHER TOMORROW***

In accordance with the Directive, the Houma Unified Command respectfully requests an exemption to apply EC9500A. As aerial dispersant is the primary response tool for tomorrow, we have mobilized the reconnaissance and deployment resources and request an initial 10,000 gallons for early opportunistic targets. This will be coupled with further reconnaissance and target identification tomorrow morning. A subsequent request will be forwarded later in the day based on the full set of spotter reports.

Sincerely,

Houma Unified Command

Exemption approved subject to the above:

(b) (6)

Date: 7-8-10

James A. Watson
Rear Admiral, USCG
Federal On-Scene Coordinator (FOSC)

Attachment 1

Dispersant Zone Map for 7 July 2010 with Oil Targets from Spotter Operations on 6 July

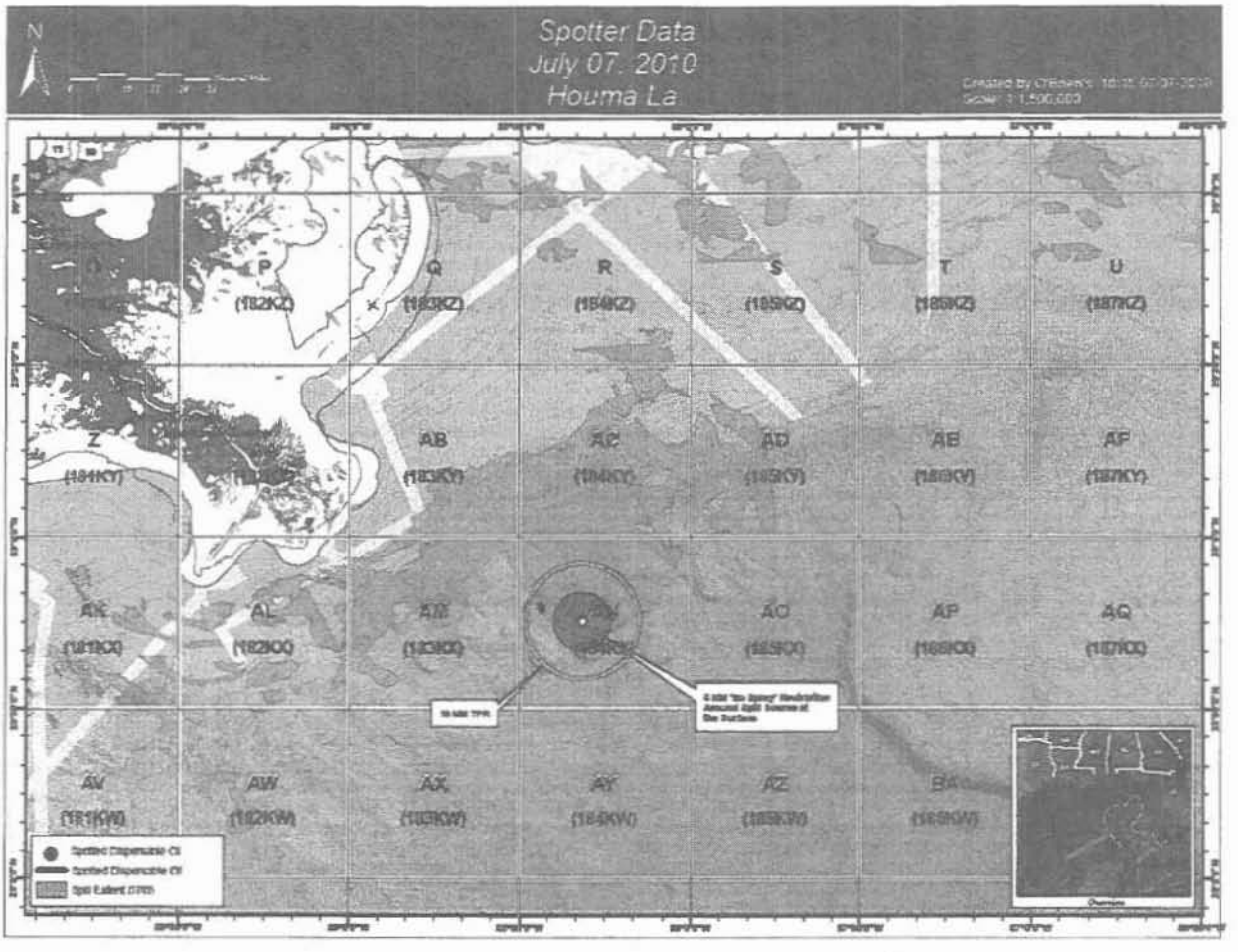


TABLE 1* Dispersible Oil Report July 7, 2010

Zone	# of slicks reported	Area in acres	Estimated percentage dispersible oil	Dispersant Needed** (1/20 DOR)
AN	1	400	50%	1,000 gallons
				1,000 gallons
Dispersants were Sprayed Today- 1,000 Gallons The requested amount for 7/8/10 will be based on tomorrow mornings reconnaissance An initial request for 10,000 gals. is being made due to the anticipation of finding dispersible oil requiring that amount of dispersants. Estimated Dispersant Needed 7/8/2010 based upon full morning spotter reports				

***Note: Table 1 shows our intentions based upon our observations the day before these actions take place. Size and location of slicks will change. Activities within slick areas e.g., skimming operations, in-situ burning, etc., or weather conditions may require revisions to the actual operational plan implemented.**

****Note: Dispersant needed is based upon area in acres x % dispersible oil x 5 gallons per acre**

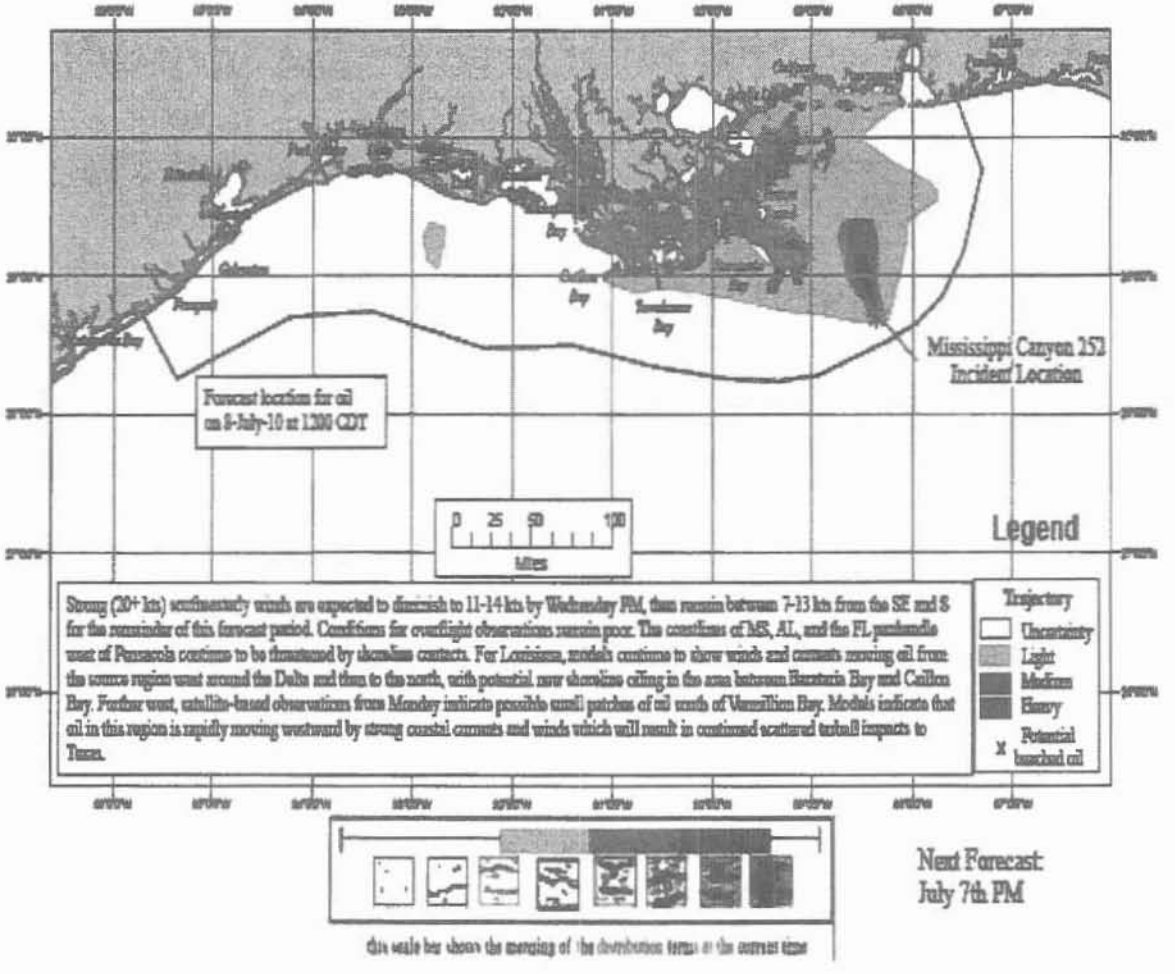
Attachment 2

Nearshore
Surface Oil Forecast
Deepwater Horizon MC252

NOAA/NOS/OR&R | Nearshore

Estimate for: 1200 CDT, Thursday, 7/08/10
Date Prepared: 2100 CDT, Tuesday, 7/06/10

This forecast is based on the NWS spot forecast from Tuesday, July 6 PM. Currents were obtained from several models (NOAA Gulf of Mexico, West Florida Shelf/USF, TGLO/TAMU, NAVO/NRL) and HFR measurements. The model was initialized from Sunday-Tuesday satellite imagery analysis (NOAA/NESDIS) and Tuesday overflights. The leading edge may contain tarballs that are not readily observable from the imagery (hence not included in the model initialization). Oil near bay inlets could be brought into that bay by local tidal currents.



Strong (20+ kts) southeasterly winds are expected to diminish to 11-14 kts by Wednesday PM, then remain between 7-13 kts from the SE and S for the remainder of this forecast period. Conditions for overflight observations remain poor. The coastlines of MS, AL, and the FL panhandle west of Pensacola continue to be threatened by shoreline contacts. For Louisiana, models continue to show winds and currents moving oil from the source region west around the Delta and then to the north, with potential near shoreline oiling in the area between Houma Bay and Caillou Bay. Further west, satellite-based observations from Monday indicate possible small patches of oil south of Vermillion Bay. Models indicate that oil in this region is rapidly moving westward by strong coastal currents and winds which will result in continued scattered tarball impacts to Texas.

this scale bar shows the merging of the distribution areas at the current time

Next Forecast:
July 7th PM

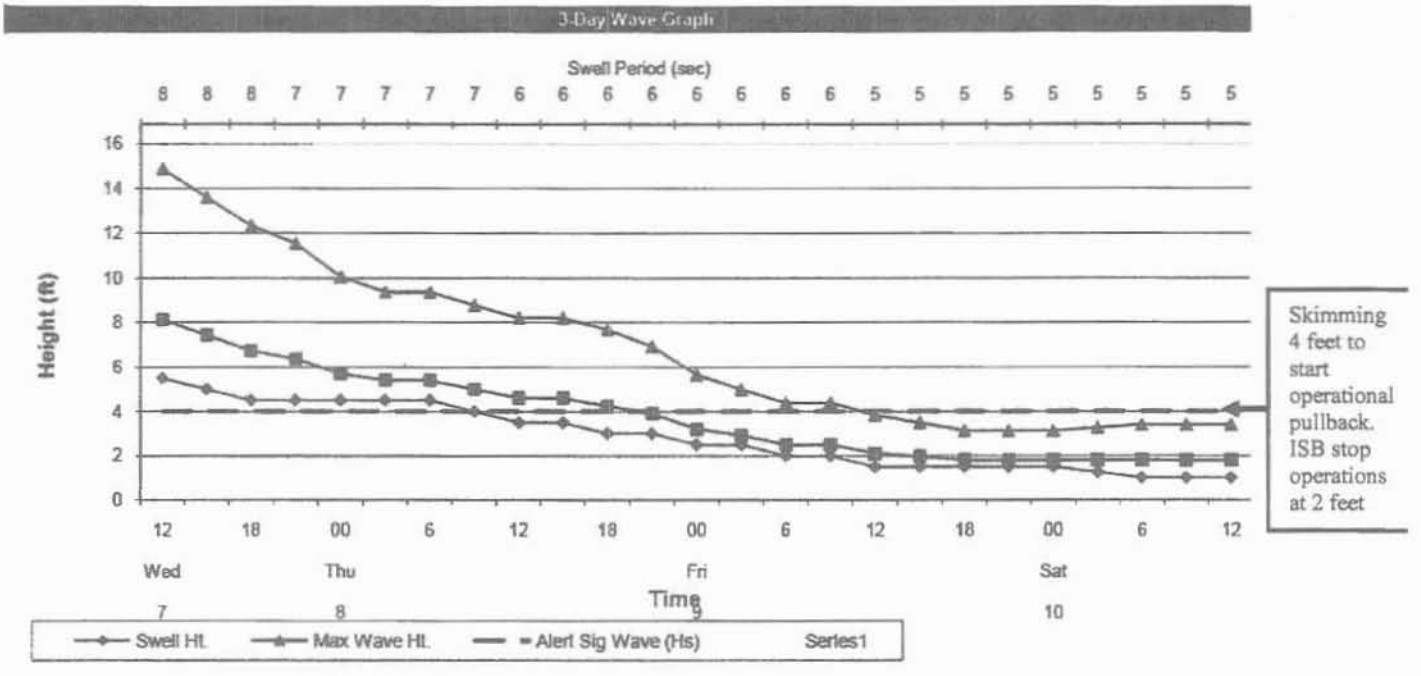
Attachment 4

QA / QC Reports

No QA/QC Checklists for this period are available.

SMART 1 did observe the spray mission today.

Attachment 5



James A. Watson
Rear Admiral, USCG
Federal On-Scene Coordinator

July 8, 2010

Dear Admiral Watson:

In compliance with the May 26, 2010, Dispersant Monitoring and Assessment Directive - Addendum 3 (the "Directive"), BP Exploration & Production Inc. ("BP") has eliminated the surface application of dispersants, except in cases where an exemption is requested and justified, and approved by the Federal On-Scene Coordinator.

Houma Command had thirteen (13) spotter/recon flights on 8 July from aircraft out of both Stennis and Houma Base. No spray missions were conducted so no dispersants were applied from our 10,000 gallon pre-approval. Morning observations indicated dispersible oil but evaluation by the Aerial Dispersants Group judged it to be more appropriate for skimming and the Offshore Group were given the coordinates to conduct skimming operations. Late in the afternoon, visible dispersible oil began to appear and two spray missions were evaluated for about 8,000 gallons, however being late in the day and our inability to move non-skimming skimmers fast enough from the area, we cancelled the spray missions.

Oil slicks were observed in the morning but mostly sheen but some dispersible oil was located. Afternoon recon flights began locating dispersible oil near the source that was not evident during the morning. We theorize that oil that has been in the adverse weather environment for the previous few days is now becoming visible as the weather/sea state improves.

As the weather continues to moderate, skimming and ISB operations will be available tomorrow for a full day of operation. Weather conditions are excellent for aerial dispersant operations.

The Friday forecast calls for 5%-10% precipitation, winds of 4-7 knots with easterly and variable winds, wind waves of 1 foot, significant wave height of approximately 2 feet, with maximum wave heights around 3 feet. Ceilings are forecasted to be unlimited with visibility 15 nm.

The NOAA Surface Oil Forecast for July 9th shows extensive areas of heavy and medium oil (Attachment 2) that are or may adversely impact the shoreline, including sensitive wetlands.

Houma Unified Command continues to anticipate that the most viable means of response will be the use of dispersants to reduce the risk of shoreline impact. The heavy weather and significant sea state over the past week enhanced the natural dispersion of the oil and also made it very difficult for spotter aircraft to see surface oil. Aerial Dispersants believes that as the sea state moderates, surface oil may become more visible than it has been for the past week.

Prior to spray operations tomorrow morning, the recon/spotter aircraft will identify the high value targeted slicks and we will prepare a report of the location and dispersant volumes needed for application as soon as practicable.

Pursuant to a request this date from Unified Command, the following information is provided.

A-Estimated size of identified dispersible oil slick targets proposed in designated zones: See Attachment 1.
B-Explicit justification for why these targets can't be skimmed or addressed by other mechanical means: The weather forecast should be suitable for skimming, ISB and dispersant operations. We anticipate that skimming and ISB resources will not be sufficient to handle the oil that will be observed as the weather improves and will require to be supplemented with aerial dispersants.

- **Skimming units:** Recommencement of skimming operations
- **ISB Assets:** Recommencement of burn operations
- **A Whale:** Operating offshore for testing of system.

C-Today, offshore recovery assets, skimmers, etc. were in port due to adverse weather and it is anticipated that these vessels will recommence skimming operations sometime during tomorrows daylight hours. ISB operations did not take place today and they are anticipated to recommence burn operations tomorrow.

D-It is planned to conduct Tier 1 helicopter SMART over flights to observe dispersant operations tomorrow should they be conducted. SMART Team Tier 1 QA/QC checklists are not yet available from the July 6th mission.

E-M/V *International Peace* is currently in port. No SMART Tier 2 or Tier 3 monitoring will be conducted.

F-The A Whale is subject to the 2 NM no spray criteria.

G-Forecast sea state through Friday showing skimming and ISB limitations is provided as Attachment 5.

In accordance with the Directive, the Houma Unified Command respectfully requests an exemption to apply EC9500A. As aerial dispersant is the primary response tool for tomorrow, we have mobilized the reconnaissance and deployment resources and ***request an initial 10,000 gallons*** for early opportunistic targets. This will be coupled with further reconnaissance and target identification tomorrow morning. A subsequent request will be forwarded later in the day based on the full set of spotter reports.

Sincerely,

Houma Unified Command

Exemption approved subject to the above:

(b) (6)

Date: 7-9-10

James A. Watson
Rear Admiral, USCG
Federal On-Scene Coordinator (FOSC)

Attachment 1

Dispersant Zone Map for 9 July 2010 with Oil Targets from Spotter Operations on 8 July

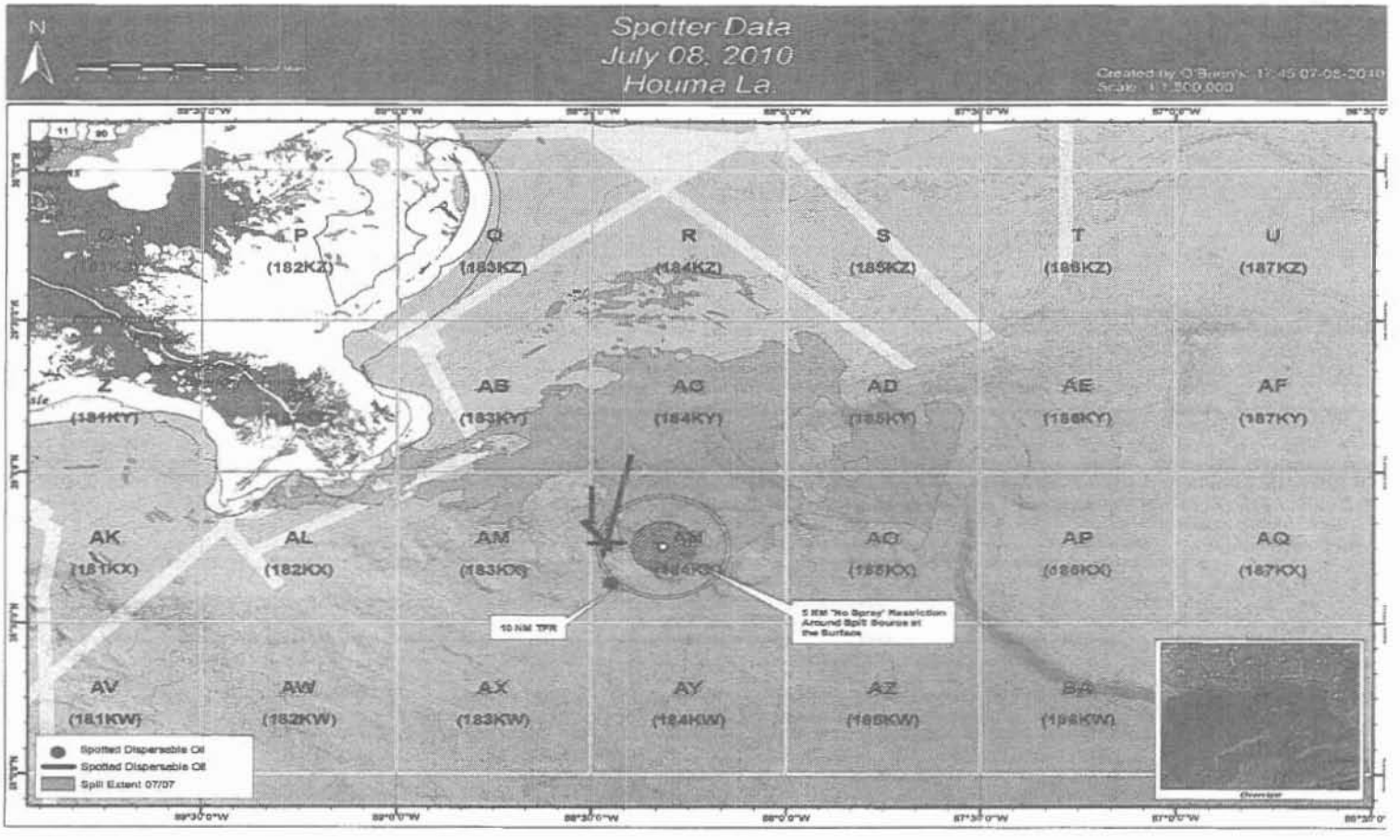


TABLE 1* Dispersible Oil Report July 8, 2010

Zone	# of slicks reported	Area in acres	Estimated percentage dispersible oil	Dispersant Needed** (1/20 DOR)
AC/AN	2	6560	35%	11,400
AN	1	3680	30%	6000
AM	1	85	25%	107
Dispersants were Sprayed Today- 0 - The requested amount for 7/9/10 will be based on tomorrow mornings reconnaissance An **initial request for 10,000 gals.** is being made due to the anticipation of finding dispersible oil requiring that amount of dispersants. Estimated Dispersant Needed 7/9/2010 based upon full morning spotter reports				**17,507**

***Note: Table 1 shows our intentions based upon our observations the day before these actions take place. Size and location of slicks will change. Activities within slick areas e.g., skimming operations, in-situ burning, etc., or weather conditions may require revisions to the actual operational plan implemented.**

****Note: Dispersant needed is based upon area in acres x % dispersible oil x 5 gallons per acre**

Attachment 2

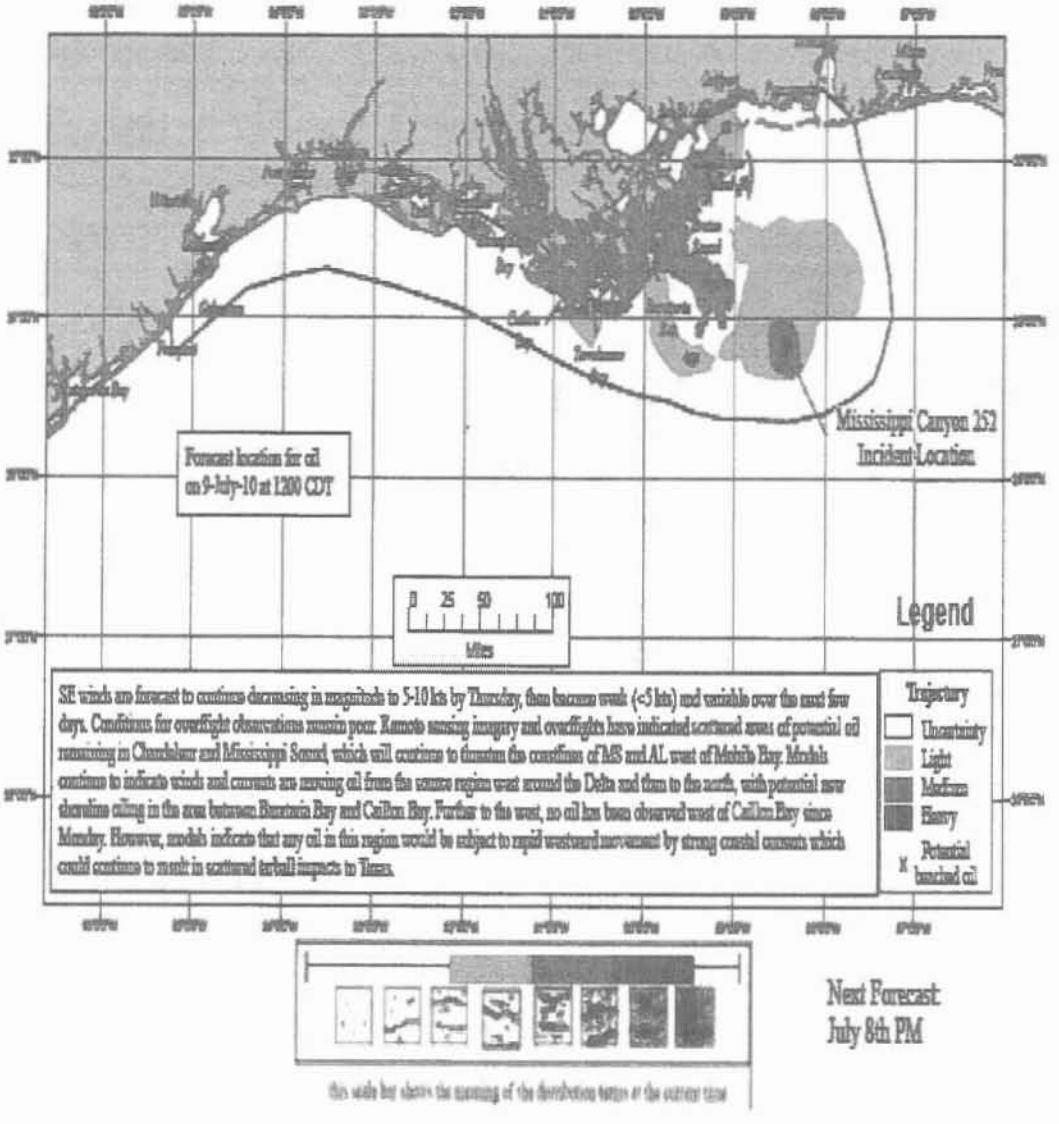
Nearshore Surface Oil Forecast Deepwater Horizon MC252

NOAA/NOS/OR&R | Nearshore

Estimate for: 1200 CDT, Friday, 7/09/10

Date Prepared: 2100 CDT, Wednesday, 7/07/10

This forecast is based on the NWS spot forecast from Wednesday, July 7 PM. Currents were obtained from several models (NOAA Gulf of Mexico, West Florida Shelf/USF, TGLO/TAMU, NAVO/NRL) and HFR measurements. The model was initialized from Wednesday satellite imagery analysis (NOAA/NESDIS) and overflights. The leading edge may contain outballs that are not readily observable from the imagery (masses not included in the model initialization). Oil near bay inlets could be brought into that bay by local tidal currents.



Next Forecast:
July 8th PM

JUNE 2010

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Dispersant Use Apr/May	Total to date: Surface 755,893 gal Subsea 238, 530 gal	**1** 0 gal surface 13,122 gal subsea	**2** 3,375 gal surface 7,465 gal subsea	**3** 6,200 gal surface 10,241 gal subsea	**4** 13,701 gal surface 13,931 gal subsea	**5** 125 gal surface 21,143 gal subsea
6 0 gal surface 13,640 gal subsea	**7** 10,744 gal surface 14,105 gal subsea	**8** 8,324 gal surface 14,207 gal subsea	**9** 2,100 gal surface 12,521 gal subsea	**10** 2,766 gal surface 10,279 gal subsea	**11** 2,766 gal surface 12,521 gal subsea	**12** 10,356 gal surface 4,371 gal subsea
13 36,012 gal surface 9,596 gal subsea	**14** 12,703 gal surface 9,689 gal subsea	**15** 2,766 gal surface 11,578 gal subsea	**16** 13,993 gal surface 9,152 gal subsea	**17** 12,423 gal surface 5,962 gal subsea	**18** 15,711 gal surface 7,642 gal subsea	**19** 8,380 gal surface 17,780 gal subsea
20 19,576 gal surface 13,695 gal subsea	**21** 11,217 gal surface 14,583 gal subsea	**22** 2,008 gal surface 10,046 gal subsea	**23** 5,099 gal surface 8,886 gal subsea	**24** 21,088 gal surface 13,808 gal subsea	**25** 4,633 gal surface 12,085 gal subsea	**26** 23,022 gal surface 12,535 gal subsea
27 6,626 gal surface 11,982 gal subsea	**28** Total to date: Surface 1,032,897 gal Subsea 552, 060 gal	**29**	**30**			
		DWH Response Dispersant Use				

MAY 2010

DWH Dispersant Use

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16 6,600 gal surface 4,500 gal subsea	17 6,074 gal surface 8,030 gal subsea	18 11,709 gal surface 5,250 gal subsea	19 3,350 gal surface 3,463 gal subsea	20 0 gal surface 14,210 gal subsea	21 29,892 gal surface 14,400 gal subsea	22 52,946 gal surface 14,130 gal subsea
23 18,104 gal surface 14,712 gal subsea	24 630 gal surface 14,400 gal subsea	25 200 gal surface 12,766 gal subsea	26 1,029 gal surface 11,110 gal subsea	27 200 gal surface 14,400 gal subsea	28 18,445 gal surface 14,040 gal subsea	29 2,900 gal surface 14,185 gal subsea
30 17,631 gal surface 14,974 gal subsea	31 11,686 gal surface 12,948 gal subsea					

April 2010

S	M	T	W	Th	F	Sa
				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	26	27	28	29	30	

June 2010

S	M	T	W	Th	F	Sa
		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	26
27	28	29	30			

Moderator: Adora Andy, EPA
May 12, 2010
3:00 pm CT

Coordinator: Good afternoon everyone. Thank you all for standing by and welcome to today's conference call.

At this time your lines have been placed on listen-only for today's conference. During the question and answer portion of our call you will be limited to one question. Once again, you must limit your questions to only one at this time.

The conference is also being recorded. If you have any objections you may disconnect at this time.

I will now turn conference over to Adora Andy. Ma'am, you may proceed.

Adora Andy: Good afternoon, my name is Adora Andy, I'm the Press Secretary for the Environmental Protection Agency. Thank you for joining us for this press conference call to discuss dispersants.

On the call today are from the Environmental Protection Agency, Administrator Lisa P. Jackson; Paul Anastas, the Assistant Administrator of EPA's Office of Research and Development, Dana Tulis, the Acting Director of EPA's Office of Emergency Management.

From the National Oceanic and Atmospheric Administration we have Dr. Jane Lubchenco, Under Secretary of Commerce and Oceans and Atmosphere, and Dr. Dave - excuse me, and Dave Westerholm, Director of NOAA's Office of Response and Restoration.

Administrator Jackson will begin with brief remarks and Dr. Lubchenco will give brief remarks and we'll open it up for questions.

Right now I'll turn it over to Administrator Jackson.

Lisa P. Jackson: Thank you Adora and thank you all for joining us.

Last night I returned from my second trip to the Gulf Coast. I've met with local community members, government officials, and local scientists.

What I can tell you from those visits is that we continue to face an extraordinary challenge. Oil is rushing into the Gulf at depths we can't easily access.

We are working with BP and convening our best minds to try and find creative solutions.

We have mobilized on multiple fronts from the drilling of the relief wells to controlled burning to the further attempts to contain the leaks.

This is an all hands on deck challenge and people are working 24 hours a day, 7 days a week.

We are here today to talk specifically about one of the weapons in our arsenal, the use of dispersants.

Dispersants are chemicals that help break up the oil with the goal of preventing damage in the water and mitigating the potential impact of landfalls.

At current BP has been authorized by EPA and the Coast Guard to use dispersants on the surface of the spill. That came with specific conditions to protect the environment and the health of residents in affected areas.

This is an approach we are familiar with and a strategy we have turned to because one, we know that when they are used on the surface, dispersants biodegrade much more rapidly than oil.

And two, dispersing the oil will help reduce the amount and the intensity of oil that reaches the shores and fragile wetlands, an urgent priority at this time.

As I said, BP is authorized to use dispersants on the surface of the water. EPA is constantly monitoring air quality in the area and keeping local authorities updated on any safety concerns.

If you have any doubts about that monitoring, consider that I just returned from my second visit to the Gulf Coast and spent plenty of time breathing the air there myself, so I am particularly interested in the air monitoring data.

And you can find that air monitoring data that we're collecting. It's posted as it becomes available on www.epa.gov/bpspill.

BP has also been authorized to test the effectiveness dispersants used below the surface.

We believe that the subsurface use of dispersants could mitigate the impact of the spill without increasing the impact on human health and the environment.

That said, that would be an unprecedented use of dispersants. That is why EPA has not authorized the full scale underwater use of dispersants at this time. Instead we are rigorously testing their effectiveness.

So far BP has initiated three tests. For those tests, the EPA and the Coast Guard set limits on the time and the volume of use.

The first two tests were inconclusive and we are awaiting the results of the third test.

Let me be clear that no use of dispersants underwater is authorized until the test results have shown them first to be effective. We absolutely must be aggressive in tackling this spill and at the same time we will take absolute care to ensure that any efforts we take are not just substituting one challenge for another.

The effects of underwater dispersant use on the environment are still widely unknown. If it is determined to reduce the consequences of the spill and BP is authorized to continue its use, EPA and our Federal partners will require regular analysis of water and air quality.

In fact we are working to establish third party monitoring to ensure we are getting all the information we can. We reserve the right to halt the use of

subsurface dispersants if any negative impacts on the environment are seen to outweigh their benefit.

Dispersants are not the silver bullet. They are used to move us towards the lesser of two difficult environmental (unintelligible). Until we find a way to stem the flow of oil we must continue to take any responsible action that will mitigate the impact of the spill, and that is what we are doing.

I'd now like to turn it over to my colleague and an invaluable partner in this effort for certain, Dr. Jane Lubchenco.

Dr. Jane Lubchenco: Thanks Lisa. And let me just say on behalf of the 12,800 employees of NOAA how much we greatly value our close working relationship with you and with everyone at EPA as we respond to this crisis.

Since the early hours of this incident NOAA has been all hands on deck in support of the federal response to the Deepwater BP oil spill.

I've personally been to the Gulf region twice since the initial explosion and quite a few of our NOAA folks have been deployed to that region.

As the nation's leading scientific resource for oil spills, NOAA has been on the scene of the Deepwater Horizon incident from the start, providing coordinated scientific weather and biological response services both on scene and remotely to federal, state, and local organizations.

NOAA has satellites in space, planes in the air, boats on the water, and scientists in the field informing the federal response.

I think it's fair to say that response has been immediate and sustained. It's also been strategic and scientific. And of course when an oil spill occurs there are no good outcomes.

Dispersant use is one of the several tools that may be employed individually or in combination to minimize consequences of an oil spill. Their use is a tradeoff decision based on a belief that if used properly they would result in less overall environmental impact.

Dispersants reduce the impact of oil on shorelines, sensitive habitats, birds, mammals, and other wildlife. They allow for the rapid treatment of large areas, and they break up the sheet of oil into smaller components which allows them to dissipate into the water and degrade more rapidly.

NOAA continues to work closely with EPA and other federal partners to determine the most effective and appropriate use of dispersants. NOAA's scientific support coordinators are working as part of the unified command and advice on when and where dispersants should be used.

This oil is unprecedented and dynamic. As situations change and as we gain new information we need to continually reevaluate our response strategy, actions, and planning.

NOAA stands shoulder to shoulder to gulf communities during these challenging times.

And as we continue to work closely with our partners at EPA and all of the rest of the federal agencies in responding to this spill, as President Obama said when he visited the Gulf, quote, "We're going to do everything in our power to protect our natural resources, compensate those who have been harmed,

rebuild what has been damaged, and help this region persevere like it has done so many times before", unquote.

Thank you.

Adora Andy: Thank you Administrator Jackson and Administrator Lubchenco. At this time we'll open the line for questions and we'll certainly take as many as time will allow.

(Jill) could you go ahead and open up the line?

Coordinator: Certainly. At this time if you would like to ask a question, please press star 1. Please be sure to record your name and affiliation to ask your question, and please limit your question to one per person.

Once again it is star 1 and please record your name and affiliation and limit yourself to one question. Please stand by.

Our first question comes from David Mattingly with CNN. Sir, your line is open.

David Mattingly: Thank you for taking my call. I'm really curious about quantity here.

With this dispersant what percentage of the oil or the hydrocarbons actually evaporate on the surface, and then what percentage of them sink to the bottom and remain in the environment?

Lisa P. Jackson: David, it's Lisa Jackson.

The long-term (unintelligible) transport of dispersants is one of the questions, especially when it comes to subsidy application, that has some answers but not as many as we would like.

Let me first make sure we all understand how dispersants work. When they're applied from the surface they're applied on a slick with specialized equipment.

They're applied in a plume. They form a plume or a cloud of oil droplets just below the surface of the water. That mixes vertically and horizontally into the water column. Obviously that means you have some pretty rapid dilution.

And the increase in surface area combined with chemical action makes for an ability for a bacterial and microscopic action to happen.

So I don't believe that dispersants have much if any impact on the volatility of the oil at the surface. The oil will volatilize as it weathers at the surface as it goes on.

If we have any other science on that...

Dr. Jane Lubchenco: This is Jane Lubchenco. I do want to emphasize something that Administrator Jackson said.

The question implied that there was oil that was ending up on the seafloor bottom and that's not what happens with dispersants.

The plume that is formed with dispersant use ends up in the water column and then it's degraded more rapidly than would be the case if it were remaining at the surface.

So it's not a case where we're simply transferring oil from the surface to the seafloor.

Coordinator: Thank you. Our next question comes from Bettina Boxall with the LA Times. Your line is open.

Bettina Boxall: Could you please tell me how much dispersant was released sub-surface and what way the tests have so far been inconclusive?

Lisa P. Jackson: The total amount released three tests conducted so far is 28,709 gallons -- this is Lisa Jackson. And the inconclusive is some of it is a matter of logistics.

The very first test there were some concerns with being able to get information data at the same time as dispersants were being applied. There have been some logistical issues.

The good news is that this last test - I think NOAA has done a wonderful job of getting some good data that we're in the process of reviewing. We have some additional sampling results that will be gotten from Louisiana State University from their lab.

Coordinator: Thank you. Our next question is from Debbie Charles with Reuters. Your line is open.

Debbie Charles: Thank you for taking my question. I have a question about the wildlife that's being reported dead.

I guess people are reporting that dolphins or turtles and other wildlife are showing up dead.

Do you have any - first of all is that true? Do you - have you seen that? And does it have any relationship to dispersants or to the oil?

Dave Westerholm: Yes, this is Dave Westerholm. And if I understood your question you're looking at the reports of the oil wildlife versus that which might have been dispersed oil on the wildlife.

At this point there's been a number of turtles that have been stranded. They have gone to labs for further testing.

There is no evidence that we've found thus far from the external view that they were oil and the internal necropsy of the animals will determine whether or not they were actually - died as a result of oil exposure.

But in that case most of the wildlife and animals you're talking about -- birds, turtles, mammals -- are really coated by surface oil and not the dispersed oil which is out clearly at the Deepwell injection site and right around that fresh oil that's emanating from the holes in the riser pipe.

Coordinator: Our next question comes (Jason Dureen) with The Associated Press. Your line is open.

(Jason Dureen): Hi, thanks for taking my question. This is for Dr. Lubchenco or Mr. Westerholm.

There are a number reefs in the area near the spill -- the pinnacle reef system -- and then a number of other ones moving East towards Florida that could be affected since there's so many dispersants being used in the oil and it's going into the water column.

I wonder if you could talk a little bit about, you know - we're talking about a tradeoff with the oil not reaching the shore from using so much dispersants, but then it does go into the water column and there are a lot of sensitive habitats and reef systems down there.

I'm wondering if you could expand on that and talk a little bit about these reefs that are in harms way?

Dr. Jane Lubchenco: (Jason) this is Jane Lubchenco. The monitoring that we do - that we are doing will enable us to get a better handle on what habitats will be affected if they are. Anything that we would say at this point is speculation.

There are a diversity of types of habitats in the Gulf. Many of them are very important in support of a variety of wildlife and fisheries.

At this point many of them are at risk of being affected but we don't have any direct way to know exactly which ones or in what amount.

I think it's important to note that the dispersants that are being used are one-tenth to one-hundredth the level of toxicity of oil. And so part of the tradeoff that we are using in making this calculation is to make a decision to use less toxic substances with the idea (unintelligible) impact.

Coordinator: Thank you. Our next question is from Sheila Grissett with Times-Picayune. I'm sorry for the mispronunciation, ma'am, but your line is open.

Sheila Grissett: Thanks. It's Times-Picayune in New Orleans.

I think all of us working on this story are inundated with emails, phone calls, and messages from the manufacturers of products that they claim are more effective and less toxic and even are already on the EPA's list.

Can you please talk about why you're using this - these particular dispersants and not using less toxic dispersants?

And also comment please, on whether there is one on the EPA's list that as proven in laboratory tests to be apparently almost 100% effective. Thank you.

Lisa P. Jackson: It's Lisa Jackson from EPA, I'll go first and then open it up to others who might want to comment as well.

And I just want to say for the record, I knew it was Times-Picayune.

But, you know, the approved list of dispersants - there's an approved list that is part of the Louisiana Plan. And obviously logistics and stockpiles and the ability of the responsibility to pull that material together, I'm sure has a lot to do with the ones that they choose to use.

They had a supply, they have their supplier and our regulatory responsibilities say that if it's on the list and they want to use it then they are preauthorized, if you will, to do so.

All I'll say about the other emails, and I'm sure you're getting them and we're all getting them and they're by well-meaning people I'm sure for the most part, who are trying to help.

Some might be entrepreneurs -- but that's great too -- is that this process of getting on the list requires toxicity testing, review by both the states that

would be impacted as well as by federal agencies. And there are others besides the two that are - and the Department of Commerce and NOAA that both represented here along with EPA. And so that decision just cannot be made lightly.

Toxicity testing and review is not something that can be done quickly and on the fly although I know that there are lots of people who would like to offer alternatives to the dispersants that have already been pre-approved for use.

Man: Yes, go ahead.

Dave Westerholm: This is Dave Westerholm. I would just like to add one point to that because I think this may be an important point for everybody out there who has an idea.

Admiral Allen, National Incident Commander has said that he does not want to leave any stone unturned. And the unified command down in that area set up what's called the ARTES, A-R-T-E-S System - the Alternative Response, and I believe Technical Evaluation System -- but I've got the acronym correct.

But that - there's a number on the - on our Web site and on the Deepwater Horizon Web site for people to call in with any idea, not just on dispersants.

So obviously as Administrator Jackson pointed out, dispersants have to be - go through an approval process. But for any alternative technology that might be of benefit, there's an evaluation team of federal scientists as well as industry and academic experts that has been put together to look at these ideas.

Coordinator: Thank you. Our next question is from Juliet Eilperin with The Washington Post. Your line is open.

Juliet Eilperin: Hi there. I was wondering if you could provide, and following up on what Administrator Jackson just said, what exactly you're testing right now.

You know, if you can describe what exactly you're looking for as you look at it's effects to the water column.

And, you know, give any kind of ballpark of how much testing or how much time you think it would take to be confident that this can be used at a broad scale sub-sea without negative environmental impact. Thank you.

Coordinator: Excuse me.

Adora Andy: (Jill), can you hear us?

Coordinator: No, we're not able to hear you.

Adora Andy: Can you hear us now?

Coordinator: I can hear you now.

Adora Andy: Okay, sorry about that, we'll start over.

Lisa P. Jackson: Sorry. Juliet, it's Lisa Jackson, sorry. What I was saying real quickly is that I'll start but I think several people in the room will want to add, particularly NOAA because they're doing a lot of the actual field work themselves.

The questions around the sub-sea dispersant tests, the primary question is, is it effective?

Is it as effective or reasonably effective, otherwise it doesn't make sense for us to introduce a new technique into other response -- a new tool into the kit if you will.

And so those include visual observations from the surface. It includes data that NOAA can speak to that look at issues of changes in particle size within the water columns.

They're also taking an initial look at dissolved oxygen as a first look at whether or not this is having an impact throughout the water column. And of course they're looking - there will be actual chemical testing and that's over at LSU Labs as I understand it.

The only thing I want to point out is that if dispersant sub-sea use of dispersants is used as a tool over time in a more regular manner, already on the EPA Web site, the epa.gov/bpspill, is a testing protocol that NOAA and EPA and other agencies have worked through to govern what I would say is more than that.

It's meant to be a go-no-go kind of testing protocol. Are we finding things as we use this method that lead us to believe we should stop and take a breath and pause or maybe stop entirely?

And we thought that was very important given that as we've said here this is quite novel. But I'll turn it over to others to give you a little bit more granularity on the testing.

Dana Tulis: Yes, this is Dana Tulis. What the Administrator said is right on and we have continued narrowly what we're calling is an adaptive monitoring approach.

So as we learn more about the science we do take the prerogative to continue to have additional reporting requirements.

At this point once the spill is (unintelligible) scale, we will require also biological testing with a 24-hour turnaround test. And we have very conservative indicators right where we would be looking at things like the (unintelligible) oxygen and those switch tests.

Ad before anything - and when I say conservative it means that immediately, if we meet a very conservative trigger we would take the decision back to all the sister agencies, immediately evaluate the data and determine whether or not we need to shut down before anything would actually happen which would harm the environment.

Dr. Jane Lubchenco: Let me just add to that -- this is Jane Lubchenco -- that the sampling that we're doing that complements what EPA is doing includes surface imaging both with satellites and with planes as well as water samples to look at the physical and chemical properties.

We're using thermometry measuring temperature and salinity dissolved oxygen, particle size analysis; a variety of other chemical and physical properties and then also some biological sampling as well.

So it's fairly comprehensive both (unintelligible) as well from the surface - I mean above the surface.

Coordinator: Thank you. Our next question is from Elisabeth Rosenthal with The New York Times. Your line is open, ma'am.

Elisabeth Rosenthal: Yes, thank you very much. I wanted to hear a little bit more about the reports of animals and dead animals on the - being found on the beaches. There were some reports this morning of some dolphins.

Do we have any sense of whether they're an abnormally number - high number of animals for this time of year? Have any of the autopsies been done yet?

And do you have any sense in which dispersants or oil might be implicated? Any concerns on that front?

Dr. Jane Lubchenco: This is Jane Lubchenco. I think we don't have definitive information for most of the individuals that have been found.

It's not unusual to see a large number of stranded turtles this year so we - you know. And as Dave indicated earlier, for the turtles there has been no evidence -- external evidence of oiling.

But we won't know until the necropsies are performed, what the actual cause of death was.

For the marine mammals I think we also are still in the discovery phase of this and we await results to be able to say something more definitive.

Coordinator: Thank you. Our next question is from Lee Bowman with Scripps Media. Your line is open.

Lee Bowman: Hi, thank you. I wanted to return just for a moment to the question raised by the Times-Picayune.

We've talked to several of these folks who actually have products that are on list and they're not novel people with innovative ideas, but things that have actually have been tested and put on the list, who are saying, you know, our products are markedly more effective, have been rated more effective, on your list for Louisiana crude.

And their contention is that they may in fact have less toxic side affects so it's not a question of logistics so much as it is a question of quality.

And I'm wondering if this becomes a product that is used over many months until other steps can be made, does it become an issue of a superior product needing to be considered in the interest of safety and efficiency.

Lisa P. Jackson: I -- it's Lisa Jackson. The other concern is also obviously availability and (unintelligible) in volume.

I mean we have already -- I think it's been acknowledged in the press already -- exceed volumes that have been used in other spills in this country. We're using an awful lot of dispersants.

So the other thing is obviously this is going on longer than one might have known on Day 3 or 4 that we would be still dealing with this fresh oil constant lease of oil.

And so we're seeing a need to continue to disburse the new amounts of oil that are coming out. So we are happy to have that conversation with BP about checking again on stockpiles of dispersants and what's available in sufficient

quantities to really be used given that as you heard, at the surface already we're talking over 400,000 gallons used already and in the subsurface.

If we were to use it, it may actually a lesser rate of dispersion which would be a good thing; less introduced into the system. But it would still be significant quantities that have to be stockpiled and brought and available.

Coordinator: Thank you. Our next question is from Mark Guarino with Christian Science Monitor. Your line is open, sir.

Mark Guarino: Hi, thanks for taking my question. I wanted to find out what exactly - what are the dispersants used? What are those dispersants being used, the 400,000 gallons by BP?

And what are- can you talk to the chemicals that are in those dispersants being used, what's at hand right now and what's inside those dispersants?

Lisa P. Jackson: It's Lisa Jackson. The two that have been used to date are Corexit 9527 and Corexit 9500.

If you want to see information on the constituents of those dispersants, they are available on the EPA Web site. I believe the MSG sheets are on the Joint Information and Command Web site.

The EPA Web site again is www.epa.gov/bpspill. Look for the Dispersant button tab on the EPA Web site.

It is a fact that some of the constituents are considered business confidential information. EPA does have access to that information but is not able to publish it.

And I have had people question whether we look at all the constituents when we look toxicity and when we look at our monitoring plans and I can assure you that we do.

We are looking at those that are publicly known as well as those that are confidential in determining how best to monitor air and water.

Coordinator: Thank you. Our next question is from Anita Lee with Sun Herald.

Anita Lee: Yes, I was wondering, on the two types of dispersants, the 9527A and then the 9500A, they do contain different things. Are they being used interchangeably or is one used in some circumstances and the other in the other or how is that working?

Dana Tulis: Really -- this is Dana Tulis, EPA -- really, all of the lists on the product lists and many, as the Administrator of EPA said earlier, there's - are similar and they're all approved and either they can be used as a balance of what available in terms of volume.

Earlier on 9527 was used and the - we did run - they did run out of the product.

There is at this point 9500 is being used; a small stockpile. 9527 was just found. So really what we're talking about is just a very, very large volumes and being able to get those volumes that are needed out into the area that's affected.

Coordinator: Thank you. Our next question is from Tom Philpott with Grist Magazine. Your line is open.

Worse Case Scenarios (2 week planning window)

Scenario	Details	Impact on							Mitigation Options
		Discharge Rate	Surface Operations			Sub-surface Operations		Shoreline Cleanup	
			Skimming	Dispersant Use	In-Situ Burning	Dispersant Use	ROV Repair Activities		
Dome Failures	Dome impacts BOP during installation resulting in unrestricted discharge	Significant Increase	Add'l sorties	Add'l sorties	Add'l sorties	Add'l sorties	Ineffective	Add'l Activity Expected[1]	1. Increase Relief Well Operations
	Dome installation fails to secure source	Decreased (if flow restricted)	Add'l sorties	Add'l sorties	Add'l sorties	Add'l sorties	Unchanged	Unchanged	
Riser Failures	Riser continues to settle and fails in additional places	Increase	Add'l sorties	Add'l sorties	Add'l sorties	Add'l sorties	Increase	Add'l Activity Expected[1]	
	Riser integrity degrades resulting in additional leaks	Increase	Add'l sorties	Add'l sorties	Add'l sorties	Add'l sorties	Increase	Add'l Activity Expected[1]	
Relief Well Failures	Relief well operation extends beyond 90 days	Unchanged	Add'l sorties	Add'l sorties	Add'l sorties	Add'l sorties	Increase	Add'l Activity Expected[1]	
	Critical drill rig equipment failure	Unchanged	Add'l sorties	Add'l sorties	Add'l sorties	Add'l sorties	Increase	Add'l Activity Expected[1]	
	Drill rig forced to relocate for health/safety concerns	Unchanged	Limited	Limited	Limited	Limited	Limited	Add'l Activity Expected[1]	
Man-made Disaster	Additional rig failures in Gulf of Mexico	Unchanged[2]	Add'l sorties	Add'l sorties	Add'l sorties	Add'l sorties	Limited	Add'l Activity Expected[1]	
	Domestic terrorism incident in maritime domain	Unchanged	Add'l sorties	Add'l sorties	Add'l sorties	Add'l sorties	Limited	Add'l Activity Expected[1]	
Natural Disaster	Hurricane in the Gulf of Mexico	Unknown	Ineffective	Ineffective	Ineffective	Ineffective	Ineffective	Add'l Activity Expected[1]	
	Earthquake in Caribbean	Unknown	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	

[1] Additional teams, boom, equipment may be required to address larger affected area
[2] Multiple sources and expanded spill locations likely

DATE: May 11, 2010 20:31:14 CST

The Ongoing Administration-Wide Response to the Deepwater Horizon Oil Spill

Key contact numbers

- Report oiled shoreline or request volunteer information: (866) 448-5816
- Submit alternative response technology, services or products: (281) 366-5511
- Submit your vessel for the Vessel of Opportunity Program: (281) 366-5511
- Submit a claim for damages: (800) 440-0858
- Report oiled wildlife: (866) 557-1401

Deepwater Horizon Incident
Joint Information Center

Phone: (985) 902-5231
(985) 902-5240

Prepared by the Joint Information Center

UPDATED May 11, 2010 6 PM

**** For a full timeline of the Administration-wide response, visit the White House Blog.***

PAST 24 HOURS

Interior Department Announces Reforms to Enhance Oil and Gas Oversight

As part of an ongoing agenda to change the way the Department of the Interior does business, Secretary of the Interior Ken Salazar announced a set of reforms that will provide federal inspectors more tools, more resources, more independence, and greater authority to enforce laws and regulations that apply to oil and gas companies operating on the Outer Continental Shelf.

Salazar has also enlisted the National Academy of Engineering to provide a set of fresh eyes on the issues surrounding the *Deepwater Horizon*incident and an independent, science-based understanding of what happened.

NOAA Modifies Fishing Closed Areas in Gulf; 93 Percent Remains Open

NOAA's Fisheries Service modified the area closed to fishing in the Gulf of Mexico due to the spill, which will include federal waters seaward of Louisiana state waters in the vicinity of Timbalier Island to waters off Florida's Choctawhatchee Bay. These changes will leave more than 93 percent of the Gulf's federal waters open for fishing, and supporting productive fisheries and tourism.

NOAA also will expedite updates to the areas closed to fishing in the Gulf of Mexico, as well as public notice of those changes. The closure process is being improved to cut down on the red tape necessary to modify the boundaries of the closure area. Area boundaries could be modified daily, based on where and how fast the oil spill is moving. NOAA will provide daily updates at http://sero.nmfs.noaa.gov by 12 p.m. EDT.

Scientific Assets Continue to Join the Response

NASA mobilized its remote-sensing assets to help assess the spread and impact of the Deepwater Horizon BP oil spill in the Gulf of Mexico at the request of U.S. disaster response agencies. NASA has deployed its instrumented research aircraft the Earth Resources-2 (ER-2) to the Gulf. The agency is also making extra satellite observations and conducting additional data processing to assist the National Oceanic and Atmospheric Administration, the U.S. Geological Survey, and the Department of Homeland Security in monitoring the spill.

Top Fisheries Scientist Dispatched

As part of its ongoing efforts to protect consumers, NOAA is sending one of its top fisheries science directors to the Gulf this week to lead its effort to rapidly assess, test and report findings about risks posed to fish in the Gulf of Mexico by contaminants from the BP oil spill and clean-up activities.

NOAA's Northeast Fisheries Science Center (NEFSC) Director Nancy Thompson, Ph.D, will head to Pascagoula, Miss., to lead NOAA's response team. Thompson will work closely with Bonnie Ponwith, Ph.D., the director at the agency's Southeast Fisheries Science Center, who is leading an intensified effort to monitor and assess the spill's effects on important species in the Gulf of Mexico.

Asian American and Pacific Islander Community Liaison Dispatched

White House Initiative on Asian Americans and Pacific Islanders Advisor on Community Engagement Miya Chen is joining the Area Unified Command Center in Robert, La., to assess the immediate needs of the Asian American community.

The Department of Labor's Occupational Safety and Health Administration (OSHA) and NIEHS are monitoring BP and its contractors to ensure that every worker receives necessary training in the worker's language, as OSHA regulations require.

The National Institute for Environmental Health Sciences (NIEHS) is collaborating with BP to provide Vietnamese-language translators and trainers. Vietnamese, Cambodian and Taiwanese translations of the BP Vessels of Opportunity fishing contracts is being provided at the Venice Community Center. BP has hired a local Vietnamese liaison officer and is contracting additional office support and translation.

OSHA Develops Multi-Lingual Worker Guides

OSHA is developing pocket-sized health and safety guides for cleanup workers and volunteers. Guides available in English should be ready by this weekend and guides in Spanish and Vietnamese should be ready for distribution early next week.

Leak Plug Tactic Approved by MMS

MMS approved the methanol injection to prevent hydrate formation in the “top hat” structure. The top hat should be on site by mid-week after modifications are made.

DOD Transports Boom and Equipment from Alaska

Following approval by Secretary of Defense Robert Gates for assistance, several commercial aircraft and numerous C-17 aircraft commenced missions to transport 150,000 feet of BP pollution response boom and approximately 250 short tons of Navy salvage equipment commenced movement from Anchorage, Alaska, to New Orleans.

By the Numbers to Date:

- Personnel were quickly deployed and approximately 13,000 are currently responding to protect the shoreline and wildlife.
- More than 460 vessels are responding on site, including skimmers, tugs, barges, and recovery vessels to assist in containment and cleanup efforts—in addition to dozens of aircraft, remotely operated vehicles, and multiple mobile offshore drilling units.
- Approximately 1.4 million feet of boom (regular and sorbent) have been deployed to contain the spill—and approximately 1.4 million feet are available.
- Approximately 3.6 million gallons of an oil-water mix have been recovered.
- Approximately 372,000 gallons of dispersant have been deployed. More than 180,000 gallons are available.
- 14 staging areas have been set up to protect vital shoreline in all potentially affected Gulf Coast states (Biloxi, Miss., Pascagoula, Miss., Pensacola, Fla., Panama City, Fla., Dauphin Island, Ala., Grand Isle, La., Shell Beach, La., Slidell, La., Venice, La., Orange Beach, Al., Theodore, Al., Pass Christian, Ms., Amelia, La., and Cocodrie, La.).

Resources:

- For information about the response effort, visit www.deepwaterhorizonresponse.com.
- For specific information about the federal-wide response, visit http://www.whitehouse.gov/deepwater-bp-oil-spill.
- To contact the Deepwater Horizon Joint Information Center, call (985) 902-5231.
- To volunteer, or to report oiled shoreline, call (866) 448-5816. Volunteer opportunities can also be found here.
- To submit your vessel as a vessel of opportunity skimming system, or to submit alternative response technology, services, or products, call 281-366-5511.
- To report oiled wildlife, call (866) 557-1401. Messages will be checked hourly.
- For information about validated environmental air and water sampling results, visit www.epa.gov/bpspill.
- For National Park Service updates about potential park closures, resources at risk, and NPS actions to protect vital park space and wildlife, visithttp://www.nps.gov/aboutus/oil-spill-response.htm.
- For daily updates on fishing closures, visit http://sero.nmfs.noaa.gov.
- To file a claim, or report spill-related damage, call BP’s helpline at (800) 440-0858. A BP fact sheet with additional information is available here. For those who have already pursued the BP claims process and are not satisfied with BP’s resolution, can call the Coast Guard at (800) 280-7118. More information about what types of damages are eligible for compensation under the Oil Pollution Act as well as guidance on procedures to seek that compensation can be found here.

For information about the response effort, visit www.deepwaterhorizonresponse.com.

Deepwater Horizon Incident

Situation Executive Summary	
Date: 05/11/2010 Time: 05:00	Custodian: Situation Unit Leader UNIFIED AREA COMMAND

Date of Issue:	May 11, 2010	**Period:**	5/10 06:00 to 5/11 06:00
IC :	Jeff Hohle (Houston) / Tom Gray (Houston) & Dave Foster (Mobile) / Brad Byczynski (Mobile)		

TODAY'S PRIORITIES

Houston, Texas

1. Monitor Riser location and plumes.
2. Progress VOC Mitigation Plan (Fire vessel, HVAC charcoal filtration, respirators).
3. Verify Operational Plans are approved and implemented via COTP OCMI Authority.
4. Obtain Boost Line pressures.
5. Progress plans for source containment (Riser Hot Tap and Top Hat options).
6. Run riser with Enterprise rig for Top Hat option.
7. Preparations for top kill (continue demolition of choke and kill lines at BOP).
8. Relief well drilling with DD-III rig and second relief well planning with DD-II rig.
9. Progress plan for handling process fluids on Enterprise.

Houma, Louisiana

1. Continue to apply and improve aerial or surface dispersants to affected areas to prevent spread further East or West.
2. Provide update of the enhanced SMART Tier 3 monitoring results and modify/enhance plan as appropriate.
3. Effectively utilize NOAA monitoring and provide update on effectiveness of dispersant operation.
4. In-situ burn - confirm the volume of oil burned; fire boom acquisition; provide brief on how to expand In-situ burning capability
5. Assess progress on Rigolets, Chandeleur, Southwest Pass, & Timbalier.
6. Continue improvement on inventory of boom by type and exact locations by staging area.
7. Continue boom deployment based on parish plans - emphasis on Rigolets, Chef Menteur, all channels leading to ICW.
8. Aggressively obtain and track boom for staging areas.
9. Continue mobilization of SCAT resources in coordination with state and federal agencies.
10. Aggressively continue wildlife impact evaluation and rehab.
11. Increase media access to the Houma Incident Commanders.

Mobile, Alabama

1. Advance the GRP percentage of shoreline deployment for Mobile Sector.
2. Effectuate the orderly increase of personnel, equipment, and resources.
3. Ensure the protection of shoreline in Alabama, Florida and Mississippi.
4. Ensure the safe and timely implementation of all approved shoreline clean-up plans.
5. Advance and refine the program for maintaining displaced boom.
6. Facilitation of maritime commerce.
7. Keep stakeholders and public informed of response activities.

FIELD REPORT

Houston/Houma: Weather (next 24 hrs): Winds SE 10-15 knots; seas 1-3 feet becoming 2-4 feet Tues night; protected waters choppy.
Mobile: Weather (next 24 hrs): Winds SE 10-15 knots; seas 2-4 feet.

Source Control Operations: Houston *Summary of Previous Operational Period:*

- Relief well MC252-3 (DD III) running riser in preparation to drill next hole section.
- ROV's monitoring BOP stack and plumes – flows unchanged last 24 hours.
- Obtaining boost line pressure data from BOP stack - ongoing.
- Progressing Top Hat containment and riser hot tap options.
- Junk shot manifold placed on seafloor.
- Test #3 24 -our subsea dispersant injection completed at 0430 hrs on 5/11.
- Stack temperature survey completed.
- Completed Choke and Kill line fail safe override, valves closed.
- Initiated demolition of Choke and Kill lines for Junk Shoot kill.

Oil Spill Response Operations: Houma *Summary of Previous Operational Period:*

- Deteriorating weather suspended most on water activities
- The skimming fleet is in safe harbor due to weather; safety stand downs and lessons learned sessions will be conducted/applied.
- Applied aerial deployed dispersants
- Plans and dispersants are in place to resume aircraft deployed surface dispersant application on May 11 providing weather stays within limits.
- No vessel-applied dispersant trials performed due to sea conditions.
- On-going protective boom placement per shoreline protection plans as weather permits.
- The Dash 8 completed two surveillance over-flights.
- Four shallow water/inland skimmers are in place and ready to conduct skimming operations if needed in the Rigolets area.
- Continued manual shoreline cleanup of small balls of residue at South Pass.
- Confirmed shoreline impact at Racoon Island and adjacent barrier islands.
- Three Rapid Assessment Teams (RAT) were mobilized to conduct off-shore observations and samples (Fourchon, Venice, and Intercoastal City).
- Continued to ramp up staging areas and expand operational capabilities to the west.
- National Guard troops on-going support in security, logistics, transport, and load-out.
- SIMOPs and AirOps monitoring and coordinating vessel and air space; Orion P3 providing de-conflict assistance.

Oil Spill Response Operations: Mobile *Summary of Previous Operational Period:*

- Continued to implement boom deployment strategies in all areas of AOR.; activities hampered by small craft advisories in AOR.
- Met with contractor representatives to better understand concerns raised by States regarding the local hiring practices in each AOR.
- Distributing boom supplies to provide inventories in strategic locations.
- Deployed wildlife team to Bayou La Batre beach pursuant to the report of a dead sea turtle; turtle was recovered, and there were no outer indications of the turtle being oiled.
- Received report of tar balls on Destin beach; deployed response team to area for clean up and sampling.
- Utilized the approved vessel decontamination plan to address a Coast Guard skimming vessel in the Gulfport designated decontamination area.
- Received confirmation from Florida IC to prioritize and initially deploy all Tier 1 AOR, then begin Tier 2 deployment.
- Continued to work with Resource group on cycling out personnel in Operations group.
- Advanced efforts to ramp up Wildlife Centers across AOR (MS, AL, FL).
- Continued working with GPA to coordinate training efforts related to the Vessels of Opportunity program in MS, AL, and FL.
- Continued working with Community Outreach to advance volunteer coordination for shoreline pre-cleaning efforts.
- Continued to interface with local, state, and federal partners to insure the continual improvement of our unified operation approach.

Environmental: Houma *Summary of Previous Operational Period:*

- Continuing to work with parishes to prioritize resources at risk.
- Addressing staffing needs based on long-range plan.
- Air and water quality monitoring continuing to occur along LA coast; no impacts observed.
- SCAT teams deployed.
- Continued development of a comprehensive sampling data management program.
- Wildlife being monitored for oiled animals to be recovered and rehabilitated.
- Sourcing and evaluating the use of solidifiers.

Environmental: Mobile *Summary of Previous Operational Period:*

- Waste Management Plan signed by ICT.
- Three sampling plans (air, water/sediment, and decontamination areas sediment plan) reviewed by environmental representatives from each state; comments being incorporated and/or addressed.
- Developing a tracking document for environmental and health sampling/monitoring across user groups (RP, Federal, State, NRDA).
- Continued approval process for the Plan that addresses the transfer of oily water from skimming vessels to onshore tanks; working with the States and EPA for final approval.
- Developed a strategy for water treatment technology in concert with Clean Harbors and Waste Management.
- Identified a location and mobilization plan for the treatment system.
- Developing waste tracking software for management of waste streams with ERM and Waste Management.
- Developed Wildlife and Rehab contacts document.
- Developed a Plan for conducting Phase I ESAs for selected staging areas.
- Reviewed all Staging, Decon, and Deployment areas for potential need for Phase I Site Assessment; created list of sites in MS, AL, FL; notified Operations of ESA locations and process.
- Determined the %percent deployment of boom in sensitive areas for MS, AL, and FL; provided data to ICP.
- Worked with Operations regarding the need for tracking waste (types and volumes) generated during the cleanup activities.
- Created additional data sheets for the existing (in use) staging areas and integrated into current packages.
- Reviewed the APC to determine if the goals and intents of the Plan for sensitive areas of Hancock County were being met; determined that boom had been deployed in most areas; identified areas in need of additional booming.
- Met with Logistics to discuss and evaluate staging map changes; worked with URS to implement the staging map changes.
- Obtained copies of crude oil description and MSDS's for dispersants and crude oil.
- Worked with real estate and legal representatives on finalizing access agreements for Staging and Decontamination areas as well as TWIC and permitting issues.
- Identified a sampling tracking strategy in order to ensure that federal, state, and company sampling efforts were captured in one place.
- GRP Site Completion Stats:
  - Mississippi Point: 41 of 57 = 72%
  - Alabama Points: 38 of 80 = 48% (note: totals adjusted per Alabama SOSC)
  - Florida Points: 21 of 47= 44% (note: reflects Tier 1 AOR only – as agreed upon with Florida SOSC)

Logistics: Houma *Summary of Previous Operational Period:*

- Preliminary Boom Plan developed and currently being vetted through AC Roberts and Houma IMT; includes streamlined process for procurement, staging, and allocation.
- Centralized boom staging area now set up at J Ray McDermott Yard in Amelia, LA.
- Awaiting instruction for opening air ops in Florida, setting up storage capability for dispersant.

Logistics: Mobile *Summary of Previous Operational Period:*

- Continued working options for personnel moves from hotel.
- Continued working long-term options for move from convention center mid-June
- Deployed personnel to investigate and validate status and location of staging areas.
- Continued supporting Distribution Center build up.
- Continued working communications set up. ETC 10 May 2010.
- IAP Software SME is ready to deploy to DC on 10 May 2010.
- Setting system up to consolidate orders for consumables.
- Integrated with Resource Team, refined on-boarding process for personnel.

Planning: Houma *Summary of Previous Operational Period:*

- Developing a hurricane evacuation plan for IMT operations.
- Developing boom deployment mapping of Louisiana coastline.
- Developing an improvement strategy for situation monitoring data and communications.

Planning: Mobile *Summary of Previous Operational Period:*

- Implemented meeting schedule changes to align ICS process.
- Finalized waste management/disposal plan.
- Established planning section Mobile email account to assist with information management.
- Established HSIN account for information access updates.

- Determine long time staffing for sustainment.
- MTSRU communication plan and measures.
- Advanced the development of status maps and detailed strategy maps for booming strategies and projected weather trajectories.

Government & Public Affairs: Mobile *Summary of Previous Operational Period:*

- 2:00 PM Florida Bird Rehab Center Press tour, Pensacola, FL
- Ongoing volunteer training for beach cleaning activities – Mobile IC

As of 05/11 @ 02:00			
	Current Period	**Previous Period**	**Cumulative Total**
HSSE			
HiPo's	0	0	2
Near Miss	1	2	21
First Aid	4	2	46
Recordable Injuries (lost time/restricted duty/med treatment)	0/0/2	0/1/0	1/2/5
Vehicle Accident	0	0	3
Exposure hrs/Man hrs	70,000	78,000	820,000
PERSONNEL			
Total	13,853	10,008	
Personnel Command Posts	2,915	2,290	
Personnel Field	9,656	6,431	
National Guard	1,282	1,287	
OPERATIONS			
Vessels Active			
*Offshore	394	294	
*Skimmer	23	19	
Aircraft Active			
-Helicopters	23	23	
-Fixed Wing	10	14	
# Dispersant Flights	22	21	163
# Mapping Flights	2	3	
Surface Dispersant Applied (gal)	56,220	55,932	428,307
Subsea Dispersant Applied (gal)	12,310	0	28,709
Dispersant Available (gal)	120,471	179,395	
Boom Deployed (ft)	94,800	50,788	1,145,480
Boom Staged (ft)	442,407	530,693	
In-Situ Burns Conducted*	0	0	10
ENVIRONMENTAL			
Oily Liquid Recovered (bbl)	5,780	5,780	97,688
Impacted Wildlife	1	7	16
CALL CENTER			
Total Calls Received (thru 5pm)	4,109	1,503	42,259
Calls Received from Volunteers	382	174	10,509
*Still completing calculations for volume oil burned to date			

National Incident Command
Daily Governmental Report
Robert-Houma-Mobile
11 MAY 2010

TOP HAT

- BP will attempt to install a ―top hat" dome over the main source of the leak. The ―top hat" is a smaller containment dome, designed to mitigate the formation of hydrates, which prevented the success of the first containment dome.

- We said from the beginning that there is no silver bullet to stop this leak. We were moving forward from the beginning under the assumption this tactic may not be successful.

- BP will continue to drill the relief well to permanently stop the leak.

- BP and industry partners have a team of experts from across the private sector working around the clock in Houston with one responsibility: discover alternative solutions to permanently stop this leak.

- DOI Secretary Ken Salazar dispatched U.S. Geological Service Director Marcia McNutt to oversee this process.

- They will continue to work hard to provide BP with alternative ideas.

"JUNK SHOT"

BP is collecting data and exploring the ―junk shot" technique, aimed at clogging the blow out preventer (BOP). Using very precisely picked materials to inject into the BOP, BP will attempt to clog it, and follow with heavy fluids and cement to permanently stop the leak. BP hopes to perform this task in the next 10-14 days.

"TOP KILL"

BP is currently exploring a method known as a "top kill"—commonly used to control wells on land but untested in deep waters. In this case, it involves reconfiguring an existing piece of equipment that sits on top of the wellhead so that heavy fluids can be pumped through it and into the well, with the aim of halting the flow.

BOOM

- As of the end of May 10, over 1.4 million feet of boom deployed and nearly 1.5 million feet available that will continue to be strategically deployed.

- We continue to work to identify additional sources of boom for delivery.

- The Coast Guard is aggressively overseeing BP efforts to ensure the appropriate type of boom is available for approved deployments as dictated by this dynamic situation.

- The Unified Command will continue to work with state, local and community leadership to ensure that needs are met and that appropriate steps are taken to stop the source of the leak, mitigate the spill and deploy the necessary resources in the Gulf.

If asked about boom shortage:
"As of last night there was over 1.4 million feet of boom deployed and nearly 1.5 million feet available that will continue to be strategically deployed. The Unified Command is aggressively overseeing BP efforts to ensure the appropriate type of boom is available for approved deployments as dictated by this dynamic situation. The Coast Guard will continue to work with state, local, and community leadership to ensure that needs are met and urge BP to take the appropriate steps to stop the source of the leak, mitigate the spill and deploy the necessary resources in the gulf."

DISPERSANTS

- The dispersant being used by BP is part of a pre-approved list and is being used on the surface of the water in an effort to mitigate the impact of the spill. Coast Guard and EPA have set specific conditions with BP to ensure the protection of the environment and the health of residents in affected areas, and EPA is conducting constant air monitoring, through air craft and fixed and mobile air stations.

- The Coast Guard and EPA also authorized BP to conduct several tests of a new approach to use this dispersant underwater, at the source of the leak, to determine if the dispersant would be effective in breaking up the oil and helping to control the leaks. No further use of dispersants underwater is planned until BP provides the results of these tests for our review.

- We reserve the right to discontinue the use of this dispersant method if any negative impacts on the environment outweigh the benefits.

TUESDAY, MAY 11 STATISTICS

Total response vessels: over 464
Containment Boom deployed: over 1.15 million feet
Containment boom available: 442,407 feet
Sorbent boom deployed: 253,607 feet
Sorbent boom available: 1,030,188 feet
Boom deployed: nearly 1.4 million feet (regular plus sorbent boom)
Boom available: nearly 1.5 million feet (regular plus sorbent boom)
Oily water recovered: approximately 4 million gallons

Dispersant used: 428,307 gallons
Dispersant available: more than 120,471 gallons
Overall personnel responding: approximately 13,000

TUESDAY, MAY 11 EVENTS

0730	Admiral Allen will tape an interview with ABC News (NOLA)
0800	Admiral Allen will interview with Americas Morning News with John McCaslin
0800	Congressman Scalise and St. Tammany Parish President Kevin Davis visit to Slidell boom staging area.
0830	Admiral Allen will interview with Los Angeles Times
0800-1700	Deepwater Horizon Coast Guard Marine Board of Investigation – Kenner
0815	Governor's teleconference – RADM Landry and Neffenger
0900	Congressman Buchanan meeting with St. Petersburg Incident Commander CAPT Close
1000	Congressman Buchanan press conference in St. Petersburg
TBD	Peggy Hatch, Secretary of LA Department of Environmental Quality meeting with BP at Robert UAC
1400	Local Official's teleconference – CAPT Hanzalik
1400	Congressional teleconference
1400	Pensacola media brief/tour of Tri State Bird Rescue **OPEN PRESS**
TBD	Teleconference with boom SME. **OPEN PRESS**
TBD	RADM Neffenger is meeting with Governor Jindal.
1500	DHS Secretary Napolitano will tour X staging location and receive a briefing at the Mobile Incident Command Center
1545	DHS Secretary Napolitano and Governor Riley will hold a press conference at the Mobile Incident Command Center **OPEN PRESS**

METRICS

- 15,621 Facebook followers the Deepwater Horizon Response Facebook page.
- Twitter has 3,267 followers.
- The www.deepwaterhorizonresponse.com site has over 13.7 million hits since it was initiated.
- Top Topics via website:
    - Jobs
    - Claims
    - Booming Activities
    - 1 fact sheet; 2 media advisories; 4 press releases; 3 image releases, 37 images uploaded and 4 videos were posted.

MONDAY, MAY 10 EVENTS

1. Open Press Events

1200 BP held a pen and pad session in Houston with BP senior executive vice-president Kent Wells

1300 Jon Jarvis, Incident Commander U.S. Department of the Interior ,Jereme Phillips, Refuge Manager Bon Secour National Wildlife Refuge and Rick Clark, Chief of Science and Resources Management Gulf Islands National Seashore held a press conference to provide an update on the Department of the Interior's role in response to the Deepwater Horizon incident as it relates to National Wildlife Refuges and National Parks

1400 Press conference with Mr. Suttles, BP COO, Radm. Landry, UAC Cmdr., and Herbst, MMS Regional Director provided an operational update, description of the ~~–to~~p hat", and update on wildlife protection.

Engagement with Governmental Officials

- Governor's call: Governors Barbour, Crist, Jindal and Riley participated.
  - RADM Neffenger and Landry provided an update on operations.
  - Mary Glackins, NOAA, provided an update on the trajectory.
  - Eileen Sobeck, FWS, provided an update on the impact of fish and wildlife
  - Gerri Fiala (AS for ETA) and David Michaels (OSHA), Dept. of Labor, provided an update on the efforts to hire locals.
- ADM Allen spoke with Rep Melancon and Senator Vitter.
- Senator Vitter received a briefing and tour from Houma Incident Commander CAPT Stanton.
- Congressmen Buchanan (FL) and Congressman Cassidy (LA) did an overflight.
- Congressman Buchanan (FL) met with RADMs Landry and Watson as well as Doug Suttles, BP at the Robert UAC.
- Sen. Bill Nelson and Congressman Debbie Wasserman-Schultz were briefed by USCG on South Florida's plans for anything that could hit the coast in the near future.
- Plaquemines Parish President Billy Nungesser met with Houma Incident Commander CAPT Stanton regarding dredging proposal.
- St. Bernard Parish President Craig Tafarro met with Houma Incident Commander CAPT Stanton regarding response plans for St. Bernard.
- Local Official's call: CAPT James Hanzalik provided an update on operations.

FUTURE EVENTS AND ISSUES

Wednesday, May 12

0800-1700 Deepwater Horizon Coast Guard Marine Board of Investigation - Kenner

TBD Jack Hayes, Director of National Weather Service visit to Houma ICP

TBD Asst. Secretary of Commerce to visit Unified Area Command

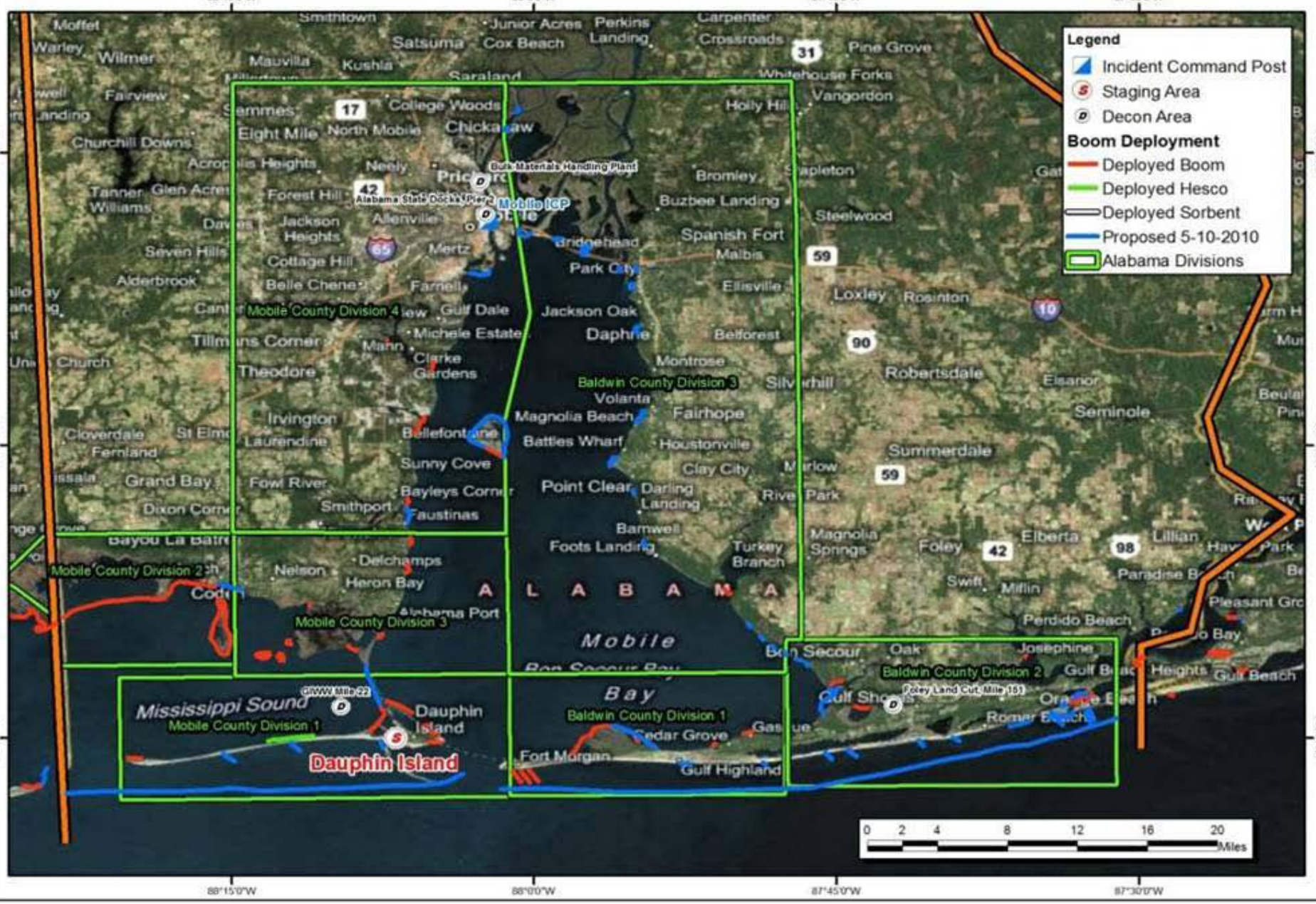
Thursday, May 13

TBD Asst. Secretary of Commerce to visit Mobile

Friday, May 14

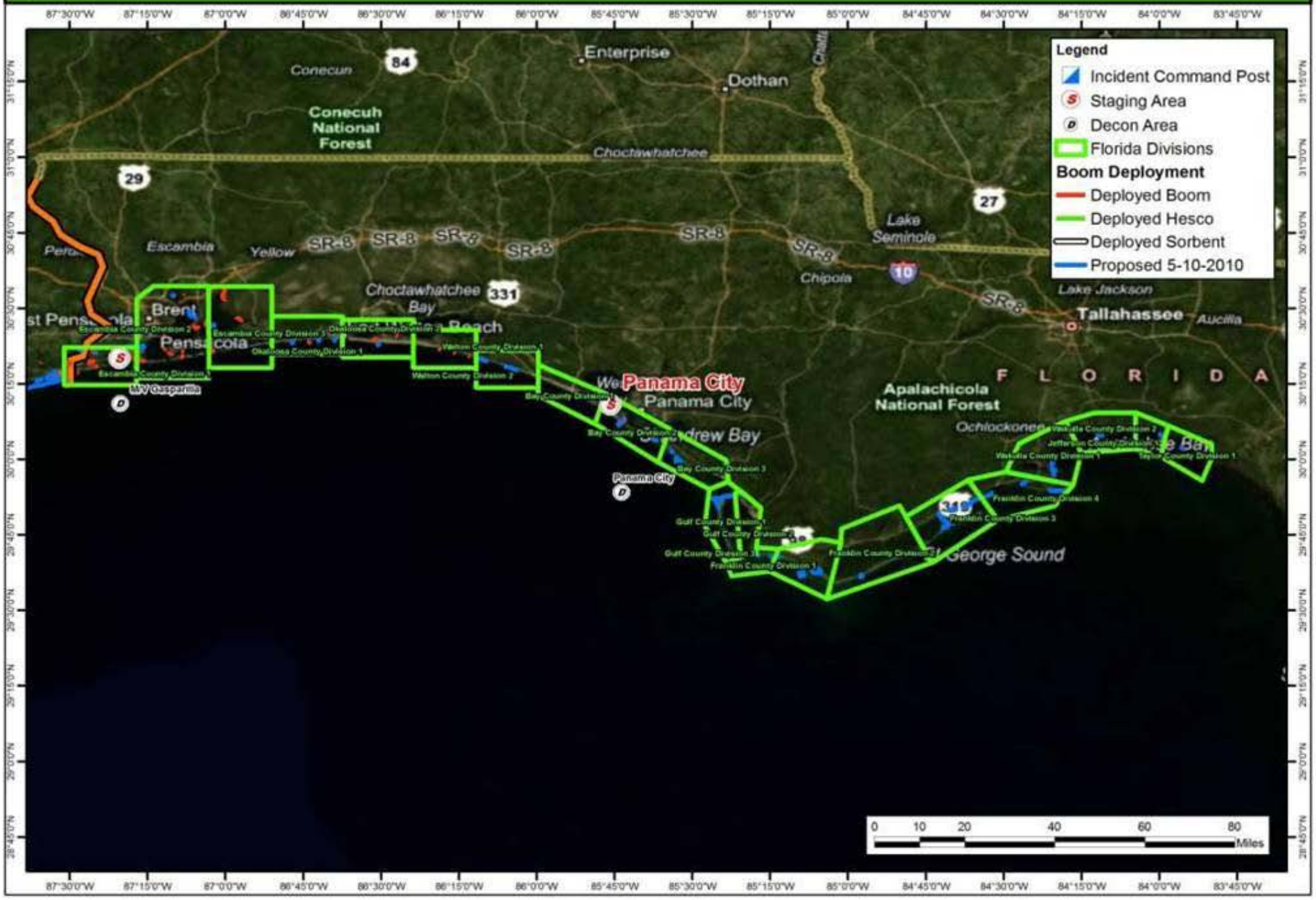
MISSISSIPPI CANYON 252
Alabama AOR Map

The Response Group
Emergency Response | Pre-Planning & Support
281-880-5000



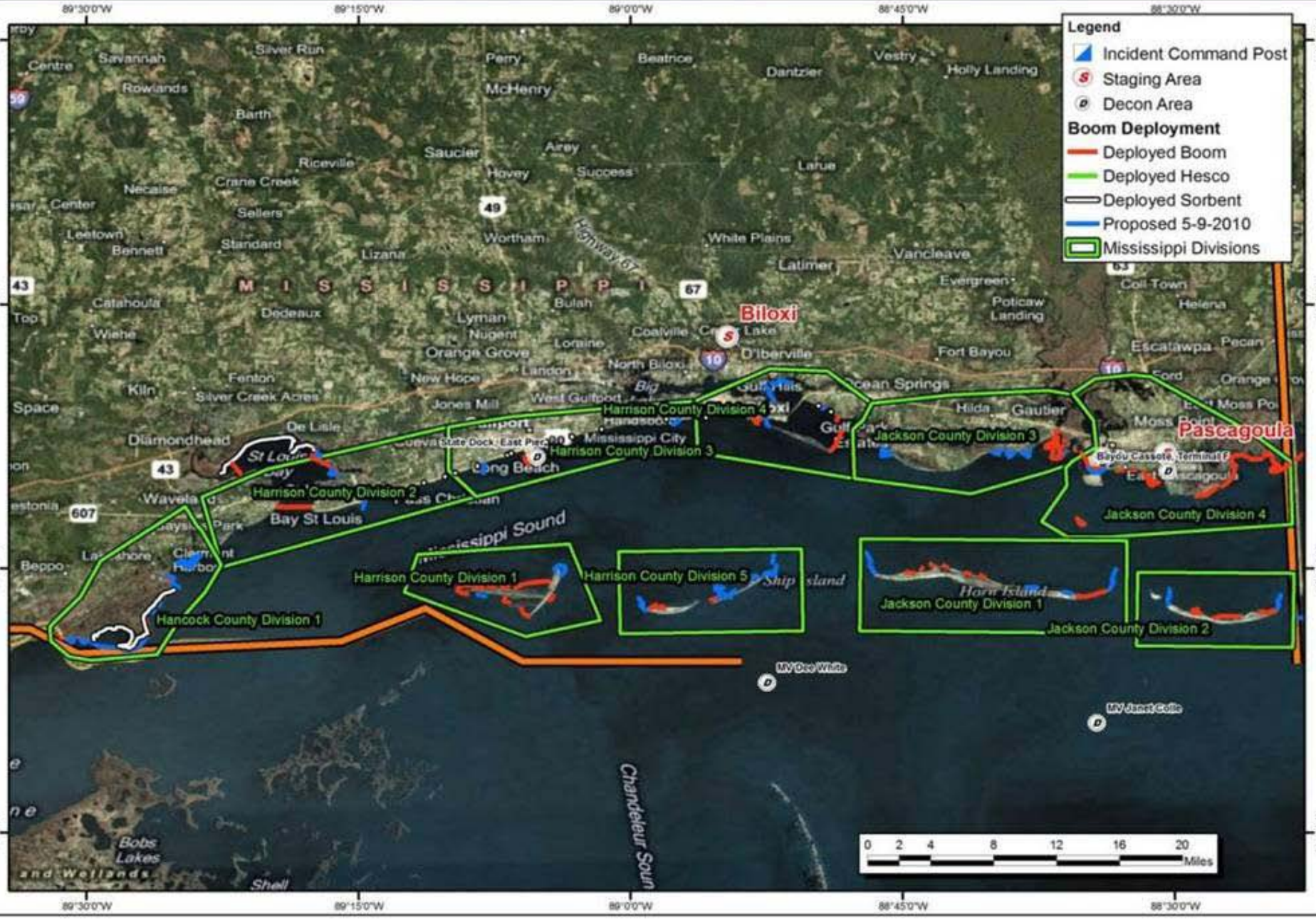
MISSISSIPPI CANYON 252
Florida AOR Map

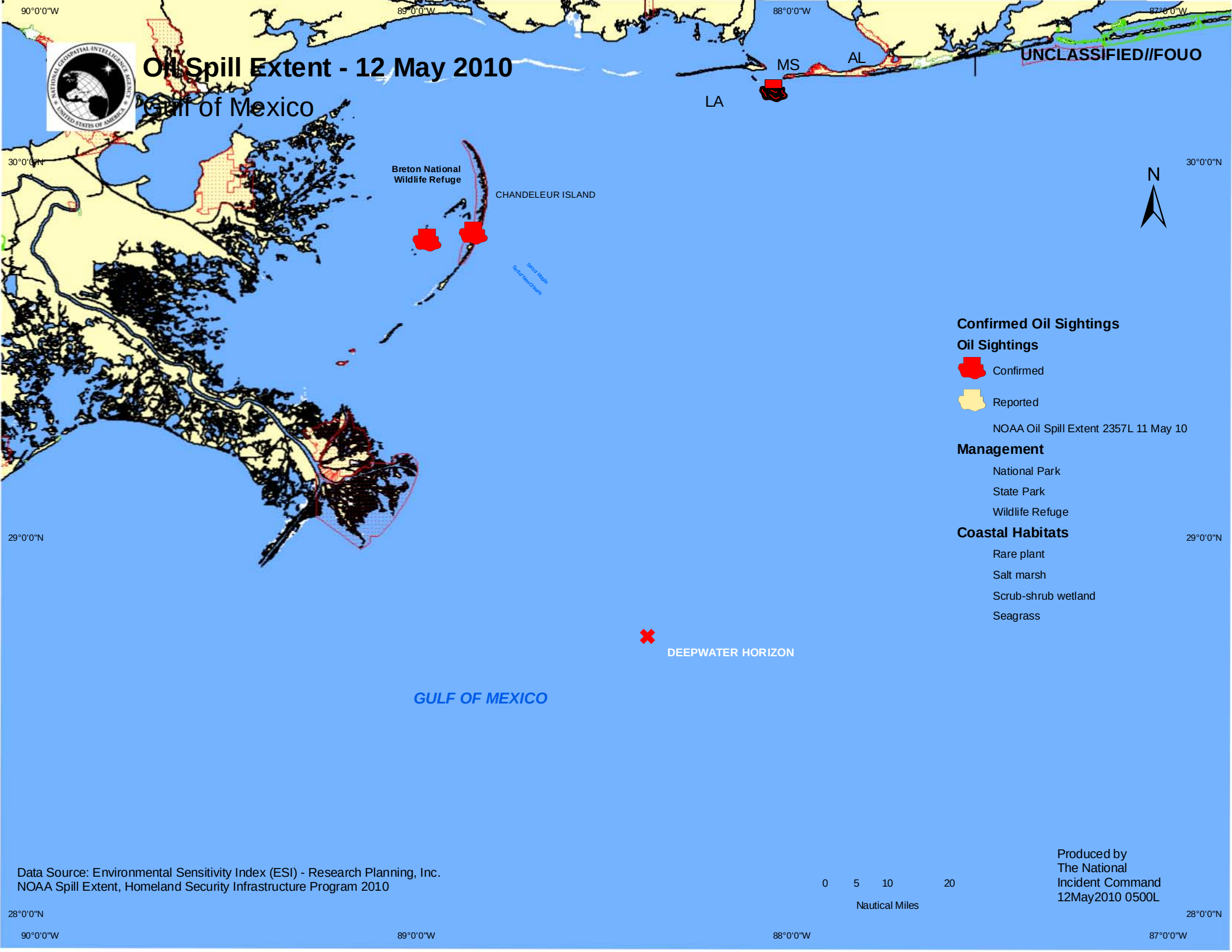
The Response Group
Emergency Response | Pre-Planning & Support
281-880-5000



MISSISSIPPI CANYON 252
Mississippi Division Booming Operations Map

The Response Group
Emergency Response | Pre-Planning & Support
281-880-5000




Oil Spill Extent - 12 May 2010
Gulf of Mexico
UNCLASSIFIED//FOUO
90°0'0"W
89°0'0"W
88°0'0"W
87°0'0"W
30°0'0"N
29°0'0"N
28°0'0"N
MS
AL
LA
Breton National Wildlife Refuge
CHANDELEUR ISLAND
N
Confirmed Oil Sightings
Oil Sightings
Confirmed
Reported
NOAA Oil Spill Extent 2357L 11 May 10
Management
National Park
State Park
Wildlife Refuge
Coastal Habitats
Rare plant
Salt marsh
Scrub-shrub wetland
Seagrass
DEEPWATER HORIZON
GULF OF MEXICO
Data Source: Environmental Sensitivity Index (ESI) - Research Planning, Inc.
NOAA Spill Extent, Homeland Security Infrastructure Program 2010
0 5 10 20
Nautical Miles
Produced by
The National
Incident Command
12May2010 0500L

Approximate Oil Locations

NO DOCUMENT
The most recent version of this NOAA document is dated 06 May 2010
This document is no longer being provided on the NOAA website
NIC will work with NOAA to re-establish graphic production

Environmentally Sensitive Areas
Southeast Louisiana Coast

UNCLASSIFIED//FOUO

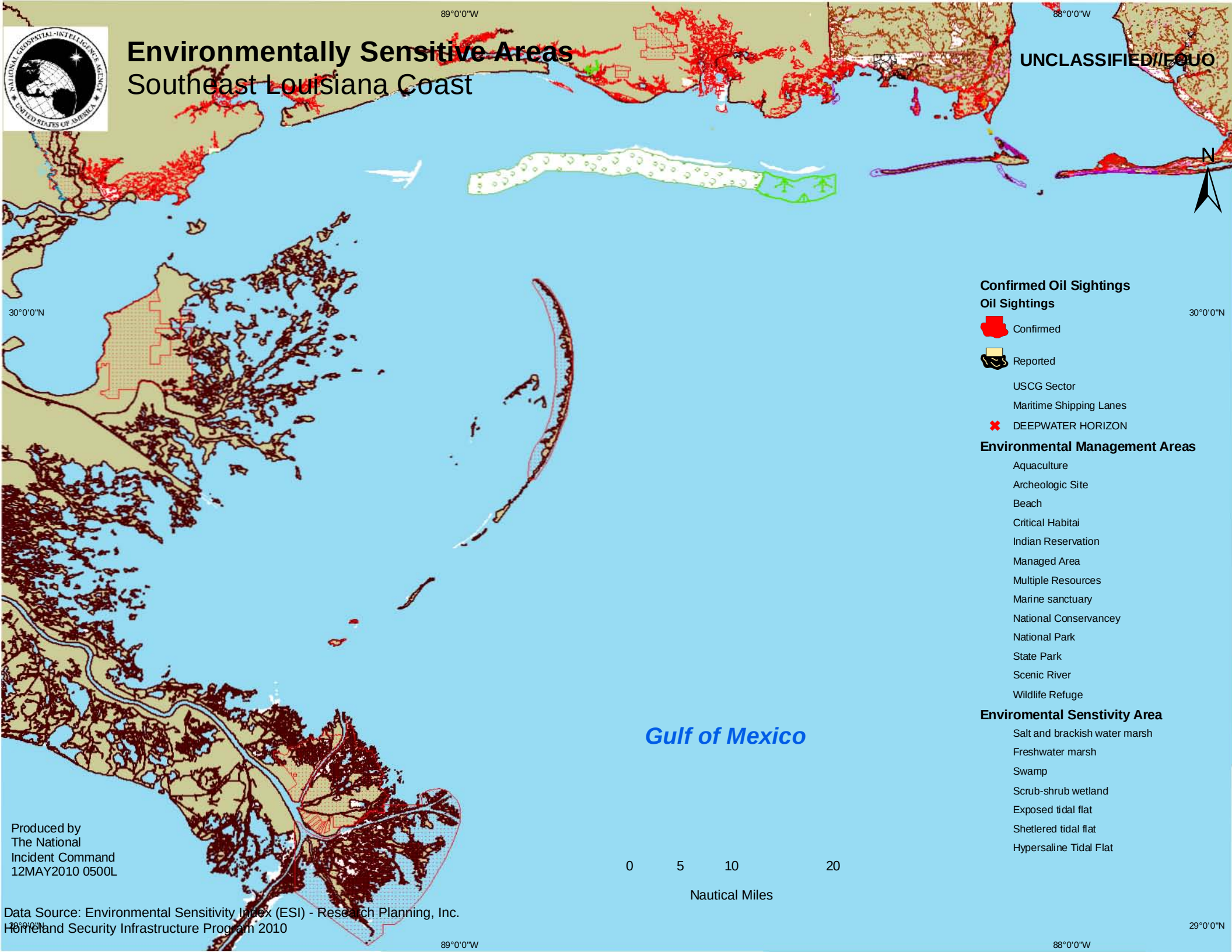
89°0'0"W

88°0'0"W

30°0'0"N

29°0'0"N

N



Confirmed Oil Sightings

Oil Sightings

- Confirmed
- Reported
- USCG Sector
- Maritime Shipping Lanes
- DEEPWATER HORIZON

Environmental Management Areas

- Aquaculture
- Archeologic Site
- Beach
- Critical Habitai
- Indian Reservation
- Managed Area
- Multiple Resources
- Marine sanctuary
- National Conservancey
- National Park
- State Park
- Scenic River
- Wildlife Refuge

Enviromental Senstivity Area

- Salt and brackish water marsh
- Freshwater marsh
- Swamp
- Scrub-shrub wetland
- Exposed tidal flat
- Shetlered tidal flat
- Hypersaline Tidal Flat

0 5 10 20

Nautical Miles

Produced by
The National
Incident Command
12MAY2010 0500L

Data Source: Environmental Sensitivity Index (ESI) - Research Planning, Inc.
Homeland Security Infrastructure Program 2010

DHS Daily Conference Calls

NO DOCUMENT
This document is unavailable at this time, National Incident Command is working to obtain the document through the NOC CAT and Unified Area Command.

National Incident Command

DEEPWATER HORIZON RESPONSE

15 May 2010, 0630 EDT

On-Scene/RFA Approved

UAC #	213RR #	Capability	Description	Status	EPA Region	Memo Status	Estimated Cost
UAC0001		Defense Coordination Officer	Defense Coordinating Officer (DCO): Includes Contingency Command Post (CCP) and 2 Defense Coordinating Elements (DCEs) staffed and augmented as required to Unified Area Command in Robert, LA	Deployed to Unified Command	4, 6	Signed	$79,000.00
UAC0003		Public Affairs Personnel	Public Affairs Personnel: 4 Public Affairs Officers (media ops team), 3 combat camera teams (5 PAX each), 1 Defense Visual Information Distribution System (DVIDS),	Deployed to Joint Information Center	6	Signed	$100,000.00
UAC0005		Navy Supervisor of Salvage	66K feet of 42" boom, nineteen (19) Skimmer systems and associated equipment , fifty eight (58) personnel in theater.	85 of 85 trucks arrived from Port Hueneme, CA and Cheatham Annex, VA. Fifty eight (58) PAX. Equipment being deployed in theater.	4, 6	Signed	$3,500,000.00
UAC0006	D0136	Two C-130 aircraft capable of Mobile Aerial Spray System (MASS)	RFA transmitted by FOSC & received by Joint Staff	2 Aircraft on scene	4, 6	Signed	TBD
UAC0007		Activation of Louisiana National Guard	National Guard Forces for LA	One thousand forty seven (1,047) supporting mission (out of 1100 authorized by FOSC).	6	Signed	$7,000,000.00

On-Scene/RFA Approved

UAC #	213RR #	Capability	Description	Status	EPA Region	Memo Status	Estimated Cost
UAC0008		Air Component Coord Element	Forward deployed to appropriate location.	En route	6	Signed	$5,000.00
UAC0012		Air Force Lift Support	Oil boom from Travis AFB, CA to Mobile Regional Airport (Mobile, AL).	Complete	4, 6	Signed	$175,000.00
UAC0014		Joint Public Affairs Support Team	Includes: 4 public affairs officers, three Combat Camera Teams (5 people each), Defense Visual Information Distribution System (DVIDS) and DVIDS operator.	On 24 hr standby at Keesler AFB, awaiting deployment orders	6	Signed	$100,000.00
UAC0015		Activation of MS Natl Guard	National Guard Forces for MS	Sixty (60) total activated.		Signed	RFA- $858646.2 FAA Missions- $5,820.96 (C-23 flight) $373,534.20 (2 UH-72 A/C for 30 days) $14,274.88 (2 Legal LNOs for 30 days)
UAC0016		Activation of AL Natl Guard	National Guard Forces for AL	Three hundred thirty five (335) currently activated (out of 362 authorized by FOSC).		Signed	RFA- $3M FAA Missions - $335,667 (UH-60 flight)
UAC0017		Activation of FL Natl Guard	National Guard Forces for FL	Six (6) ARNG in T-32 : (3) Unified Command Center, (1) ESF-13 , (1) Incident Command and (1) Area Command		Signed	$8,250.00
UAC0019		DMIGS Support	Support for NIC	Provide geospatial intelligence analysis and support		In Work	TBD

On-Scene/RFA Approved

UAC #	213RR #	Capability	Description	Status	EPA Region	Memo Status	Estimated Cost
UAC0020		CAP Coverage	Civil Air Patrol (CAP) support to provide aerial reconnaissance and imagery	NORTHCOM FRAGO 041 directs JFACC to coordinate CAP provision of (250) flight hours of support.		Signed	$37,500.00
UAC0023		Airlift Support	DoD received RFA for the airlift of 150,000 ft of boom and other equipment equipment. Lift from Anchorage, AK to New Orleans, LA.	Approved. Lift will be split: BP contracted (4) 747 aircraft; remaining lift by DOD resources - TRANSCOM and CJTF-AK directed to support.		Signed	$2,300,000.00
UAC0030		FLNG C2	RFA :31 Personnel for Command and control, coordination cell, and information sharing	Approved 11 May		Signed	$442,027.00
UAC0036	Full Routing	Boom and skimmer equipment	10-100,000 ft internal float containment boom, 24"-31" (1) 1,000 ft 12" internal float river boom (1) 1,000 ft 18" internal float river boom (6) US Navy Busters w/3 crews, TONO blowers & HB accessories (1) SeaArk, Boston Whalers w/2 crews for ea vessel and tow bridle (28) Boom mooring system 10kg-20kg (1) 28' Kvichak Rapid Response Skimmer (1) Skimmer weir for use with Kvichak (1) Pump for overloading oil from harbor buster	Approved/ force en route	4, 6	Signed	$1,000,000.00

On-Scene/RFA Approved

UAC #	213RR #	Capability	Description	Status	EPA Region	Memo Status	Estimated Cost
UAC0039	FOSC	MSNG	10- MSNG 10-012, 10-013, 10-015, 10-016. 1 Segovia flyaway kit for comm support, 47th CST for 30 days for assistance and advise to local and state authorities, C-23 Sherpa for 30 days estimated 60 hours of flight time to be used for Incident Awareness and Assessment overflight, transportation and key leader movement. 50 ANG personnel for 30 days for command and control and communications support and for a planning cell to the ICP and State agencies.	On scene	4, 6	Signed	$571,043.90
UAC0021		NGB Personnel Support	Request for (20) personnel mission processing and administrative support at UAC Roberts, LA; NGB HQ; and JFHQ-St HQ	Request for (6) T-32 personnel approved by OSD. Request for (14) T-10 personnel denied.		Signed	$129,300.00

RFA In Progress

UAC #	213RR #	Capability	Description	Status	EPA Region	Memo Status	Estimated Cost
UAC0010		Pensacola Naval Air Station Staging Area (Pensacola, FL)	Utilize Pensacola Naval Air Station as a staging base for spill response equipment	In Use	4	In Work	TBD
UAC0011		Keesler Air Force Base (KAFB) Logistics Base	Utilize Keesler AFB as Logistics Base for Operations	KAFB has been designated as such; awaiting logistics flow	4	In Work	TBD
UAC0018		Air Force Lift Support	Airlift of 70K ft of boom from Alaska	RFA pends from FOSC	6	In Work	TBD
UAC0024		Boom and skimmer equipment	RFA for 102,000 ft of boom, boom mooring systems, skimmer capabilities and equipment, pumps from Naval Region Southeast	NORTHCOM requires modification of RFA		Signed	$100,000.00
UAC0031		Boom and skimmer equipment	RFA: supervisor of salvage, boom and boom moorings, 136,000 oil storage bladder, 2 tow boats	In coordination		Signed	
UAC0032		ALNG	10-005AL 125 Soldiers to assist in the movement, emplacement, repair and monitoring of all protective barriers as required by the Incident Commander for 30 days.	In coordination		Draft	$712,500.00
UAC0033		MSNG	1 additional LNO to UAC Robert to augment existing LNO	In coordination		Draft	$7,857.00
UAC0034			Naval Air Station Joint Reserve Base (NASJRB) Belle Chasse provide offload team, Advance approval for day/night off load ops, POC for contractor base entry permit.	In coordination	4, 6	Draft	
UAC0035			DCO Amendment, to facilitate engagement, coordination and requests for support between DoD partners and other Unified Area Command members and incident responders.	In coordination	4, 6	Signed	$151,250.00
UAC0037	BP/ FOSC	Vessel w/ side scan sonar & survey capability	Vessel with side scan sonar and hydrographic survey capability for West Bay shipping channel for decontamination station. Max depth: 15 fathoms (90ft) Estimate: 4 day requirement	In coordination	4, 6	Draft	$43,500.00

RFA In Progress

UAC #	213RR #	Capability	Description	Status	EPA	Memo	Estimated Cost
UAC0038	FOSC	FLNG	FLNG 10-001FL Amendment 1. Soldier will assist with receipt, tracking, processing, and oversight of mission requests submitted by the FOSC by the State of Florida National Guard through the ICP	In coordination	4, 6	Signed	$18,500.00
UAC0040	BP/ FOSC	Public Affairs/Media Support	5 public affairs officers (media ops team), 3 combat camera teams (5 personnel each), 1 Defense Visual Information Distribution System (DVIDS), 1 DVIDS operator. Mobile equipped, scalable, expeditionary Joint Public Affairs and imagery collection capabilities to operate in support of response operations in areas affected by the oil spill.	Under Consideration	4,6	Draft	$151,150.00
UAC0043	BP/FOSC	Incident staging base (ISB) at Naval Air Station Pensacola FL, in response and recovery operations	Incident staging base @ NAS Pensacola FL , to stage booms, boats and equipment for oil prevention.	DOD On Scene	4,6	Draft	$15,000.00
UAC0044	Full Routing	Aerial port of embarkation/aeriel port of debarkation load and offload services at Elmendorf Air Force Base, AK and Naval Air Station Joint Reserve Base (NAS JRB), Belle Chase, LA for up to 10 military aircrafts for oil spill recovery.	Equipement needed to be loaded onto aircraft and the offloaded upon arrival of destination.		4,6	Signed	$40,000.00
UAC0045	Full Routing	One P3 Aircraft	Request CBP (Customs and Border Protection) to provide aircraft advisories for the safety of all airborne Deepwater Horizon response operations		4,6	Signed	$2,250,000.00

RFA In Progress

UAC #	213RR #	Capability	Description	Status	EPA	Memo	Estimated Cost
UAC0047	BP	Army National Guard Aviation Support 550 aviation hours	To provide an additional 550 hours in support of civil authorities in LA parishes affected by the Deepwater Horizon Oil Spill. TF missions to include imagery, reconnaissance, personnel and equipment transport.		4,6	Draft	$2,900,832.00
UAC0048	BP	20 Additional Air National Guard	20 Additional Air Guard personnel for 30 days in support of civil authorities in LA parishes affected by Deepwater Horizon oil spill. FAA 10-005 LA		4,6	Draft	$230,000.00

RFA/Under Consideration

UAC #	213RR #	Capability	Description	Status	EPA Region	Memo Status	Estimated Cost
		Two Additional C-130 aircraft capable of Mobile Aerial Spray System (MASS) and delivery of 2,000 gallon spray capacity per sortie.	Increase aircraft capacity for dispersant deployment	Pends FOSC requirements determination.			
		Naval Surface Combatant (Amphibious)	Includes LCAC (Hovercraft x3) Embarked Helo Detachment. Provides sea-bearing capability	Pends FOSC requirements determination.			
		P-3C Aircraft (AIP Variant) with Tactical Common Data Link (TCDL) Equipment/Personnel (Jacksonville, FL)	P-3C AIP Aircraft & TCDL Ground Equipment	Available			
		LCAC / LCU (Little Creek, VA)	Aboard LHA	Available			
		Naval Mobile Construction Battalion Air Detachment (Task Tailored NMCB DET) (Gulfport, MS)	89 Personnel plus selected civil engineering equipment	Available			
		Fleet Survey Team (Stennis AFB, MS)	Hydrographic Survey Capability for Impacted Ports	Available			
		Beach Group TWO (Little Creek, VA)	Logistics Over the Shore (LOTS)	Available			
		E-2C HAWKEYE (Norfolk, VA)	Surface Surveillance and Air Control	Available			
		C-2A GREYHOUND (Norfolk, VA)	Logistics Support	Available			
		Naval Station Pensacola, FL	Logistics Support Base	Available			
		Joint Reserve Base New Orleans, LA	Logistics Support Base (APOD)	Available			
		Naval Air Station Key West, FL	Logistics Support Base (APOD)	Available			
		Naval Support Activity Panama City, FL	Logistics Support Base (SPOD)	Available			
		USAF Aux/Civil Air Patrol	GA-8 Archer – 12 hrs	Available			
		USAF Aux/Civil Air Patrol	C-182 – 6 hrs	Available			
		Unmanned Aerial Aircraft (UAV) / Remote Piloted Aircraft (RPA)	Surrogate Predator – 48 hrs	Available			
		Naval Support Activity Panama City	Immediate	Available			
		Marine Corps Logistics Base, Albany GA	48-hrs	Available			

RFA/Under Consideration

UAC #	213RR #	Capability	Description	Status	EPA Region	Memo Status	Estimated Cost
		1 Subsurface damage control expert	Subsurface damage control expert to deploy to TransOcean/BP ICP in Houston, TX				
		Air Force Lift Support	Oil boom from airports near pre-staged equipment location on east coast to oil spill region.				
		Air Force Lift Support	Oil boom from airports near pre-staged equipment location on west coast to oil spill region.				
		Air Force Lift Support	Vessel of Opportunity Skimmer System (VOSS) from airports near pre-staged equipment location on east coast to oil spill region				
		Air Force Lift Support	VOSS from airports near pre-staged equipment location on east coast to oil spill region				

Canceled

UAC #	213RR #	Capability	Description	Status	EPA Region	Memo Status	Estimated Cost
UAC0009		Airspace Coordination Planner	Located at Incident Command Post in Houma, LA	CANCELED – DCO determined this was a redundant request that was filled from the ACCE request (UAC0008).	6	In ork	TBD
UAC0013	A0510	1 X USAF Aviation Weather Briefer/Observer	USAF aviation weather briefer/observer to conduct daily planning for operational decision making	CANCELED – DCO determined NOAA is on-scene providing requested capability.	6	Signed	$5,000.00
UAC0041	BP/ FOSC	Common Operating Picture Support	Maintain a Common Operating Picture (COP) at the AFNORTH AOC, Tyndall AFB, FL to provide situational awareness to Incident Command Post (ICP) Houma for 30-90 days. All data will stay within the SIPR system at Tyndall AFB, FL. Appropriate/authorized information will be coordinated/shared with the ICP at Houma as needed. pr ovide situational awareness/flight tracking for the Air Operations Branch at ICP Houma.	Canceled -File not forwarded as per LT (b) (6) as per discussion with CDR (b) (6) (Air Ops supervisor in Houmma). Request went to Northcomm and because of legal issues they decided to provide service for free.	4,6	Draft	$1,000.00

Canceled

UAC #	213RR #	Capability	Description	Status	EPA Region	Memo Status	Estimated Cost
UAC0042	FOSC	14 Flights for airlift of pollution response & salvage equipment	DoD airlift of pollution response boom (approx. 8 TEUs) & Navy Supervison of Salvage equipment (approx. 250 short tons) from vicinity of Anchorage, AK (Elmendorf AFB) to vicinity of incident site to include any designated Incident Support Bases (ISBs) to facilitate rapid delivery of critical equipment.	CANCELED Canceled for the additional flights per Matt Weakly	4,6	Draft	$3,080,000.00 Total Cost to date: $660,000
UAC0046	BP / FOSC	Equipment necessary to set up Just In Time Training (JITT)command for the Pollution Investigation School (PI) at the Base Support Unit New Orleans	Lexmark x552 DEMFP Printer/copier, Brother Intelligence 1860c Fax Machine, Office phones for use by school staff, and instructors (no cost), analog phone card 500120-000-001 analog line card, S Analog Station Baby Boards 189208-101-PAK, Patriot hands free keyboards, black, 219300-VOE-27S, Acer 17" computer monitor CDW#1795176 MFG# ET BV3RP.B01	CANCELED Canceled as Cmd (b) (6)	4,6	Draft	$5,705.28

Demobilized

UAC #	213RR #	Capability	Description	Status	EPA Region	Memo Status	Estimated Cost
		Heavy Lift Helicopters H-53 Series (Norfolk, VA)	4x H-53 Series Helicopters	Available			
		Medium Lift Helicopters H-60 (Norfolk, VA and Mayport, FL)	8x H-60 Helicopters (Mission Specific)	Available			
		6 X Medium Lift Helos (SH-60)	72 hours	Available			

DEEPWATER HORIZON Response
Resource Summary (0400 EDT 13 MAY10)

Essential Elements	USCG Today	USCG To-Date	DOD Today	Other Today	Other To-Date	Totals To-date
Personnel						
Assigned in the Field						9,316
Assigned to Command Post						720
Total						10,036
Boom (Combined total of sorbent and surface) (ft)						
Ordered						1,521,239
Available/Staged						1,531,006
In Use						1,410,500
Dispersant Materials (gal)						
Ordered						750,000
Available/Staged						120,471
In Use						267,264
Recovery Barges						
Ordered						1091
Available/Staged						102
In Use						27
Skimmers						
Ordered						129
Available/Staged						173
In Use						20
Oil Spill Response Vessels						
Ordered						3
Available/Staged						2
In Use						18
Tugs						
Ordered						26
Available/Staged						22
In Use						4
Other Support Vessels						
Ordered						455
Available/Staged						31940
In Use						526
Remotely Operated Vehicles						
Ordered						4
Available/Staged						0
In Use						12
Fixed-wing Aircraft						
Ordered						15
Available/Staged						4
In Use						12
Helicopters						
Ordered						5
Available/Staged						2
In Use						28

Worse Case Scenarios (2 week planning window)

Scenario	Details	Impact on							Mitigation Options
		Discharge Rate	Surface Operations			Sub-surface Operations		Shoreline Cleanup	
			Skimming	Dispersant Use	In-Situ Burning	Dispersant Use	ROV Repair Activities		
Dome Failures	Dome impacts BOP during installation resulting in unrestricted discharge	Significant Increase	Add'l sorties	Add'l sorties	Add'l sorties	Add'l sorties	Ineffective	Add'l Activity Expected[1]	1. Increase Relief Well Operations
	Dome installation fails to secure source	Decreased (if flow restricted)	Add'l sorties	Add'l sorties	Add'l sorties	Add'l sorties	Unchanged	Unchanged	
Riser Failures	Riser continues to settle and fails in additional places	Increase	Add'l sorties	Add'l sorties	Add'l sorties	Add'l sorties	Increase	Add'l Activity Expected[1]	
	Riser integrity degrades resulting in additional leaks	Increase	Add'l sorties	Add'l sorties	Add'l sorties	Add'l sorties	Increase	Add'l Activity Expected[1]	
Relief Well Failures	Relief well operation extends beyond 90 days	Unchanged	Add'l sorties	Add'l sorties	Add'l sorties	Add'l sorties	Increase	Add'l Activity Expected[1]	
	Critical drill rig equipment failure	Unchanged	Add'l sorties	Add'l sorties	Add'l sorties	Add'l sorties	Increase	Add'l Activity Expected[1]	
	Drill rig forced to relocate for health/safety concerns	Unchanged	Limited	Limited	Limited	Limited	Limited	Add'l Activity Expected[1]	
Man-made Disaster	Additional rig failures in Gulf of Mexico	Unchanged[2]	Add'l sorties	Add'l sorties	Add'l sorties	Add'l sorties	Limited	Add'l Activity Expected[1]	
	Domestic terrorism incident in maritime domain	Unchanged	Add'l sorties	Add'l sorties	Add'l sorties	Add'l sorties	Limited	Add'l Activity Expected[1]	
Natural Disaster	Hurricane in the Gulf of Mexico	Unknown	Ineffective	Ineffective	Ineffective	Ineffective	Ineffective	Add'l Activity Expected[1]	
	Earthquake in Caribbean	Unknown	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	

[1] Additional teams, boom, equipment may be required to address larger affected area
[2] Multiple sources and expanded spill locations likely

DATE: May 14, 2010 19:49:58 CST

The Ongoing Administration-Wide Response to the Deepwater Horizon Oil Spill

Key contact numbers

- Report oiled shoreline or request volunteer information: (866) 448-5816
- Submit alternative response technology, services or products: (281) 366-5511
- Submit your vessel for the Vessel of Opportunity Program: (281) 366-5511
- Submit a claim for damages: (800) 440-0858
- Report oiled wildlife: (866) 557-1401

Deepwater Horizon Incident Joint Information Center

Phone: (985) 902-5231
(985) 902-5240

Prepared by the Joint Information Center

UPDATED May 14, 2010 8 PM

**** For a full timeline of the Administration-wide response, visit the White House Blog.***

PAST 24 HOURS

President Obama Holds Principals Meeting and Updates Public on Response

The President met with members of his Cabinet and other senior administration officials to determine next steps in the ongoing effort to stop the BP oil spill, contain its spread, and help affected communities. He also provided an update to the American people—stressing the seriousness and urgency of the situation by stating that he will not be satisfied until the leak is stopped at the source, the oil in the Gulf is contained and cleaned up, and the people of the Gulf are able to go back to their lives and their livelihoods.

The President emphasized that the administration-wide mobilization and response efforts have always been geared toward the possibility of a catastrophic event, no matter how large the leak. He stressed that every available resource is being used to stop the oil from coming ashore. The President also asked for prompt action on the legislation sent to Congress that would provide additional resources to mitigate the damage caused by the spill, help with cleanup efforts, provide unemployment assistance and job training to folks whose jobs are affected by this crisis, and help with the region's economic recovery.

In addition, the President announced that there will now be a new examination of the environmental procedures for oil and gas exploration and development and reaffirmed his commitment to putting in place every necessary safeguard and protection to ensure that a tragedy like this does not happen again—a responsibility shared by all parties involved, including the oil companies, the equipment manufacturers, and the federal government. He asserted that Gulf Coast residents deserve nothing less than for the federal government to do whatever is necessary to stop the spill, prevent further damage and ensure all who have already been harmed are compensated.

Review is Launched to Examine Environmental Procedures of Oil and Gas Exploration

The Council on Environmental Quality and the Department of the Interior announced a review of the National Environmental Policy Act procedures for the Minerals Management Service (MMS), the bureau in DOI that manages the nation's natural gas, oil and other mineral resources on the outer continental shelf (OCS). The review will examine the MMS NEPA procedures for OCS oil and gas exploration and development.

Coast Guard and BP Officials Brief Local Elected Officials

Officials from the U.S. Coast Guard and BP briefed local elected officials from Mobile County and Baldwin County, Ala., on shore cleanup plans.

Admiral Allen Meets with Local Responders

National Incident Commander and Coast Guard Commandant Admiral Thad Allen met with local responders—bouy tenders and Shoreline Cleanup Assessment (SCAT) Teams—at staging areas in Dauphin Island, Ala. and Biloxi, Miss.

DOD Aircraft Conduct Dispersant Spray Missions

The Department of Defense's Modular Aerial Spray System (MASS) aircraft flew multiple missions—dispensing the same dispersant chemicals being used by BP and federal responders. These systems are capable of covering up to 250 acres per flight, and flights are coordinated with the EPA and the State of Louisiana to ensure all environmental concerns are addressed.

DOD Supply Transport Completed

The transport of 150,000 feet of BP pollution response boom and approximately 250 short tons of Navy salvage equipment from Anchorage, Alaska, to the Gulf Coast was completed as the two remaining C-17 lift missions—authorized by Secretary of Defense Robert Gates—arrived in New Orleans.

Wildlife Surveillance and Recovery Teams Search for Impacted Wildlife

Eight joint surveillance and recovery teams were deployed via air, land, and sea. Two helicopter surveys were conducted. Typical marine birds (pipers, gulls, pelicans, herons, osprey) were observed in the normal clumped pattern along the shoreline. No evidence of oiled shoreline or oiled wildlife was observed by aerial operations

Preparations Continue for Drilling of Second Relief Well

MMS reports the *Development Driller II* arrived at a temporary location approximately five miles from the drill site to load materials required to position the vessel and begin drilling the well. MMS expects the vessel will move to the drill location within the next 24-48 hours and prepare to begin drilling.

Additional Funds are Authorized for Pollution Removal Efforts

MMS successfully amended its Pollution Removal Fund Authorization to cover response operations through May 17 with a maximum value of $1 million. This agreement may be amended as the response situation warrants.

Boom Quality Flights Continue

U.S. Fish and Wildlife Service personnel are working with BP to ensure overflights occur twice daily in the morning and evening to check that booming is deployed appropriately and any required maintenance is completed quickly.

Plans Begin for Potential Manatee Monitoring and Potential Rescue

The U.S. Geological Survey is working with the Florida Fish and Wildlife Research Institute on a plan for potential manatee rescues and monitoring (by aerial surveys), in coordination with NOAA and FWS in Florida, Alabama and Louisiana. Crews collected water and sediment samples at four sites in Louisiana and seven sites in the Florida panhandle.

Scientists Conduct Studies on Subsurface Oil

The NOAA Research-funded mission of the R/V Pelican is back at the spill site with six scientists from National Institute for Undersea Science and Technology and currently engaged in efforts to learn more about subsurface oil.

Teams Continue Shoreline Cleanup and Assessments

SCAT teams surveyed 19 miles of Dauphin Island, Ala., and the Jackson County shoreline with minimal tarball findings. An additional five teams were deployed to Bon Secour National Wildlife Refuge (Ala.) to recover tarballs.

For information about the response effort, visit www.deepwaterhorizonresponse.com.

Deepwater Horizon Incident

Situation Executive Summary	
Operating Period 23	Custodian: Situation Unit Leader UNIFIED AREA COMMAND

Date of Issue:	May 14, 2010	**Period:**	5/13 06:00 to 5/14 06:00
IC :	M. Utsler, S. Toth (Houma); J. Hohle, T. Gray (Houston); D. Foster, B. Byczynski (Mobile); K. Seilhan B. Allan (St. Pete)		

KEY MESSAGES

General

- Total containment boom deployed to date is 1,203,400
  - Louisiana is 397,950 ft
  - Mississippi is 323,050 ft
  - Alabama is 296,000 ft
  - Florida is 186,400 ft
- Total personnel working on response is 17,444
- Total volunteers signed up to date is 11,823, with 1,761 trained
- Waiting on approval to restart subsea dispersant injection

Last 24-Hour Operational Period (No. 21)

- DD-II on location, preparing for 2nd relief well
- 15 Surface dispersant flights, 41,620 gallons applied
- Continue preparations for top kill
- Flood Tubes being installed at South Pass

Next 24-Hour Operational Period (No. 22)

- Pick up Riser Insertion Tube Tool with Enterprise and insert into riser
- Preparing for top kill, install jumpers to junk shot skid
- Relief well MC252-3 (DD-III) running riser
- Florida Attorney General McCollum to visit St. Pete Unified Command Center

FIELD REPORTS

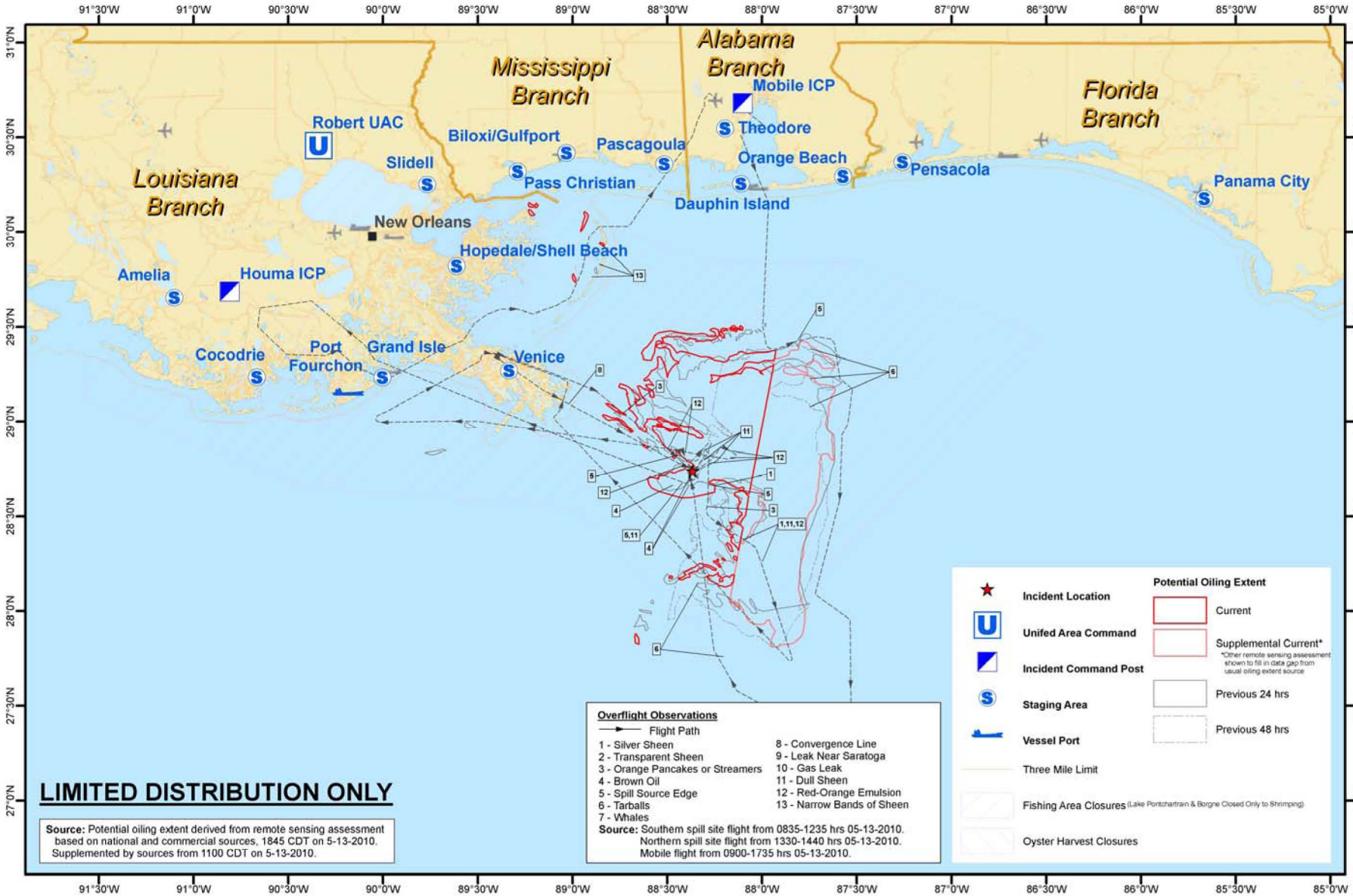
Attached for Each Incident Command Post

- Houma, Louisiana
- Houston, Texas
- Mobile, Alabama
- St. Petersburg, Florida

May 14, 2010			
	Current Period	Previous Period	Cumulative Total
HSSE			
HiPo's*	0		2
Near Miss *	1		53
First Aid*	2		55
Recordable Injuries (lost time/restricted duty/med treatment)*	0/0/1		1/2/36
Vehicle Accident*	3		8
Exposure hrs/Man hrs	99,000	103,000	1,110,000
PERSONNEL			
Total	14,542	13,436	
Personnel Command Posts	3,028	3,055	
Personnel Field (incl. Nat Guard)	14,416	11,487	
OPERATIONS			
Vessels Active			
*Offshore	559	529	
*Skimmer	30	20	
Aircraft Active			
-Helicopters	26	28	
-Fixed Wing	12	10	
# Dispersant Flights	15	1	192
# Mapping Flights	1	2	
Surface Dispersant Applied (gal)	41,620	39,710	517,577
Subsea Dispersant Applied (gal)	0	0	28,709
Dispersant Available (gal)	258,981	217,465	
Containment Boom Deployed (ft).	61,300	39,400	1,203,400**
Containment Boom Staged (ft)	178,832	219,882	
Sorbent Boom Deployed			385,820
Sorbent Boom Staged	873,876		
In-Situ Burns Conducted	0	0	10
ENVIRONMENTAL			
Oily Liquid Recovered (bbl)	0	27,697	151,391
Impacted Wildlife	2	1	22
CALL CENTER			
Total Calls Received (thru 5pm)	3861	4049	54,473
Calls Received from Volunteers	262	336	11,447
*HSSE figures as of 0530 May 13			
** Numbers adjusted for field information			

Deepwater Horizon (MC-252) - Situation Status Map

5/14/2010 0600 Hrs



LIMITED DISTRIBUTION ONLY

Source: Potential oiling extent derived from remote sensing assessment based on national and commercial sources, 1845 CDT on 5-13-2010. Supplemented by sources from 1100 CDT on 5-13-2010.

For Official Use Only

0 20 40 80 120 160 Miles

The Response Group
Emergency Response | Pre-Planning & Support

Houma Daily Operational Report
14-May-10

	Prev 24 Hrs	Prior Period	Cumulative	24-Hour Look Ahead Plan
Safety				
Near Miss Incidents	0	1	18	
First Aid Incidents	4	1	25	
Recordables	0	0	12	
Boom Deployed (ft)				
Louisiana	24,350	24,700	397,950	Parish Boom Accountability Teams (BAT) to track reciept & deployment of boom- 12 personnel
Mississippi		0	0	
Alabama		0	0	
Florida		0	0	
Boom Staged (ft)				
Louisiana				Expanding staging areas to west, as needed. Port St. Mary staging area established.
Mississippi			0	Incoming boom consolidated at Amelia.
Alabama			0	West coast OSRV's sourced, awaiting release decision
Florida			0	
Sorbent				
Deployed	13,260	13,260	256,370	
Active Vessels/Equipment				
Offshore Vessels	333	322		Seacor Lee will engage other skimming resources, weather permitting.
Skimmers	17	17		Seacor Lee- On Station, M/V Mississippi & Gulf Coast en route- eta 0600 leak site
ROVs	0	0		Smaller skimming vessels moved to safe harbor and offloading.
Spill Containment				
Oily Liquid Recovered (bbls)	0	27,697	151,391	
In-situ Burns Completed	0	0	14	In-Situ Burn fleet ready pending weather
In-situ Burns (bbls)	0	0	9,150	Vessel applied dispersant test trials will resume, weather permitting.
Surface Dispersant Applied (gal)	41,620	39,710	517,577	Dispersant vessel M/V Adriatic ready, Hos Super H pending contract approval.
Subsea Dispersant Applied (gal)	0	0	0	
Dispersant Available (gal)*	258,981	217,465		
Aircraft				
Active Helicopters	17	19		Aerial dispersant operations continue.
Active Fixed Wing	12	12		
# Dispersant Flights	15	12	192	Dash 8 is now scheduled for 1 flight per day to allow maintenance time.
# Mapping Over Flights	1	1		
Personnel				
Personnel Command Post	803	721		
Personnel Field	595	985		
Volunteers	57	53		
Wildlife Impact				
Captured	0	0	7	Properly trained wildlife responders to deploy to field for wildlife recon & capture
DoA	0	0	13	Ensure no dispersant spraying within 2 miles of a marine mammal or sea turtle.
Shoreline Impacts (feet)				
Louisiana	0	0	59,881	6 SCAT teams (4 on water, 2 in air)
Mississippi	0	0	0	- Each on-water team has 2 air boats and 1 skiff
Alabama	0	0	0	Aerial Support required to transport each team to vessels and assist in monitoring shoreline
Florida	0	0	0	Resume shoreline clean up, weather permitting.

Key Priorities for Today

1. Ensure the Health, Safety, & Security of Citizens and Response Personnel.
2. Maximize Protection of Environmentally and Economically Sensitive Areas and Contain and Recover Spilled Material.
3. Recover & Rehabilitate Injured Wildlife.
4. Manage Coordinated Response.
5. Keep Stakeholders and Public Informed.
6. Better coordination and utilization of field data.

Operational Comments

Shoreline cleanup continues based on confirmed impact- SCAT survey.
Strategic nearshore booming operations are ongoing based on ACP.
Dash 8 data relevant and timely- resource remains on scene.
Flood tubes being installed at South Pass.
Testing AT802 dispersant aircraft.
Calibrating ASI Turbo DC3 spray system.
RAT Teams on station. Very responsive and effective regarding validation and field truthing oil etc.
Coordinate restock of dispersants offshore for restock of dispersant vessels working near the source.

Environmental Comments

Evaluating long term effects of dispersant on environment.

Other Comments

* staged hard boom

Definitions

Deployed boom= to water from each parish (TOTAL)
Staged boom= boom on hand at each parish staging area (TOTAL)

Houston Daily Operational Report

submitted to UAC 5/14/2010, 0200

	Prev 24 Hrs	Prior Period	Cumulative	24-Hour Look Ahead Plan
Safety				
Near Miss Incidents	0	0	0	Ensure Safety of Response Personnel
First Aid Incidents	0	0	3	Field focus around VOC mitigation
Recordables	0	0	0	Office focus around stress management
Active Vessels/Equipment				
Offshore Vessels	14	13		
Skimmers	0	0		
ROVs	8	8		
Tugs	1	1		
Spill Containment				
Oily Liquid Recovered (bbls)				
In-situ Burns Completed				
In-situ Burns (bbls)				
Surface Dispersant Applied (gal)	0	0	0	
Subsea Dispersant Applied (gal)	0	0	30,591	Restart approval pending, awaiting evaluation of samples from Test #3
Dispersant Available (gal)	103, 274	117, 488		No dispersant applied offshore, amount corrected for Fourchon supply
Aircraft				
Active Helicopters				
Active Fixed Wing				
# Dispersant Flights				
# Mapping Over Flights				
Personnel				
Personnel Command Post	629	587		
Personnel Field	1,026	1,031		
Volunteers	0	0		
Wildlife Impact				
Captured	0	0	0	
DoA	0	0	0	

Key Priorities for Today

1. Monitor Riser location and plumes
2. Progress VOC Mitigation Plan (Fire vessel, HVAC charcoal filtration, respirators).
3. Verify Operational Plans are approved and implemented
4. Progress plans for source containment options (Top Hat, hot tap, ...)
5. Pick up RITT tool with Enterprise and insert into riser
6. Preparations for top kill, install jumpers to junk shot skid
7. Relief well drilling with DD-III rig and second relief well planning with DD-II rig
8. Begin flowback on the Enterprise

Operational Comments

- Relief well MC252-3 (DDIII) running riser
- DDII mobilized to Safe Zone to prepare for relief well no. 2
- RITT being set on mud mat for Enterprise pick-up
- Enterprise on location and preparing for production and containment through RITT
- ROV's monitoring BOP stack and plumes
- Progressing various containment options
- Preparation ongoing for readiness to connect BOP with Junk Shot manifold
- Waiting on approval to restart subsea dispersant injection
- Surface dispersant approved for fire/boom vessels as needed

Environmental Comments

- Water column samples acquired during subsea dispersant test #3 arrived at LSU for testing.
- Developing correlation of response vessel VOC's with meteorological conditions at spill site

Other Comments

Definitions

Deployed boom includes assigned boom
Staged boom is awaiting deployment in warehouses

Mobile Daily Operational Report

13-May-2010

	Period 23	Period 22	Cumulative	24-Hour Look Ahead Plan
Safety				
Near Miss Incidents	0	2	35	
First Aid Incidents	2	2	40	
Recordables	0	0	25	
Boom Deployed (ft)				
Louisiana				Continue to deploy boom in all areas of AOR. If weather permits, we should be 100% complete w/ACP in Mississippi. Deployed 10,500 ft of boom in Baldwin County in Division 3. Will continue strategies NOP we should be at 65%-70% complete by end of NOP
Mississippi	600	2,400	*323,050	
Alabama	18,150	8,000	*296,000	
Florida	18,200	4,300	*186,400	
*New formatting for boom data from area command using boom summation adjusted numbers to operations and away from IAP				
Boom Staged (ft)				
Louisiana				
Mississippi	31,750	27,650		
Alabama	29,350	7,300		
Florida	17,750	40,250		
Sorbent				
Deployed	129,450	84,020		
Active Vessels/Equipment				
Offshore Vessels	226	204		
Skimmers	13	3		Begin deploying VoO's in FL NOP
ROVs	0	0		
Spill Containment				
Oily Liquid Recovered (bbls)				
In-situ Burns Completed				
In-situ Burns (bbls)				
Surface Dispersant Applied (gal)				
Subsea Dispersant Applied (gal)				
Dispersant Available (gal)				
Aircraft				
Active Helicopters	9	9		
Active Fixed Wing	0	0		1000 USCG Helo overflight
# Dispersant Flights				
# Mapping Over Flights	0	0		
Personnel				
Personnel Command Post	163	298		
Personnel Field	6,885	3,991		
Volunteers	11,755	*14,500		
**(Value represents total registered volunteers for all states)				
Wildlife Impact				
Captured	2	2	2	
DoA	0	0	0	
Shoreline Impacts (feet)				
Louisiana				
Mississippi	0		0	
Alabama	0		0	
Florida	0		0	

Key Priorities for Today

Ensure the safety of citizens and response personnel
Advance the GRP percentage of shoreline boom deployment for Alabama, Mississippi, and Florida.
Effect the orderly increase of personnel, equipment and resources
Implement shoreline clean-up plans as required
Advance program for maintaining displaced boom
Keep stakeholders and public informed of response activities

Operational Comments

Deployed 10,500 ft of boom in Baldwin County in Division 3
Opened new staging area in St. Joe, FL, awaiting boom supply to continue with ACP Priority A sites
Worked with Safety and OSHA to continue improving process and span of control in all AOR
Safety officer on board vessel towing boom witnessed "tens/thousands" of small 1 to 1.5 inch dead silver minnows in Orange Beach area. AL Dept of Conservation and Natural Resources notified
Continue to increase the VoO's across MS and AL and will begin deploying VoO's in FL NOP

Environmental Comments

SCAT surveys are being completed in AL (Dauphin Island and Gulf Shores), MS (Gulf Islands and Long Beach), and FL (Pensecola and Escambia 2 and 3)
Creating a Mobile Strategic Response Sampling Protocol document that is consistent across command centers for response (non-NRDA) sampling
Developed wildlife tracking process, integrating information from AL, FL, and MS for birds, marine mammals, turtles, and fish
Prepare Phase II Environmental Assessment for Pensacola site
Prepare Hurricane Emergency Response Plan for Biloxi site
Visit Heritage demob site to conduct site inspection and prepare Environmental Screening Report
Prepare Environmental Screening Report for Panama City site

Other Comments

Planning:
Prepared new boom summary spreadsheets for area command
Wired in process to begin defining deliverables for skimming and storage capacities of recovery operations
Defining process maps to determine accountability and deliverables by ICS position
Logistics:
Continue scouting staging areas to have a clear understanding of locations current status and identify additional needs
Finalized training and onboarding process for Qualified Community Responders with State of Alabama and Fluor/P2S
Continue working various real estate options for staging areas as well as long term options for Mobile command center
Modified material request process to include field operations orders
On-boarded two contract specialists to improve execution of MSAs and organize new contracts
Government Affairs Schedule for May 14:
0600 USCG Commandant at Dauphin Island National
0900 USCG Commandant at Dauphin Island Pier - media availability
1000 USCG Helo overflight/media should be at Brookley Field by 0900
1400 USCG Commandant at Biloxi - media availability
1400 Baldwin County Mayors information meeting/UC inviited - no media

St. Pete Daily Operational Report

May 12, 2010

	Prev 24 Hrs (Period 21)	Prior Period	Cumulative	24-Hour Look Ahead Plan
Safety				
Near Miss Incidents	0	0	0	
First Aid Incidents	0	0	0	
Recordables	0	0	0	
Boom Deployed (ft)				
Louisiana	0	0	0	
Mississippi	0	0	0	
Alabama	0	0	0	
Florida	0	0	0	
Boom Staged (ft)				
Louisiana	0	0	0	
Mississippi	0	0	0	
Alabama	0	0	0	
Florida	0	0	0	
Sorbent				
Deployed	0	0	0	
Active Vessels/Equipment				
Offshore Vessels	0	0		
Skimmers	0	0		
ROVs	0	0		
Spill Containment				
Oily Liquid Recovered (bbls)	0	0	0	
In-situ Burns Completed	0	0	0	
In-situ Burns (bbls)	0	0	0	
Surface Dispersant Applied (gal)	0	0	0	
Subsea Dispersant Applied (gal)	0	0	0	
Dispersant Available (gal)	0	0		
Aircraft				
Active Helicopters	0	0		
Active Fixed Wing	0	0		
# Dispersant Flights	0	0	0	
# Mapping Over Flights	0	0		
Personnel				
Personnel Command Post	70	90		
Personnel Field	0	0		
Volunteers	0	0		
Wildlife Impact				
Captured	0	0	0	
DoA	0	0	0	
Shoreline Impacts (feet)				
Louisiana	0	0	0	
Mississippi	0	0	0	
Alabama	0	0	0	
Florida	0	0	0	

Key Priorities for Today

1. Ensure continuity of shoreline response activities between St. Petersburg and Mobile
2. Track resources and capabilities available throughout the AOR
3. Rapid Response team established for potential shoreline impacts within Sector St. Petersburg's AOR
4. Define, procure and deploy resources to implement external relations program
5. Liaise with state emergency management representatives to include periodic communications at city/county level as needed
6. Develop ship decontamination plan and promulgate extended communication plan
7. Enlist local resources (governmental/academic) through Environmental Unit
8. Develop a training matrix to summarize requirements and training offerings.

Operational Comments

Rapid Response team positioned in Taylor and Dixie country to quickly respond to oil sightings or shoreline impacts, while completing staging area assessments.

Environmental Comments

Completed workshops with representatives from Citrus, Hernando and Pasco counties to review the ACP and develop/revise prioritized booming strategies.
6 of 13 counties in Sector St. Pete now complete.
Workshops with all counties within Sector St. Pete AOR scheduled to be completed by 18 May.

Other Comments

Finance Section - Worked with Houma and Mobile IMTs to establish a consistant Claims Process Workflow. Expectations are that the process will be finalized today.

PIO - Conducted a live interview with a Key West radio station.
Researched and collected tourism data for Sector St. Petersburg and submitted report to Robert JIC to assess potential cost impact.
Met with local environmental organizations and Federal agencies responsible for wildlife issues to assist with volunteer engagement.
Developed Media Advisory for Friday press teleconference at 11:30 a.m.
Preparations for Florida Attorney General McCollum visit to Unified Command Center at 3 p.m. Friday.
Working closely with Area Command to develop local implementation of volunteer/contractor coordination plan.

Definitions

Deployed boom includes assigned boom
Staged boom is awaiting deployment in warehouses

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DAILY GOVERNMENTAL REPORT
UNIFIED AREA COMMAND EXTERNAL AFFAIRS SUMMARY
SATURDAY, MAY 15

AIR MONITORING

- Once this crisis began EPA immediately made plans to monitor both air and water quality in the areas off the Louisiana and Mississippi coasts. Those efforts commenced and have been fully in operation over the past weeks.

- EPA air monitoring, in particular, is carried out in several ways -- through air monitoring aircraft as well as through multiple fixed and mobile air monitoring stations in throughout region.

- The data results of EPA's constant air monitoring efforts are publicly made available each day at www.epa.gov/bpspill.

- Up until his point, EPA has determined no cause for concern regarding air quality. However, the agency urges the public to closely monitor the EPA site should the situation change.

DISPERSANTS

- There is a list of dispersants authorized for use as part of what is called the "National Contingency Plan Product Schedule" which is overseen by EPA. The dispersant being used on-site at the BP spill is on that approved list.

- There are two ways dispersants can be used: (1) on the water's surface, dropped by planes and (2) below the water's surface, through injections using remote-control devices (sub-surface).

- When this crisis occurred, Coast Guard and EPA gave BP immediate authorization to move forward with the use of this approved dispersant on the affected water's surface in an effort to mitigate the impact of the spill.

- This authorization included specific conditions to ensure the protection of the health of residents in the affected areas and the environment.

- With our approval, BP continues to use this dispersant on the surface of the water (BP will have to provide further information about how effective the dispersant has been).

The Coast Guard and EPA also authorized BP to conduct three tests of a novel approach to use this dispersant sub-surface, at the source of the leak. The tests were done to determine if the dispersant would be effective in breaking up the oil and helping to control the leaks, as well as to monitor any adverse effects this tactic may have on the environment.

- We are awaiting from BP the complete results of the tests.

- No further use of the dispersant sub-surface will take place until the results of these tests are provided to us and reviewed.

- If the tests demonstrate that the sub-surface dispersant was effective, we may authorize its use along with ongoing monitoring of its effects on the environment.

- We also reserve the right to withdraw our approval of its use sub-surface at any time if we determine that the negative impacts on the environment outweigh the benefits.

TOP HAT

- BP will attempt to install a "top hat" dome over the main source of the leak. The "top hat" is a smaller containment dome, designed to mitigate the formation of hydrates, which prevented the success of the first containment dome.

- We said from the beginning that there is no silver bullet to stop this leak. We were moving forward from the beginning under the assumption this tactic may not be successful.

- BP will continue to drill the relief well to permanently stop the leak.

- BP and industry partners have a team of experts from across the private sector working around the clock in Houston with one responsibility: discover alternative solutions to permanently stop this leak.

- DOI Secretary Ken Salazar dispatched U.S. Geological Service Director Marcia McNutt to oversee this process.

- On May 12, at the request of the President, Secretary Salazar and Secretary Chu traveled to Houston to participate in meetings with DOE and national lab staff, industry officials and other engineers and scientists involved in finding solutions to cap the flow of oil and contain the spill.

- Secretary Salazar and Secretary Chu conferred at the BP Command Center in Houston with teams of federal and industry scientists and engineers who are using cutting-edge technological resources and innovative ideas to find solutions to containing the oil spill and protecting Gulf Coast communities.

- They will continue to work hard to provide BP with alternative ideas.

BOOM

- As of the end of May 13, over 1.2 million feet of containment boom has been deployed and nearly 200,000 feet of containment boom available that will continue to be strategically deployed.

- As of last night there was over 385,000 feet of sorbent boom has been deployed and over 870,000 feet of containment boom available that will continue to be strategically deployed.

- We continue to work to identify additional sources of boom for delivery.

- The Coast Guard is aggressively overseeing BP efforts to ensure the appropriate type of boom is available for approved deployments as dictated by this dynamic situation.

- The Unified Command will continue to work with state, local and community leadership to ensure that needs are met and that appropriate steps are taken to stop the source of the leak, mitigate the spill and deploy the necessary resources in the Gulf.

If asked about boom shortage:
"As of last night there was over 1.5 million feet of boom deployed and nearly 1 million feet available that will continue to be strategically deployed. The Unified Command is aggressively overseeing BP efforts to ensure the appropriate type of boom is available for approved deployments as dictated by this dynamic situation. The Coast Guard will continue to work with state, local, and community leadership to ensure that needs are met and urge BP to take the appropriate steps to stop the source of the leak, mitigate the spill and deploy the necessary resources in the gulf."

THURSDAY, MAY 13 STATISTICS

Total response vessels: 559
Containment Boom deployed: over 1.2 million feet
Containment boom available: nearly 200,000 feet
Sorbent boom deployed: over 385,000 feet
Sorbent boom available: over 870,000 feet
Boom deployed: over 1.5 million feet (regular plus sorbent boom)
Boom available: over 1 million feet (regular plus sorbent boom)
Oily water recovered: more than 6 million gallons
Dispersant used: over 517,000 gallons
Dispersant available: more than 250,000 gallons
Overall personnel responding: more than 17,000

FRIDAY, MAY 14 EVENTS

0815	Governors' teleconference – ADM Allen and Watson
0900	Admiral Allen will participate in a media availability at Dauphin Island
1100	Governor Jindal, Senators Landrieu and Vitter (LA), and Congressman Scalise (LA) press conference in Slidell, LA
1300	Senate Homeland Security Staff visit to Robert UAC
1400	Local Official's teleconference – CAPT Hanzlik

1400	Congressional teleconference
1400	RADM Landry and BP Suttles will participate in a media availability
1400	ADM Allen will participate in media availability in Biloxi
1500	Florida Attorney General McCollum briefing/tour of St. Petersburg ICP
TBD	Representative Miller visit to USCG Station Destin
TBD	Baldwin County, AL (14) mayors to visit Mobile ICP

METRICS

- 18,746 Facebook followers the Deepwater Horizon Response Facebook page.
- Twitter has 3,796 followers.
- The www.deepwaterhorizonresponse.com site has over 19 million hits since it was initiated.
- Top Topics via website:
    - Jobs
    - Dispersant
    - Vessels of Opportunity
    - 42 fact sheets; 5 media advisories; 1 press release; 2 image releases, 61 images uploaded.

THURSDAY, MAY 13 EVENTS

Engagement with Government Officials

- Governors' Call: Governors Barbour, Jindal, Perry, and Riley participated:
    - Monica Medina of NOAA provided an update on observations trajectory projections, and fisheries closures
    - ADM Watson, UAC Robert provided an update on response operations, including leak stabilization activities
    - EPA Administrator Jackson provided an update on subsea dispersant testing
    - FWS Deputy Asst. Secretary Sobeck provided an update on wildlife impacts
- Governor Riley met with CPTN Poulin at Mobile IPC
- Governor Jindal and local government official conducted overflight of St. Mary Parish and held press conference
- Governor Jindal call with USACE Colonel Lee regarding dredging proposal.
- Local Official's teleconference - ADM Watson briefed
- Congressional teleconference - Questions received from Speaker Pelosi (CA), Senator Landrieu (LA), Congressman Bilirakis (FL), and Senate Appropriations Committee staff
- NOAA Asst. Secretary Larry Robinson and Asst. Administrator David Kennedy visited Mobile ICP
- DOI Asst. Secretary and COS Strickland visited Mobile IPC
- MS National Guard visit to Mobile IPC - Colonels Smith, Bryan, and Smithson
- National Geospatial-Intelligence Agency (NGA) Directors visited Houma ICP

OIL BUDGET (Best Estimate) EXECUTIVE SUMMARY

OP DAY: 5/15/2010

	Total in bbls	Last OPS Day	Current Assumptions
Discharged	**123,000**	**5,000**	**5K bbls/day**
Dispersed Naturally (Surface & Subsurface)	11,934	500	10% by volume of surface oil
Evaporated	35,801	1,500	30% per volume of available surface oil
Amount Available for Recovery	**75,266**	**3,000**	
Skimmed	12,529	0	10% of water collected is oil
Burned	9,150	0	Based on surface area and thickness calculations on site before burning
Dispersed Chemically (Surface & Subsurface)	11,952	786	Surface: oil dispersed = dispersant X 3 Surface: dispersant impacts 25% of treatable oil Subsurface: oil dispersed = dispersant X 5
Total Dispersant Used	**11,782**	**1,048**	**note: converted fm gals to bbls**
Sorbents	2	0	5% of oily solid waste is oil
Remaining	**41,633**	**2,214**	
	% change	6%	

1 bbl = 42 gals

Note: Assumptions vetted through the Interagency Solutions Group and will be updated with new information/developments

Produced by National Incident Command

National Incident Command

DEEPWATER HORIZON RESPONSE

16 May 2010, 0630 EDT

Produced by the National Incident Command
16 MAY 2010

OIL BUDGET (Best Estimate) EXECUTIVE SUMMARY

OP DAY: 5/15/2010

	Total in bbls	Last OPS Day	Current Assumptions
Discharged	**123,000**	**5,000**	**5K bbls/day**
Dispersed Naturally (Surface & Subsurface)	11,872	414	10% by volume of surface oil
Evaporated	35,616	1,242	30% per volume of available surface oil
Amount Available for Recovery	**75,512**	**3,344**	
Skimmed	15,139	0	10% of water collected is oil
Burned	9,150	0	Based on surface area and thickness calculations on site before burning
Dispersed Chemically (Surface & Subsurface)	14,605	1,113	Surface: oil dispersed = dispersant X 3 Surface: dispersant impacts 25% of treatable oil Subsurface: oil dispersed = dispersant X 5
Total Dispersant Used	**14,623**	**510**	**note: converted fm gals to bbls**
Sorbents	2	0	5% of oily solid waste is oil
Remaining	**36,616**	**2,230**	
	% change	6%	

1 bbl = 42 gals

Note: Assumptions vetted through the Interagency Solutions Group and will be updated with new information/developments. These are best estimates and not exact quantities and are based on conservative estimates of potential volume and/or visual observations.

This information is based on most current information available at 0500; update will also be provided at 1700.

Produced by National Incident Command

Not for release without NIC approval

National Incident Command

DEEPWATER HORIZON RESPONSE

17 May 2010, 0630 EDT

Produced by the National Incident Command
17 MAY 2010

Deepwater Horizon Incident

Situation Executive Summary	
Operating Period 25	Custodian: Situation Unit Leader UNIFIED AREA COMMAND

Date of Issue:	May 16, 2010	**Period:**	5/15 06:00 to 5/16 06:00
IC :	M. Utsler, S. Toth (Houma); J. Hohle, T. Gray (Houston); D. Foster, B. Byczynski (Mobile); K. Seilhan B. Allan (St. Pete)		

KEY MESSAGES

General

- Total containment boom deployed to date is 1,294,910 ft
  - Louisiana is 433,460 ft
  - Mississippi is 337,700 ft
  - Alabama is 323,050 ft
  - Florida is 200,700 ft
- Total personnel working on response is 19,163
- Total volunteers signed up to date is 11,806, with 2,589 trained
- Subsea dispersant injection restarted; 7,222 gallons injected

Last 24-Hour Operational Period (No. 25)

- Riser Insertion Tube Tool successfully inserted into riser
- 6 surface dispersant flights, 14,208 gallons applied
- Continue preparations for top kill
- Additional jumper installed for subsea dispersant injection
- Dash 8 has been repaired and returned to service

Next 24-Hour Operational Period (No. 26)

- Commission Enterprise containment operations
- Re-establish subsea dispersant injection (after shut down for RITT simops)
- Make up 36” bottomhole assembly and move on location for second relief well (DD-II)
- Preparing for top kill, install jumpers to junk shot skid (as simops with Enterprise allow)

FIELD REPORTS

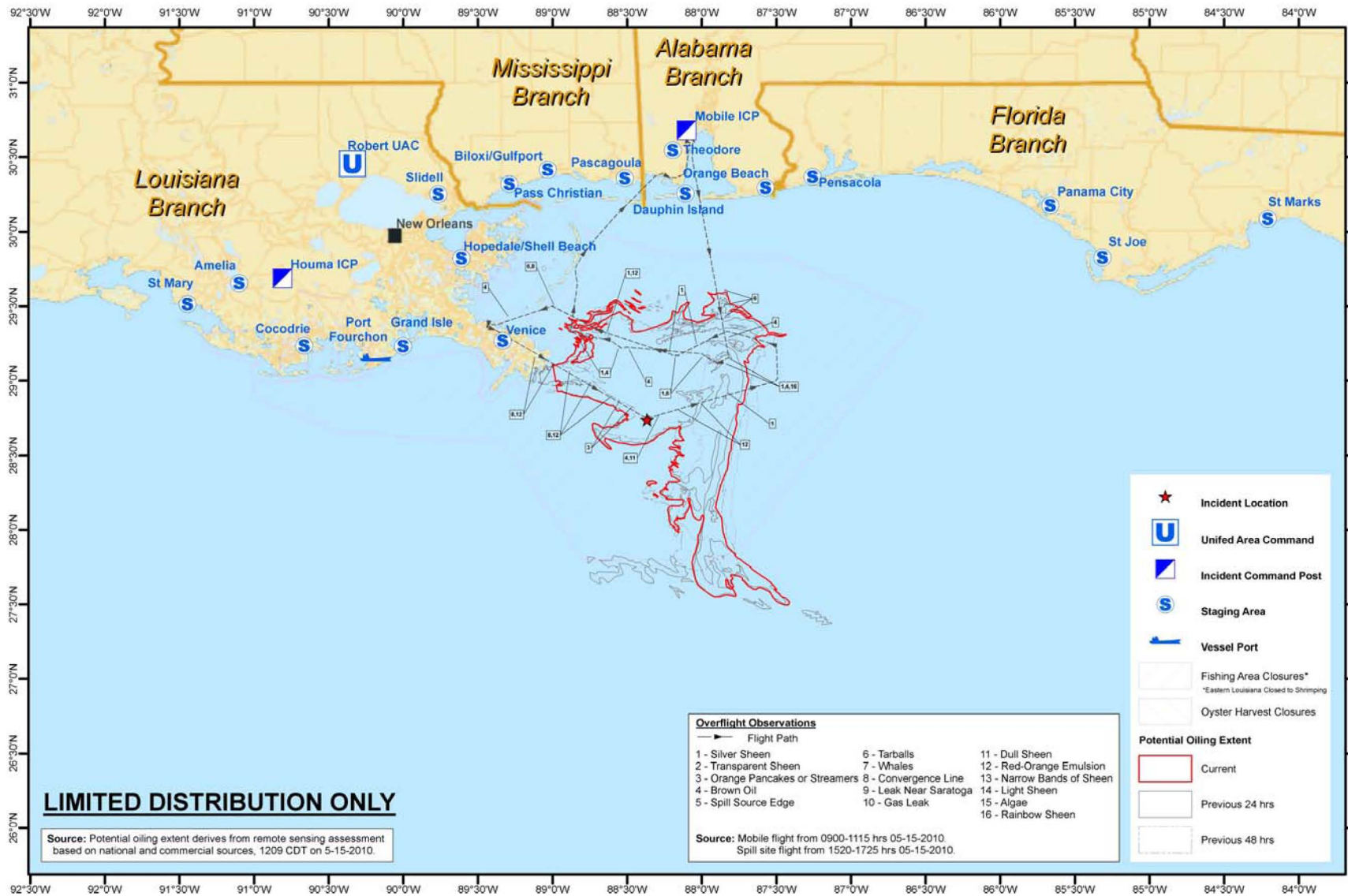
Attached for Each Incident Command Post

- Houma, Louisiana
- Houston, Texas
- Mobile, Alabama
- St. Petersburg, Florida

May 15, 2010			
	Current Period	Previous Period	Cumulative Total
HSSE			
HiPo's*	0	0	2
Near Miss *	4	1	63
First Aid*	4	6	83
Recordable Injuries (lost time/restricted duty/med treatment)*	0/0/0	0/0/1	1/2/37
Vehicle Accident*	0	3	8
Exposure hrs/Man hrs	139,000	127,000	1,376,000
PERSONNEL			
Total	19,163	17,496	
Personnel Command Posts	3,816	3,037	
Personnel Field (incl. Nat Guard)	15,347	14,416	
OPERATIONS			
Vessels Active			
*Offshore	656	627	
*Skimmer	32	30	
Aircraft Active			
-Helicopters	35	26	
-Fixed Wing	17	12	
# Dispersant Flights	6	14	192
# Mapping Flights	0	0	
Surface Dispersant Applied (gal)	14,208	44,031	575,816
Subsea Dispersant Applied (gal)	7,222	0	37,813
Dispersant Available (gal)	282,435	263,346	
Containment Boom Deployed (ft).	18,300	70,760	1,294,910
Containment Boom Staged (ft)	285,558	274,904	
Sorbent Boom Deployed	600	24,800	441,620
Sorbent Boom Staged	649,755***	900,848	
In-Situ Burns Conducted	0	0	10
ENVIRONMENTAL			
Oily Liquid Recovered (bbl)	0	0	151,391
Impacted Wildlife	5	6	32
CALL CENTER			
Total Calls Received (thru 5pm)**	2,993		57,248
Calls Received from Volunteers	188	227	11,862
*HSSE figures as of 2100 May 15			
** Call center numbers adjusted to reflect single calls addressing more than one issue previously being counted as multiple calls			
*** Reflects inventory review at Mobile			

Deepwater Horizon Incident - Situation Status Map

5/16/2010 0600 Hrs



LIMITED DISTRIBUTION ONLY

Source: Potential oiling extent derives from remote sensing assessment based on national and commercial sources, 1209 CDT on 5-15-2010.

For Official Use Only

0 25 50 100 150 200 Miles

N W E S

Houma Daily Operational Report

16-May-10

	Prev 24 Hrs (Period 25)	Prior Period	Cumulative	24-Hour Look Ahead Plan
Safety				
Near Miss Incidents*	1	1	20	Personnel Offshore Air Monitoring
First Aid Incidents	0	0	25	*No sample results received have indicated excursions for VOC's or benzene during this current period.
Recordables	0	0	12	
Boom Deployed (ft)				
Louisiana	1,200	27,360	433,460	Parish Boom Accountability Teams (BAT) to track receipt & deployment of boom- 12 personnel
Mississippi	0	0	0	Set 26" Navy boom for Breton Island
Alabama	0	0	0	Grand Isle- Adjusting booming strategy to move to leeward side of islands
Florida	0	0	0	
Boom Staged (ft)				
Louisiana				Expanding staging areas to west, as needed. Port St. Mary staging area established
Mississippi			0	Incoming boom consolidated at Amelia.
Alabama			0	Sourcing additional OSRV's, awaiting release decision
Florida			0	International Peace- offshore dispersant test platform- ready for service
Sorbent (ft.)				
Deployed	600	24,800	312,170	Commercial vessel in port due to weather
Staged	410,420	387,760		
Active Vessels/Equipment				
Offshore Vessels	396	370		(13) OSRV on scene
Skimmers	19	17		Skimming OPS to resume pending weather
ROVs	0	0		
Spill Containment				
Oily Liquid Recovered (bbls)	0	0	151,391	
In-situ Burns Completed	0	0	14	In-Situ Burn fleet ready pending weather
In-situ Burns (bbls)	0	0	11,642	Vessel applied dispersant test trials will resume, weather permitting
Surface Dispersant Applied (gal)	14,208	44,031	575,816	Dispersant vessel M/V Adriatic- standby at sea
Subsea Dispersant Applied (gal)	0	0	0	Hos Super H - outfitted- departure weather pending
Dispersant Available (gal)	232,435	263,346		
Aircraft				
Active Helicopters	17	17		Aerial dispersant operations continue
Active Fixed Wing	12	12		
# Dispersant Flights	6	14	212	AT802 Ag Tractor H2O spray test conducted. Approved for 75' altitude and 10 miles from shore
# Mapping Over Flights	0	0		Dash 8 has been repaired and returns to service 5/16/10
Personnel				
Personnel Command Post	687	962		
Personnel Field	942	1158		
Volunteers***	81	68		
Wildlife Impact				
Captured	0	1	8	Properly trained wildlife responders to deploy to field for wildlife recon & capture
DoA	3	3	19	Ensure no dispersant spraying within 2 miles of a marine mammal or sea turtle
Shoreline Impacts (feet)				
Louisiana	90,097	0	150,078*	6 SCAT teams (4 on water, 2 in air)
Mississippi	0	0	0	Shoreline cleanup approved SCAT plans- Whiskey Island, Trinity, South Pass, Grand Isle, Fourchon beach
Alabama	0	0	0	
Florida	0	0	0	

Key Priorities for Today

1. Ensure the Health, Safety, & Security of Citizens and Response Personnel.
2. Maximize Protection of Environmentally and Economically Sensitive Areas and Contain and Recover Spilled Material.
3. Recover & Rehabilitate Injured Wildlife.
4. Manage Coordinated Response.
5. Keep Stakeholders and Public Informed.
6. Better coordination and utilization of field data.

Operational Comments

Ramp up shoreline cleanup.

Strategic nearshore booming operations are ongoing based on ACP.

Dash 8 data relevant and timely- resource remains on scene.

Flood tubes being installed at South Pass. Delayed due to weather.

Test approved AT802 dispersant aircraft.

Calibrating ASI Turbo DC3 spray system.

RAT Teams on station. Very responsive and effective regarding validation and field truthing oil etc. Stood down mid-day high seas.

Completed restock of dispersants offshore for restock of dispersant vessels working near the source.

Environmental Comments

Continuing SCAT surveys, wildlife recon & recovery, waste management activities, trajectory forecasts, sampling program implementation, and advanced technology analysis.

Other Comments

* BP HSE statistic definitions apply
** staged hard boom
*** volunteer data still being determined

Deployed boom= to water from each parish (TOTAL)
Staged boom= boom on hand at each parish staging area (TOTAL)

Houston Daily Operational Report

5/16/2010, submitted at 0200 to UAC

	Prev 24 Hrs (Period 24)	Prior Period	Cumulative	24-Hour Look Ahead Plan
Safety				
Near Miss Incidents	0	0	0	Ensure Safety of Response Personnel
First Aid Incidents	1	0	4	Field focus around VOC mitigation
Recordables	0	0	0	Office focus around stress management
Boom Deployed (ft)				
Louisiana	0	0	0	
Mississippi				
Alabama				
Florida				
Boom Staged (ft)				
Louisiana	0	0		
Mississippi				
Alabama				
Florida				
Sorbent (ft.)				
Deployed	0	0	0	
Staged				
Active Vessels/Equipment				
Offshore Vessels	15	12		
Skimmers	0	0		
ROVs	8	8		
Spill Containment				
Oily Liquid Recovered (bbls)	0	0	0	
In-situ Burns Completed	0	0	0	
In-situ Burns (bbls)	0	0	0	
Surface Dispersant Applied (g	0	0	0	Adriatic is on location, Super H is en route
Subsea Dispersant Applied (g	7,222	0	37,813	Subsea Dispersant injected from 0256 to 1419 hrs, suspended for Enterprise simops
Dispersant Available (gal)	100,328	103,274		Pat Tillman transferred 6300 gallons to the Skandi Neptune
Aircraft				
Active Helicopters	0	0		
Active Fixed Wing	0	0		
# Dispersant Flights	0	0	0	
# Mapping Over Flights	0	0		
Personnel				
Personnel Command Post	581	726		
Personnel Field	1,006	1,047		
Volunteers	0	0		
Wildlife Impact				
Captured	0	0	0	
DoA	0	0	0	
Shoreline Impacts (feet)				
Louisiana	0	0	0	
Mississippi				
Alabama				
Florida				

Key Priorities for Today

1. Monitor Riser location and plumes
2. Progress VOC Mitigation Plan (Fire vessel, HVAC charcoal filtration, respirators).
3. Verify Operational Plans are approved and implemented
4. Commission Enterprise containment operations
5. Re-establish sub-sea dispersant injection with the Skandi Neptune (as simops with Enterprise allow)
6. Preparations for top kill, install 150' jumpers between junk shot skid and BOP (as simops with Enterprise allow)
7. Progress plans for other source containment options
8. Relief well drilling: DD3 = BOP testing, DD2 = make up 36" BHA and move on well location
9. VOC communication plans completed and IH and doctor doing offshore engagements

Operational Comments

1. ROV's monitoring BOP stack and plumes
2. Injected 7222 gal of subsea dispersant, suspended at 1419 hrs for Enterprise RITT operations
3. Enterprise successfully inserted RITT into the riser
4. Additional jumper installed for subsea dispersant injection to facilitate simops with Enterprise
5. Enterprise preparing for containment through RITT
6. Install jumpers to the BOP for the Top Kill manifold (prepared and standing by)
7. Progressing various containment options
8. Relief well MC252-3 (DDIII) - preparing to test BOP
9. DDII preparing to move on location with 36" BHA
10. Yellow POD on deck and ready to be installed (as simops with Enterprise allow)

Environmental Comments

• M/V Brooks McCall on location for subsea testing of dispersant

Other Comments

• First aid is twisted ankle aboard Boa Sub C - IP flown to shore for evaluation

Definitions

Deployed boom includes assigned boom
Staged boom is awaiting deployment in warehouses

Mobile, AL Daily Operational Report

15-May-2010

	Period 25	Period 24	Cumulative	24-Hour Look Ahead Plan
Safety				
Near Miss Incidents	2	0	39	
First Aid Incidents	3	2	52	
Recordables	0	0	26	
Boom Deployed (ft)				
Louisiana				
Mississippi	3,200	14,050	337,700	Weather did not allow operations to be completed today. If weather allows operations will continue in Hancock division 1 and Harrison division 2
Alabama	10,900	15,950	323,050	
Florida	3,000	13,400	200,700	
*New formatting for boom data from area command using boom summation form adjusted numbers to operations				
Boom Staged (ft)				
Louisiana				
Mississippi	15,650	16,500		
Alabama	37,450	51,250		
Florida	48,930	61,250		
Sorbent				
Deployed	0	0	129,450	
Active Vessels/Equipment				
Offshore Vessels	245	245		
Skimmers	13	13		
ROVs	0	0		
Spill Containment				
Oily Liquid Recovered (bbls)				
In-situ Burns Completed				
In-situ Burns (bbls)				
Surface Dispersant Applied (gal)				
Subsea Dispersant Applied (gal)				
Dispersant Available (gal)				
Aircraft				
Active Helicopters	9	9		
Active Fixed Wing	0	0		0845 Aircraft overflight with media At Brookley Field
# Dispersant Flights	0	0		
# Mapping Over Flights	0	0		
Personnel				
Personnel Command Post	279	163		
Personnel Field	6,911	6,885		
Volunteers	11,724	11,998		
***(Value represents total registered volunteers for all states)**				
Wildlife Impact				
Captured	1	1	4	
DoA	1	0	1	
Shoreline Impacts (feet)				
Louisiana				
Mississippi	0		0	
Alabama	0		0	
Florida	0		0	

Key Priorities for Today

Safety and welfare of citizens and response personnel
Manage a coordinated prevention, response and recovery effort.
Maximize hiring of local contractors and laborers for oil spill cleanup efforts

Operational Comments

Completed boom deployment for Baldwin County Division 2
Identified the ten most qualified boat operators to maintain and reconfigure boom after all deployments are complete
Apalachicola (Battery Park) and Carrabelle, contracts are finalized

Environmental Comments

Confirmed: 1 Northern Gannet captured today and is alive in Pensacola Rehab Center
Prepared Stakeholder Engagement Plan and submitted it to BP Community outreach
Continued waste stream management reporting through IAP (ICS 209 - Waste Management Estimate report for 5/14/10= only trash no oily waste)

Other Comments

Planning:
Streamlined IAP process and changing to a 48 hour operational period as of Monday
Logistics:
Establish initial stocking at distribution centers
Reassessing security priorities at all sites
Government Affairs Schedule for May 16:
0845 Aircraft overflight with media at Brookley Field
1515 BP COO Doug Suttles will visit Command Center and Field Operations

St. Pete Daily Operational Report

15-May-10

	Prev 24 Hrs (Period 24)	Prior Period	Cumulative	24-Hour Look Ahead Plan
Safety				
Near Miss Incidents	0	0	0	
First Aid Incidents	0	0	0	
Recordables	0	0	0	
Boom Deployed (ft)				
Louisiana	0	0	0	
Mississippi				
Alabama				
Florida				
Boom Staged (ft)				
Louisiana	0	0		
Mississippi				
Alabama				
Florida				
Sorbent (ft.)				
Deployed	0	0	0	
Staged				
Active Vessels/Equipment				
Offshore Vessels	0	0		
Skimmers	0	0		
ROVs	0	0		
Spill Containment				
Oily Liquid Recovered (bbls)	0	0	0	
In-situ Burns Completed	0	0	0	
In-situ Burns (bbls)	0	0	0	
Surface Dispersant Applied (gal)	0	0	0	
Subsea Dispersant Applied (gal)	0	0	0	
Dispersant Available (gal)	0	0		
Aircraft				
Active Helicopters	0	0		
Active Fixed Wing	0	0		
# Dispersant Flights	0	0	0	
# Mapping Over Flights	0	0		
Personnel				
Personnel Command Post	74	42		
Personnel Field	0	0		
Volunteers	0	0		
Wildlife Impact				
Captured	0	0	0	
DoA	0	0	0	
Shoreline Impacts (feet)				
Louisiana	0	0	0	
Mississippi				
Alabama				
Florida				

Key Priorities for Today

1. Complete plan for potential shoreline impacts within Sector St. Petersburg's AOR
2. Refine external communications and public relations program.
3. Complete ship decontamination plan and promulgate extended communication plan
4. Finalize volunteer management plan.
5. Execute SSP Protective Booming Strategy.

Operational Comments

Rapid Response team positioned in Taylor and Dixie country to quickly respond to oil sightings or shoreline impacts, while completing staging area assessments.

Environmental Comments

Environmental Unit Coordinated with Environmental Unit Leader from Sector Key West to offer assistance with ACP Geographic Response Plan Workshops in Monroe County (Florida Keys). Awaiting response from Sector Key West regarding necessary assistance with developing and running the ACP update workshops.

Environmental Unit prepared a summary of the spill trajectory and fate/effects briefing provided by Dr. Jerry Galt of NOAA on Thursday 5/13 and forwarded same to BP Environmental in Houston. NOAA PowerPoint Presentation delivered by Dr. Galt provides spill impact probabilities and estimated transport times for a consolidated analysis of 500 spill transport scenarios.

Environmental Unit provided an initial analysis of the results of the NOAA long term transport modeling with a focus on the potential timing and impacts within the Sector St Petersburg AOR

Environmental Unit worked with FWC GIS staff IN St Petersburg to develop a daily GIS product that will assist the Unified Command in tracking the movement of the NOAA Spill Trajectory "Line of Uncertainty" and spill boundaries so that the "Speed of Advance" can be effectively tracked. The Unified Command is using the spill's speed of advance and estimated time of potential landfall w

Other Comments

Finance:
Continue to support Legal as they work with Ops, JIC, Mobile, Houston and Louisiana on standardize claims process.
Worked with JIC and Legal to finalize details and issued check to Florida Keys Community College to support Hazmat training in Key West area.
Developed a cost tracking spreadsheet for all contractors based on Resource Group ICS 211P

Definitions

Deployed boom includes assigned boom
Staged boom is awaiting deployment in warehouses

OIL BUDGET (Best Estimate) EXECUTIVE SUMMARY

OP DAY: 5/14/2010

	Total in bbls	Last OPS Day	Current Assumptions
Discharged	**118,000**	**5,000**	**5K bbls/day**
Dispersed Naturally (Surface & Subsurface)	8,135	446	10% by volume of surface oil
Evaporated	24,406	1,339	30% per volume of available surface oil
Amount Available for Recovery	**85,458**	**3,214**	
Skimmed	699	699	10% of water collected is oil
Burned	0	0	Based on surface area and thickness calculations on site before burning
Dispersed Chemically (Surface & Subsurface)	47,420	654	Surface: oil dispersed = dispersant X 3 Surface: dispersant impacts 25% of treatable oil Subsurface: oil dispersed = dispersant X 5
Total Dispersant Used	**21,694**	**264**	**note: converted fm gals to bbls**
Sorbents	2	0	5% of oily solid waste is oil
Remaining	**37,338**	**1,862**	
	% change	5%	

1 bbl = 42 gals

Note: Assumptions vetted through the Interagency Solutions Group and will be updated with new information/developments. These are best estimates and not exact quantities and are based on conservative estimates of potential volume and/or visual observations.

This information is based on most current information available at 0500; update will also be provided at 1700.

Produced by National Incident Command

Not for release without NIC approval

National Incident Command

DEEPWATER HORIZON RESPONSE

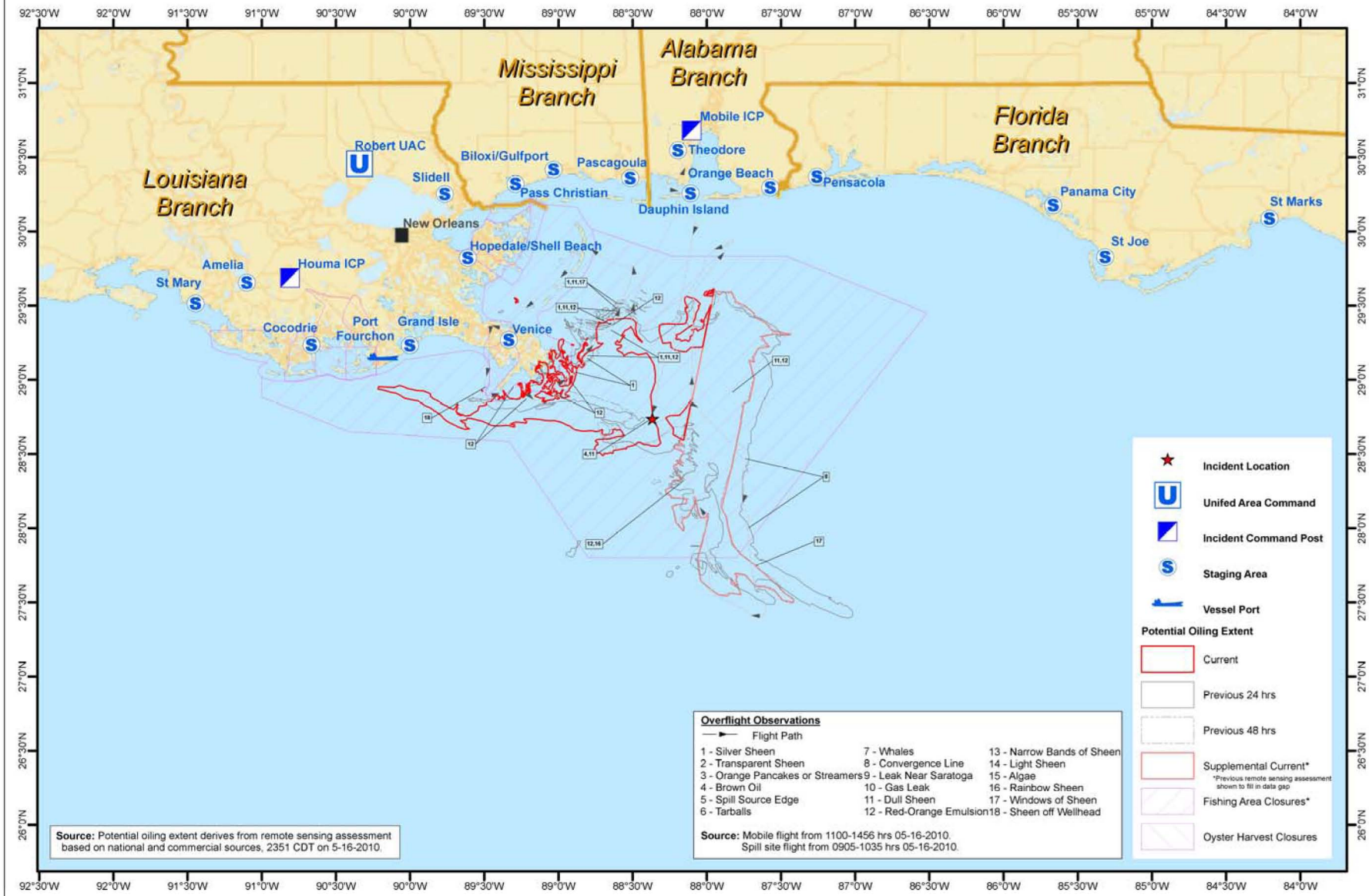
18 May 2010, 0630 EDT

Produced by the National Incident Command
18 MAY 2010

May 16, 2010			
	Current Period	Previous Period	Cumulative Total
HSSE			
HiPo's*	0	0	2
Near Miss *	2	4	65
First Aid*	5	4	88
Recordable Injuries (lost time/restricted duty/med treatment)*	0/0/2	0/0/0	1/2/39
Vehicle Accident*	0	3	8
Exposure hrs/Man hrs	140,000	139,000	1,516,000
PERSONNEL			
Total	17,159	19,163	
Personnel Command Posts	2,682	3,816	
Personnel Field (incl. Nat Guard)	14,477	15,347	
OPERATIONS			
Vessels Active			
*Offshore	720	656	
*Skimmer	32	32	
Aircraft Active			
-Helicopters	35	35	
-Fixed Wing	17	17	
# Dispersant Flights	0	6	192
# Mapping Flights	0	0	
Surface Dispersant Applied (gal)	6,600	14,208	582,416
Subsea Dispersant Applied (gal)	7,500**	7,222	45,313
Dispersant Available (gal)	390,555	282,435	
Containment Boom Deployed (ft).	5,200	18,300	1,300,110
Containment Boom Staged (ft)	362,896	285,558	
Sorbent Boom Deployed	4,000	600	401,490
Sorbent Boom Staged	754,910***	649,755	
Controlled Burns Conducted	0	0	10
ENVIRONMENTAL			
Oily Liquid Recovered (bbl)	6,987	0	158,378
Impacted Wildlife	3	5	35
CALL CENTER			
Total Calls Received (thru 5pm)**	2,036	2,993	59,284
Calls Received from Volunteers	114	188	11,976
*HSSE figures as of 2100 May 16			
** Dispersant injected as of 0200 May 17			
*** Reflects inventory review at Mobile			

Deepwater Horizon Incident - Situation Status Map

5/17/2010 0600 Hrs



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Houma Daily Operational Report

17-May-10

	Prev 24 Hrs (Period 26)	Prior Period	Cumulative	24-Hour Look Ahead Plan
Safety				
Near Miss Incidents*	1	1	21	Personnel Offshore Air Monitoring
First Aid Incidents	0	0	25	*No sample results received have indicated excursions for VOC's or benzene during this current period.
Recordables	0	0	12	Onshore- 1307 air samples with no exceedances over the Action Limits.
Boom Deployed (ft)				
Louisiana	5200	1,200	438,660*	Parish Boom Accountability Teams (BAT) remain in place and are actively tracking boom inventory.
Mississippi	0	0	0	Near shore pile driving and boom deployment is on going.
Alabama	0	0	0	
Florida	0	0	0	
Boom Staged (ft)				
Louisiana			177,082**	Continuing to source and stand up potential staging areas to the west based on oil movement trajectories.
Mississippi			0	Incoming boom consolidated at Amelia.
Alabama			0	Sourcing additional OSRV's, awaiting release decision
Florida			0	International Peace- offshore dispersant test platform- ready for service
Sorbent (ft.)				
Deployed	4000	600	317,370	Commercial vessel in port due to weather
Staged	439,100	410,420		
Active Vessels/Equipment				
Offshore Vessels	426	396		(13) OSRV resumed skimming operations and remain on station to resume skimming
Skimmers	19	19		
ROVs	0	0		
Spill Containment				
Oily Liquid Recovered (bbls)	6,987	0	158,378	
Controlled Burns Completed	1	0	15	Controlled Burn fleet ready
Controlled Burns (bbls)	0	0	11642*	Vessel applied dispersant test trials will resume, weather permitting
Surface Dispersant Applied (gal)	0	14,208	575,816	MV Adriatic and HOS Super H are on scene and have applied dispersant material at source and will continue.
Subsea Dispersant Applied (gal)	0	0	0	Conducted removal of contaminated shrimp and vessel decontamination of local fisherman in Theriot, LA. Investigation pending.
Dispersant Available (gal)	247,739	232,435		
Aircraft				
Active Helicopters	25	17		Aerial dispersant operations continue weather pending
Active Fixed Wing	17	12		
# Dispersant Flights	0	6	212	AT802 Ag Tractors ready for deployment upon final approval
# Mapping Over Flights	0	0		Dash 8 is ready, weather pending
Personnel				
Personnel Command Post	772	687		
Personnel Field	1086	942		
Volunteers***	60	81		
Wildlife Impact				
Captured	0	0	8	Properly trained wildlife responders to deploy to field for wildlife recon & capture
DoA	3	3	22	Ensure no dispersant spraying within 2 miles of a marine mammal or sea turtle
Shoreline Impacts (feet)				
Louisiana				6 SCAT teams (4 on water, 2 in air)
Mississippi			0	Re-allocate (2) assets to submerged oil sampling
Alabama			0	Organizing clean up system classifications.
Florida			0	Continue clean up at South Pass, Chandeleur, Whiskey and Trinity Islands, and Fourchon

Key Priorities for Today

1. Ensure the Health, Safety, & Security of Citizens and Response Personnel.
2. Maximize Protection of Environmentally and Economically Sensitive Areas and Contain and Recover Spilled Material.
3. Recover & Rehabilitate Injured Wildlife.
4. Manage Coordinated Response.
5. Keep Stakeholders and Public Informed.
6. Better coordination and utilization of field data.

Operational Comments

Ramp up shoreline cleanup.

Strategic nearshore booming operations are ongoing based on ACP and trajectory analysis.

Dash 8 data relevant and timely- resource remains on scene.

Flood tubes being installed at South Pass. Delayed due to weather.

AT802 dispersant aircraft, approved and available.

Calibrating ASI Turbo DC3 spray system.

RAT Teams on station. Very responsive and effective regarding validation and field truthing oil etc. RAT overflight cut short due to weather.

Completed restock of dispersants offshore for restock of dispersant vessels working near the source. two vessels on location for dispersant application as needed.

Environmental Comments

Continuing SCAT surveys, wildlife recon & recovery, waste management activities, trajectory forecasts, sampling program implementation, and advanced technology analysis.

Other Comments

* BP HSE statistic definitions apply
** staged hard boom
*** volunteer data still being determined
**** Shoreline Impacts: Total reflects any changes due to cleanup or natural removal.

Deployed boom= to water from each parish (TOTAL)
Staged boom= boom on hand at each parish staging area (TOTAL)

Houston Daily Operational Report

5/17/2010, submitted at 0200 to UAC

	Prev 24 Hrs (Period 26)	Prior Period	Cumulative	24-Hour Look Ahead Plan
Safety				
Near Miss Incidents	0	0	0	Ensure Safety of Response Personnel
First Aid Incidents	0	0	3	Field focus around VOC mitigation
Recordables	0	1	1	Office focus around stress management
Boom Deployed (ft)				
Louisiana	0	0	0	
Mississippi				
Alabama				
Florida				
Boom Staged (ft)				
Louisiana	0	0		
Mississippi				
Alabama				
Florida				
Sorbent (ft.)				
Deployed	0	0	0	
Staged				
Active Vessels/Equipment				
Offshore Vessels	14	15		
Skimmers	0	0		
ROVs	8	8		
Spill Containment				
Oily Liquid Recovered (bbls)	0	0	0	
Controlled Burns Completed	0	0	0	
Controlled Burns (bbls)	0	0	0	
Surface Dispersant Applied (gal)	6,600	0	6,600	Adriatic & Super H are empty. Gulf Princess is en route with 20 - 1000 gallon totes
Subsea Dispersant Applied	7,500	7,222	45,313	Subsea Dispersant injection ongoing from 1330, 5/16 at 10gpm.
Dispersant Available (gal)	142,816	100,328		Pat Tillman in Fourchon, loaded with 47,000 gallons (+10 totes) for Skandi Neptune
Aircraft				
Active Helicopters	0	0		
Active Fixed Wing	0	0		
# Dispersant Flights	0	0	0	
# Mapping Over Flights	0	0		2 aircraft due to fly at 0630, 5/17
Personnel				
Personnel Command Post	784	726		
Personnel Field	994	1,047		
Volunteers	0	0		
Wildlife Impact				
Captured	0	0	0	
DoA	0	0	0	
Shoreline Impacts (feet)				
Louisiana	0	0	0	
Mississippi				
Alabama				
Florida				

Key Priorities for Today

1. Monitor Riser location and plumes
2. Progress VOC Mitigation Plan (Fire vessel, HVAC charcoal filtration, respirators).
3. Verify Operational Plans are approved and implemented
4. Continue Enterprise containment operations with RITT
5. Continue sub-sea dispersant injection with the Skandi Neptune
6. Install 150' jumpers between skid and BOP for top kill preparations
7. Prepare Q4000 for yellow pod installation at BOP
8. Progress plans for other source containment options
9. Relief well drilling: DD3 = pressure tests on BOP, DD2 = spud second relief well
10. VOC communication plans completed and IH and doctor doing offshore engagements

Operational Comments

1. ROV's monitoring BOP stack and plumes
2. Continuing subsea dispersant (7500+ gallons at 0200 this period)
3. Enterprise in containment operations using the RITT
4. Closely monitoring simops with Enterprise, jumper/POD work and subsea dispersant injection
5. Progressing various containment options
6. DDIII - completed deadman tests on BOP

Environmental Comments

- M/V Brooks McCall on location for subsea testing of dispersant

Other Comments

- First aid twisted ankle case reclassified to a recordable.

Definitions

Deployed boom includes assigned boom
Staged boom is awaiting deployment in warehouses

Mobile, AL Daily Operational Report

16-May-2010

	Period 26	Period 25	Cumulative	24-Hour Look Ahead Plan
Safety				
Near Miss Incidents	1	2	40	
First Aid Incidents	3	3	63	
Recordables	0	0	26	
Boom Deployed (ft)				
Louisiana				
Mississippi	0	3,200	337,700	
Alabama	0	10,900	323,050	Begin deploying boom in Gulf and Franklin counties
Florida	0	3,000	200,700	
*Boom data reported from Operations Boom Deployment Summary, not included in ICS 209 form				
Boom Staged (ft)				
Louisiana				
Mississippi	15,650	15,659		
Alabama	49,350	43,850		
Florida	*59,050	48,930		
*Includes staging area Port St. Joe				
Sorbent				
Deployed	0	0	84,120	
Staged	315,857	239,335		
Active Vessels/Equipment				
Offshore Vessels	280	245		
Skimmers	13	13		38 VoO's are expected to begin monitoring boom as of 5/17/2010
ROVs	0	0		
Spill Containment				
Oily Liquid Recovered (bbls)				
In-situ Burns Completed				
In-situ Burns (bbls)				
Surface Dispersant Applied (gal)				
Subsea Dispersant Applied (gal)				
Dispersant Available (gal)				
Aircraft				
Active Helicopters	10	9		
Active Fixed Wing	0	0		0845 Aircraft overflight with media
# Dispersant Flights	0	0		
# Mapping Over Flights	0	0		
Personnel				
Personnel Command Post	1,187	279		
Personnel Field	7,213	6,911		
Volunteers	8,202	11,724		
*(Value represents total registered volunteers for all states)				
Wildlife Impact				
Captured	0	1	4	
DoA	0	0	1	
Shoreline Impacts (feet)				
Louisiana				
Mississippi	0		0	
Alabama	0		0	
Florida	0		0	

Key Priorities for Today

Safety and welfare of citizens and response personnel
Manage a coordinated prevention, response and recovery effort
Maximize hiring of local contractors and laborers for oil spill cleanup efforts
Further develop transition plan for personnel turnover

Operational Comments

Operations have been suspended for 5/16/10 in both Biloxi and Pascagula
Working toward placing a partial task force for near shore clean up ops at Destin and Panama City

Environmental Comments

Working with state GIS experts to map confirmed events
Develop scope and cost to conduct additional Phase II investigationsat up to 5 sites
Coordinated a USCG flight to take aerial photographs of WM sites and inventory

Other Comments

Planning:
Streamlined IAP process and changing to 48 HR operational period as of Monday
Logistics:
Evaluate and change Decon site in Panama City as it was too small and public
Evaluate transportaion modules and load/unload capabilities at existing staging areas
Government Affairs Schedule for May 17:
13:30 Governor Riley will visit Mobile IC
14:30 Congressman Meek (District 17 Florida) will visit Mobile IC
18:00 RDML MAY (USCG) will visit Mobile IC

St. Pete Daily Operational Report

16-May-10

	Prev 24 Hrs (Period 25)	Prior Period	Cumulative	24-Hour Look Ahead Plan
Safety				
Near Miss Incidents	0	0	0	
First Aid Incidents	0	0	0	
Recordables	0	0	0	
Boom Deployed (ft)				
Louisiana	0	0	0	
Mississippi				
Alabama				
Florida				
Boom Staged (ft)				
Louisiana	0	0		
Mississippi				
Alabama				
Florida				
Sorbent (ft.)				
Deployed	0	0	0	
Staged				
Active Vessels/Equipment				
Offshore Vessels	0	0		
Skimmers	0	0		
ROVs	0	0		
Spill Containment				
Oily Liquid Recovered (bbls)	0	0	0	
Controlled Burns Completed	0	0	0	
Controlled Burns (bbls)	0	0	0	
Surface Dispersant Applied (gal)	0	0	0	
Subsea Dispersant Applied (gal)	0	0	0	
Dispersant Available (gal)	0	0		
Aircraft				
Active Helicopters	0	0		
Active Fixed Wing	0	0		
# Dispersant Flights	0	0	0	
# Mapping Over Flights	0	0		
Personnel				
Personnel Command Post	42	36		
Personnel Field	0	0		
Volunteers	0	0		
Wildlife Impact				
Captured	0	0	0	
DoA	0	0	0	
Shoreline Impacts (feet)				
Louisiana	0	0	0	
Mississippi				
Alabama				
Florida				

Key Priorities for Today

1. Complete plan for potential shoreline impacts within Sector St. Petersburg's AOR
2. Refine external communications and public relations program.
3. Complete ship decontamination plan and promulgate extended communication plan
4. Finalize volunteer management plan.
5. Execute SSP Protective Booming Strategy.

Operational Comments

Rapid Response team positioned in Taylor and Dixie country to quickly respond to oil sightings or shoreline impacts, while completing staging area assessments.

Environmental Comments

Environmental Unit completing preparations for Area Contingency Plan Geographic Response Plan (GRP) protective booming strategy workshops for Sarasota, Charlotte, and Collier counties to be held on Monday May 17, 2010. Workshops will validate current protective booming strategies in the ACP GRP sheets and make necessary adjustments based upon input from counties and other resource trustees.

Preparations Underway for final ACP GRP protective booming workshop in Sector St. Petersburg for Lee County scheduled for Tuesday May 18, 2010.

Environmental Unit continues to review response strategies for weathered oil.

Other Comments

Sector St. Petersburg JIC :
Sent out Outlook Calendar Conference Request (Tuesday 1000) with Agenda to the PIOs for the EOCs of the 13 counties in the St. Petersburg Sector to listen and maintain good communication and assure we are meeting their needs.
Confirmed location of Hayward/Crist meeting to be Tallahassee, FL.
Completed Crisis Communications Plan and Volunteer Engagement Plan for delivery to the UC on Monday.
Completed key message (2-pager) to be submitted to PIOs of EOCs in St Petersburg Sector.

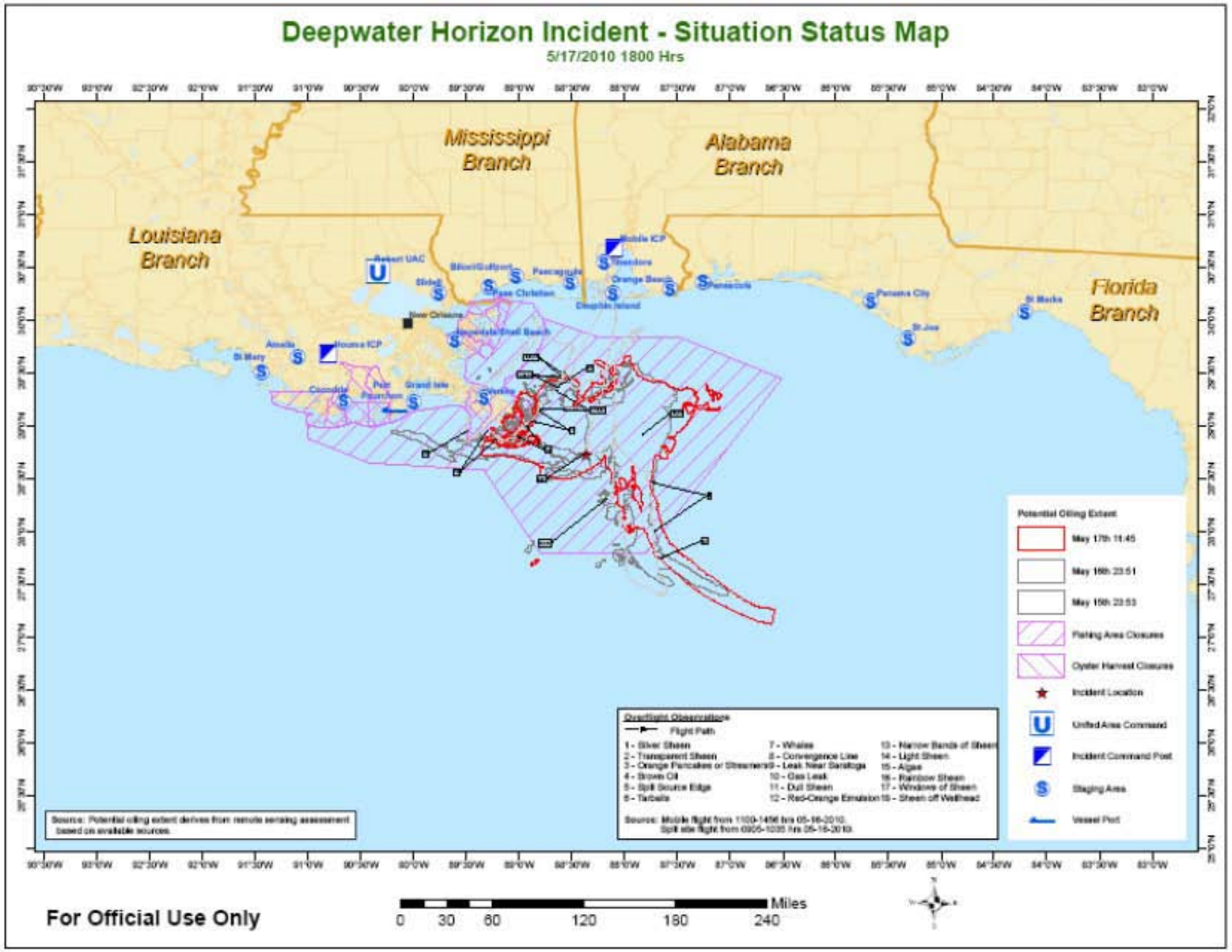
Finance:
Continue to support Legal as they work with Ops, JIC, Mobile, Houston and Louisiana on standardize claims process.
Worked with JIC and Legal to finalize details and issued check to Florida Keys Community College to support Hazmat training in Key West area.
Developed a cost tracking spreadsheet for all contractors based on Resource Group ICS 211P

Definitions

Deployed boom includes assigned boom
Staged boom is awaiting deployment in warehouses

DEEPWATER HORIZON

UNCLAS/FOUO

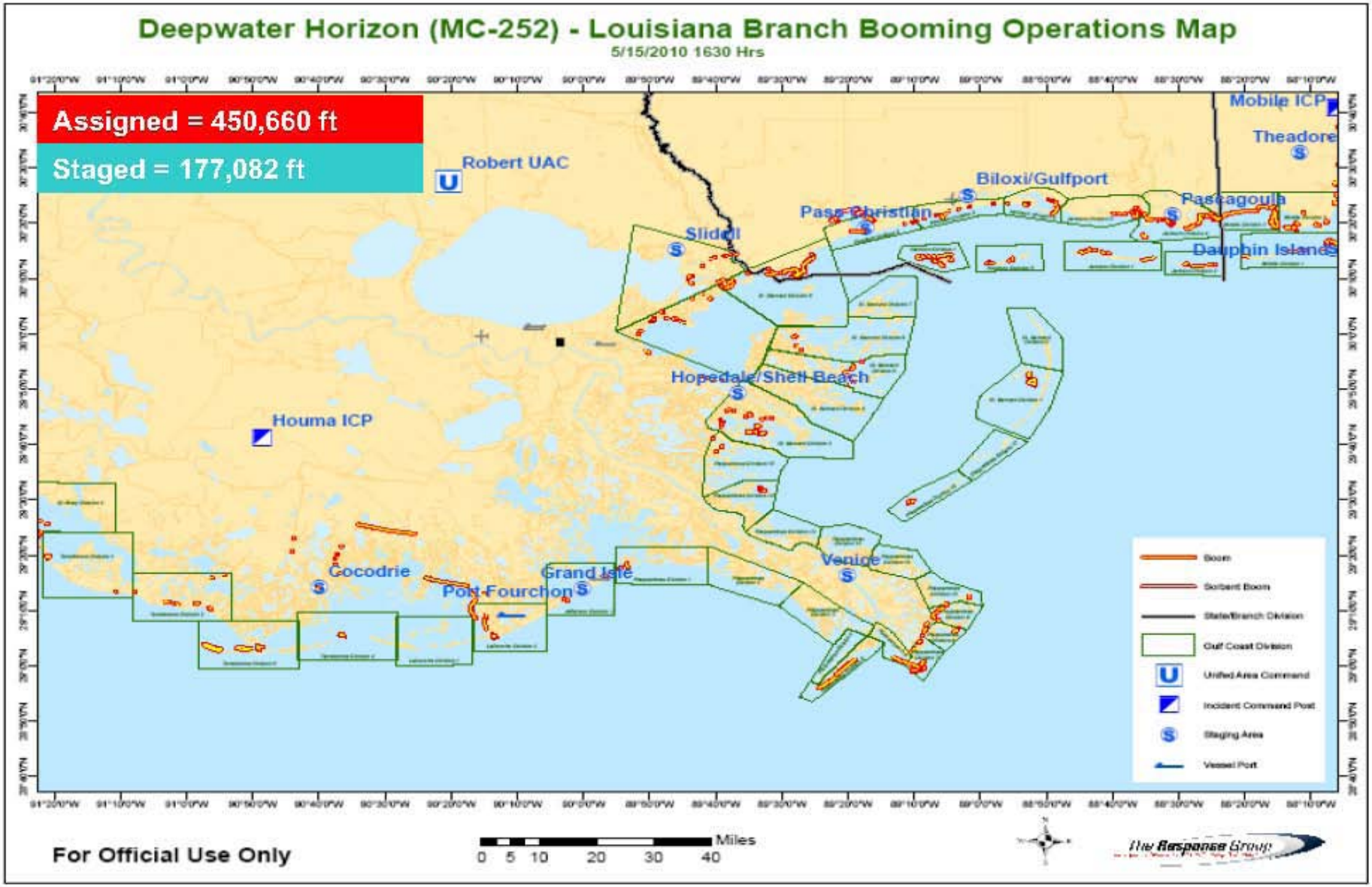


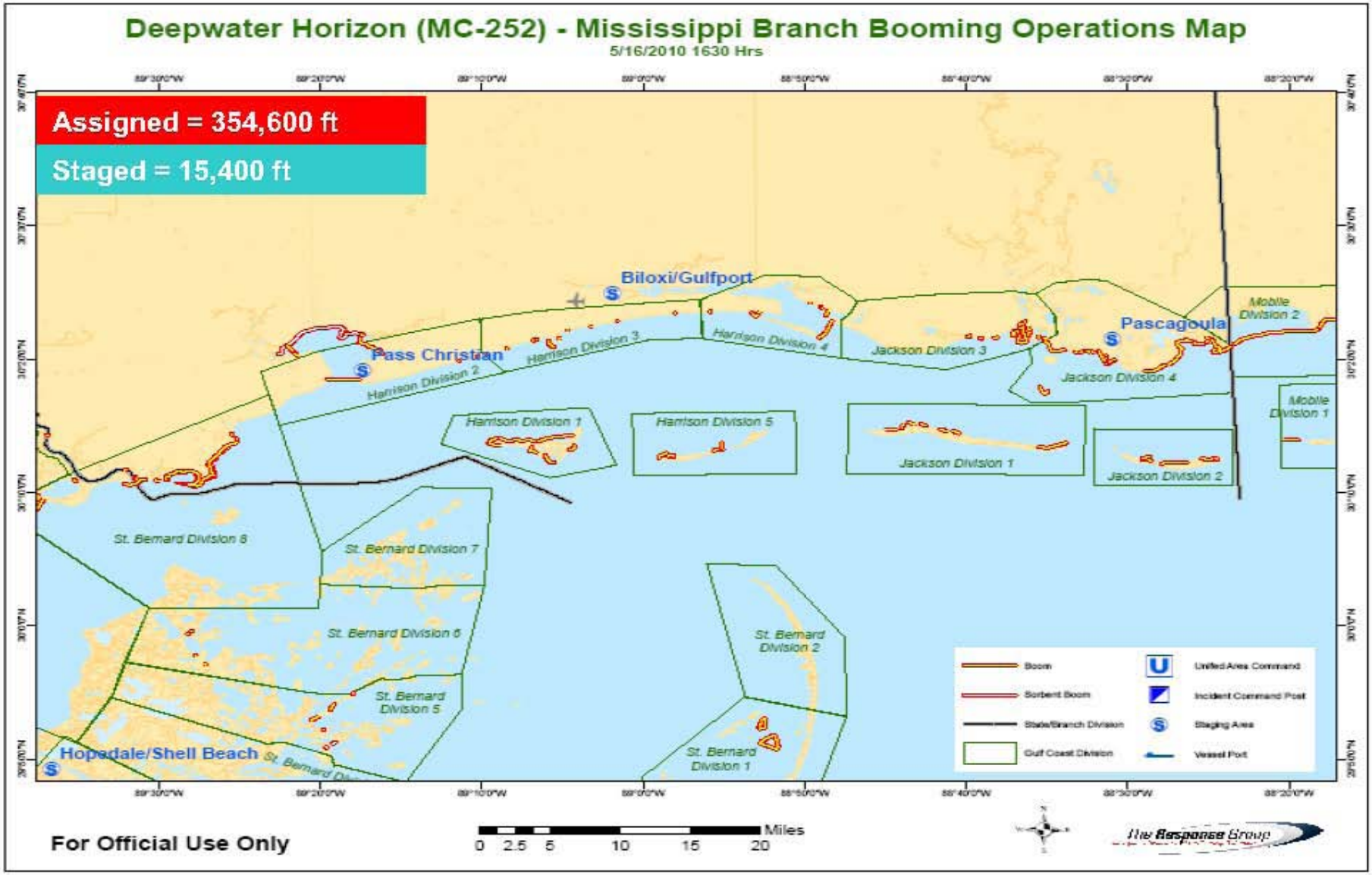
UNCLAS/FOUO

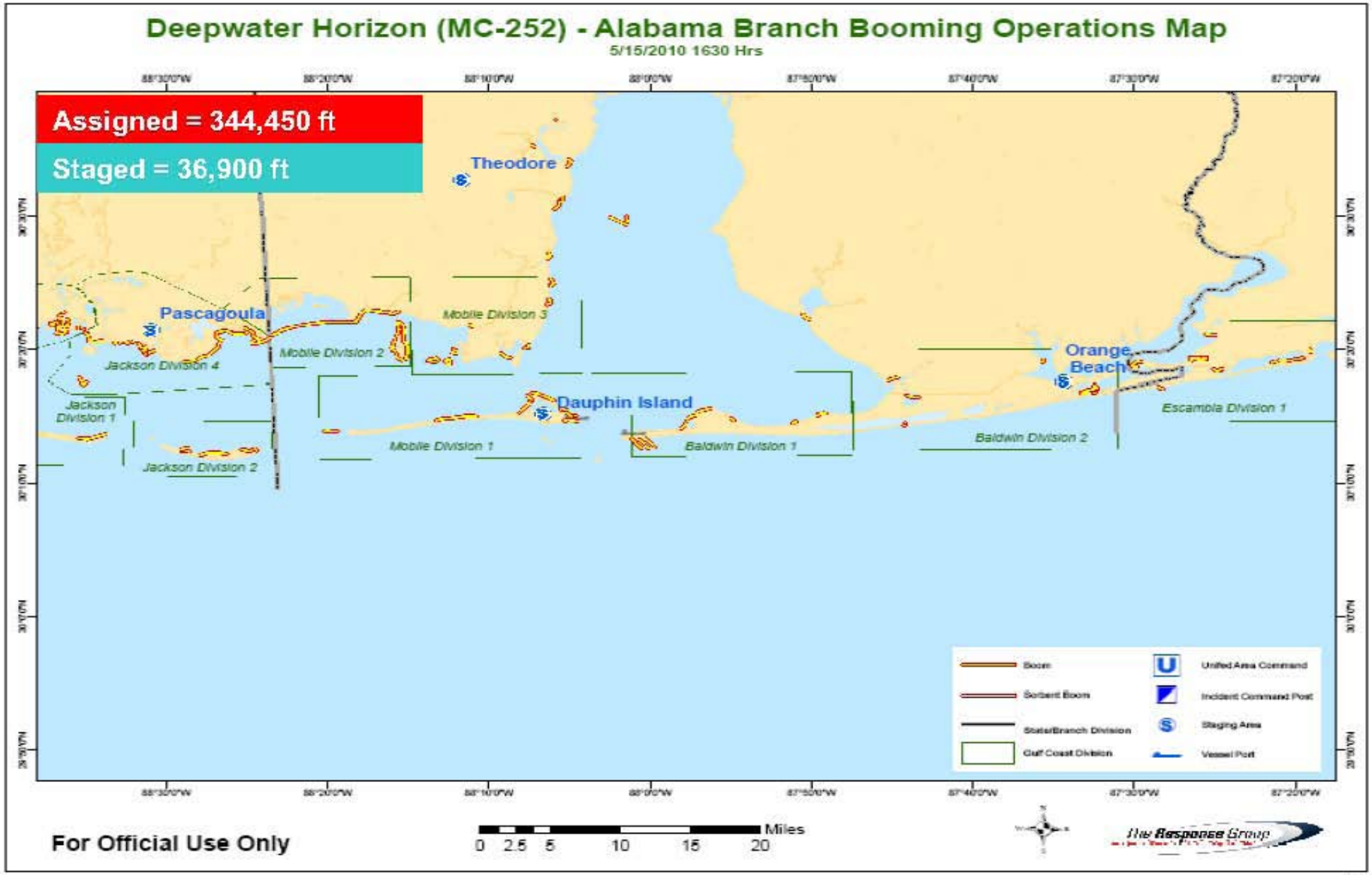
0400Z – 18 May 2010

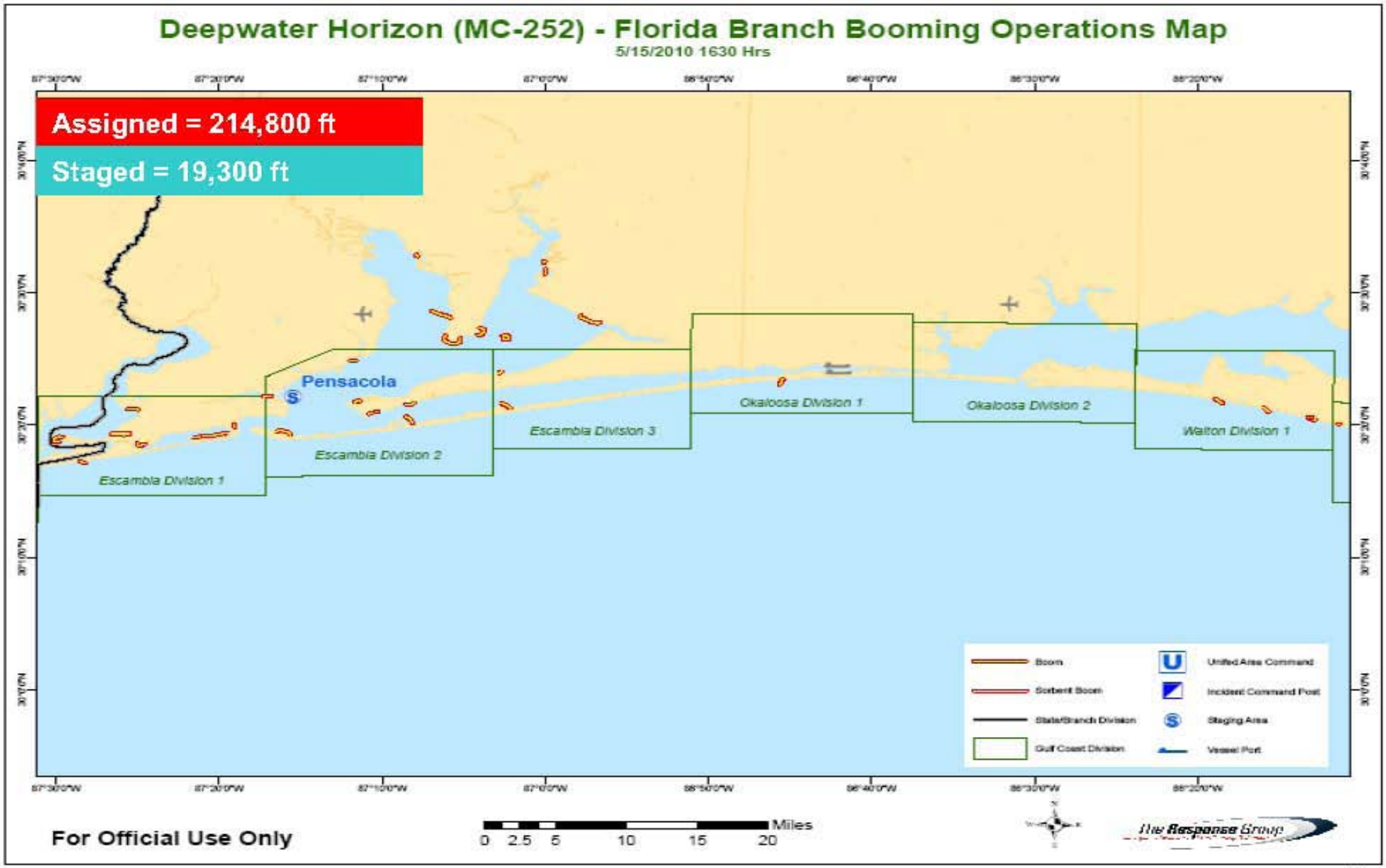
DEEPWATER HORIZON

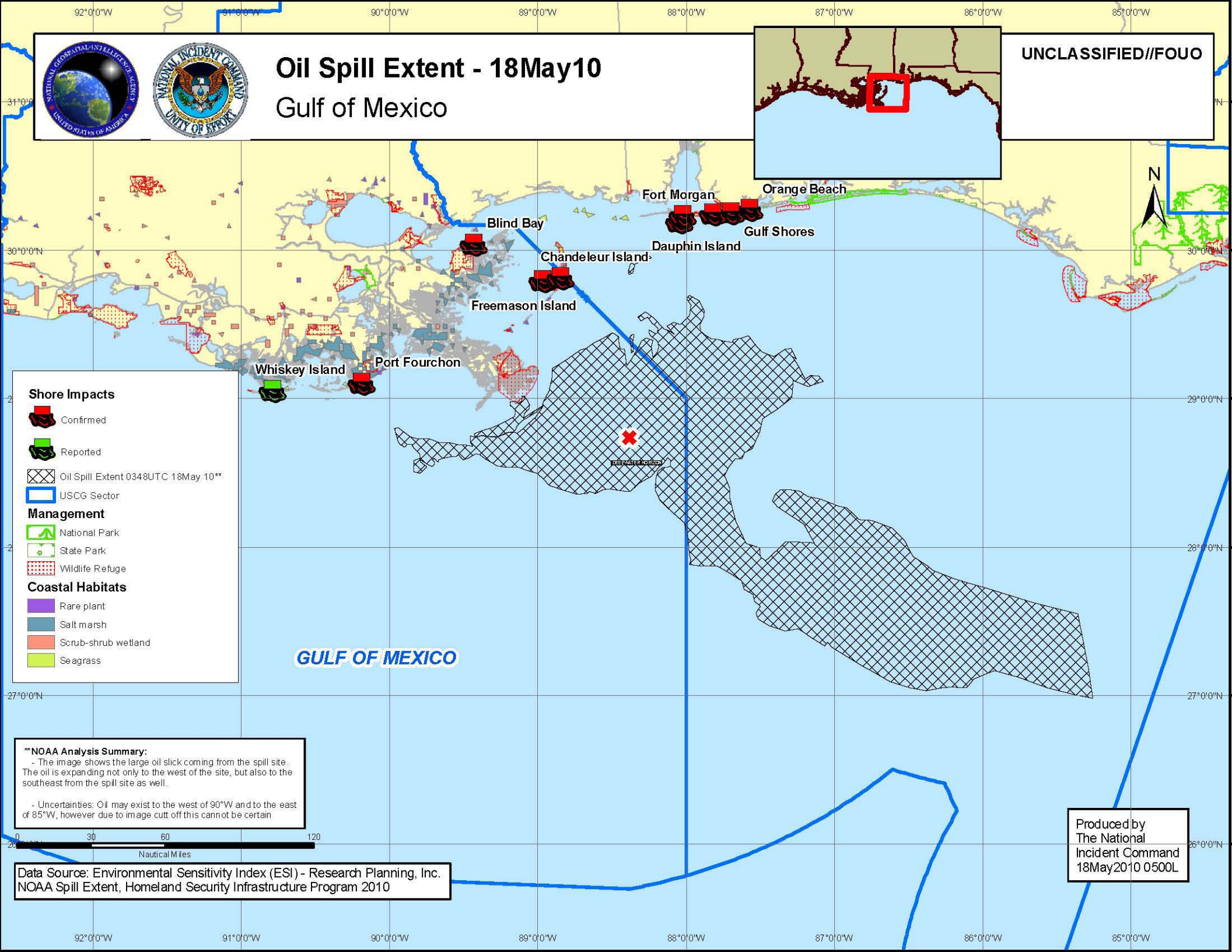
UNCLAS/FOUO




Deepwater Horizon (MC-252) - Mississippi Branch Booming Operations Map
5/16/2010 1630 Hrs
Assigned = 354,600 ft
Staged = 15,400 ft
Biloxi/Gulfport
Pass Christian
Pascagoula
Harrison Division 1
Harrison Division 2
Harrison Division 3
Harrison Division 4
Harrison Division 5
Jackson Division 1
Jackson Division 2
Jackson Division 3
Jackson Division 4
Mobile Division 1
Mobile Division 2
St. Bernard Division 1
St. Bernard Division 2
St. Bernard Division 5
St. Bernard Division 6
St. Bernard Division 7
St. Bernard Division 8
Hopedale/Shell Beach
Boom
Sorbent Boom
State/Branch Division
Gulf Coast Division
Unified Area Command
Incident Command Post
Staging Area
Vessel Port
Miles
0 2.5 5 10 15 20
For Official Use Only
The Response Group


Deepwater Horizon (MC-252) - Alabama Branch Booming Operations Map
5/15/2010 1630 Hrs
Assigned = 344,450 ft
Staged = 36,900 ft
Theodore
Pascagoula
Mobile Division 3
Mobile Division 2
Jackson Division 4
Jackson Division 1
Jackson Division 2
Dauphin Island
Mobile Division 1
Baldwin Division 1
Orange Beach
Baldwin Division 2
Escambia Division 1
Boom
Sorbent Boom
State/Branch Division
Gulf Coast Division
Unified Area Command
Incident Command Post
Staging Area
Vessel Port
For Official Use Only
Miles
0 2.5 5 10 15 20


Deepwater Horizon (MC-252) - Florida Branch Booming Operations Map
5/15/2010 1630 Hrs
Assigned = 214,800 ft
Staged = 19,300 ft
Pensacola
Escambia Division 1
Escambia Division 2
Escambia Division 3
Okaloosa Division 1
Okaloosa Division 2
Walton Division 1
Boom
Sorbent Boom
State/Branch Division
Gulf Coast Division
Unified Area Command
Incident Command Post
Staging Area
Vessel Port
For Official Use Only
Miles
0 2.5 5 10 15 20


Oil Spill Extent - 18May10
Gulf of Mexico
UNCLASSIFIED//FOUO
Fort Morgan
Orange Beach
Gulf Shores
Dauphin Island
Blind Bay
Chandeleur Island
Freemason Island
Whiskey Island
Port Fourchon
DEEPWATER HORIZON
GULF OF MEXICO
N
Shore Impacts
Confirmed
Reported
Oil Spill Extent 0348UTC 18May 10**
USCG Sector
Management
National Park
State Park
Wildlife Refuge
Coastal Habitats
Rare plant
Salt marsh
Scrub-shrub wetland
Seagrass
**NOAA Analysis Summary:
- The image shows the large oil slick coming from the spill site. The oil is expanding not only to the west of the site, but also to the southeast from the spill site as well.
- Uncertainties: Oil may exist to the west of 90°W and to the east of 85°W, however due to image cutt off this cannot be certain
0 30 60 120
Nautical Miles
Data Source: Environmental Sensitivity Index (ESI) - Research Planning, Inc.
NOAA Spill Extent, Homeland Security Infrastructure Program 2010
Produced by
The National
Incident Command
18May2010 0500L
92°0'0"W
91°0'0"W
90°0'0"W
89°0'0"W
88°0'0"W
87°0'0"W
86°0'0"W
85°0'0"W
31°0'0"N
30°0'0"N
29°0'0"N
28°0'0"N
27°0'0"N
26°0'0"N

National Incident Command

DEEPWATER HORIZON RESPONSE

14 May 2010, 0630 EDT

On-Scene/RFA Approved

UAC #	213RR #	Capability	Description	Status	EPA Region	Memo Status	Estimated Cost
UAC0001		Defense Coordination Officer	Defense Coordinating Officer (DCO): Includes Contingency Command Post (CCP) and 2 Defense Coordinating Elements (DCEs) staffed and augmented as required to Unified Area Command in Robert, LA	Deployed to Unified Command	4, 6	Signed	$79,000
UAC0003		Public Affairs Personnel	Public Affairs Personnel: 4 Public Affairs Officers (media ops team), 3 combat camera teams (5 PAX each), 1 Defense Visual Information Distribution System (DVIDS),	Deployed to Joint Information Center	6	Signed	$100,000
UAC0005		Navy Supervisor of Salvage	66K feet of 42" boom, nineteen (19) Skimmer systems and associated equipment , fifty eight (58) personnel in theater.	85 of 85 trucks arrived from Port Hueneme, CA and Cheatham Annex, VA. Fifty eight (58) PAX. Equipment being deployed in theater.	4, 6	Signed	$3.5M
UAC0006	D0136	Two C-130 aircraft capable of Mobile Aerial Spray System (MASS)	RFA transmitted by FOSC & received by Joint Staff	2 Aircraft on scene	4, 6	Signed	TBD
UAC0007		Activation of Louisiana National Guard	National Guard Forces for LA	Nine hundred thirty (930) supporting mission (out of 1100 authorized by FOSC).	6	Signed	$7M

On-Scene/RFA Approved

UAC #	213RR #	Capability	Description	Status	EPA Region	Memo Status	Estimated Cost
UAC0008		Air Component Coord Element	Forward deployed to appropriate location.	En route	6	Signed	$5,000
UAC0012		Air Force Lift Support	Oil boom from Travis AFB, CA to Mobile Regional Airport (Mobile, AL).	Complete	4, 6	Signed	$175,000
UAC0014		Joint Public Affairs Support Team	Includes: 4 public affairs officers, three Combat Camera Teams (5 people each), Defense Visual Information Distribution System (DVIDS) and DVIDS operator.	On 24 hr standby at Keesler AFB, awaiting deployment orders	6	Signed	$100,000
UAC0015		Activation of MS Natl Guard	National Guard Forces for MS	Fifty Three (53) total activated.		Signed	RFA- $858646.2 FAA Missions- $5,820.96 (C-23 flight) $373,534.20 (2 UH-72 A/C for 30 days) $14,274.88 (2 Legal LNOs for 30 days)
UAC0016		Activation of AL Natl Guard	National Guard Forces for AL	Three hundred twenty-three (323) currently activated (out of 362 authorized by FOSC).		Signed	RFA- $3M FAA Missions - $335,667 (UH-60 flight)
UAC0017		Activation of FL Natl Guard	National Guard Forces for FL	• Six (6) ARNG in T-32 : (3) Unified Command Center, (1) ESF-13 , (1) Incident Command and (1) Area Command		Signed	$8,250.00
UAC0019		DMIGS Support	Support for NIC	Provide geospatial intelligence analysis and support		In Work	TBD

On-Scene/RFA Approved

UAC #	213RR #	Capability	Description	Status	EPA Region	Memo Status	Estimated Cost
UAC0020		CAP Coverage	Civil Air Patrol (CAP) support to provide aerial reconnaissance and imagery	NORTHCOM FRAGO 041 directs JFACC to coordinate CAP provision of (250) flight hours of support.		Signed	$37,500.00
UAC0023		Airlift Support	DoD received RFA for the airlift of 150,000 ft of boom and other equipment equipment. Lift from Anchorage, AK to New Orleans, LA.	Approved. Lift will be split: BP contracted (4) 747 aircraft; remaining lift by DOD resources - TRANSCOM and CJTF-AK directed to support.		Signed	$2,300,000.00
UAC0030		FLNG C2	RFA :31 Personnel for Command and control, coordination cell, and information sharing	Approved 11 May		Signed	$442,027.00
UAC0036	Full Routing	Boom and skimmer equipment	10-100,000 ft internal float containment boom, 24"-31" (1) 1,000 ft 12" internal float river boom (1) 1,000 ft 18" internal float river boom (6) US Navy Busters w/3 crews, TONO blowers & HB accessories (1) SeaArk, Boston Whalers w/2 crews for ea vessel and tow bridle (28) Boom mooring system 10kg-20kg (1) 28' Kvichak Rapid Response Skimmer (1) Skimmer weir for use with Kvichak (1) Pump for overloading oil from harbor buster	Approved/ force in route	4, 6	Signed	$1,000,000

On-Scene/RFA Approved

UAC #	213RR #	Capability	Description	Status	EPA Region	Memo Status	Estimated Cost
UAC0039	FOSC	MSNG	10- MSNG 10-012, 10-013, 10-015, 10-016. 1 Segovia flyaway kit for comm support, 47th CST for 30 days for assistance and advise to local and state authorities, C-23 Sherpa for 30 days estimated 60 hours of flight time to be used for Incident Awareness and Assessment overflight, transportation and key leader movement. 50 ANG personnel for 30 days for command and control and communications support and for a planning cell to the ICP and State agencies.	On scene	4, 6	Signed	$571,043.90
UAC0021		NGB Personnel Support	Request for (20) personnel mission processing and administrative support at UAC Roberts, LA; NGB HQ; and JFHQ-St HQ	Request for (6) T-32 personnel approved by OSD. Request for (14) T-10 personnel denied.		Signed	$129,300.00

RFA In Progress

UAC #	213RR #	Capability	Description	Status	EPA Region	Memo Status	Estimated Cost
UAC0010		Pensacola Naval Air Station Staging Area (Pensacola, FL)	Utilize Pensacola Naval Air Station as a staging base for spill response equipment	In Use	4	In Work	TBD
UAC0011		Keesler Air Force Base (KAFB) Logistics Base	Utilize Keesler AFB as Logistics Base for Operations	KAFB has been designated as such; awaiting logistics flow if/when required	4	In Work	TBD
UAC0018		Air Force Lift Support	Airlift of 70K ft of boom from Alaska	RFA pends from FOSC	6	In Work	TBD
UAC0024		Boom and skimmer equipment	RFA for 102,000 ft of boom, boom mooring systems, skimmer capabilities and equipment, pumps from Naval Region Southeast	NORTHCOM requires modification of RFA		Signed	$100,000
UAC0031		Boom and skimmer equipment	RFA: supervisor of salvage, boom and boom moorings, 136,000 oil storage bladder, 2 tow boats	In coordination		Signed	
UAC0032		ALNG	10-005AL 125 Soldiers to assist in the movement, emplacement, repair and monitoring of all protective barriers as required by the Incident Commander for 30 days.	In coordination		Draft	712,500
UAC0033		MSNG	1Additional LNO to UAC Robert to augment existing LNO	In coordination		Draft	$7,857.00
UAC0034			Naval Air Station Joint Reserve Base (NASJRB) Belle Chasse provide offload team, Advance approval for day/night off load ops, POC for contractor base entry permit.	In coordination	4, 6	Draft	
UAC0035			DCO Amendment, to facilitate engagement, coordination and requests for support between DoD partners and other Unified Area Command members and incident responders.	In coordination	4, 6	Signed	$151,250.00

RFA In Progress

UAC #	213RR #	Capability	Description	Status	EPA Region	Memo Status	Estimated Cost
UAC0037	BP/ FOSC	vessel w/ side scan sonar & survey capability	Vessel with side scan sonar and hydrographic survey capability for West Bay shipping channel for decontamination station. Max depth: 15 fathoms (90ft) Estimate: 4 day requirement	In coordination	4, 6	Draft	$43,500.00
UAC0038	FOSC	FLNG	FLNG 10-001FL Amendment 1. Soldier will assist with receipt, tracking, processing, and oversight of mission requests submitted by the FOSC by the State of Florida National Guard through the ICP	In coordination	4, 6	Signed	$18,500.00
UAC0040	BP/ FOSC	Public Affairs/Media Support	5 public affairs officers (media ops team), 3 combat camera teams (5 personnel each), 1 Defense Visual Information Distribution System (DVIDS), 1 DVIDS operator. Mobile equipped, scalable, expeditionary Joint Public Affairs and imagery collection capabilities to operate in support of response operations in areas affected by the oil spill.	Under Consideration	4,6	Draft	151,150.00
UAC0043	BP/FOSC	Incident staging base (ISB) at Naval Air Station Pensacola FL, in response and recovery operations	Incident staging base @ NAS Pensacola FL , to stage booms, boats and equipment for oil prevention.	DOD On Scene	4,6	Draft	15,000.00

RFA In Progress

UAC #	213RR #	Capability	Description	Status	EPA Region	Memo Status	Estimated Cost
UAC0044	Full Routing	Aerial port of embarkation/aeriel port of debarkation load and offload services at Elmendorf Air Force Base, AK and Naval Air Station Joint Reserve Base (NAS JRB), Belle Chase, LA for up to 10 military aircrafts for oil spill recovery.	Equipement needed to be loaded onto aircraft and the offloaded upon arrival of destination.		4,6	Signed	40,000.00

RFA/Under Consideration

UAC #	213RR #	Capability	Description	Status	EPA Region	Memo Status	Estimated Cost
		Two Additional C-130 aircraft capable of Mobile Aerial Spray System (MASS) and delivery of 2,000 gallon spray capacity per sortie.	Increase aircraft capacity for dispersant deployment	Pends FOSC requirements determination.			
		Naval Surface Combatant (Amphibious)	Includes LCAC (Hovercraft x3) Embarked Helo Detachment. Provides sea-bearing capability	Pends FOSC requirements determination.			
		P-3C Aircraft (AIP Variant) with Tactical Common Data Link (TCDL) Equipment/Personnel (Jacksonville, FL)	P-3C AIP Aircraft & TCDL Ground Equipment	Available			
		LCAC / LCU (Little Creek, VA)	Aboard LHA	Available			
		Naval Mobile Construction Battalion Air Detachment (Task Tailored NMCB DET) (Gulfport, MS)	89 Personnel plus selected civil engineering equipment	Available			
		Fleet Survey Team (Stennis AFB, MS)	Hydrographic Survey Capability for Impacted Ports	Available			
		Beach Group TWO (Little Creek, VA)	Logistics Over the Shore (LOTS)	Available			
		E-2C HAWKEYE (Norfolk, VA)	Surface Surveillance and Air Control	Available			
		C-2A GREYHOUND (Norfolk, VA)	Logistics Support	Available			
		Naval Station Pensacola, FL	Logistics Support Base	Available			
		Joint Reserve Base New Orleans, LA	Logistics Support Base (APOD)	Available			
		Naval Air Station Key West, FL	Logistics Support Base (APOD)	Available			

RFA/Under Consideration

UAC #	213RR #	Capability	Description	Status	EPA Region	Memo Status	Estimated Cost
		Naval Support Activity Panama City, FL	Logistics Support Base (SPOD)	Available			
		USAF Aux/Civil Air Patrol	GA-8 Archer – 12 hrs	Available			
		USAF Aux/Civil Air Patrol	C-182 – 6 hrs	Available			
		Unmanned Aerial Aircraft (UAV) / Remote Piloted Aircraft (RPA)	Surrogate Predator – 48 hrs	Available			
		Naval Support Activity Panama City	Immediate	Available			
		Marine Corps Logistics Base, Albany GA	48-hrs	Available			
		1 Subsurface damage control expert	Subsurface damage control expert to deploy to TransOcean/BP ICP in Houston, TX				
		Air Force Lift Support	Oil boom from airports near pre-staged equipment location on east coast to oil spill region.				
		Air Force Lift Support	Oil boom from airports near pre-staged equipment location on west coast to oil spill region.				
		Air Force Lift Support	Vessel of Opportunity Skimmer System (VOSS) from airports near pre-staged equipment location on east coast to oil spill region				
		Air Force Lift Support	VOSS from airports near pre-staged equipment location on east coast to oil spill region				

RFA/Under Consideration

UAC #	213RR #	Capability	Description	Status	EPA Region	Memo Status	Estimated Cost

Canceled

UAC #	213RR #	Capability	Description	Status	EPA Region	Memo Status	Estimated Cost
UAC0009		Airspace Coordination Planner	Located at Incident Command Post in Houma, LA	CANCELED – DCO determined this was a redundant request that was filled from the ACCE request (UAC0008).	6	In Work	TBD
UAC0013	A0510	1 X USAF Aviation Weather Briefer/Observer	USAF aviation weather briefer/observer to conduct daily planning for operational decision making	CANCELED – DCO determined NOAA is on-scene providing requested capability.	6	Signed	$5,000

Demobilized

UAC #	213RR #	Capability	Description	Status	EPA Region	Memo Status	Estimated Cost
		Heavy Lift Helicopters H-53 Series (Norfolk, VA)	4x H-53 Series Helicopters	Available			
		Medium Lift Helicopters H-60 (Norfolk, VA and Mayport, FL)	8x H-60 Helicopters (Mission Specific)	Available			
		6 X Medium Lift Helos (SH-60)	72 hours	Available			

DEEPWATER HORIZON Response
Resource Summary (0400 EDT 13 MAY10)

Essential Elements	USCG Today	USCG To-Date	DOD Today	Other Today	Other To-Date	Totals To-date
Personnel						
Assigned in the Field						9,316
Assigned to Command Post						720
Total						10,036
Boom (Combined total of sorbent and surface) (ft)						
Ordered						1,521,239
Available/Staged						1,531,006
In Use						1,410,500
Dispersant Materials (gal)						
Ordered						750,000
Available/Staged						120,471
In Use						267,264
Recovery Barges						
Ordered						1091
Available/Staged						102
In Use						27
Skimmers						
Ordered						129
Available/Staged						173
In Use						20
Oil Spill Response Vessels						
Ordered						3
Available/Staged						2
In Use						18
Tugs						
Ordered						26
Available/Staged						22
In Use						4
Other Support Vessels						
Ordered						455
Available/Staged						31940
In Use						526
Remotely Operated Vehicles						
Ordered						4
Available/Staged						0
In Use						12
Fixed-wing Aircraft						
Ordered						15
Available/Staged						4
In Use						12
Helicopters						
Ordered						5
Available/Staged						2
In Use						28

Worse Case Scenarios (2 week planning window)

Scenario	Details	Impact on							Mitigation Options
		Discharge Rate	Surface Operations			Sub-surface Operations		Shoreline Cleanup	
			Skimming	Dispersant Use	In-Situ Burning	Dispersant Use	ROV Repair Activities		
Dome Failures	Dome impacts BOP during installation resulting in unrestricted discharge	Significant Increase	Add'l sorties	Add'l sorties	Add'l sorties	Add'l sorties	Ineffective	Add'l Activity Expected[1]	1. Increase Relief Well Operations
	Dome installation fails to secure source	Decreased (if flow restricted)	Add'l sorties	Add'l sorties	Add'l sorties	Add'l sorties	Unchanged	Unchanged	
Riser Failures	Riser continues to settle and fails in additional places	Increase	Add'l sorties	Add'l sorties	Add'l sorties	Add'l sorties	Increase	Add'l Activity Expected[1]	
	Riser integrity degrades resulting in additional leaks	Increase	Add'l sorties	Add'l sorties	Add'l sorties	Add'l sorties	Increase	Add'l Activity Expected[1]	
Relief Well Failures	Relief well operation extends beyond 90 days	Unchanged	Add'l sorties	Add'l sorties	Add'l sorties	Add'l sorties	Increase	Add'l Activity Expected[1]	
	Critical drill rig equipment failure	Unchanged	Add'l sorties	Add'l sorties	Add'l sorties	Add'l sorties	Increase	Add'l Activity Expected[1]	
	Drill rig forced to relocate for health/safety concerns	Unchanged	Limited	Limited	Limited	Limited	Limited	Add'l Activity Expected[1]	
Man-made Disaster	Additional rig failures in Gulf of Mexico	Unchanged[2]	Add'l sorties	Add'l sorties	Add'l sorties	Add'l sorties	Limited	Add'l Activity Expected[1]	
	Domestic terrorism incident in maritime domain	Unchanged	Add'l sorties	Add'l sorties	Add'l sorties	Add'l sorties	Limited	Add'l Activity Expected[1]	
Natural Disaster	Hurricane in the Gulf of Mexico	Unknown	Ineffective	Ineffective	Ineffective	Ineffective	Ineffective	Add'l Activity Expected[1]	
	Earthquake in Caribbean	Unknown	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	

[1] Additional teams, boom, equipment may be required to address larger affected area
[2] Multiple sources and expanded spill locations likely

DATE: May 13, 2010 19:03:31 CST

The Ongoing Administration-Wide Response to the Deepwater Horizon Oil Spill

Report oiled shoreline or request volunteer information: (866)-448-5816
Submit alternative response technology, services or products: (281) 366-5511
Submit your vessel for the Vessel of Opportunity Program: (281) 366-5511
Submit a claim for damages: (800) 440-0858
Report oiled wildlife: (866) 557-1401

Deepwater Horizon Incident Joint Information Center

Phone: (985) 902-5231
(985) 902-5240

Key contact numbers

- Report oiled shoreline or request volunteer information: (866) 448-5816
- Submit alternative response technology, services or products: (281) 366-5511
- Submit your vessel for the Vessel of Opportunity Program: (281) 366-5511
- Submit a claim for damages: (800) 440-0858
- Report oiled wildlife: (866) 557-1401

Prepared by the Joint Information Center

UPDATED May 13, 2010 7 PM

**** For a full timeline of the Administration-wide response, visit the White House Blog.***

PAST 24 HOURS

Secretary Salazar Announces First Steps in MMS Restructuring

As the federal government continues its relentless response to the Deepwater BP Oil Spill and investigates the cause of the explosion and oil spill, Secretary Salazar directed Assistant Secretary for Policy, Management and Budget Rhea Suh and Senior Advisor Chris Henderson to oversee a restructuring of the Minerals Management Service that will ensure the independence of the agency's inspections and enforcement mission.

Secretary Salazar also sent a letter to Congressional leaders asking for their ideas and input on his plan to reform the agency.

Officials Inspect Rig Preparing to Drill Relief Well
National Incident Commander and Coast Guard Commandant Admiral Thad Allen and Federal On-Scene Coordinator Rear Admiral Mary Landry inspected the Development Driller II, which is set to begin drilling the second relief well shortly to permanently cap the leaking well.

BP's "Top Hat" Containment System Approaches Completion
MMS reports that BP has approached completion of the "top hat" containment system, and expects an update from BP as early as tomorrow on its operational status.

Community Town Hall Held in Port Sulpher and Dulac, La.
Representatives from the Coast Guard, EPA, NOAA, the Department of the Interior, the Department of Labor, the Agency for Toxic Substance and Disease Registry and BP participated town hall meetings in Port Sulpher and Dulac, La., to provide an update on the response to the oil spill and continue the dialogue with members of the community, local business leaders and other organizations.

Shoreline Cleanup Teams Continue to Assess Impact
Shoreline Cleanup and Assessment Teams (SCAT) surveyed 19 miles of Dauphin Island, Ala., and the Jackson County shoreline with minimal tarball findings. An additional five teams were deployed to Bon Secour National Wildlife Refuge to recovery tarballs.

The Department of the Interior has deployed 568 total personnel to the affected area to assist in cleanup, wildlife protection and rehabilitation, and shoreline assessment efforts.

Unified Area Command Continues to Build Web and New Media Engagement
The Unified Area Command in Robert, La., continues to grow its public engagement via its website (www.deepwaterhorizonresponse.com), which has received more than 19 million hits since it was launched on April 23, as well as Facebook (18,277 users) and Twitter (3,707 followers). These resources contain information about response efforts, jobs, volunteer opportunities, impacts to wildlife and other important public information.

DOD Aircraft Conduct Dispersant Spray Missions
The Department of Defense's Modular Aerial Spray System (MASS) aircraft flew multiple missions—dispensing the same dispersant chemicals being used by BP and federal responders. These systems are capable of covering up to 250 acres per flight, and flights are coordinated with the EPA and the State of Louisiana to ensure all environmental concerns are addressed. Since MASS flights began on

May 1, a total of 47 missions have been flown and nearly 70,000 gallons of dispersant have been applied.

National Guard Support Continues to Build
1,304 National Guard personnel are currently supporting oil response—952 from the Louisiana National Guard are providing Command and Control and sandbagging support to St. Bernard and Plaquemines parishes, supporting marina operations and conducting HAZMAT training; 323 from the Alabama National Guard are deploying protective barriers around Dauphin Island and conducting sandbag and security operations; 25 from the Mississippi National Guard personnel are providing helicopter support and liaison officers to aid local officials with emergency response; and four from the Florida National Guard are performing liaison duties in support of the response effort to the Unified Command Center in Alabama and to its own emergency operations center in Tallahassee.

Five Oil Platforms Have Been Evacuated to Ensure Health and Safety
A total of five platforms have been evacuated in order to ensure the safety and health of rig workers. Estimated oil production shut-in is 2,300 barrels a day (0.14 percent of the Gulf ‘s oil production) and approximately 1.2 million cubic feet of gas (0.02 percent of the Gulf’s gas production).

Joint Bird Rescue Operations Are Dispatched
U.S. Fish and Wildlife Services and the National Parks Services dispatched a joint boat operation to Horn Island, Miss., to recover potentially oiled wildlife and transport them to a wildlife rehabilitation center for treatment. Treatment and rehabilitation operations are also ongoing on Chandeleur Island.

By the Numbers to Date:
- Personnel were quickly deployed and approximately 13,000 are currently responding to protect the shoreline and wildlife.

- More than 520 vessels are responding on site, including skimmers, tugs, barges, and recovery vessels to assist in containment and cleanup efforts—in addition to dozens of aircraft, remotely operated vehicles, and multiple mobile offshore drilling units.

- More than 1.4 million feet of boom (regular and sorbent) have been deployed to contain the spill—and approximately 1 million feet are available.

- Approximately 5 million gallons of an oil-water mix have been recovered.

- Approximately 476,000 gallons of dispersant have been deployed. More than 217,000 gallons are available.

- 14 staging areas have been set up to protect vital shoreline in all potentially affected Gulf Coast states (Biloxi, Miss., Pascagoula, Miss., Pensacola, Fla., Panama City, Fla., Dauphin Island, Ala., Grand Isle, La., Shell Beach, La., Slidell, La., Venice, La., Orange Beach, Ala., Theodore, Ala., Pass Christian, Miss., Amelia, La., and Cocodrie, La.).

Resources:

- For information about the response effort, visit www.deepwaterhorizonresponse.com.

- For specific information about the federal-wide response, visit http://www.whitehouse.gov/deepwater-bp-oil-spill.

- To contact the Deepwater Horizon Joint Information Center, call (985) 902-5231.

- To volunteer, or to report oiled shoreline, call (866) 448-5816. Volunteer opportunities can also be found here.

- To submit your vessel as a vessel of opportunity skimming system, or to submit alternative response technology, services, or products, call 281-366-5511.

- To report oiled wildlife, call (866) 557-1401. Messages will be checked hourly.

- For information about validated environmental air and water sampling results, visitwww.epa.gov/bpspill.

- For National Park Service updates about potential park closures, resources at risk, and NPS actions to protect vital park space and wildlife, visit http://www.nps.gov/aboutus/oil-spill-response.htm.

- For daily updates on fishing closures, visit http://sero.nmfs.noaa.gov.

- To file a claim, or report spill-related damage, call BP's helpline at (800) 440-0858. A BP fact sheet with additional information is available here. For those who have already pursued the BP claims process and are not satisfied with BP's resolution, can call the Coast Guard at (800) 280-7118. More information about what types of damages are eligible for compensation under the Oil Pollution Act as well as guidance on procedures to seek that compensation can be found here.

Deepwater Horizon Incident

Situation Executive Summary	
Operating Period 22	Custodian: Situation Unit Leader UNIFIED AREA COMMAND

Date of Issue:	May 13, 2010	**Period:**	5/12 06:00 to 5/13 06:00
IC :	M. Utsler, S. Toth (Houma); J. Hohle, T. Gray (Houston); D. Foster, B. Byczynski (Mobile); K. Seilhan B. Allan (St. Pete)		

KEY MESSAGES

General

- Total containment boom deployed to date is 1,210, 150)
  - Louisiana is 376,600 ft
  - Mississippi is 321,400 ft
  - Alabama is 271,000 ft
  - Florida is 171,600 ft
  - Federal is 69,550 ft as of May 11
- Total personnel working on response is 13,436
- Total volunteers signed up to date is 14,500; 1,586 trained
- Waiting on approval to restart subsea dispersant injection
- Dash 8 schedule reduced to one flight per day to allow maintenance time

Last 24-Hour Operational Period (No. 21)

- DD-II rig in route, ETA May 13 pm
- Obtained boost line pressure data from MC252 #1 stack
- Running riser on Enterprise for RITT operation
- Surface dispersant flights resumed, 27,697 gallons applied
- Preparing to reinstall Yellow Control Pod and jumpers for BOP in preparation for junk shot
- Continue preparations for top kill

Next 24-Hour Operational Period (No. 22)

- Running drill pipe in riser on Enterprise for RITT operation
- Relief well MC252-3 (DD-III) preparing to run riser and BOP
- Aerial dispersant flights to resume today
- In situ Burn fleet to be deployed, weather permitting
- 6 SCAT teams operating in Mobile

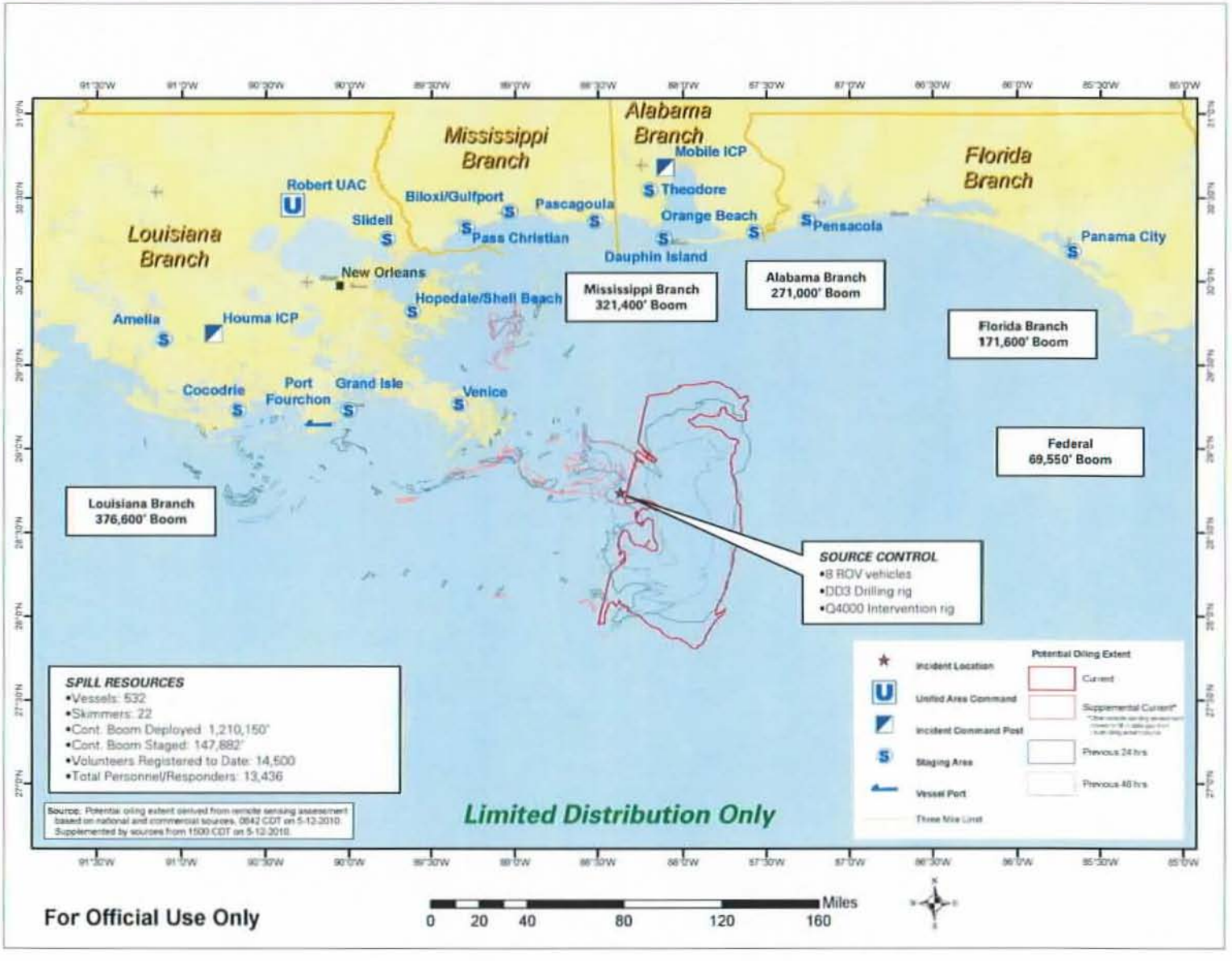
FIELD REPORTS

Attached for Each Incident Command Post

- Houma, Louisiana
- Houston, Texas
- Mobile, Alabama
- St. Petersburg, Florida

May 13, 2010			
	Current Period	Previous Period	Cumulative Total
HSSE			
HiPo's*	0		2
Near Miss *	5		46
First Aid*	4		49
Recordable Injuries (lost time/restricted duty/med treatment)*	0/0/1		1/2/31
Vehicle Accident*	1		4
Exposure hrs/Man hrs	103,000	88,000	1,011,000
PERSONNEL			
Total	14,542	13,436	
Personnel Command Posts	3,055	3,703	
Personnel Field (incl. Nat Guard)	11,487	9,733	
OPERATIONS			
Vessels Active			
*Offshore	529	532	
*Skimmer	20	22	
Aircraft Active			
-Helicopters	28	23	
-Fixed Wing	10	10	
# Dispersant Flights	1	22	165
# Mapping Flights	2	1	
Surface Dispersant Applied (gal)	39,710	7,940	475,957
Subsea Dispersant Applied (gal)	0	12,310	28,709
Dispersant Available (gal)	217,465	120,471	
Containment Boom Deployed (ft).	39,400	78,083	1,210,150**
Containment Boom Staged (ft)	219,882	393,292	
Sorbent Boom Deployed			323,090
Sorbent Boom Staged	867,398		
In-Situ Burns Conducted	0	0	10
ENVIRONMENTAL			
Oily Liquid Recovered (bbl)	27,697	0	125,385
Impacted Wildlife	2	1	22
CALL CENTER			
Total Calls Received (thru 5pm)	4049	4,241	50,612
Calls Received from Volunteers	336	340	11,185
*HSSE figures as of 0530 May 12			
** Numbers adjusted for field information			

Deepwater Horizon Incident (data from 05/12/2010)



Houma Daily Operational Report
13-May-10

	Prev 24 Hrs	Prior Period	Cumulative	24-Hour Look Ahead Plan
Safety				
Near Miss Incidents	1	0	18	
First Aid Incidents	1	0	21	
Recordables	0	0	12	
Boom Deployed (ft)				
Louisiana	24,700	16,500	376,600	Parish Boom Accountability Teams (BAT) to track reciept & deployment of boom- 12 personnel
Mississippi	0	0	0	
Alabama	0	0	0	
Florida	0	0	0	
Boom Staged (ft)				
Louisiana			72,682*	Expanding staging areas to west, Port St. Mary & others as needed.
Mississippi			0	Incoming boom consolidated at Amelia.
Alabama			0	Additional OSRV's sourced- western coastline
Florida			0	
Sorbent				
Deployed	13,260	37,380	239,070	
Active Vessels/Equipment				
Offshore Vessels	322	312		Offshore skimming fleet will be on location near source available to skim, conditions permitting.
Skimmers	17	17		Resume shoreline clean up, weather permitting.
ROVs	0	0		
Spill Containment				
Oily Liquid Recovered (bbls)	27,697	0	125,385	
In-situ Burns Completed	0	0	14	In-Situ Burn fleet to be deployed, weather permitting.
In-situ Burns (bbls)	0	0	9,150	
Surface Dispersant Applied (gal)	39,710	7,940	475,957	Vessel applied dispersant trials will resume, weather permitting.
Subsea Dispersant Applied (gal)	0	0	16,399	
Dispersant Available (gal)*	217,465	120,471		Mobilizing/outfitting two vessels for dispersant application.
Aircraft				
Active Helicopters	19	19		Aerial dispersant operations continue.
Active Fixed Wing	12	10		
# Dispersant Flights	12	2	177	Dash 8 is now scheduled for 1 flight per day to allow maintenance time.
# Mapping Over Flights	1	2		
Personnel				
Personnel Command Post	721	915		
Personnel Field	985	1,265		
Volunteers	53	59		
Wildlife Impact				
Captured	0	0	7	Properly trained wildlife responders to deploy to field for wildlife recon & capture
DoA	0	0	13	Ensure no dispersant spraying within 2 miles of a marine mammal or sea turtle.
Shoreline Impacts (feet)				
Louisiana	-	-	TBD	Based on trajectories and potentially impacted shoreline, survey shorelines from air and water
Mississippi	0	0	0	6 SCAT teams (4 on water, 2 in air)
Alabama	0	0	0	
Florida	0	0	0	

Key Priorities for Today

1. Ensure the Health, Safety, & Security of Citizens and Response Personnel.
2. Maximize Protection of Environmentally and Economically Sensitive Areas and Contain and Recover Spilled Material.
3. Recover & Rehabilitate Injured Wildlife.
4. Manage Coordinated Response.
5. Keep Stakeholders and Public Informed.

Operational Comments

Environmental Comments

Other Comments

* staged hard boom

Definitions

Deployed boom= to water from each parish (TOTAL)
Staged boom= boom on hand at each parish staging area (TOTAL)

Houston Daily Operation Report

May 13, 2010

	Prev 24 Hrs (Period 22)	Prior Period	Cumulative	24-Hour Look Ahead Plan
Safety				
Near Miss Incidents	0	0	0	Ensure Safety of Response Personnel
First Aid Incidents	0	0	3	Field focus around VOC mitigation
Recordables	0	0	0	Office focus around stress management
Active Vessels/Equipment				
Offshore Vessels	13	14		
Skimmers	0	0		
ROVs	8	9		
Tugs	1	1		
Spill Containment				
Oily Liquid Recovered (bbls)				
In-situ Burns Completed				
In-situ Burns (bbls)				
Surface Dispersant Applied (gal)				
Subsea Dispersant Applied (gal)	0	0	30,591	Restart approval pending, awaiting evaluation of samples from Test #3
Dispersant Available (gal)	117,488	101,141		
Aircraft				
Active Helicopters				
Active Fixed Wing				
# Dispersant Flights				
# Mapping Over Flights				
Personnel				
Personnel Command Post	587	564		
Personnel Field	1,031	1,070		
Volunteers	0	0		
Wildlife Impact				
Captured	0	0	0	
DoA	0	0	0	

Key Priorities for Today

1. Monitor Riser location and plumes
2. Progress VOC Mitigation Plan (Fire vessel, HVAC charcoal filtration, respirators).
3. Verify Operational Plans are approved and implemented
4. Progress plans for source containment (Riser Insertion Tube Tool (RITT) and Top Hat options)
5. Run riser on Enterprise rig in preparation for RITT operation
6. Preparations for top kill (continue demolition of choke and kill lines at BOP)
7. Relief well drilling with DD-III rig and second relief well planning with DD-II rig
8. Progress plan for flowback operations to the Enterprise.

Operational Comments

- Relief well MC252-3 (DD III) preparing to run riser and BOP.
- ROV's monitoring BOP stack and plumes
- Obtained boost line pressure data from MC252 #1 BOP stack.
- Progressing various containment options.
- Preparation ongoing for readiness to connect BOP with Junk shot manifold.
- Waiting on approval to restart subsea dispersant injection
- DDII in route to location for 2nd Relief Well, ETA May 13-PM
- Preparing to reinstall Yellow Control Pod and jumpers for MC252 #1 BOP in preparation for junk shot
- Enterprise running drill pipe in riser for RITT operations.

Environmental Comments

- Water column samples acquired during subsea dispersant test #3 arrived at LSU for testing.
- Developing correlation of response vessel VOC's with meteorological conditions at spill site

Mobile Daily Operational Report

12-May-2010

	Period 22	Period 21	Cumulative	24-Hour Look Ahead Plan	Data Source
Safety					
Near Miss Incidents	2	0	35		Daily HSSE performance update
First Aid Incidents	2	6	38		Daily HSSE performance update
Recordables	0	0	25		Daily HSSE performance update
Boom Deployed (ft)	**(Values exclude Federal)**				
Louisiana					ICS 209 (from 2200 hrs)
Mississippi	2,400	17,100	321,400	Deployed 5,400 feet of Boom in North Mobile Bay in Baldwin County, with planned deployment of 7800 feet in NOP for Mobile Bay	ICS 209 (from 2200 hrs)
Alabama	8,000	18,000	271,000		ICS 209 (from 2200 hrs)
Florida	4,300	16,000	171,600		ICS 209 (from 2200 hrs)
Boom Staged (ft)	**(Values exclude Federal)**				
Louisiana				Began setting up new Staging Area in St. Joe's, Florida, will be in full operation by End of Day 5-13-10	ICS 209 (from 2200 hrs)
Mississippi	27,650	20,788			ICS 209 (from 2200 hrs)
Alabama	7,300	122,000			ICS 209 (from 2200 hrs)
Florida	40,250	54,414			ICS 209 (from 2200 hrs)
Sorbent	**(Values exclude Federal)**				
Deployed	84,020	106,327			ICS 209 (from 2200 hrs)
Active Vessels/Equipment					
Offshore Vessels	204	205		Will deploy 20 VOO's in Florida in NOP All number of VOO's will increase in NOP	ICS 209 (from 2200 hrs)
Skimmers	3	5			ICS 209 (from 2200 hrs)
ROVs	0	0			ICS 209 (from 2200 hrs)
Spill Containment					
Oily Liquid Recovered (bbls)					ICS 209 (from 2200 hrs)
In-situ Burns Completed					IC Situation Unit Leader
In-situ Burns (bbls)					ICS 209 (from 2200 hrs)
Surface Dispersant Applied (gal)					Dispersant summary report
Subsea Dispersant Applied (gal)					Dispersant summary report
Dispersant Available (gal)					Dispersant summary report
Aircraft					
Active Helicopters	9	4			ICS 209 (from 2200 hrs)
Active Fixed Wing	0	0			ICS 209 (from 2200 hrs)
# Dispersant Flights	0	0			IC Situation Unit Leader
# Mapping Over Flights	0	0			IC Situation Unit Leader
Personnel					
Personnel Command Post	298	211			ICS 209 (from 2200 hrs)
Personnel Field	3,991	4,232			ICS 209 (from 2200 hrs)
Volunteers	*14,500	*14,500			
Wildlife Impact					
Captured	2	1	1		Wildlife template
DoA	0	0	0		Wildlife template
Shoreline Impacts (feet)					
Louisiana					
Mississippi	0		0		
Alabama	0		0		
Florida	0		0		

*(Value represents total registered volunteers for all states)

Key Priorities for Today

Ensure the safety of citizens and response personnel
Advance the GRP percentage of shoreline boom deployment for Alabama, Mississippi, and Florida.
Effect the orderly increase of personnel, equipment and resources
Implement shoreline clean-up plans as required
Advance program for maintaining displace boom
Keep stakeholders and public informed of response activities

Operational Comments

Continue to tighten field reporting process
Cleared tar balls washed ashore in Baldwin County (approximately 10 gallons)
Responded to report of dead dolphin on Horn Island, no dolphin was found
Responded to report of dead Wildlife near Waveland, MS. Found 100+ catfish, 2 stingrays, 1 turtle. No visible sign of oiling, Wildlife Branch handled
OPS Section Chief toured Staging Areas near Dauphin Island
Deployed 99 VOO's in Mississippi, 53 VOO's in Alabama.

Environmental Comments

Developed one system to track all air, water, wildlife, waste events and sampling
Conduct environmental screenings at sites Heritage has demobilized
Working with waste management and operations to evaluate treatment criteria for near shore skimming
Distinguishing and mapping NRDA vs. response sampling
Developing central warehouse process for analytical response data
Conducted flight inventory of various waste staging areas
Prepared release/receiving forms for equipment at decontamination stations
Prepared manifest signature authority letter and had it signed by BP legal
Revised Decon Plan and distributed to Agencies

Daily Operational Report

St. Pete, FL
May 12, 2010

	Prev 24 Hrs (Period 21)	Prior Period	Cumulative	24-Hour Look Ahead Plan	Data Source
Safety					
Near Miss Incidents	0	0	0		Daily HSSE performance update
First Aid Incidents	0	0	0		Daily HSSE performance update
Recordables	0	0	0		Daily HSSE performance update
Boom Deployed (ft)					
Louisiana	0	0	0		ICS 209 (from 2200 hrs)
Mississippi	0	0	0		ICS 209 (from 2200 hrs)
Alabama	0	0	0		ICS 209 (from 2200 hrs)
Florida	0	0	0		ICS 209 (from 2200 hrs)
Boom Staged (ft)					
Louisiana	0	0	0		ICS 209 (from 2200 hrs)
Mississippi	0	0	0		ICS 209 (from 2200 hrs)
Alabama	0	0	0		ICS 209 (from 2200 hrs)
Florida	0	0	0		ICS 209 (from 2200 hrs)
Sorbent					
Deployed	0	0	0		ICS 209 (from 2200 hrs)
Active Vessels/Equipment					
Offshore Vessels	0	0			ICS 209 (from 2200 hrs)
Skimmers	0	0			ICS 209 (from 2200 hrs)
ROVs	0	0			ICS 209 (from 2200 hrs)
Spill Containment					
Oily Liquid Recovered (bbls)	0	0	0		ICS 209 (from 2200 hrs)
In-situ Burns Completed	0	0	0		IC Situation Unit Leader
In-situ Burns (bbls)	0	0	0		ICS 209 (from 2200 hrs)
Surface Dispersant Applied (gal)	0	0	0		Dispersant summary report
Subsea Dispersant Applied (gal)	0	0	0		Dispersant summary report
Dispersant Available (gal)	0	0			Dispersant summary report
Aircraft					
Active Helicopters	0	0			ICS 209 (from 2200 hrs)
Active Fixed Wing	0	0			ICS 209 (from 2200 hrs)
# Dispersant Flights	0	0	0		IC Situation Unit Leader
# Mapping Over Flights	0	0			IC Situation Unit Leader
Personnel					
Personnel Command Post	64	70			ICS 209 (from 2200 hrs)
Personnel Field	0	0			ICS 209 (from 2200 hrs)
Volunteers	0	0			
Wildlife Impact					
Captured	0	0	0		Wildlife template
DoA	0	0	0		Wildlife template
Shoreline Impacts (feet)					
Louisiana	0	0	0		
Mississippi	0	0	0		
Alabama	0	0	0		
Florida	0	0	0		

Key Priorities for Today

1. Ensure continuity of shoreline response activities between St. Petersburg and Mobile
2. Track resources and capabilities available throughout the AOR
3. Rapid Response team established for potential shoreline impacts within Sector St. Petersburg's AOR
4. Define, procure and deploy resources to implement external relations program
5. Liaise with state emergency management representatives to include periodic communications at city/county level as needed
6. Develop ship decontamination plan and promulgate extended communication plan
7. Enlist local resources (governmental/academic) through Environmental Unit
8. Develop a training matrix to summarize requirements and training offerings.

Operational Comments

Rapid Response team positioned in Taylor and Dixie country to quickly respond to oil sightings or shoreline impacts.

Environmental Comments

EUL completed workshops with representaties from Taylor, Dixie and Levy counties to review the ACP and develop/revise prioritized booming strategies.
ACP booming strategy workshops with Citrus, Hernando and Pasco county representatives scheduled for 13 May.
Workshops with all counties within St. Petersburg AOR scheduled to be completed by 18 May.

Other Comments

Finance Section - Worked with Houma and Mobile IMTs to establish a consistant Claims Process Workflow. Process has been provided to SSP JIC for review.
Disseminated news release on Area Contingency Plan workshops with county EOC responders. Conducted press conference, focused on workshops, guests included Gov. Crist, State Reps. Bembry and Rouson; all major network affiliates and print news outlets in attendance; interest focused on tourism impact, governor's request for $35 million, volunteerism, training, resource shortages, timing of impact to Florida.
Conducted conference call with PIOs of county EOCs; all SSP counties in attendance.
Draft volunteer plan being reviewed by external affairs reps in JIC.
Conducted radio interview with Commander Riley, Ops Section Chief, and George Henderson, Research Scientist, for WUSF Public Radio.
Indentified e-NGOs for partnership volunteer opportunities.
Media inquiries increasing as public learns of UC's setup in St. Petersburg.

Definitions

Deployed boom includes assigned boom
Staged boom is awaiting deployment in warehouses

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UNIFIED AREA COMMAND EXTERNAL AFFAIRS SUMMARY
FRIDAY, MAY 14

DISPERSANTS

There is a list of dispersants authorized for use as part of what is called the "National Contingency Plan Product Schedule" which is overseen by EPA. The dispersant being used on-site at the BP spill is on that approved list.

There are two ways dispersants can be used: (1) on the water's surface, dropped by planes and (2) below the water's surface, through injections using remote-control devices (sub-surface).

- When this crisis occurred, Coast Guard and EPA gave BP immediate authorization to move forward with the use of this approved dispersant on the affected water's surface in an effort to mitigate the impact of the spill.

- This authorization included specific conditions to ensure the protection of the health of residents in the affected areas and the environment.

- With our approval, BP continues to use this dispersant on the surface of the water (BP will have to provide further information about how effective the dispersant has been).

The Coast Guard and EPA also authorized BP to conduct three tests of a novel approach to use this dispersant sub-surface, at the source of the leak. The tests were done to determine if the dispersant would be effective in breaking up the oil and helping to control the leaks, as well as to monitor any adverse effects this tactic may have on the environment.

- We are awaiting from BP the complete results of the tests.

- No further use of the dispersant sub-surface will take place until the results of these tests are provided to us and reviewed.

- If the tests demonstrate that the sub-surface dispersant was effective, we may authorize its use along with ongoing monitoring of its effects on the environment.

- We also reserve the right to withdraw our approval of its use sub-surface at any time if we determine that the negative impacts on the environment outweigh the benefits.

The federal government is constantly monitoring air quality in the area to ensure that nearby residents are informed and protected. EPA is conducting air monitoring through the use of aircraft as well as fixed and mobile air monitoring stations on land, and our procedure are regularly reevaluated so we can make any necessary adjustments. EPA has

a dedicated Web site providing daily updates of its air monitoring data (www.epa.gov/bpspill).

At any time, we reserve the right to stop BP from continuing to use the dispersant on the water's surface if we determine air quality is being adversely affected.

TOP HAT

- BP will attempt to install a "top hat" dome over the main source of the leak. The "top hat" is a smaller containment dome, designed to mitigate the formation of hydrates, which prevented the success of the first containment dome.

- We said from the beginning that there is no silver bullet to stop this leak. We were moving forward from the beginning under the assumption this tactic may not be successful.

- BP will continue to drill the relief well to permanently stop the leak.

- BP and industry partners have a team of experts from across the private sector working around the clock in Houston with one responsibility: discover alternative solutions to permanently stop this leak.

- DOI Secretary Ken Salazar dispatched U.S. Geological Service Director Marcia McNutt to oversee this process.

- On May 12, at the request of the President, Secretary Salazar and Secretary Chu traveled to Houston to participate in meetings with DOE and national lab staff, industry officials and other engineers and scientists involved in finding solutions to cap the flow of oil and contain the spill.

- Secretary Salazar and Secretary Chu conferred at the BP Command Center in Houston with teams of federal and industry scientists and engineers who are using cutting-edge technological resources and innovative ideas to find solutions to containing the oil spill and protecting Gulf Coast communities.

- They will continue to work hard to provide BP with alternative ideas.

BOOM

- As of the end of May 13, over X.X million feet of boom deployed and nearly X million feet available that will continue to be strategically deployed.

- We continue to work to identify additional sources of boom for delivery.

- The Coast Guard is aggressively overseeing BP efforts to ensure the appropriate type of boom is available for approved deployments as dictated by this dynamic situation.

- The Unified Command will continue to work with state, local and community leadership to ensure that needs are met and that appropriate steps are taken to stop the source of the leak, mitigate the spill and deploy the necessary resources in the Gulf.

If asked about boom shortage:
"As of last night there was over XX million feet of boom deployed and nearly X million feet available that will continue to be strategically deployed. The Unified Command is aggressively overseeing BP efforts to ensure the appropriate type of boom is available for approved deployments as dictated by this dynamic situation. The Coast Guard will continue to work with state, local, and community leadership to ensure that needs are met and urge BP to take the appropriate steps to stop the source of the leak, mitigate the spill and deploy the necessary resources in the gulf."

THURSDAY, MAY 13 STATISTICS

Total response vessels: 526
Containment Boom deployed: over 1.1 million feet
Containment boom available: over 300,000 feet
Sorbent boom deployed: over 320,000 feet
Sorbent boom available: over 850,000 feet
Boom deployed: over 1.4 million feet (regular plus sorbent and fire boom)
Boom available: over 1 million feet (regular plus sorbent and boom)
Oily water recovered: more than 5 million gallons
Dispersant used: over 475,000 gallons
Dispersant available: more than 215,000 gallons
Overall personnel responding: more than 13,000

FRIDAY, MAY 14 EVENTS

0815	Governors' teleconference – ADM Allen and Watson
0900	Admiral Allen will participate in a media availability at Dauphin Island
1100	Governor Jindal, Senators Landrieu and Vitter (LA), and Congressman Scalise (LA) press conference in Slidell, LA
1300	Senate Homeland Security Staff visit to Robert UAC
1400	Local Official's teleconference – CAPT Hanzalik
1400	Congressional teleconference
1400	RADM Landry and BP Suttles will participate in a media availability
1400	ADM Allen will participate in media availability in Biloxi
1500	Florida Attorney General McCollum briefing/tour of St. Petersburg ICP
TBD	Representative Miller visit to USCG Station Destin
TBD	Baldwin County, AL (14) mayors to visit Mobile ICP

METRICS

- 18,746 Facebook followers the Deepwater Horizon Response Facebook page.
- Twitter has 3,796 followers.

- The www.deepwaterhorizonresponse.com site has over 19 million hits since it was initiated.
- Top Topics via website:
    - Jobs
    - Dispersant
    - Vessels of Opportunity
    - X fact sheet; X media advisories; X press releases; X image releases, XX images uploaded and X videos were posted.

THURSDAY, MAY 13 EVENTS

Engagement with Government Officials

- Governors' Call: Governors Barbour, Jindal, Perry, and Riley participated:
    - Monica Medina of NOAA provided an update on observations trajectory projections, and fisheries closures
    - ADM Watson, UAC Robert provided an update on response operations, including leak stabilization activities
    - EPA Administrator Jackson provided an update on subsea dispersant testing
    - FWS Deputy Asst. Secretary Sobeck provided an update on wildlife impacts
- Governor Riley met with CPTN Poulin at Mobile IPC
- Governor Jindal and local government official conducted overflight of St. Mary Parish and held press conference
- Governor Jindal call with USACE Colonel Lee regarding dredging proposal.
- Local Official's teleconference - ADM Watson briefed
- Congressional teleconference - Questions received from Speaker Pelosi (CA), Senator Landrieu (LA), Congressman Bilirakis (FL), and Senate Appropriations Committee staff
- NOAA Asst. Secretary Larry Robinson and Asst. Administrator David Kennedy visited Mobile ICP
- DOI Asst. Secretary and COS Strickland visited Mobile IPC
- MS National Guard visit to Mobile IPC - Colonels Smith, Bryan, and Smithson
- National Geospatial-Intelligence Agency (NGA) Directors visited Houma ICP
- EPA Assistant Administrator Stanislaur, Solid Waste Emergency Response, and EPA Senior Advisor Garcia, Environmental Justice, toured the Houma ICP and met with imbedded EPA staff.
- Town hall meetings held in Port Sulphur and Dulac - CAPT Stanton (Port Sulphur) and CDR Cooper (Dulac) attended.
- LA State Senator A.G. Crowe made an impromptu visit to Robert ICP and met with BP and RADM Watson.

FUTURE EVENTS AND ISSUES

Friday, May 14

TBD Senate Homeland Security Staff visit

TBD Representative Miller visit to CG STA Destin
TBD Ms. Birnbaum, MMS Director visit to UAC Robert

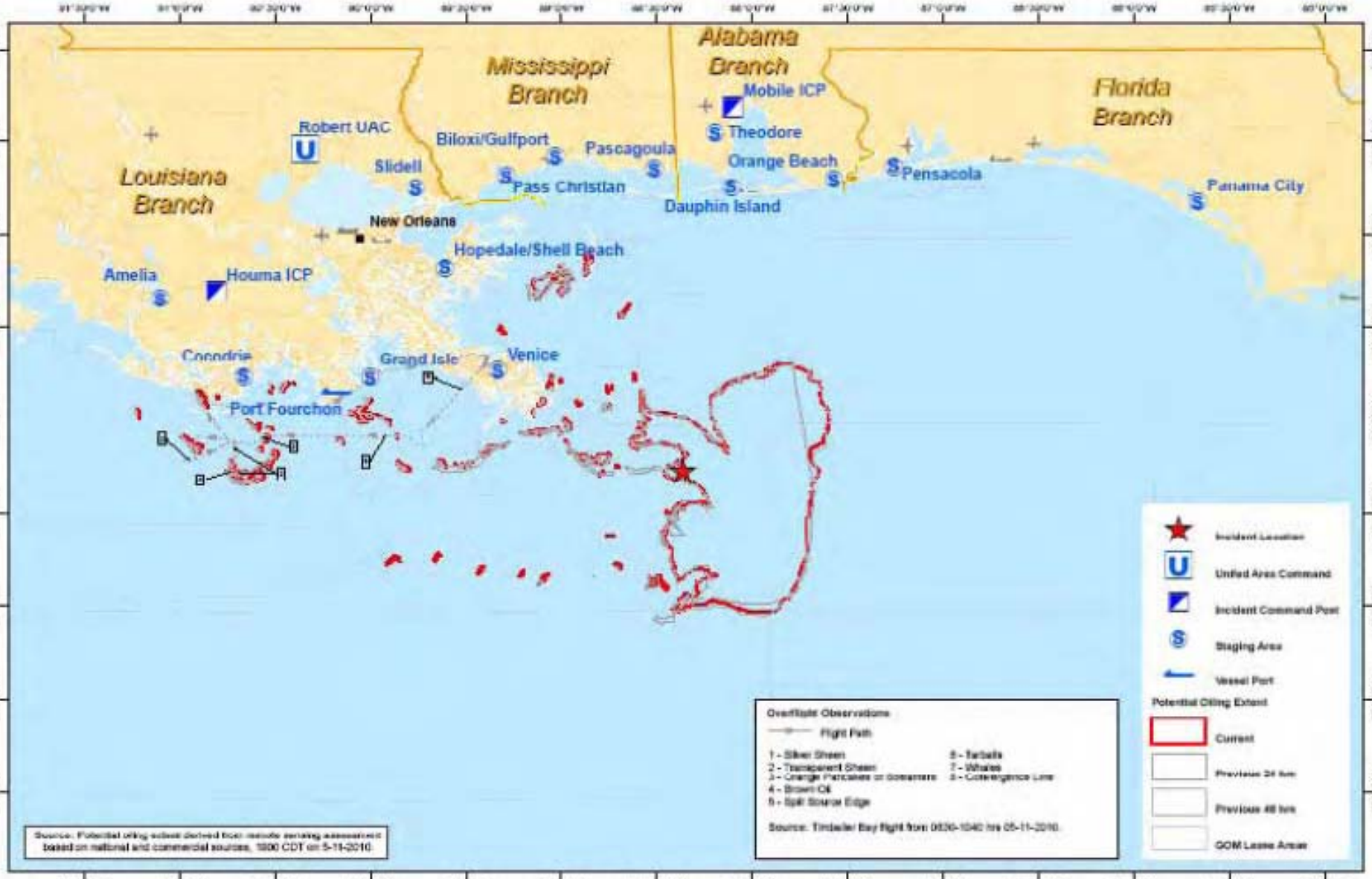
Saturday, May 15
TBD Congressman Melancon (LA) overflight
TBD DOI visit UAC Robert

Monday, May 17
1430 Congressman Meek (Florida) visit to Mobile ICP

June
TBD House Natural Resources STAFFDEL

Deepwater Horizon (MC-252) - Situation Status Map

5/12/2010 1800 Hrs



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Miles

0 20 40 80 120 160

The Response Group

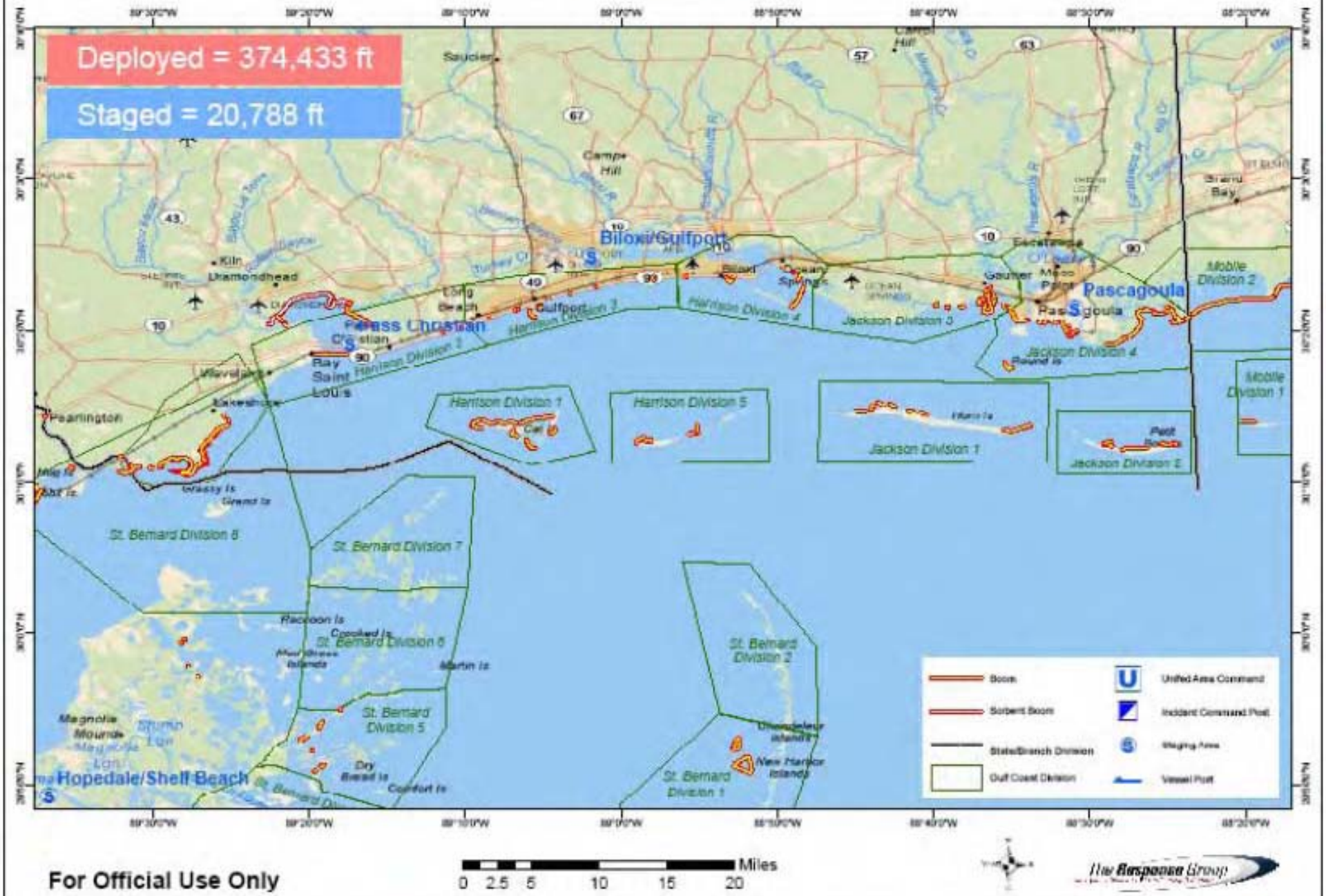
Deepwater Horizon (MC-252) - Louisiana Branch Booming Operations Map

5/12/2010 0600 Hrs

For Official Use Only

Deepwater Horizon (MC-252) - Mississippi Branch Booming Operations Map

5/12/2010 0600 Hrs



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Deepwater Horizon (MC-252) - Alabama Branch Booming Operations Map

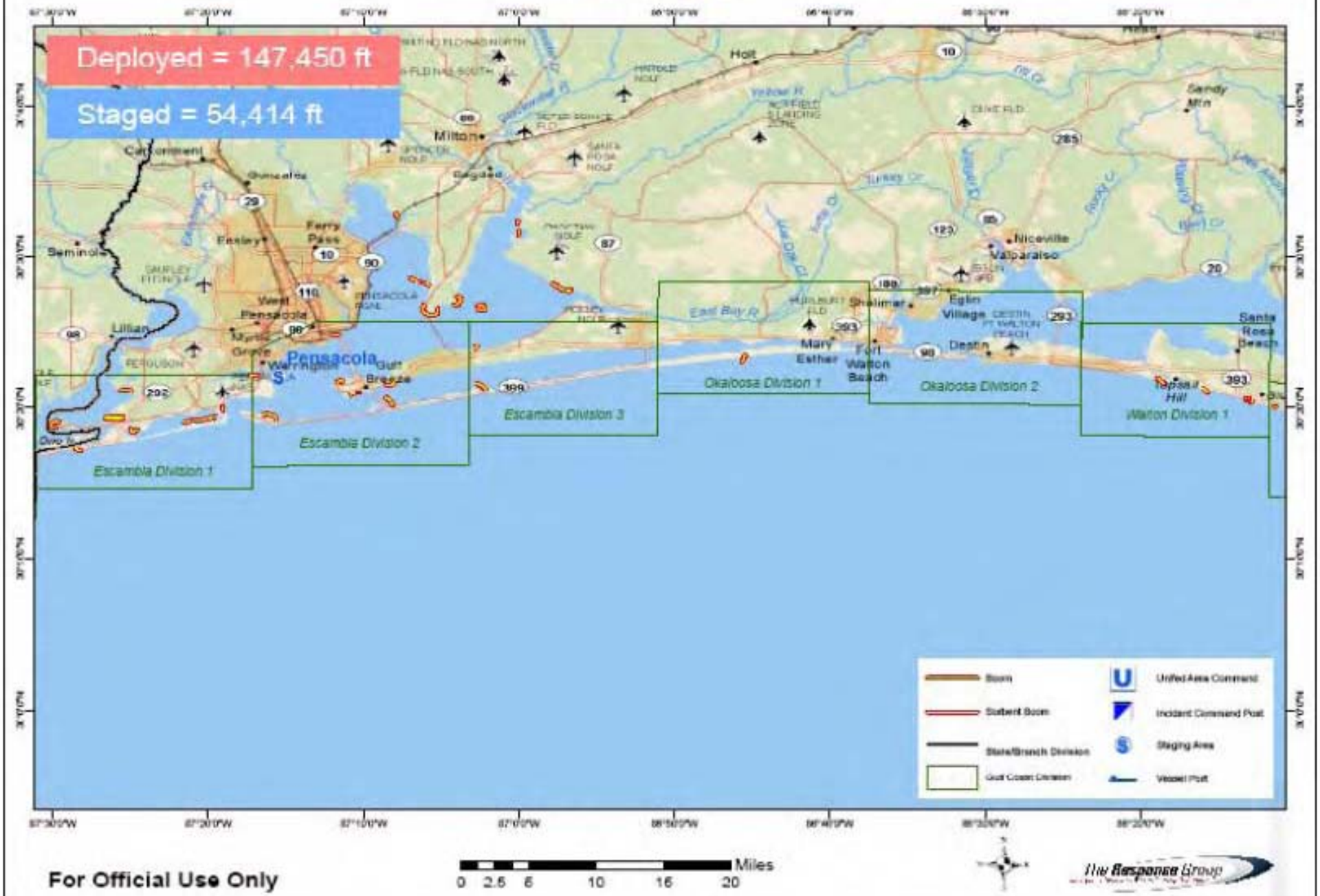
5/12/2010 0600 Hrs

For Official Use Only

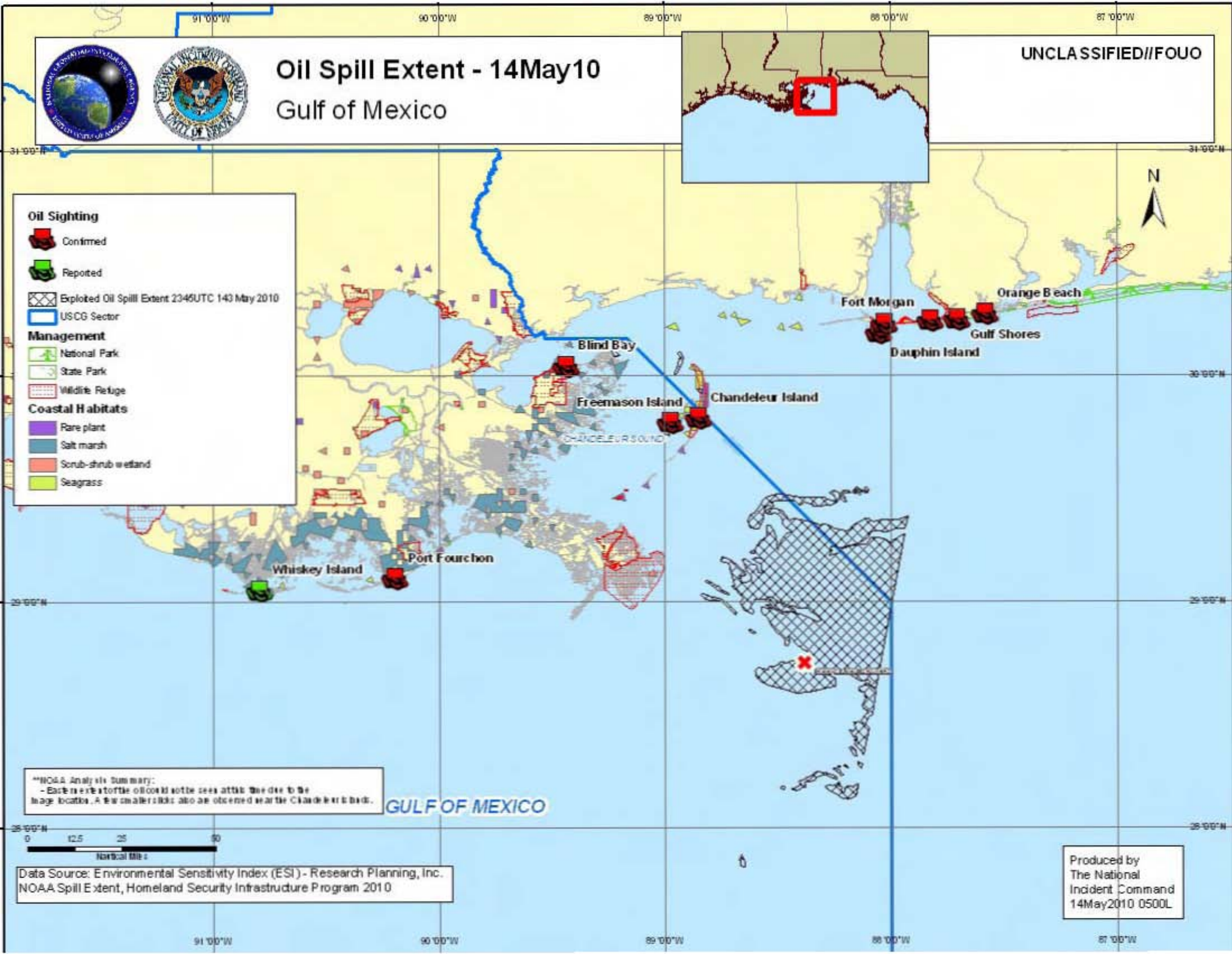
The Response Group

Deepwater Horizon (MC-252) - Florida Branch Booming Operations Map

5/12/2010 0600 Hrs



For Official Use Only

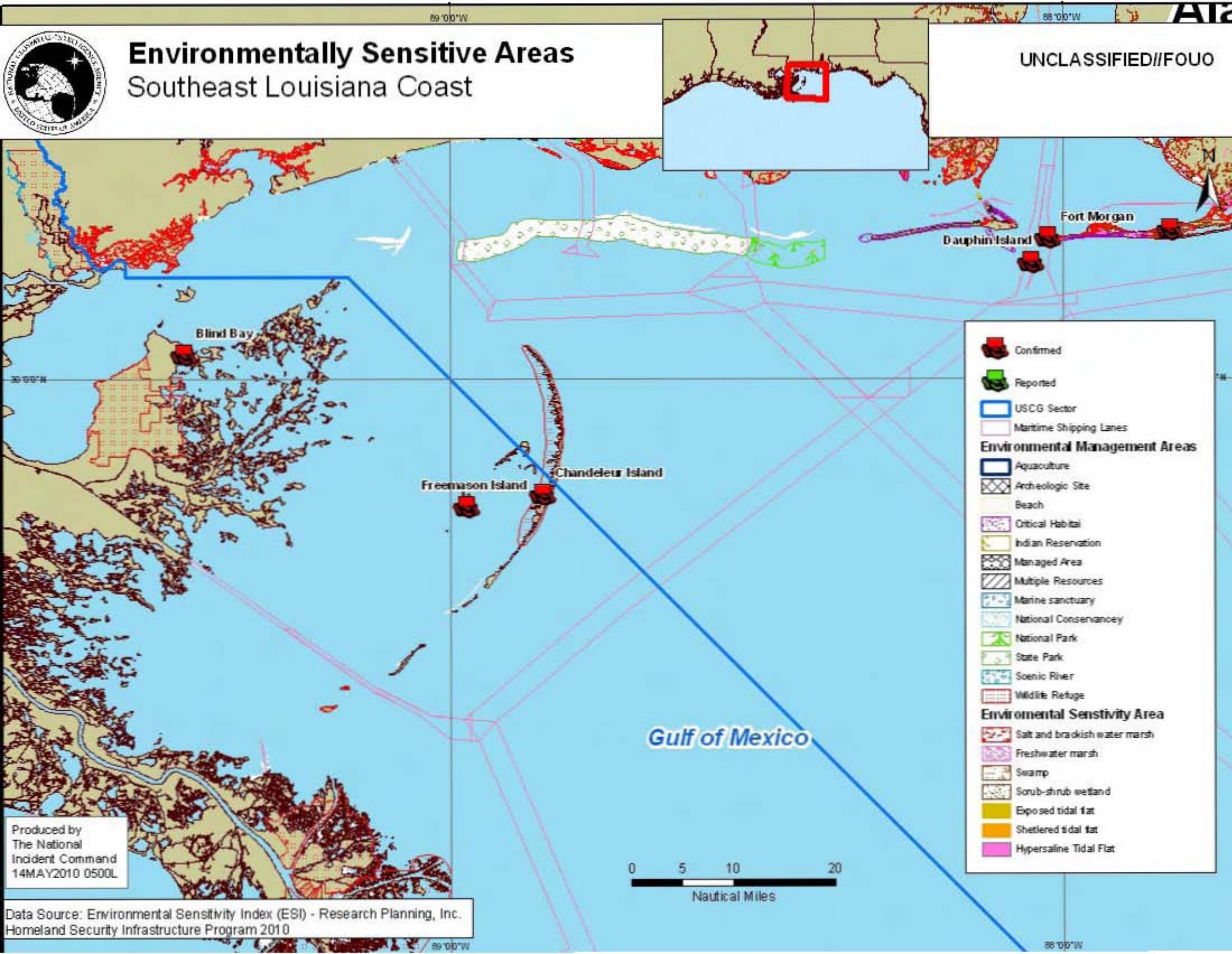

Oil Spill Extent - 14May10
Gulf of Mexico
UNCLASSIFIED//FOUO
Oil Sighting
Confirmed
Reported
Exploited Oil Spill Extent 2345UTC 14 May 2010
USCG Sector
Management
National Park
State Park
Wildlife Refuge
Coastal Habitats
Rare plant
Salt marsh
Scrub-shrub wetland
Seagrass
N
Fort Morgan
Orange Beach
Gulf Shores
Dauphin Island
Blind Bay
Freemason Island
Chandeleur Island
CHANDELEUR SOUND
Port Fourchon
Whiskey Island
GULF OF MEXICO
**NOAA Analysis Summary:
- Eastern extent of the oil could not be seen at this time due to the
image location. A few smaller slicks also are observed near the Chandeleur Islands.
0
12.5
25
50
Nautical Miles
Data Source: Environmental Sensitivity Index (ESI) - Research Planning, Inc.
NOAA Spill Extent, Homeland Security Infrastructure Program 2010
Produced by
The National
Incident Command
14May2010 0500L

Approximate Oil Locations

NO DOCUMENT
The most recent version of this NOAA document is dated 06 May 2010
This document is no longer being provided on the NOAA website
NIC will work with NOAA to re-establish graphic production

Environmentally Sensitive Areas
Southeast Louisiana Coast

UNCLASSIFIED//FOUO



Produced by
The National
Incident Command
14MAY2010 0500L

Data Source: Environmental Sensitivity Index (ESI) - Research Planning, Inc.
Homeland Security Infrastructure Program 2010

General Spill ResponseA ConsiderationsA

When prevention efforts fail and an oil spill(occurs on the water, spill responders face a dif-(ficult battle against a dynamic opponent. They(have a number of tools at(their disposal, depending on the unique(aspects of each situation. Among the options(available are mechanical cleanup methods,(such as containment booms and skimmers,(non-mechanical methods, such as dispersants(or *in-situ* burning, natural removal, and(shoreline cleanup. The selected mix of(countermeasures will depend on potential(shoreline and natural resource impacts, the(size, location, and type of oil spilled, weather,(and other variables.(

This pamphlet on dispersant use is one of a(series that provides an overview of oil spill(prevention, planning, and response topics.(

What Are Dispersants?A

Dispersants are specially designed oil spill(products that are composed of detergent-like(surfactants in low toxicity solvents.(Dispersants do not actually remove oil from(the water. Instead, they break the oil slick into(small particles, which then disperse into the(water where they are further broken down by(natural processes. Dispersion of oil into the(water column occurs naturally in untreated(spills; dispersants just speed up the process.(Dispersants also prevent the oil droplets from(coming together again and forming another(surface slick. Dispersants also reduce the(ability of the oil to attach to birds and other(animals, shoreline rocks, and vegetation. Fire(and explosion hazards are lessened because(dispersants reduce evaporation of volatile oil(components. The effects of the rapidly diluted(dispersed oil must be weighted against the(effects of that oil if it were allowed to impact(wildlife populations or the shoreline.(

Dispersants may be applied to oil from air-(planes, helicopters, or vessels. Dispersant(spray systems are designed to provide the cor-(rect droplet size and dosage, as both are(important factors in effective oil dispersal. The(volume of dispersant applied is a fraction of(the volume of oil treated, with a typical(dispersant to oil ratio of 1:20.(

Where the Oil GoesA

When the oil is treated with dispersants, it ini-(tially disperses within approximately the upper(30 feet of the water column. The dispersed oil(will be spread horizontally by tides and cur-(rents, rapidly decreasing the concentration of(the oil. Many impacted water column popula-(tions will rapidly recover from the dispersed(oil exposure because of their mobility. If these(impacts are expected to be short-term, these(organisms are given a lower priority than bird(and mammal populations and sensitive shore-(line habitats, which when oiled recover quite(slowly. Typically, dispersant use is reserved(for deeper waters to ensure sufficient dilution(of the oil and to prevent impacts on bottom-(dwelling organisms. There may be cases(where use in shallower environments can be(justified to minimize impact to highly sensitive(areas that are difficult to otherwise protect.(

Dispersant EffectivenessA

Like other spill response techniques, disper-(sants are not likely to be 100% effective in dis-(persing surface oil, but may be strategically(employed to protect certain areas. Dispersant(effectiveness is dependent on the type of oil(and environmental conditions.

Approval of Dispersant UseA

Because of the tradeoffs involved (i.e., relative(benefits and potential negative effects), the(National Oil and Hazardous Substances(Pollution Contingency Plan (NCP) sets limita-(tions on dispersant use. Dispersants must be(on a national list maintained by the(Environmental Protection Agency. Federal(and state agency agreements establish areas(where rapid decisions on dispersants may be(made by the Federal On-Scene Coordinator.(Use outside these areas requires the approval(of additional agencies identified in the NCP.(

Studies of DispersantsA

Relevant to some of our sensitive subtropical(resources, a 1987 study funded by API (Ballow et al. was conducted to determine the(effects of oil and dispersed oil on mangrove,(seagrass, and coral communities. This study(concluded that dispersants applied to offshore(oil in deep water greatly reduced the impacts(to mangroves. The impacts to the seagrass(and coral communities would be insignificant. The chemically dispersed oil was diluted to(non-toxic concentrations in deeper water. It(was recommended that dispersants be(considered when highly sensitive inter-tidal(communities are involved. The dispersant(application should take place in the deepest(water possible.(

What Are the Potential Benefits?A

- Reduced impact of surface oil on shorelines,(sensitive habitats, birds, mammals, and(other wildlife.(
- Rapid treatment of large areas.(
- Reduced oil storage and disposal problems.(
- Accelerated natural degradation processes.(
- Use in high seas and currents is feasible.(

What Are the Potential TradeoffA Considerations?A

- Increased oil exposure to organisms in the(upper 30 feet of water column.(
- Time frame for effective use may be short.(
- Application equipment or dispersants may(not be readily available.(

NOAA's Office of Response and Restoration • Emergency Response Division

Acknowledgements -

This job aid was prepared as a companion guide for individuals who have completed training in dispersant application observation. It is designed to be a refresher on observing and identifying dispersed and undispersed oil, describing their characteristics, and reporting this information to decision-makers. We recommend that this book be used with the Open Water Oil Identification Job Aid for Aerial observation to help describe both surface oil and dispersed oil.

Photos for this document were provided by Dr. Ron Goodman, Imperial Oil Resources; Charles Huber, Mobil Oil; Dr. Per Daling, IKU Petroleum Research, Dr. John Fraser; Charlie Henry, NOAA; Dr. Karen Purnell, ITOPF; Heidi Snell, Charles Darwin Foundation; OHMSETT; and Louisiana Department of Environmental Quality. Technical support was provided by Alan A. Allen, Spilltec and Dr. Robert Fiocco, Exxon.

U.S. Department of Commerce • National Oceanic and Atmospheric Administration • National Ocean Service

Carlos M. Gutierrez
Secretary, U.S. Department of Commerce

Vice Admiral Conrad C. Lautenbacher, Jr., USN (Ret.)
Under Secretary for Oceans and Atmosphere and
NOAA Administrator

John H. Dunnigan
Assistant Administrator Ocean Services and
Coastal Zone Management
NOAA Ocean Service

Table of Contents -

Black Oil: Area of black colored oil sometimes appearing with a latex texture. Often confused with kelp beds and other natural phenomenon.

Brown Oil: Typically a 0.1 - 1.0 µm thickness of water-in-oil emulsion. Thickness can vary widely depending on wind and current conditions. Maybe referred as heavy or dull colored sheens.

Dispersion: The breaking of an oil slick into small droplets mixed into the water column as a result of breaking waves, other sea surface turbulence and/or action of chemical dispersants.

Emulsification: The formation of a water-in-oil mixture. The tendency for emulsification to occur varies with different oils and is much more likely to occur under high energy conditions (winds and waves, oil well blowouts). This mixture is frequently referred to as mousse.

Mousse: Water-in-oil emulsion often formed as oil weathers: colors can range from orange or tan to dark brown.

Sheen: Sheen is a very thin layer of oil (0.0003 mm or less) floating on the water surface and is the most common form of oil seen in the later stages of a spill. Sheens vary in color according to their thickness, ranging from almost transparent for the thinnest layers, to silvers, and rainbows and grays for the thicker layers.

Light Sheen: A light, almost transparent layer of oil. Sometimes confused with windrows and natural sheen resulting from biological processes. Sometimes referred to as transparent sheen.

Rainbow Sheen: Sheen that reflects colors.

Silver Sheen: A slightly thicker layer of oil that appears silvery or shimmers. Occasionally called gray sheen.

Slick: Oil spilled on the water that absorbs energy and dampens out the surface waves, making the oil appear smoother or "slicker" than the surrounding water.

SMART: Special Monitoring of Applied Response Technologies: establishes a monitoring system for rapid collection and reporting of real-time, scientifically based information, in order to assist the Unified Command with decision-making during in situ burning or dispersant operations. SMART recommends monitoring methods, equipment, personnel training, and command and control procedures that strike a balance between the operational demand for rapid response and the Unified Command's need for feedback from the field in order to make informed decisions. Refer to SMART manual for details.

Streamers: Oil or sheen oriented in lines, windrows or streaks. Brown oil and mousse can be easily confused with algal scum collecting in convergence lines or mats of kelp, Fucus, or seagrass. Sometimes called streaks, stringers or fingers.

Tarballs: Weathered oil that has formed a pliable ball. Size may vary from pinhead to about 30 cm. Sheen may or may not be present.

Code	Description	Layer-Thickness Interval		Concentration	
		µm	in.	m^3 per Km^2	bbl/acre
S	Sheen (silvery/grey)	0.04 - 0.30	1.6×10^{-6} – 1.2×10^{-5}	0.04 – 0.30	1×10^{-3} – 7.8×10^{-3}
R	Rainbow	0.30 – 5.0	1.2×10^{-5} - 2.0×10^{-4}	0.30 – 5.0	7.8×10^{-3} – 1.28×10^{-1}
M	Metallic	5.0 – 50	2.0×10^{-4} – 2.0×10^{-3}	5.0 – 50	1.28×10^{-1} – 1.28
T	Transitional Dark (or True) Color	50 – 200	2.0×10^{-3} – 8×10^{-3}	50 – 200	1.28 – 5.1
D	Dark (or True) Color	>200	$> 8 \times 10^{-3}$	>200	> 5.1

Chart modified by A. Allen from Bonn Agreement Oil Appearance Code (BAOAC) 02 May, 2006.

While observing dispersant applications, remember these important points:

General Information

- The monitoring observer does not make operational decisions (e.g., how much dispersant to apply, when or where to apply it, etc.) or volumetric estimates. These decisions are made by the Operations Section.

Factors Affecting Visual Observations

- Oil surface slicks and plumes look different for many reasons; for example, oil or product characteristics, time of day (different sun angles), weather, sea state, and rate at which oil disperses.
- Low-contrast light conditions (i.e., overcast, twilight, haze, etc.) make observations difficult.
- For best viewing, the sun should be behind you, with the aircraft at an altitude of about 500 to 1,000 feet observing the slick at a 30-degree angle.
- Appearances of dispersant action can range from brown to no visible plume. The visibility of the dispersed plume will vary according to water clarity. In some cases, remaining surface oil and sheen may mask oil dispersing under the slick and thus interfere with observations of the dispersed oil plume.
- Sometimes other things, such as suspended solids or algal blooms, may resemble dispersed oil.

Factors Affecting Visual Observations, *cont.*

- Dispersed oil plume formation may not be instantaneous after dispersant application. In some cases, such as when oil is emulsified, it can take several hours and may not show a visible plume at all.

What to Watch for

- A reduction in surface area or the change in appearance of the treated slick versus an untreated slick might indicate that the dispersant is working.
- A visible cloud in the water column may indicate that the dispersant is working.
- If you cannot detect a visible cloud in the water column, it is difficult to determine whether or not the dispersant is working.
- The initial dispersant application may have a herding effect on the oil making the slick appear to be shrinking when, in fact, the dispersant is "pushing" the oil together. This effect may cause the oil slick to "visibly disappear" from the sea surface for a short time.
- Dispersed oil plumes are often highly irregular in shape and vary in oil thickness. This may lead to errors in estimating dispersant effectiveness.

What to Watch for, *cont.*

- It may not be possible to determine the thickest area of oil concentration. The actual dispersant application dose will vary according to the oil thickness. This will lead to overdoses and underdoses of dispersant and variations in the effectiveness of application. The observer should note these variations.
- Boat wakes through oil may appear to disperse oil. However, this could be just the vessel wake physically parting the oil or mechanically dispersing it. Mechanically dispersed oil may recoalesce and float to the surface.
- Observers need to report the presence of marine mammals, turtles, and birds in the area of dispersant application. -

Is it Working?

- Observers may see color changes in emulsions due to reduced water content and viscosity, and changes in the shape of the slick due to the demulsification action of the dispersant, which enhances the dispersion. Sometimes other things, such as suspended solids or algal blooms, may resemble dispersed oil.
- Different observers at the same site may reach different conclusions about how much of the slick has been dispersed. This highlights the importance of standard reporting criteria and training of individuals with a common set of guidelines. Focus should stay on determining if it is working or not.

Airplane Application Platforms - 7

This is a side view of a DC-4 during dispersant application methods tests by the Southern California-Petroleum Contingency Organization and API in September 1978 and 1979. The dispersant has been dyed red for increased visibility.

Dispersant application from a C-130 Hercules using an Aerial Dispersant Deployment System (ADDS). The dispersant has been dyed red for experimental purposes.

Helicopter Application Platforms - 9

A helicopter applying dispersant using a bucket spray unit (side and top views).

Dispersant application from a ship (front and rear views).

NOFO* Trials, 1994

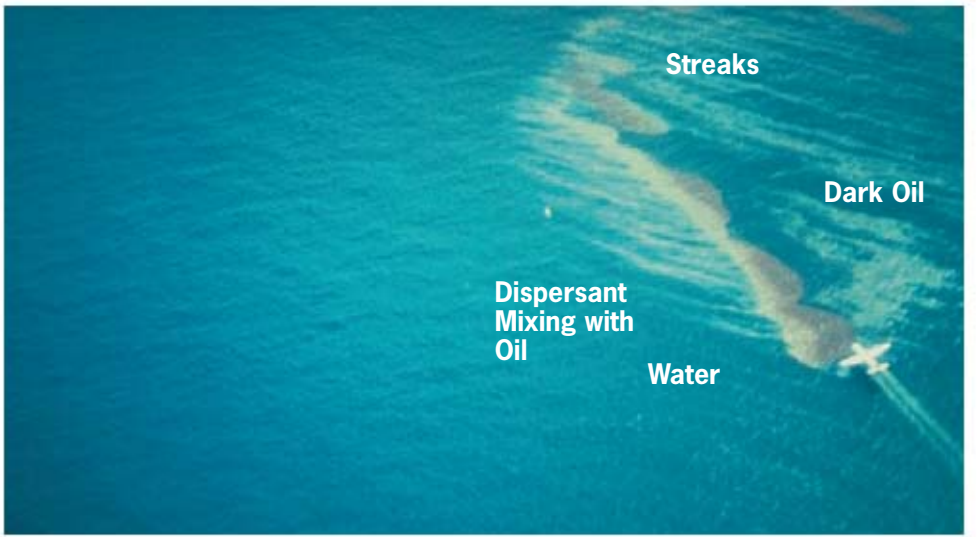
Release of 20 cubic meters (5,300 gallons) of Sture blend crude, weathered for 35 hours before treatment. In the photo, a helicopter applies 800 liters (5 barrels or 211 gallons) of COREXIT 9500 to the oil. Due to the combination of cloudy weather conditions and the oil forming a very dark emulsion, it was difficult for the personnel in the application helicopter to differentiate thicker, emulsified oil from thinner oil films and sheens. This points to the need for a spotter aircraft to achieve successful dispersant application.

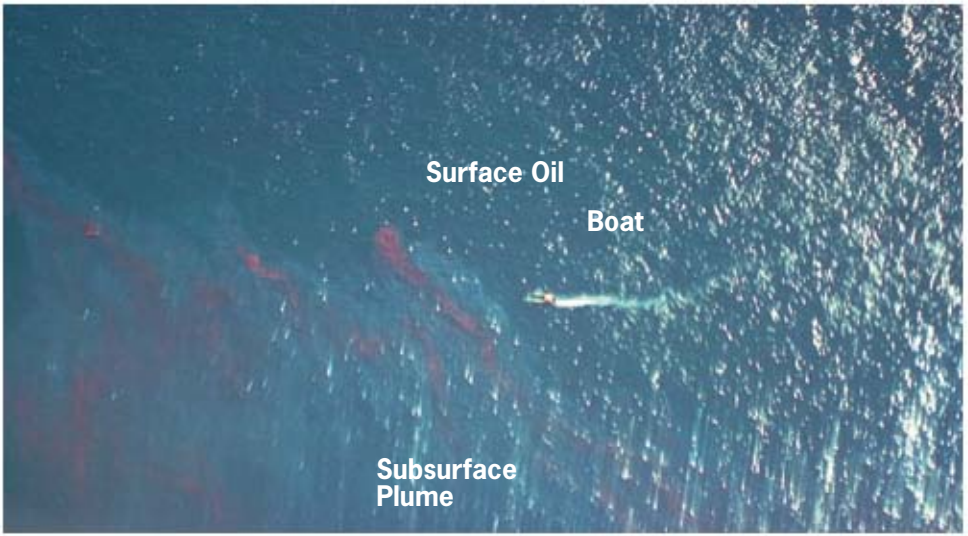
*Norwegian Clean Seas Association for Operating Companies

Researchers reported that despite poor conditions for visually observing dispersed plume development, oil was dispersed and the dispersed plume was documented by water column measurements. Shown here is the initial “herding” effect on the thin oil film area - application same as the previous photo.

Dispersant Application to a Spill

This series of three photographs shows dispersant applications during the *Exxon Valdez* spill in 1989. This photograph shows an application to thick dark oil. Note sheen moving off slick after dispersant was applied. This is due to wind and current moving the surface oil faster than the subsurface dispersed oil, which is moving by current alone. There is no visible subsurface plume. (Time: 14:52)

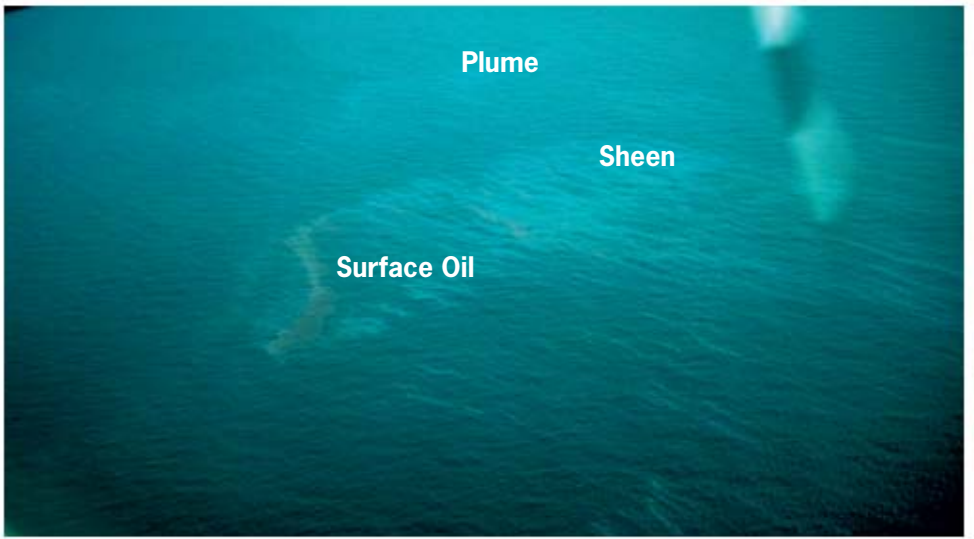




Slick breaking up about 30 minutes after the third dispersant application. A subsurface plume is now visible. (Time: 15:24)

Dispersant Application to a Spill - 15

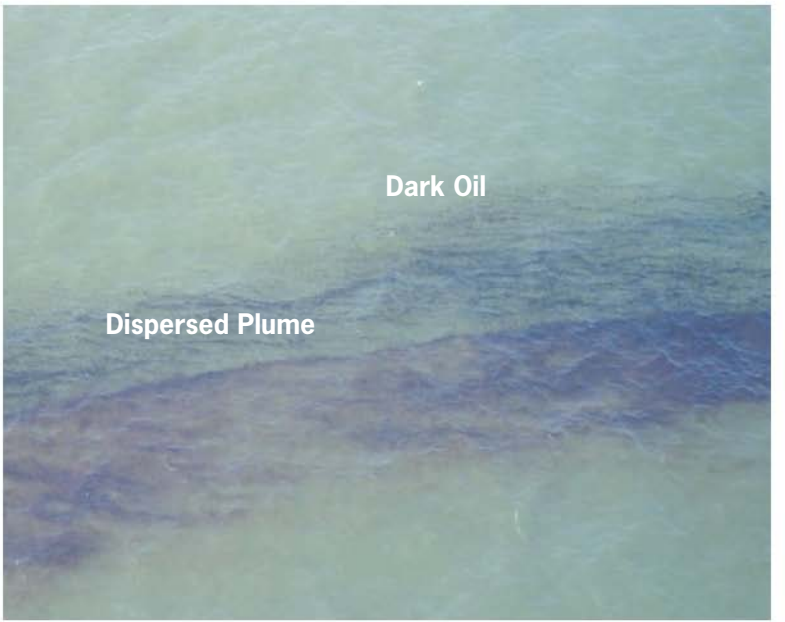
The slick an hour after the previous photo. Note that some of the slick was not sprayed and remains on the surface. The surface oil is moving faster than the dispersed plume due to wind effects. Dispersed oil plume formation may not be instantaneous after dispersant application. In some cases, such as when oil is emulsified, it can take several hours and may not show a visible plume at all. (Time: 16:41)

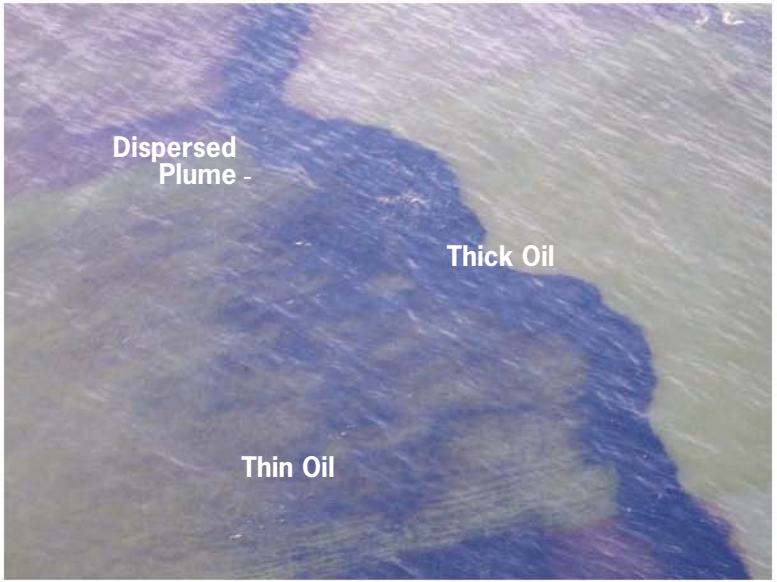


The next three photographs contrast treated vs. non-treated oil only a few minutes after application. The sea state was calm, resulting in a very slow dispersion rate. No subsurface plume was observed in part due to the slow dispersion rate and in part due to the lack of water clarity of coastal waters off the Mississippi Delta. Observation Platform = helicopter. Altitude = 500 ft.

Main Pass 69, Gulf of Mexico, 2004

Dispersant applied to a portion of slick only. Changes in the treated oil are clearly visible shortly after application. Observation Platform = helicopter. Altitude = less than 100 ft.



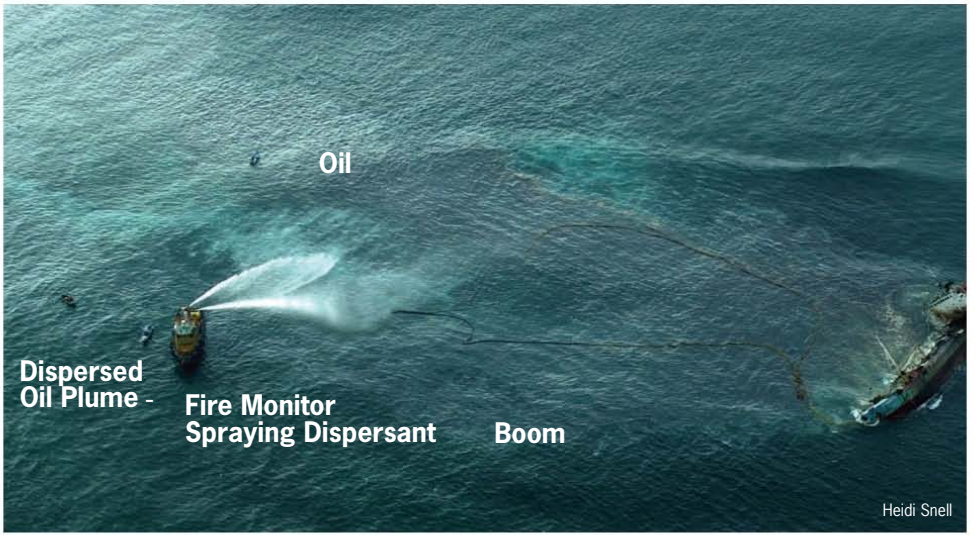


Application across oil slick. Thin oil slick is dispersing, but the thick portion of the slick is slow to disperse, or may require a second application to be efficient. Photograph taken shortly after application.
Observation Platform = helicopter. Altitude = less than 100 ft.

Main Pass 69, Gulf of Mexico, 2004

Main Pass 69, Gulf of Mexico, 2004

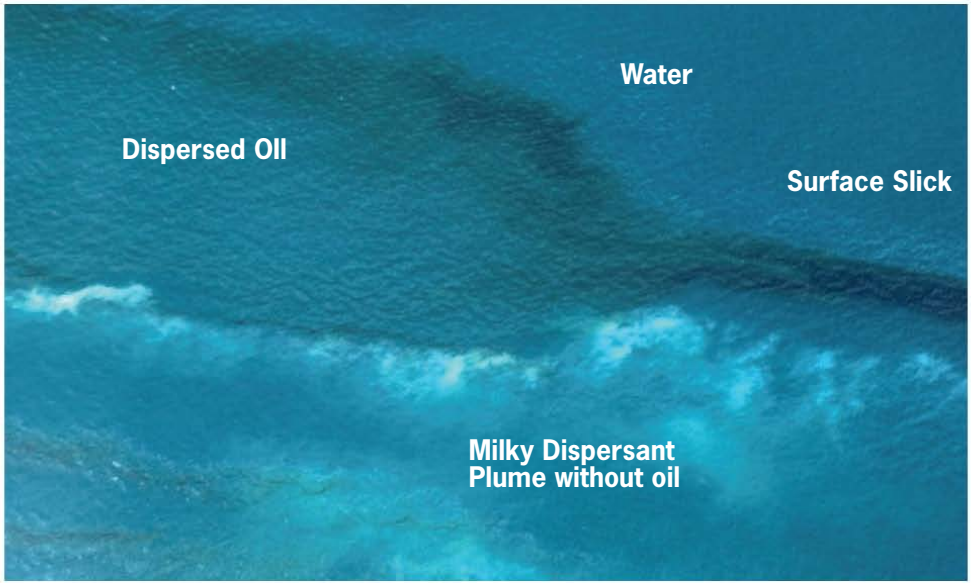
Application applied to upper portion of photo exhibits rapid changes as oil begins to disperse. Oil slick shown on the lower portion of the slide was untreated. Observation Platform = helicopter. Altitude = less than 100 ft.



The Tanker Jessica struck a reef off Puerto Baquerizo Moreno on San Cristobal Island on the night of 16 January. The 260 foot vessel was carrying 160,000 gallons of diesel fuel oil and 78,000 gallons of IFO 120. The vessel lost a significant quantity of oil and was hard aground on a shallow shoal off the harbor entrance near Wreak Bay.

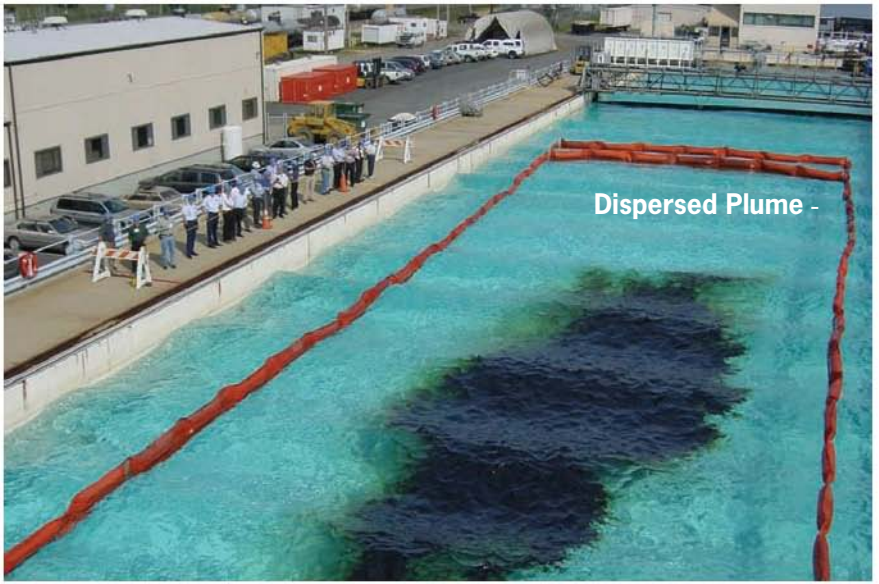
T/V *Jessica*, Galapagos, January 2001

The dispersant (Seacare Ecosperse) was applied to the heavy oil slick by boat application using an inline foam induction system with a hand-held fire monitor beginning on 23 January. The application was effective as the dispersant was being applied to fresh oil which continued to leak from the vessel. The white milky plume observed in this photo is most likely dispersant not hitting the oil.



Within 30 minutes the dark coffee-colored dispersed oil plume can be observed separating from the black surface slick. The milky dispersant plume that did not contact oil can also be observed.

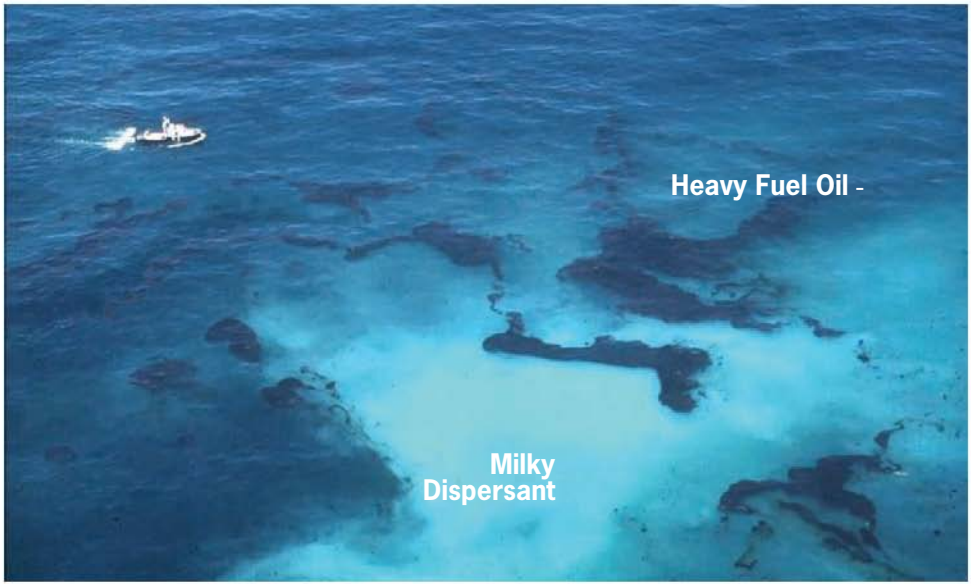
Boat passing through sheen and darker oil. Notice how the vessel wake is breaking a path through the oil, either physically parting the oil or mechanically dispersing it. Mechanically dispersed oil may recoalesce and float to the surface.



View of surface slick minutes after dispersant application. Coffee color plume is becoming visible beneath surface. Notice the minimal wave energy. In the absence of wave energy and mixing currents, mechanically dispersed oil may coalesce (this picture shows calm conditions).

OHMSETT Effective Dispersant Test - 25

Another test dispersant run viewed from below. Notice the coffee color of the plume and how it spreads out below the surface. The tank is 3.4 meters deep.



This photo shows an ineffective use of dispersants on a heavy fuel oil. The picture was taken off the coast of South Africa following the collision between the Ventpet and Venoil in 1997. The milky plume is the dispersant mixing with the sea water. No oil is being dispersed.

Ineffective Operation - Heavy Oil Spill Example

Birds, turtles, and marine mammals need to be reported if they are in the dispersant application area. This photo shows a herd of manatees swimming below the surface. You can see the paddle shape of the tail.

Whales may form patterns in the water that can be confused with dispersing oil.

This photo shows a turtle swimming below the surface.

Observers: _____

Date: _____

Start Time: _____ End Time: _____

Platform: _____

Rank	Standard Phrase	Description	Time	Time	Time
1	No obvious dispersion	Dispersant being washed off the black oil as white, watery solution leaving oil on surface. Quantity of oil on sea surface not altered by dispersant.			
2	Slow or partial dispersion	Some surface activity (oil appearance altered). Spreading out of oil. Droplets of oil seen rapidly rising back to sea surface, but overall quantity appear to be similar to that before dispersant spraying.			
3	Rapid dispersion	Oil rapidly disappearing from surface. Light brown plume of dispersed oil visible in water under the oil and drifting away from it. Oil in some areas being dispersed to leave only sheen on sea surface, but in other areas still some oil present.			

Time of observations should be recorded from initial application or arrival on scene and then approximately 15 minutes apart until observations area ceased. -

(Modified from the UK 2003 Dispersant Sea Trials Observation Recording Form) -

VIA EMAIL AND CERTIFIED MAIL

May 28, 2010

Rear Admiral Mary Landry
Commander, Eighth Coast Guard District
Hale Boggs Federal Building
500 Poydras Street
New Orleans, LA 70130

Dear Admiral Landry:

In compliance with the May 26, 2010 Dispersant Monitoring and Assessment Directive - Addendum 3 (the "Directive"), BP Exploration & Production Inc. ("BP") has eliminated the surface application of dispersants except in cases where an exemption is requested and justified, and approved by the Federal On-Scene Coordinator.

BP has located a large (2x0.5 miles) dispersible oil slick approximately 90 miles Southeast of Houma, Louisiana with suitable weather for dispersant operations, i.e. visibility > 4 sm, ceiling > 1500 ft and winds less than 35 knots. BP anticipates that, due to the location and size of the oil slick the use of mechanical recovery and ISB will provide insufficient means due to the travel distance to the site and the operational time needed to remove this spill volume, on May 28, 2010. Accordingly, in accordance with the Directive, BP respectfully requests an exemption to apply EC9500A in volumes not to exceed 15,000 gallons for a period not to exceed 12 hours.

Sincerely,

(b) (6)

Douglas J. Suttles

Exemption approved subject to the above:

(b) (6)

Date: 5/28/2010

Mary E. Landry
Rear Admiral, USCG
Federal On-Scene Coordinator

RRT-6

FOSC DISPERSANT PRE-APPROVAL GUIDELINES and CHECKLIST

RRT-6 APPROVED JANUARY 10, 1995
VERSION 2.0 MAY 1, 1996
VERSION 3.0 January 19, 2000
VERSION 4.0, January 24, 2001

Purpose and Use of These Guidelines and Checklist

This document, and any internal procedures adopted for its implementation, is intended solely to assist the Federal On-Scene Coordinator in making the decision to approve or reject the use of dispersants. It does not constitute rulemaking by any agency and may not be relied upon to create a right or benefit, substantive or procedural, enforceable by law or in equity, by any person. Any agency or person may take action at variance with this guidance or its internal implementing procedures, however, if done so, the rule governing dispersant use at Section 300.910 of the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR Part 300) shall be in full force and effect. Mention of trade names, commercial products, or commercial companies does not constitute endorsement or recommendation for their use by any agency of the United States Government.

Regional Response Team

Regional VI Oil and Hazardous Substances Pollution Contingency Plan

July 17, 1996

FROM: Federal Region VI Regional Response Team

TO: Federal Region VI On-Scene Coordinators (OSC)

RRT

Environmental Protection Agency
United States Coast Guard
Department of Commerce
Department of Interior
Department of Agriculture
Department of Defense
Department of State
Department of Justice
Department of Transportation
Department of Health and Human Services
Federal Emergency Management Agency
Department of Energy
General Services Administration
Department of Labor
Nuclear Regulatory Commission
States of Arkansas Louisiana New Mexico Oklahoma Texas

The Federal Region VI Regional Response Team (RRT), in accordance with the "National Oil and Hazardous Substances Pollution Contingency Plan" [40 CFR Part 300, Section 300.910], grants preauthorization to the OSC for dispersant use as defined by the "RRT VI OSC Preapproved Dispersant Use Manual", Version 2.0, in responding to any oil pollution located in offshore waters of Texas and Louisiana which are no less than 10 meters in depth and at least three nautical miles from the nearest shoreline.

This preauthorization is based on RRT VI's initial approval of January 10, 1995 and Version 2.0, dated May 1, 1996, which authorizes the OSCs the use of dispersants on oil spills within the following area:

From the ten meter isobath or three nautical miles, whichever is farthest from shore, to 200 nautical miles offshore (Exclusive Economic Zone boundary), beginning from the Texas - Mexico border and extending through the States of Texas and Louisiana to the boundary between Federal Regions IV and VI. All previously identified exclusionary zones have been removed.

The provisions of the "OSC Preapproval Dispersant Use Manual" must be fully complied with in order to meet the requirements of this preapproval.

A copy of this letter should be retained in the front of this manual.

(b) (6)

J. W. Calhoun
Captain, USCG
Region VI Co-Chair

Report Oil and Chemical Spills Toll Free (800) 424-8802

RRT VI APPROVAL SIGNATURES
FOSC DISPERSANT PRE-APPROVAL GUIDELINES AND CHECKLIST VERSION 4.0
January 24, 2001

(b) (6)

Charles A. Gazda
Chief, Response & Prevention Branch
U.S. Environmental Protection Agency
Region VI RRT Co-Chair

(b) (6)

Gordon Marsh, Captain
Commander, 8th Coast Guard District (m)
U.S. Coast Guard
Region VI RRT Co-Chair

(b) (6)

Glenn B. Sekavec
Regional Environmental Officer
U.S. Department of the Interior

(b) (6)

Jim Morris, CDR
Primary RRT Member
U.S. Department of Commerce - NOAA

(b) (6)

Roland Guidry
Louisiana Oil Spill Coordinator
Louisiana Oil Spill Coordinator's Office
Office of the Governor

(b) (6)

Greg Pollock
Deputy Commissioner, Oil Spill
Texas General Land Office

CONTENTS

PREFACE

This dispersant pre-approval is designed to provide for the timely use of dispersants along with mechanical techniques and *in-situ* burning for offshore oil spill response. No single response method is 100% effective, thereby establishing a need to consider the use of all available methods from the start of the spill response. Initially, the assumption needs to be made that all three methods (mechanical, *in-situ* burn, and dispersants) may be used and then adjustments are made to that assumption as information concerning the spill is received by the Federal On-Scene Coordinator (FOSC).

The objective of the Regional Response Team VI (RRT 6) FOSC Dispersant Pre-approval Guidelines and Checklist is to provide for meaningful, environmentally safe, and effective dispersant operation. The programmed checklist approach allows the FOSC to quickly arrive at a logical "GO/NO GO" decision. This gives the dispersant operation the opportunity to begin in a timely manner that is consistent with attempting to maximize the effectiveness of dispersant use as a countermeasure to reduce the impact of oil spills.

In this document the RRT 6 Dispersant Pre-approval Overview, the FOSC Dispersant Use Checklist and the FOSC Dispersant Use Flowchart define the dispersant pre-approval requirements. If the dispersant pre-approval requirements are not met, the request for use of dispersant must follow the approval process as specified in the RRT 6 Regional Contingency Plan Subpart H Authorization.

RRT 6 DISPERSANT PRE-APPROVAL OVERVIEW

In accordance with the National Contingency Plan, Regional Response Team VI (RRT 6) dispersant pre-approval authority is given only to the Federal On-Scene Coordinator (FOSC) and with the following guidelines:

- The FOSC must utilize the decision-making process as defined in this guidance to determine the applicability of dispersants as a response option for a specific spill response.

- The RRT will be notified by the FOSC of an approval to initiate dispersant operations as soon as practicable after the approval has been given to the Responsible Party (RP). Provided the dispersant application is successful and operational results are positive, no RRT approval will be required for additional sorties and passes. The RRT must be kept informed on the status of the dispersant application throughout the operation. Post-application information/results will be provided to the RRT within 24 hours of the dispersant application. Formal convening of the RRT, however, is not necessary. A final debrief will be given to the RRT by the FOSC/SSC and must include an "After-Action-Report" to the RRT.

- The pre-approved area includes offshore waters "from the ten-meter isobath or three nautical miles", whichever is farthest from the shore, to 200 nautical miles offshore (Exclusive Economic Zone boundary), beginning from the Texas-Mexico border and extending through the states of Texas and Louisiana to the boundary between federal Regions IV and VI.

- The only requirement for dispersant product selection is that the dispersant must be included on the NCP Product Schedule and considered appropriate by the FOSC for existing environmental and physical conditions.

- Dispersant spraying operations are conducted during daylight hours only. To achieve the intended results of this pre-approval, it is essential that every reasonable effort be made to make the first dispersant drop as soon as possible after the oil has been released into the marine environment.

- An appropriate contractual relationship with the dispersant application contractor must be established as part of the pre-spill planning process. Such contractual relationship can be with the RP, State or Federal Agency, or Spill Management Team.

- Contracted dispersant operations shall have the organization and capability to provide the first application of dispersant over the designated response zone as rapidly as possible.

- Pre-approval is not restricted to aerial application only. Other application techniques (e.g., boat) may be considered. In general, dispersant boat spray systems should be considered when a relatively small areal coverage of oil is involved. This is primarily due to the smaller swath widths and slower speeds of the surface vessels as compared to large aircraft. However, this could be especially useful if there is an unusually thick layer of oil to be dispersed, or when the geometry of the situation makes aerial application unfeasible.

- The general criteria for evaluating the approval for use of any dispersant system should be the ability of the party or parties that are requesting approval to demonstrate to the satisfaction of the FOSC, in addition to any other requirements of the RRT6 Dispersant Use Pre-approval Guideline and Checklist, the following:
  1) That the application system has been a) specifically designed for its intended purpose, or b) if not specifically designed for dispersant use, has been used previously and was deemed to be effective and appropriate, and will be used again in a similar manner, or c) by some other specific means, documentation or experience reasonably deemed to be effective and appropriate under the circumstances.
  2) That the design and operation of the application system can reasonably be expected to apply the chemical dispersant in a manner consistent with the dispersant manufacturers recommendation, especially with regard to dosage rates, and concentrations.
  3) That the operation will be supervised or coordinated by personnel that have experience, knowledge, specific training, and/or recognized competence with chemical dispersants and the type of system to be used.

- In case of Aerial Application of dispersants:
  1) The FOSC must ensure that the RP's dispersant operation provides for a dispersant controller who is over the spray zone(s) in separate aircraft from the dispersant aircraft. The controller must be qualified and be able to direct the dispersant aircraft in carrying out the offshore dispersant operation inclusive of avoiding the spraying of birds (by 1000 ft. horizontal distance), marine mammals and turtles that may be in the area.
  2) Aircraft spray systems must be capable of producing dispersant droplet sizes that provide for optimal dispersant effectiveness (generally 250-500 μm, but follow manufacturer and ASTM guidance).
  3) Additional guidance for aerial spray systems is provided in the Section entitled "AERIAL SPRAY GUIDELINES"

- In case of Boat Application of dispersants:
  1) If the system involves spray arms or booms that extend out over the edge of the boat and have fan type nozzles that spray a fixed pattern of dispersant, the following ASTM standards apply:
     a) **ASTM F 1413-92** "Standard Guide for Oil Spill Dispersant Application Equipment: Boom and Nozzle Systems
     b) **ASTM F 1460-93** Standard Practice for Calibrating Oil Spill Dispersant Application Equipment Boom and Nozzle Systems
     c) **ASTM F 1737-96** Standard Guide for Use of Oil Spill Dispersant Application Equipment During Spill Response: Boom and Nozzle Systems.
  2) If the system involves the use of a fire monitor and or fire nozzle to apply the dispersants, a straight and narrow "firestream" flow of dispersant directly into the oil is to be avoided. At this time there are no applicable ASTM standards for these types of systems.
  3) Fire monitor systems must meet the general criteria for approval specified above.

4) Additional guidance for boat spray systems is provided in the Section entitled "BOAT SPRAY GUIDELINES"

- The FOSC must activate the Special Monitoring of Applied Response Technologies (SMART) Program monitoring team. Every attempt should be made to implement the on-water monitoring component of the SMART monitoring protocols in every dispersant application. At a minimum, Tier 1 (visual) monitoring must occur during any dispersant operations approved in accordance with the Dispersant Pre-approval Guidelines and Checklist. The SMART controller/observer should be flying over the response zone to visually assess effectiveness of the dispersant applications, and to look out for marine animals. When possible DOI/DOC will provide a specialist in aerial surveying of marine mammals/turtles and pelagic/migratory birds who will accompany the SMART controller/observer (see Appendix A for contact information.)

The various forms, flowchart and graph used in this Dispersant Pre-approval Guidelines and Checklist are intended for use by the FOSC as working documents. Completed forms are to be sent to RRT 6 representatives from USCG District 8, EPA, DOI, DOC, and Louisiana and/or Texas both during and after (i.e., with the After-Action-Report) the pre-approved dispersant operation.

DISPERSANT OPERATIONS DECISION PROCESS

The dispersant operations decision-making process consists of the following guides:

1 Dispersant Pre-Approval Initial Call Checklist (page 5)

2 FOSC Dispersant Use Checklist (pages 6-9) - The following are used to complete this checklist:

2-1 FOSC Dispersant Use Flowchart (page 10)
2-2 FOSC Dispersant Use Oil Table - General Dispersability Relative to API Gravity and Pour Point (page 11)

In this dispersant pre-approval process there is no requirement for the Responsible Party (RP) to complete any forms. Instead, the information required from the RP is recorded by the FOSC's representative during the initial contact with the RP. For post-response reporting, the FOSC may require more detailed information from the RP at a later date. The FOSC needs to instruct operations personnel to record the appropriate information during initial contact for reported spills in order to ensure a timely decision by the FOSC when it is required.

Using the Decision Tools:

1 **Dispersant Pre-Approval Initial Call Checklist -** This checklist is for collecting the information necessary for the FOSC to complete the pre-approved dispersant use decision-making process. The checklist should be completed by MSO operations personnel when they make the first telephone contact with the Responsible Party's official representative. The areas that are boxed contain information that is necessary to complete the "FOSC Dispersant Use Checklist".

2 **FOSC Dispersant Use Checklist -** This checklist is designed to cover the details of the decision-making process. The initial list portion of the checklist should be provided to the operations staff to be completed and passed to the FOSC, or the FOSC's designated representative, immediately if the RP expresses a desire to use dispersants in the response. When the checklist is completed, the decision as to whether or not to disperse will be clearly defined. The following chart and table are used to complete this checklist. Make extra copies of each sheet so they can be written on during a response, and then sent to the RRT:

- **FOSC Dispersant Use Flowchart -** The flowchart is used as a general guide to aid in keeping track of the progress on the FOSC Dispersant Use Checklist. As each appropriate box related to the checklist is completed, check that box on the flowchart. The numbers and letters in brackets, [ ], on the checklist are keyed with the number or letter located on top of each box in the flowchart.

- **FOSC Dispersant Use Oil Table - General Dispersability Relative to API Gravity and Pour Point** - This table provides a general assessment of oil dispersability only. Given the wide range of dispersants, oil, and weather conditions, the FOSC should use what information is available as well as feedback from the monitoring team.

The checklists and the flowchart and table are designed to be written on, and at the end of the process can be sent to the RRT.

Dispersant Pre-Approval Initial Call Checklist

Boxes denote essential Information

CALLER

Time of Initial Call: Date: ____ / ____ / ____ Time: ____ CT
(Month / Day / Year) (24 hour clock)

Name of Caller: ____

Telephone #: (__ __ __) __ __ __ - __ __ __ __

Name of Alternate Contact: ____

Telephone #: (__ __ __) __ __ __ - __ __ __ __

Company Name: ____

Address:

Street: ____

City: ____

State: ____ *Zip Code:* ____

SPILL

Initial Time of Spill: Date: ____ / ____ / ____ Time: ____ CT
(Month / Day / Year) (24 hour clock)

Location of Spill: LAT: ____ N LON: ____ W

Block Name: ____ Block Number: ____

Type of Release: [Instantaneous ( ) or Continuous Flow ( )]

Oil: Name: ____

API: ____ Pour Point: ____ (°C or °F)
Circle One

Amount Spilled: ____ [GAL or BBLS (42 GAL/BBL)]
Circle One

Flow Rate if Continuous Flow (Estimate): ____

ON-SCENE WEATHER (Note: If not available contact SSC for Weather)

Wind Direction From (Degrees): ____ Wind Speed: ____ Knots

Surface Current (Direction toward, Degrees): ____

(Speed): ____ Knots

Visibility: ____ Nautical Miles

Ceiling: ____ Feet

Sea State (Wave height): ____ Feet

DISPERSANT SPRAY OPERATION

Dispersant Spray Contractor

Name: ____

Address:

Street: ____

City: ____

State: ____ *Zip Code:* ____

Telephone: (__ __ __) __ __ __ - __ __ __ __

Dispersant: Name: ____

Quantity Available: ____

Platform: Aircraft Type: ____

Multi-Engine ( ) or Single-Engine ( )

Boat Type: ____

Other: ____

Dispersant Load Capability (Gal): ____

Time to First Drop on the oil (Hours): ____

FOSC DISPERSANT USE CHECKLIST

(Items on the far left of this checklist are keyed to letter and numbers on the top of the boxes in the FOSC Dispersant Use Flowchart and apply to offshore pre-approval only. INFORMATION AVAILAIBLE IN THE DISPERSANT PRE-APPROVAL INITIAL CALL CHECKLIST, AND THE TABLE ON THE OTHER SHEET ARE NECESSARY TO COMPLETE THIS CHECKLIST.)

OIL SPILLED

A. FOSC completes and evaluates DISPERSANT PRE-APPROVAL INITIAL CALL CHECKLIST.
B. Ask spiller if dispersant spray operation is on alert pending completion of pre-approval use evaluation by the FOSC.

[1] DEPLOY SMART

A. Immediately Deploy USCG Strike Team SMART Team to the spill site if dispersant use is likely. Every attempt should be made to implement the on-water monitoring component of the SMART monitoring protocols in every dispersant application. At a minimum, Tier 1 (visual) monitoring must occur during any dispersant operations approved in accordance with this Dispersant Pre-approval Guidelines and Checklist
B. Immediately notify DOI/DOC survey specialist contact identified in Appendix A if dispersant use is likely.
C. Deploy mechanical and/or in-situ burn operations, weather allowing.

[2] PRE-APPROVED DISPERSANT OPERATIONS ACTIVATION EVALUATION

1. Do you expect the use of dispersants in this case to provide an environmental benefit? The NOAA SSC should be contacted for trajectory and environmental fate analysis.

YES	( )	GO TO SECTION 2 BELOW
NO	( )	GO TO SECTION 11 BELOW

2. Plot the position of the spill on the appropriate nautical chart, draw a circle about the spill source with a 10 nautical mile radius as a worst-case scenario for surface movement. Hash mark any area within the circle that is in waters less than 10 meters deep or 3 nautical miles from shore. What is left is considered the dispersant operational area.
Is the dispersant operational area to be in offshore water that is no less than 10 meters deep and at least 3 nautical miles from the nearest shoreline?

YES	( )	GO TO SECTION 3 BELOW
NO	( )	GO TO SECTION 9 BELOW

3. Was a contractual relationship with a dispersant spray contractor established prior to the spill?

YES	( )	GO TO SECTION 4 BELOW
NO	( )	GO TO SECTION 9 BELOW

4. Dispersant Platform
Considering the amount of oil spilled, the location of the operational area, volume of available dispersants to be used, and the timeframe in which the required equipment can be on-scene, what is the most effective application platform? More than one platform type may be considered.

If Aerial	GO TO SECTION 5 BELOW
If Boat	GO TO SECTION 6 BELOW
If Other	GO TO SECTION 7 BELOW

5. Aerial Application Operational Conditions

[A] If on-scene weather was available from the spiller on initial telephone contact use that information to complete this section and assume for planning purposes that it will remain the same during the timeframe in which this decision is operating. At the earliest opportunity, contact the SSC for detailed weather, but do not delay this decision process for the SSC weather input (Note: All dispersant operations are carried out during daylight hours only).

Winds less than or equal to 25 knots, and
Visibility greater than or equal to 3 nautical miles, and
Ceiling greater than or equal to 1,000 feet?

YES	( )	GO TO SECTION 8 BELOW
NO	( )	GO TO [B] IN THIS SECTION BELOW

[B] Notify the spiller's representative that the dispersant use decision has been delayed until the weather improves, and that the Dispersant Spray Operation is to be placed on a standby status.

GO TO SECTION [C] IN THIS SECTION BELOW

[C] Consult with RRT 6 members. Contact the USCG Co-chair at USCG District 8, EPA, DOI, DOC, and Louisiana and/or Texas RRT representatives to notify them that dispersants are being considered, but delayed due to weather. When the weather is beginning to improve:

BEGIN AGAIN IN SECTION 2 ABOVE

6. Boat Application Operational Conditions

[A] If on-scene weather was available from the spiller on initial telephone contact use that information to complete this section and assume for planning purposes that it will remain the same during the timeframe in which this decision is operating. At the earliest opportunity, contact the SSC for detailed weather, but do not delay this decision process for the SSC weather input (Note: All dispersant operations are carried out during daylight hours only).

Wave height such that the boats to be used for the dispersant application can conduct an effective and safe spray operation?

YES	( )	GO TO SECTION 8 BELOW
NO	( )	GO TO [B] IN THIS SECTION BELOW

[B] Notify the spiller's representative that the dispersant use decision has been delayed until the sea state improves, and that the Dispersant Spray Operation is to be placed on a standby status.

GO TO SECTION [C] IN THIS SECTION BELOW

[C] Consult with RRT 6 members. Contact the USCG Co-chair at USCG District 8, EPA, DOI, DOC, and Louisiana and/or Texas RRT representatives to notify them that dispersants are being considered, but delayed due to sea state. When the sea state is beginning to improve:

BEGIN AGAIN IN SECTION 2 ABOVE

7. Immediately consult with the Scientific Support Coordinator (SSC) to evaluate potential alternatives to the Aircraft and Boat Platforms.
   [A] After a briefing on the spill response situation from the FOSC, does the SSC recommend aerial application of Dispersants?

YES	( )	GO TO SECTION 5 ABOVE
NO	( )	GO TO [B] IN THIS SECTION BELOW

   [B] After a briefing on the spill response situation from the FOSC, does the SSC recommend boat application of Dispersants?

YES	( )	GO TO SECTION 6 ABOVE
NO	( )	GO TO [C] IN THIS SECTION BELOW

   [C] After a briefing on the spill response situation from the FOSC, does the SSC recommend an alternative platform?

YES	( )	DEVELOP A PLAN AND GO TO SECTION 8 BELOW
NO	( )	GO TO SECTION 11 BELOW

8. Is the dispersant to be used listed on the NCP Product Schedule and considered appropriate for existing environmental and physical conditions?

YES	( )	GO TO SECTION 10
NO	( )	GO TO SECTION 9

9. **GO NO FURTHER** IN THIS FOSC DISPERSANT USE CHECKLIST. The request for dispersant use does not qualify under the guidelines for pre-approval use of dispersants in Region 6. Contact your SSC and begin the dispersant use approval process as specified in the RRT 6 Regional Contingency Plan Subpart H Authorization (Authorization for Use of Dispersants in Non-Life Threatening Situations)

10. Dispersability
    Refer to the Dispersant Pre-Approval Initial Call Checklist
    Does the available technical information suggest that dispersion is likely given the spilled oil, anticipated oil weathering, and selected dispersant? Use the FOSC Dispersant Use Oil Table and any technical sources such as the SSC to make this assessment.

YES	( )	GO TO 12 BELOW
NO	( )	GO TO 11 BELOW

11. **GO NO FURTHER** IN THIS FOSC DISPERSANT USE CHECKLIST. In this case dispersant use is either inappropriate for this response or will probably not be considered to be effective relative to the effort required.
    Concentrate your efforts on Mechanical and/or in-situ burn operations
    Note: You may want to consider dispersant pre-approval use at a later time if the field situation changes (i.e., becomes a continuous spill or has a new instantaneous release.) In such an event, make sure the Initial Call Checklist has been updated and return to the start of this checklist (OIL SPILLED ON PAGE 6.)

12. INITIATE APPLICATION OF DISPERSANTS WITHIN THESE RRT GUIDELINES.
    - Water depth ≥ 10 meters and no less than 3 nautical miles from nearest shoreline.
    - The SMART controller/observer should be over the spray site before the start of the operation. If possible, a DOI/DOC-approved marine mammal/turtle and pelagic/migratory birds survey specialist will accompany the SMART observer, but the operation will not be delayed for that individual (see Appendix A for contact information).
      Note: The purpose of SMART monitoring is to confirm best professional advice related to the potential success of dispersant use. Given the uncertainty involved relating to physical and environmental condition, oil weathering, and dispersant and oil interaction, we must rely on positive feedback from the monitors to continue dispersant application.
    - Personal protective equipment for personnel on-site will conform to the appropriate dispersant's MSDS
    - If dispersant platform is an aircraft, spray aircraft will maintain a minimum 1000-foot horizontal separation from rafting flocks of birds. Caution will be taken to avoid spraying over marine mammals and marine turtles.
    - If dispersant platform is a boat:
      - If the system involves spray arms or booms that extend out over the edge of the boat and have fan type nozzles that spray a fixed pattern of dispersant, the following ASTM standards apply:
        - **ASTM F 1413-92** Standard Guide for Oil Spill Dispersant Application Equipment: Boom and Nozzle Systems.
        - **ASTM F 1460-93** Standard Practice for Calibrating Oil Spill Dispersant Application Equipment Boom and Nozzle Systems.
        - **ASTM F 1737-96** Standard Guide for Use of Oil Spill Dispersant Application Equipment During Spill Response: Boom and Nozzle Systems.
      - If the system involves the use of a fire monitor and or fire nozzle to apply the dispersants, a straight and narrow "firestream" flow of dispersant directly into the oil is to be avoided. At this time (May 2000) there are no applicable ASTM standards for these types of systems.
    - If an alternative dispersant platform is used, the Operation Plan should include dispersant application guidelines.

    - The FOSC is to notify the RRT as soon as practicable after the approval is given to the RP.

    GO TO SECTION 13 BELOW

13. The RRT (EPA, DOI, DOC, and the State of Louisiana and/or the State of Texas) must be kept informed on the status of the dispersant application throughout the operation. Provided the dispersant application is successful and operational results are positive, no RRT approval will be required for additional sorties and passes.

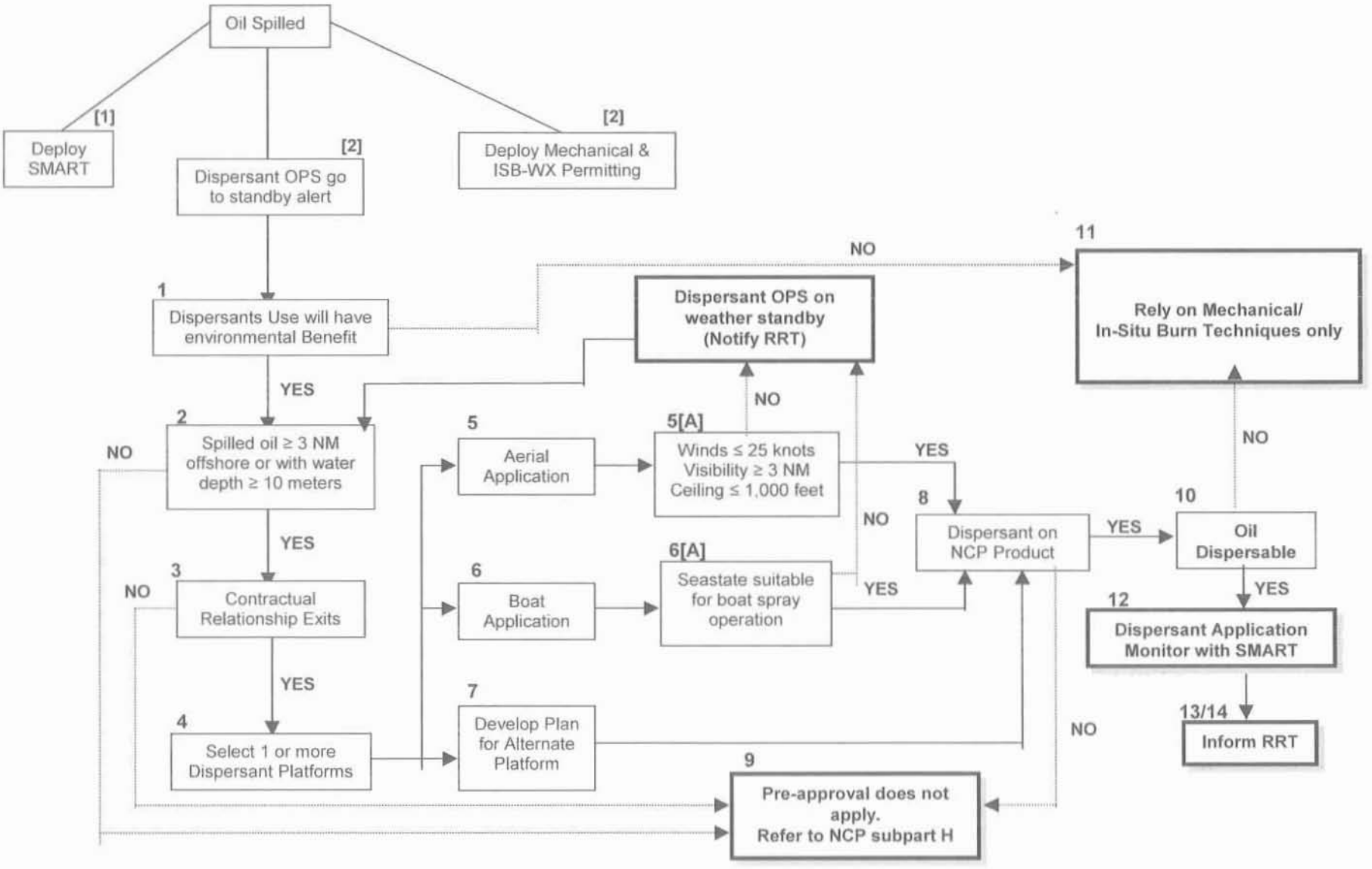
    GO TO SECTION 14 BELOW

14. At the completion of the dispersant operation, send the following to the RRT representatives:
    1. This completed Checklist
    2. The Dispersant Pre-Approval Initial Call Checklist
    3. A one page summary of the operation to date
    4. Other information as necessary

    Provide the RRT post-application information/results within 24 hours of the dispersant application. Formal convening of the RRT, however, is not necessary

    Follow-up operation by insuring that flight logs and SMART team logs are secured should RRT members request additional documentation.

FOSC DISPERSANT USE FLOWCHART



FOSC DISPERSANT USE OIL TABLE

GENERAL DISPERSABILITY RELATIVE TO API GRAVITY AND POUR POINT

Probably difficult or impossible to disperse	Medium weight material. Fairly persistent. Probably difficult to disperse if water temperature is below pour point of material.	Lightweight material. Relatively non-persistent. Probably difficult to disperse if water temperature is below pour point of material.	No need to disperse. Very light weight material. Oil will dissipate rapidly
	Medium weight material. Fairly persistent. Easily dispersed if treated promptly.	Lightweight material. Relatively non-persistent. Easily dispersed.	

API	17	34.5	45
Gravity	.953	.852	.802

Derived from information published by the
International Tanker Owners Pollution Federation,
Ltd., London (API 1986)

This table provides general guidance only. Note that specific dispersant formulations are designed to treat heavier, more viscous oils. Consult manufacturer recommendations prior to application and recommendations from monitoring team for continued use.

After-Action-Report Requirements

- **Incident Overview**
- **Oil Slick Trajectory and Behavior**
- **Justification for Dispersant Use**
- **Chronology (Date and Time) of Dispersant-Related Events**
- **Overview of Dispersant Operations**
- **Completed Dispersant Pre-Approval Initial Call Checklist and FOSC Dispersant Use Checklist**

Suggested outline for report requirements:

Incident Overview

- Description of initial report (date, time, source, etc.)
- Spill source
- Spill location
- Estimated quantity & potential quantity
- Environmental conditions

Oil Slick Trajectory and Behavior

- Expected movement of slick
- Expected weathering and behavior of product
- Observations of same

Justification for Dispersant Use

- Potential impact areas and their respective sensitivities to impact
- Within pre-approval zone for RRT VI
- Potential for use of other recovery methods (e.g., mechanical recovery, in-situ burning)
- Weather and seastate

Chronology (Date and Time) of Dispersant-Related Events

- FOSC notification of spill
- Reconnaissance aircraft requested
- Reconnaissance aircraft "wheels up"
- Gulf Strike Team alerted for SMART
- SMART en-route
- Reconnaissance aircraft on-scene and reports
- RP requested use of dispersants
- Source and field sample requested by USCG
- Dispersant use approved under pre-approval guidelines
- Dispersant contractor notified
- Dispersant stock requested
- Dispersant stock en-route
- Dispersant stocks arrive at airport/dock
- Spotter aircraft "wheels up"
- Dispersant aircraft/boat "wheels up"/left dock
- SMART vessel launch
- Spotter aircraft on-scene
- Dispersant aircraft/boat on-scene
- SMART vessel on-scene

- Source and "in-water" sample collected
- SMART sampling begins
- First application
- Spotter aircraft opinion of efficacy
- SMART sampling results (go/no go)
- SMART sampling begins, again
- Second application
- Spotter aircraft opinion of efficacy
- SMART sampling results (go/no go)
- Additional applications, Spotter aircraft opinions, and SMART sampling (as required)
- Termination of dispersant operation

Overview of Dispersant Operations

- Amounts and times of dispersants applied
- Any extenuating circumstances affecting the deployment of any element (spotters, dispersant, SMART, etc.)
- Estimates and observations of efficacy
- Any discrepancies between estimates
- Any discrepancies between observations
- Any sightings of pelagic/migratory birds, sea turtles, or marine mammals

Completed Dispersant Pre-Approval Initial Call Checklist and FOSC Dispersant Use Checklist

Request for Additional Information

- Parties may request additional information (e.g., pilot's logs, SMART logs, and SMART data) by contacting the FOSC for the particular spill/release response activity
- Information requested will be provided within 30 to 60 days following the request.

Boat Spray Guidelines

The implementation of the RRT pre-approval and actual use of chemical dispersants applied from aircraft has been demonstrated successfully on several occasions. Although the thought process related to the benefits and trade-offs for the use of chemical dispersants remain the same, there are some differences in the operational, logistical, and dosage parameters when considering the application of dispersants from a vessel mounted system. Chemical dispersants applied from a boat has the potential to be a very effective technique under the appropriate circumstances. The intent of this guideline is to very briefly address issues that may be of concern with respect to the approval of dispersant application from a surface vessel.

Generally, there are two different types of systems envisioned for applying chemical dispersants to an oil spill from a boat. The first type is a system involving spray arms or booms that extend out over the edge of the boat and have fan type nozzles that spray a fixed pattern of dispersant. The following ASTM standards apply to these types of systems: **ASTM F 1413-92** "Standard Guide for Oil Spill Dispersant Application Equipment: Boom and Nozzle Systems; **ASTM F 1460-93** Standard Practice for Calibrating Oil Spill Dispersant Application Equipment Boom and Nozzle Systems; **ASTM F 1737-96** Standard Guide for Use of Oil Spill Dispersant Application Equipment During Spill Response: Boom and Nozzle Systems. The second, and more recent type of system, involves the use of a fire monitor and or fire nozzle to apply the dispersants. At this time (May 2000) there are no applicable ASTM standards for these types of systems.

The perceived advantage of the fire monitor type system is the simplicity of operation and the potential for obtaining greater swath width than spray boom systems, and thereby increasing potential "areal" coverage rates. A straight and narrow "firestream" flow of dispersant directly into the oil is to be avoided. For either of these types of systems, depending on pump rates, swath widths, vessel speed and the amount of oil to be dispersed, the dispersant may either be sprayed neat (i.e. undiluted) or diluted with seawater. For the purposes of this document, both of these types of systems will be collectively referred to as "boat spray systems."

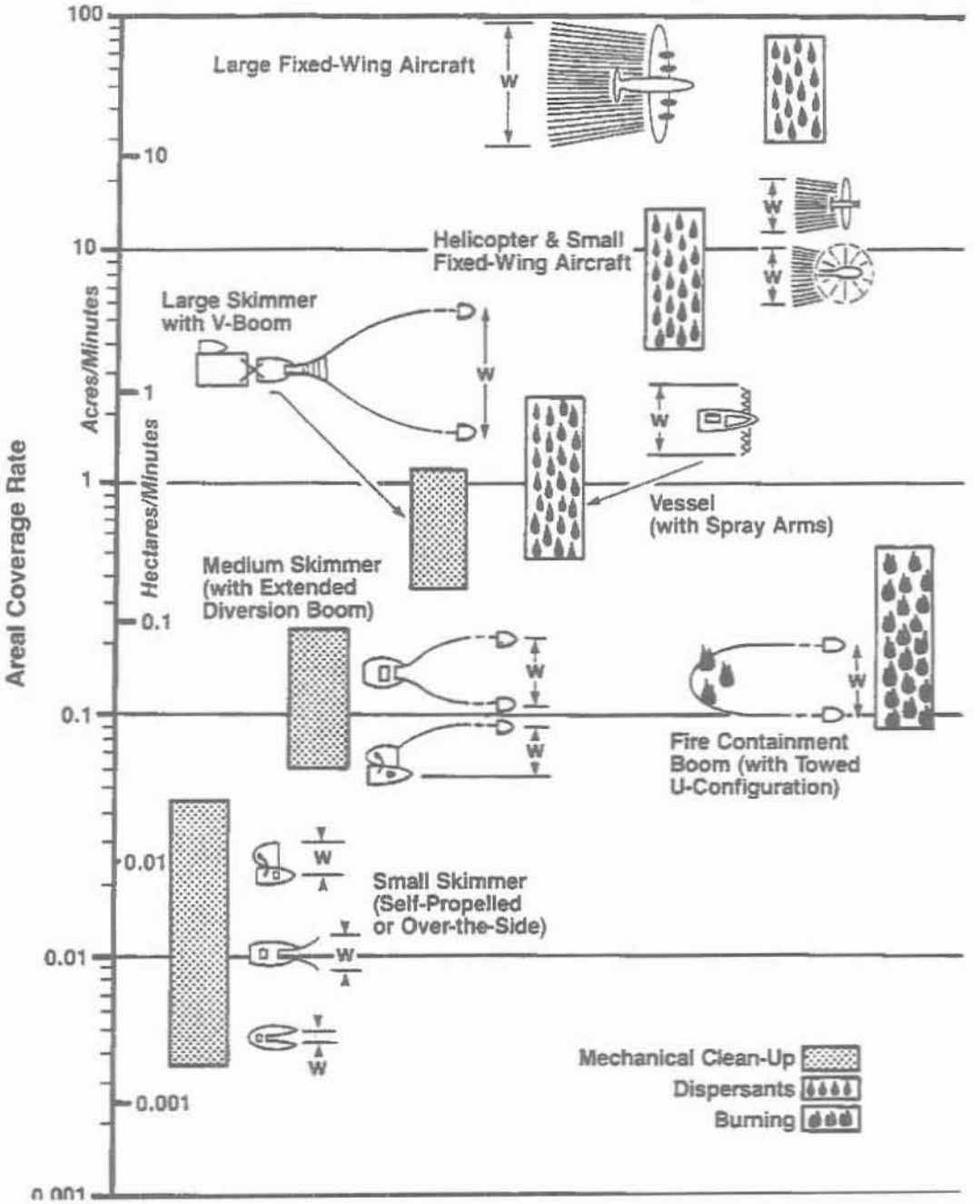
With respect to the application of chemical dispersants, areal coverage rate is the rate at which area is being covered by the dispersant. That is, the swath width times the speed of the delivery platform. In general, dispersant boat spray systems should be considered when a relatively small areal coverage of oil is involved. This is primarily due to the smaller swath widths and slower speeds of the surface vessels as compared to large aircraft. However, this could be especially useful if there was an unusually thick layer of oil that needed to be dispersed, or when the geometry of the situation makes aerial application unfeasible. The chart on page 16 compares the areal coverage rates, in acres per minute, of various spill response systems including small and large aircraft dispersant spray systems and conventional boat spray systems. Note that the acres per minute axis is scaled logarithmically. The chart was developed by Al Allen of Spilltec, and is included in this document with his permission.

The exact operational parameters will depend on whether a spray boom or fire monitor type system is selected and the specific parameters of the particular system. Measurable quantities such as times, pressures, distances and volumes should be documented in the field during the operation whenever possible. The following are **some of the issues** that will need to be taken into consideration and documented when a boat spray system is used.

1. How will the actual swath width for a moving operation be determined?
2. Will the dispersant be sprayed neat or diluted? If diluted, what percent?
3. How will the oil be spotted, and how will the boat spray system target the oil to be dispersed?

4. How far offshore is the spill, and is this distance practical for the boat spray system(s) intended for use? The practicality of considering boat spray systems to apply dispersants to spills exceeding 20-40 miles offshore should be carefully considered.
5. How will the amount of dispersant actually applied and the area actually covered be documented? Is the area to be covered consistent with the practical capability of the boat spray system(s) intended to be used?
6. What are the operational constraints with respect to wind speed and sea state.
7. What safety precautions will be taken onboard the spray vessel to prevent crewmembers from coming in contact with the dispersant being sprayed?

Areal Coverage Rates for Selected Spill Response



Source: Al Allen, Spilltec

Aerial Spray Guidelines

The ASTM Guides should be referenced for appropriate dispersant application types and application requirements. There are no additional guidelines for aerial application of dispersants.

APPENDICES

APPENDIX A- DOI/DOC CONTACT NUMBERS

The DOI contact number is:	Regional Environmental Office after hours, Steve Spencer	(505) 766-3565; (b) (6)
The DOC contact is:	Jim Morris (Please note that this number will allow the caller to have Jim Morris paged)	(206) 526-6317

APPENDIX B- RELEVANT WEB SITES

http://resolute.gerg.tamu.edu/tglo/	Measured currents and winds
http://resolute.gerg.tamu.edu/Tglo/arl.html	Forecasted wind maps
http://hyper20.twdb.state.tx.us/tides.html	Tides (measured & predicted for Texas coast)
http://www.glo.state.tx.us/oilspill/	Access to the cd-rom toolkit (sensitivity maps) & the current version of RRT 6 pre-approval dispersant use manual (to be replaced with the newer one when available)
http://response.restoration.noaa.gov	SMART Protocol
http://www.epa.gov/oilspill	NCP Product Schedule
http://www.uscg.mil/d8/mso/nola/library/plans.htm	ACPs
http://lagic.lsu.edu	Louisiana GIS environmental, socio-economic and oil spill response database
http://opal.ga.lsu.edu	Wave-Current Information System
http://www.osradp.lsu.edu	Louisiana R&D Program

APPENDIX C- DISPERSANT USE POLICY OF THE FLOWER GARDENS NATIONAL MARINE SANCTUARY

On the condition that dispersant application is deemed appropriate and conducive by the On-Scene Coordinator (FOSC), and subject to the conditions below, the Flower Garden Banks National Marine Sanctuary approves of such use. Although the Sanctuary and vicinity would not be an oil dispersant exclusion area, if the decision is made to apply oil dispersants in that area, all efforts must be made to apply them in water as deep as possible and as far from the Sanctuary as possible, in order to promote dilution of dispersed oil and minimize the effects on shallow-water organisms. Conditions that should be considered in determining whether application of dispersants is appropriate include, but may not be limited to, weather, sea state, water temperature, oil characteristics, history of spill, and risk of spill contact for particular life forms.

In addition to whichever NOAA officials are routinely consulted in the event of an oil spill, the Sanctuary requests immediate notification of any decision to apply dispersants so that it may consider timely implementation of appropriate monitoring and assessment protocols. The Sanctuary may also be able to provide information to the RRT and FOSC that could affect the decision to apply dispersants. For example, in rare instances, such as during mass spawning periods for corals and other species, it may be advisable to avoid the addition of dispersants. The Sanctuary further requests that information relating to resource impacts or monitoring collected by the FOSC or other parties be made available to the Sanctuary.

APPENDIX D - BIOASSESSMENT OF THE POTENTIAL IMPACTS RESULTING FROM DISPERSANT USE IN OFFSHORE WATERS IN THE GULF OF MEXICO (DECEMBER 16, 1994)

INTRODUCTION

Region VI is considering the establishment of areas in the Gulf of Mexico for which dispersant use would be pre-approved, under specific conditions. These conditions include limiting the pre-approval to aerial application of dispersants, and the pre-approval area includes offshore waters beyond the 10-meter isobath or three miles from the shoreline, whichever is further offshore.

The intent of this paper is to briefly summarize the potential environmental impacts on living natural resources resulting from dispersant use in offshore waters of Texas and Louisiana under these conditions of use. The approach taken is to discuss the distribution and life history of key species for each major resource category of concern (e.g., lesser scaup are representative of diving ducks that are present in offshore waters). The resource categories and key species are as follows, listed in groups according to the risk of being directly affected by the use of dispersants in offshore water:

Resources at **Low Risk** of Being Directly Affected by Dispersant Use
(because of predominance of inshore or nearshore distribution)

- Colonial sessile shellfish: American oyster
- Solitary infaunal shellfish: Southern quahog clam
- Anadromous fish: Gulf sturgeon
- Dabbling duck: Mallard
- Wading bird: Whooping crane
- Shorebird: Piping plover
- Raptor: Bald eagle

Resources at **Medium Risk** of Being Directly Affected by Dispersant Use
(because of deep-water preference or low numbers likely to be offshore)

- Benthic-spawning fish: Red snapper
- Diving bird: Brown pelican
- Seabird: Herring gull
- Marine reptile: Kemp's Ridley; green; loggerhead; hawksbill; and leatherback sea turtles
- Marine mammal: Fin whale (baleen); sperm whale (toothed); and bottlenose dolphin

Resources at **High Risk** of Being Directly Affected by Dispersant Use
(because of water surface or upper water column preference in offshore waters)

- Free-swimming shellfish: Brown shrimp (buoyant eggs); white shrimp (sinking eggs); and blue crab
- Water column-spawning fish: Gulf menhaden
- Diving duck: Lesser scaup

DISTRIBUTION AND LIFE HISTORY OF KEY SPECIES

For each key species, the distribution and life history are briefly summarized below:

Resources at **Low Risk** of Being Directly Affected by Dispersant Use
(because of predominance of inshore or nearshore distribution)

American oyster (colonial sessile shellfish)
- important commercial and recreational species
- mainly found shoreward of the 10 m contour
- eggs/larvae are planktonic, present in nearshore waters during March-November
- juveniles/adults are attached to hard substrates, often forming reefs

Southern quahog clam (solitary infaunal shellfish)
- important commercial and recreational species
- mainly found in intertidal and subtidal areas of estuaries and bays
- eggs/larvae are planktonic, present in nearshore waters during March-December
- juveniles/adults found in sand or seagrass bottoms, mainly burrowed in the substrate

Gulf sturgeon (anadromous fish)
- protected (threatened) subspecies, formerly a commercial species (caviar)
- occurs in Louisiana, doubtful in Texas, generally in large rivers and Gulf waters (depths not known)
- eggs sinking and adhesive in rivers, larvae also in rivers
- juveniles stay in rivers for at least one year, reach maturity in 10-15 years
- older juveniles/adults annually migrate between Gulf of Mexico (fall and winter) and large rivers (spring and summer), spawn in rivers
- mainly bottom-oriented but may occur throughout the water column, even breaking the surface during aerial leaps

Mallard (dabbling duck)
- recreational/managed species, most hunted duck in North America
- primarily occurs inshore and in coastal fresh and brackish waters
- some are present nearly year-round in Louisiana, others winter along Texas and Louisiana coasts, breeds in spring in Louisiana, nesting in uplands and marshes near water
- floats and swims on the water surface, feeds on marsh and aquatic vegetation

Whooping crane (shorebird)
- protected (endangered) species
- occurs around tidal flats and marshes
- all individuals (110 total) winter along Texas coast (November-April)
- feeds on bottom invertebrates

Piping plover (shorebird)
- protected species
- primarily occurs around intertidal sand flats, beaches, and river mouths
- winters on Gulf Coast, Texas is most important wintering area
- may occur in large flocks of shorebirds during peak migration periods

Bald eagle (raptor)
- protected (threatened) species
- occurs in vicinity of nearshore coastal zone
- present year round, breeds in winter and spring
- feeds on fish mainly, also on waterfowl, shorebirds, and carrion, may be attracted to dying or injured prey

Resources at **Medium Risk** of Being Directly Affected by Dispersant Use
(because of deep-water preference or low numbers likely to be offshore)

Red snapper (benthic-spawning fish)
- commercial and recreational species, major fishing grounds between the 100- 200 m contours
- adults occur to the 200 m contour, possibly up to 1200 m, juvenile nursery areas occur from the shoreline to the 40 m contour
- eggs/larvae are planktonic in offshore waters from June-October
- juveniles are bottom-oriented in estuaries and nearshore waters, moving deeper with age
- adults occur offshore, are bottom/structure oriented displaying some site fidelity

Brown pelican (diving bird)
- protected species
- rarely ventures more than 20 miles offshore
- present year-round, colonial breeder in winter, nests on small coastal islands near salt/brackish water
- may form large flocks while resting on water surface or feeding, feeds by diving from the air for fish

Herring gull (seabird)
- common species
- generally found nearshore, common in harbors
- winters along Gulf coast, may be present in all seasons except summer
- scavenger, also feeds on intertidal invertebrates, may be attracted to concentrations of dead/dying fishes or invertebrates

Sea turtles (marine reptiles)
- protected species (includes Kemp's Ridley, green, loggerhead, hawksbill, and leatherback sea turtles)
- occur in nearshore and offshore waters, generally inside the 100 m contour
- present year-round, may sporadically nest on sand beaches in Louisiana and Texas
- juveniles may be more common within the 20 m contour, possibly associated with drifting rafts of marine algae at the water surface
- feed on variety of bottom organisms and marine plants, and/or jellyfish in the water column
- must surface regularly to breathe

Fin whale (baleen whale)
- protected species, occurring in offshore waters generally outside of the 200 m contour
- winters in Gulf of Mexico, including waters offshore of Texas and Louisiana, resident populations may exist but have not been verified
- feeds with baleen on crustaceans and fish at or near the water surface
- surfaces to breathe

Sperm whale (toothed whale)
- protected species
- inhabits deep waters at the edge of or beyond the continental shelf, generally outside the 200 m contour
- some evidence of a Gulf of Mexico population, little migration
- feeds on giant squid and deep-water fishes
- surfaces to breathe

Bottlenose dolphin (toothed whale)
- protected species (marine mammal conservation act)
- occurs to the 200 m contour, more common in nearshore waters

- present year-round, breeds year-round
- feeds on fish and surfaces to breathe

Resources at **High Risk** of Being Directly Affected by Dispersant Use
(because of water surface or upper water column preference in offshore waters)

Brown shrimp (free-swimming shellfish)
- commercial species, composes 60% of the Gulf of Mexico shrimp fishery, which is the most valuable commercial fishery in the continental U.S. (total $)
- major fishing grounds are within the 100 m contour east of the Mississippi River and between the 60-100 m contours west of the river
- a seasonal fishing ground during spring, summer, and fall occurs within the 20 m contour west of the Mississippi River
- eggs/larvae are planktonic, mainly occur in offshore waters during September-June, perhaps year-round
- post-larvae are planktonic, migrating toward estuaries where they become bottom-oriented; peak recruitment to estuaries occurs during February-April
- juveniles are bottom-oriented in estuaries, migrating offshore towards the 20m contour and beyond during May-August, becoming adults enroute
- during offshore migration juvenile/adults concentrate near the bottom during day and near the water surface at night

White shrimp (free-swimming shellfish)
- commercial species, compose 27% of the Gulf of Mexico shrimp fishery
- fishing grounds in Louisiana and Texas are within the 20 m contour during spring, summer, and fall, offshore life stages may occur as far as the 40 m contour
- eggs sink to the bottom, larvae are planktonic, mainly in offshore water during April-September
- post-larvae are planktonic, migrating toward estuaries, becoming bottom-oriented when recruited to estuaries during May-November
- juveniles occur mainly in low salinity marshes, migrate offshore during August-December, becoming adults as they reach deeper waters
- juveniles occur near the water surface during offshore migrations

Blue crab (free-swimming shellfish)
- commercial species, mainly fished in inshore waters (bay, estuaries, rivers)
- generally occur to the 100 m contour, adult concentration areas and juvenile nursery grounds mainly within the 30 m contour
- eggs attached to females, larvae are planktonic in open ocean waters, later stages move toward estuaries and shallow nearshore waters, year round
- juveniles are bottom-oriented in estuaries and shallow nearshore waters
- adults are bottom-oriented from estuaries to offshore waters

Gulf menhaden (water column-spawning fish)
- commercial species, largest commercial fishery in the U.S. (by weight)
- mainly found within the 120 m contour and throughout the water column
- eggs/larvae/post-larvae are planktonic in offshore waters from September to May
- juveniles in estuaries and shallow nearshore waters, schooling in the water column, juveniles migrate offshore during October-January becoming adults
- adults spawn in the water column offshore (to 120 m contour), may migrate back into estuaries during March-April following spawning

Lesser scaup (diving duck)
- recreational/managed species
- occurs on nearshore waters at least 10 miles offshore and 12 m depth

- winters in coastal Texas and Louisiana
- can aggregate in large rafts, floats and swims on water surface feeds by diving for bottom invertebrates

IMPACT ASSESSMENT

For those resources likely to be present in the proposed pre-approval zone, an assessment of the likely impacts resulting from the application of dispersants to an oil slick is made. Key to this assessment is evaluating the exposure pathway and dose to the resource. For resources present in the water column, the primary exposure pathway is via oil dispersed into the water column, and the dose can be calculated using the concept of the toxicity index reported in ppm-hours. For resources present on the water surface, the primary exposure pathway is via direct exposure to treated oil slicks. The appropriate assessment approach is to compare likely impacts from exposure to treated versus untreated slicks.

The primary ecological concerns with the use of dispersants are:

- Effects of dispersed oil on marine life in the upper water column; and
- Effects on water-surface organisms (direct contact with the dispersant and effects of expanded oil slicks).

Impacts to Marine Life in the Upper Water Column

A comparison of the relative toxicity of crude oil versus dispersant by the NRC (1989) showed that the acute lethal toxicity of most dispersants is low compared to the constituents and fractions of crude oils and refined products. It was considered unlikely that, at the recommended application rates, dispersants would contribute significantly to the lethal or sublethal toxicities of dispersed oils. Thus, toxicity test results for petroleum oils should be used to assess impacts to water-column organisms. Table 1 lists toxicity test results for select crude oils (South Louisiana, Nigerian, Arabian light, Prudhoe Bay, and Cook Inlet) for fish and shellfish species, with emphasis on those species present in the Gulf of Mexico and tests for which the actual exposure concentration in the water over the exposure period was measured rather than calculated based on the volume of oil added (referred to as nominal concentrations).

Exposures to dispersed oil in open water are characterized by rapidly changing concentrations as the dispersed oil mixes laterally and vertically in the water column. Mackay and Wells (1983) have modeled the concentrations of dispersed oil in the water column at selected depths, for an oil slick 0.15 mm thick (many spills of varying size tend to reach a similar average thickness of about 0.1 mm within the first several hours, so this amount of oil is slightly conservative), assuming that the dispersion was 65 percent effective (although the actual range of optimal effectiveness under operational conditions is 30-60 percent, so the model is again conservative).

TABLE 1 LC50 toxicities and toxicity indices of crude oils for marine organisms.

Organism	Life History Stage	Crude Oil Type[1]	LC50 (ppm)	Time (hrs)	Toxicity Index[2] (ppm-hr)	Ref[3]
Bivalves						
Am. Oyster	eggs	C. Gulf of Mexico (CD)	4.0	96	92	1
	eggs	W. Gulf of Mexico (CD)	11.2	96	288	1
Quahog clam	eggs	S. Louisiana (WSF)	5.7	48	96	2
	eggs	various crude oils (WSF)	0.23-12	48	4-202	2
	larvae	S. Louisiana (WSF)	6.0	48	101	2
	larvae	various crude oils (WSF)	0.25->25	48	4->420	3
Gulf of Mex. Bivalves	adults	Arabian light (CD)	>2,500	--	--	3
Decapods						
Brown shrimp	post-larvae	W. Gulf of Mexico (WAF)	59.9	96	291	1
	post-larvae	W. Gulf of Mexico (CD)	52.7	96	222	1
	post-larvae	S. Louisiana (OWD)	>1,000	24	>8,400	4
	post-larvae	S. Louisiana (WSF)	>20	24	>168	4
	post-larvae	S. Louisiana (WSF)	>19.8	96	>665	4
	juveniles	S. Louisiana	19.8	48	333	5
	adults	S. Louisiana	19.8	48	333	4
	adults	Arabian light (CD)	>18.8	96	>632	3
White shrimp	post-larvae	C. Gulf of Mexico (WAF)	30.2	96	10	1
	post-larvae	C. Gulf of Mexico (CD)	13.8	96	147	1
	post larvae	W. Gulf of Mexico (WAF)	>100	96	>486	1
	post-larvae	W. Gulf of Mexico (CD)	18.6	96	78	1
	adults	Arabian Light (CD)	>16	96	>537	3
Blue crab	late-larvae	C. Gulf of Mexico (WAF)	70.7	96	24	1
	late-larvae	C. Gulf of Mexico (CD)	19.8	96	210	1
	late-larvae	W. Gulf of Mexico (WAF)	>100	96	>486	1
	late-larvae	W. Gulf of Mexico (CD)	90.8	96	383	1
	adults	Arabian light (CD)	49	96	1,643	3
Fish						
Atlantic menhaden	eggs/larvae	C. Gulf of Mexico (WAF)	42.1	96	163	1
	eggs/larvae	C. Gulf of Mexico (CD)	64.6	96	1,014	1
	eggs/larvae	W. Gulf of Mexico (WAF)	64.1	96	267	1
	eggs/larvae	W. Gulf of Mexico (CD)	90.8	96	341	1
Pacific herring	adults	Cook Inlet (WSF)	1.22	96	22-41	6
Spot	eggs/larvae	C. Gulf of Mexico (WAF)	70.7	96	273	1
	eggs/larvae	C. Gulf of Mexico (CD)	50.3	96	790	1
	eggs/larvae	W. Gulf of Mexico (WAF)	>100	96	>417	1
	eggs/larvae	W. Gulf of Mexico (CD)	68.2	96	1,046	1

[1] WAF = water accommodated fraction, OWD = oil in water dispersion, WSF = water soluble fraction, CD = chemically dispersed oil or oil and dispersant mixture

[2] Toxicity index calculated by multiplying ppm-hrs by 0.35, a conservative correction factor which accounts for evaporative loss (McAuliffe, 1987), except for index values reported for reference 1, where ppm-hrs were calculated by integration over time (Fucik et al., 1994).

[3] References:

1 Fucik *et al.,* 1994
2 Byrne and Calder, 1977
3 Shuba and Heikamp, 1989
4 Anderson *et al.,* 1974
5 Neff et al., 1976
6 Rice *et al.,* 1979

Figure 1 shows the predicted concentrations for selected depths over time based on their calculations. The plot shows that dispersed oil concentrations are not predicted to exceed I ppm at depths greater than 10 m. This calculation is the basis for the guideline that dispersants are not to be applied in waters less than 10 m, with I ppm selected as the threshold oil concentration above which effects to bottom organisms may be of concern.

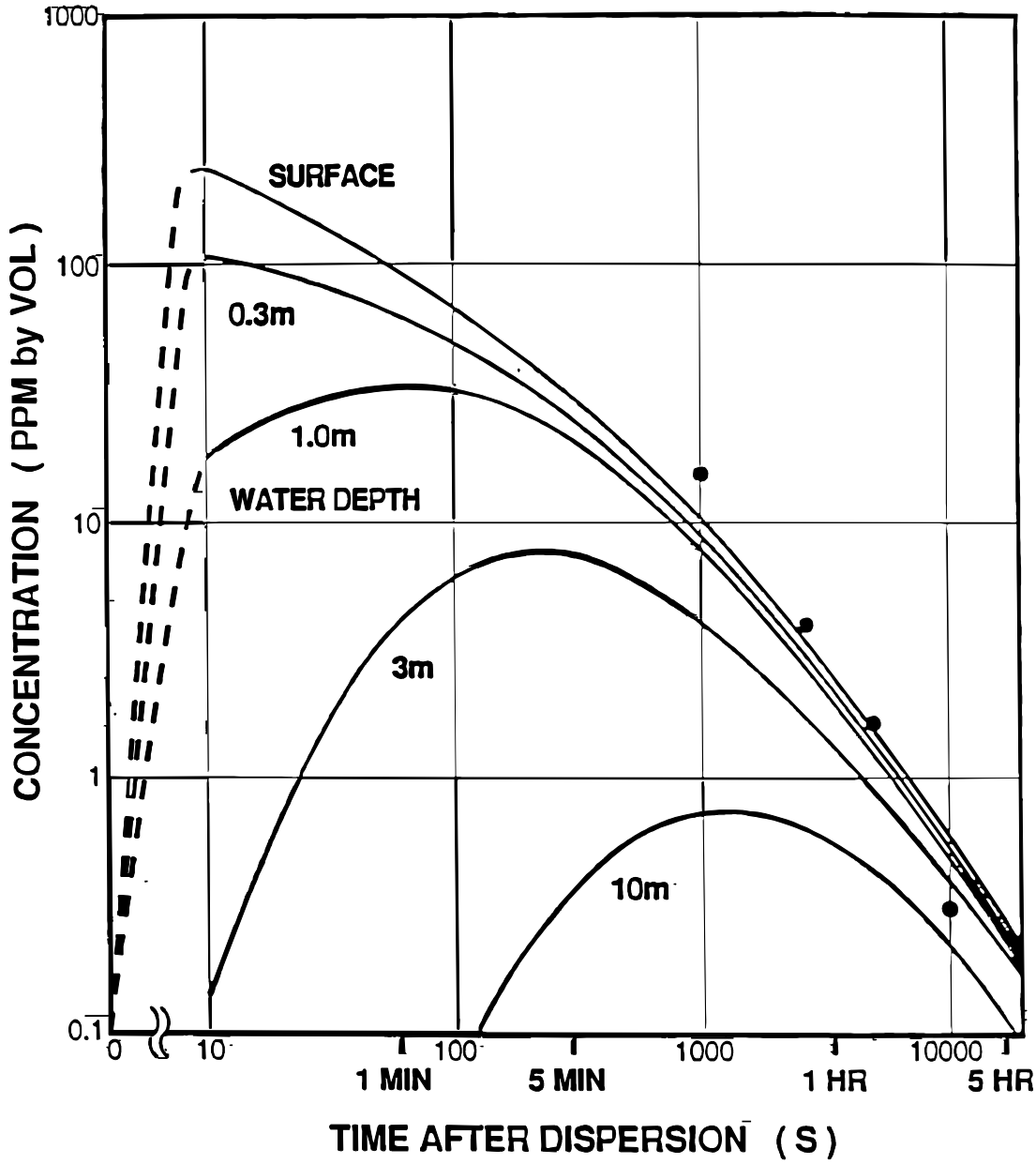


FIGURE 1: Predicted concentrations of dispersed oil under a slick 0.15mm thick, with a 65% dispersant effectiveness, for selected water depths and times after dispersant application. The dots are actual values from the California sea trial in 1979 (after Mackey and Wells, 1983).

The curves in Figure 1 show the speed at which dispersed oil concentrations are likely to decrease in open water, dropping to concentrations below I ppm after five hours. It is obvious that comparing laboratory toxicity test results based on a 24- or 96-hour test period to field conditions of exposure is a very difficult procedure. Anderson et al. (1982) used the concept of a toxicity index in ppm-hours as a means to express the exposure to water-column organisms. The ppm-hours are calculated using the mean exposure oil concentration in ppm multiplied by the test duration in hours. This same approach can be used to represent oil concentrations in the water column under a dispersed slick by integrating the oil concentrations over time. Thus, for the I m depth curve in Figure 1, the average concentration over the first minute is about 50 ppm, which would be about I ppm-hour (see Table 2). For the first 24 hours, the exposure is about 20 ppm-hours. Beyond 24 hours, there is little additional exposure because the concentrations are estimated to be much less than 0.1 ppm. Expressed in this manner (ppm-hours), exposure can then be compared with toxicity test results.

TABLE 2 Estimated exposure in the water column under a dispersed slick, based on the model results in Mackay and Wells (1983).

Time Interval	Oil Concentration (ppm)	Oil Exposure (ppm-hours)	Cumulative Oil Exposure (ppm-hours)
Water Depth 1.0 m			
1 minute	50	1.0	1.0
1-5 minutes	35	2.5	3.5
5-16.6 minutes	15	3	6.5
16.6-60 minutes	7	5	11.5
1-5 hours	1	4	15.5
5-24 hours	0.1	2	17.5
Water Depth 10 m			
1 minute	0	0	0
1-5 minutes	0.4	0.03	0.03
5-16.6 minutes	1.0	0.2	0.2
16.6-60	1.0	0.7	0.9
1-5 hours	0.4	1.6	2.5
5-24 hours	0.1	2.0	4.5

Based on the distribution and life history profiles of representative species, the organisms at greatest risk from the use of dispersants in waters greater than 10 m or at least 3 miles offshore are: young life stages of brown shrimp and white shrimp because their planktonic larvae occur in offshore waters; and blue crab and menhaden because of their planktonic larvae. Toxicity tests results for these species can be used as a guideline for the likely impacts to water-column organisms.

There are many problems associated with how toxicity tests are conducted for minimally soluble products such as petroleum, and the standard toxicity test conditions (static bioassays using nominal initial exposures) are not realistic in either the exposure concentration or duration of exposure. In spite of these problems, it is still useful to compare short-term toxicity data with likely exposures if both are expressed in ppm-hours. Table 1 lists LC50 data for oils and species of concern, reported in both ppm for a specific for a specific exposure period and as ppm-hours. The ppm-hours values have been multiplied by 0.35 (for 96-hour tests) or 0.75 (for 24-hour tests) following the suggestion of McAuliffe (1987) to correct for loss of the lighter components by evaporation. This correction factor increases the toxicity index for the 96- hour test by a factor of three. Nearly all of the values for the LC50 reported are much greater than 30-ppm-hours, the likely exposure in the top 1 m over the first 24 hours after dispersion. Essentially, the 24-hour

LC50 would have to be about 1.5 ppm to be equal to the calculated exposure I m under a treated slick over the first 24 hours.

There are very few toxicity tests for which the LC50 is reported for a 24-hour exposure. MMS recently completed dispersed oil toxicity tests with biological species indigenous to the Gulf of Mexico, using various test conditions (flow-through and static; acute and chronic), reporting LC50 and toxicity index data for 24- and 96-hour exposures (Fucik et al., 1994). Invertebrates have been shown to have high sensitivity to oil and oil-related compounds (NRC, 1986; Sprague et al., 1982), thus the early life stages of these organisms are likely to be the most sensitive of all water- column organisms. The toxicity indices for brown shrimp larvae and South Louisiana crude oil with a 24-hour exposure in Table I are all higher than the estimated exposure by a factor of five or more. For the toxicity tests recently sponsored by MMS, the toxicity of dispersed oils to the most sensitive life stages of shrimp and crabs, based on total hydrocarbon measured in the water, for a 24-hour exposure were all greater than 148 ppm-hours (Fucik et al., 1994). McAuliffe (1987) has compared the 24-hour exposures as measured during sea trials under actual slicks with 24-hour LC50 data (both expressed in ppm-hours), calculating the number of times that actual exposures would need to be increased to reach the LC50 value. This number ranged from a low of 115 for shrimp to a high of nearly 3,000 for herring larvae.

Figure 2 is a plot of the estimated oil exposure under a dispersed oil stick, based on the curve in Figure 1 and the data in Table 2. The cumulative oil exposure in ppm-hours was determined by summing the ppm-hours for each of the time intervals listed. Also shown on Figure 2 are the toxicity indices in ppm-hours for the 24-hour toxicity test results using dispersed oil from the MMS study, as reported in Fucik et al. (1994). This plot indicates that, for the assumptions in the Mackay and Wells (1983) model (listed above), the estimated oil exposure for the first 24 hours after dispersion at I meter under a dispersed slick is about an order of magnitude lower that the 24-hour toxicity index for the most sensitive species and life stages of concern in the Gulf of Mexico. At 10 meters, the difference is about two orders of magnitude.

Based on the comparison of the calculated and measured concentrations under a slick treated with dispersants with laboratory toxicity test results, a significant impact to water-column organisms is not expected to occur when dispersants are applied in offshore waters as specified in the pre-approval operations plan.

Effects on Water-Surface Organisms

There are two concerns with the use of dispersants related to organisms that use the water surface.- 1) effects from direct contact with the dispersant; and 2) increased risk of contact with the slick due to it's expansion after treatment. Direct contact is primarily of concern for birds because of the potential large numbers of individuals that could be Present and the preponderance of time they spend on the water surface. Of the key species listed above, brown pelican and lesser scaup are the types of birds at significant risk of direct impacts during dispersant application because they can be found in offshore waters. Regarding marine mammals and sea turtles, the National Marine Fisheries Service (NMFS) in a September 8, 1994 letter to the RRT VI in response to a request for a Section 7 consultation on dispersant use pre-approval determined that "the species under our purview are not likely to be adversely affected by the use of chemical countermeasures in response to an oil spill. Rather, the use of dispersants is expected to minimize adverse effects caused by the spill."

Most of the published data for birds were for tests conducted with oil and dispersed oil (NRC, 1989), rather than on the toxicity of dispersants alone. Thus, although the concern is always voiced that direct accidental spraying of birds with dispersants will cause negative effects, without data it is not possible to compare these effects with oil. To be accidentally sprayed, any birds would likely be in very close proximity to the targeted slick, thus they would be at a significant risk of being oiled. It is likely that being oiled would have greater consequences than being sprayed with dispersant. However, the guidelines in the pre-approval specify that dispersants are not to be applied where concentrations of birds are present.

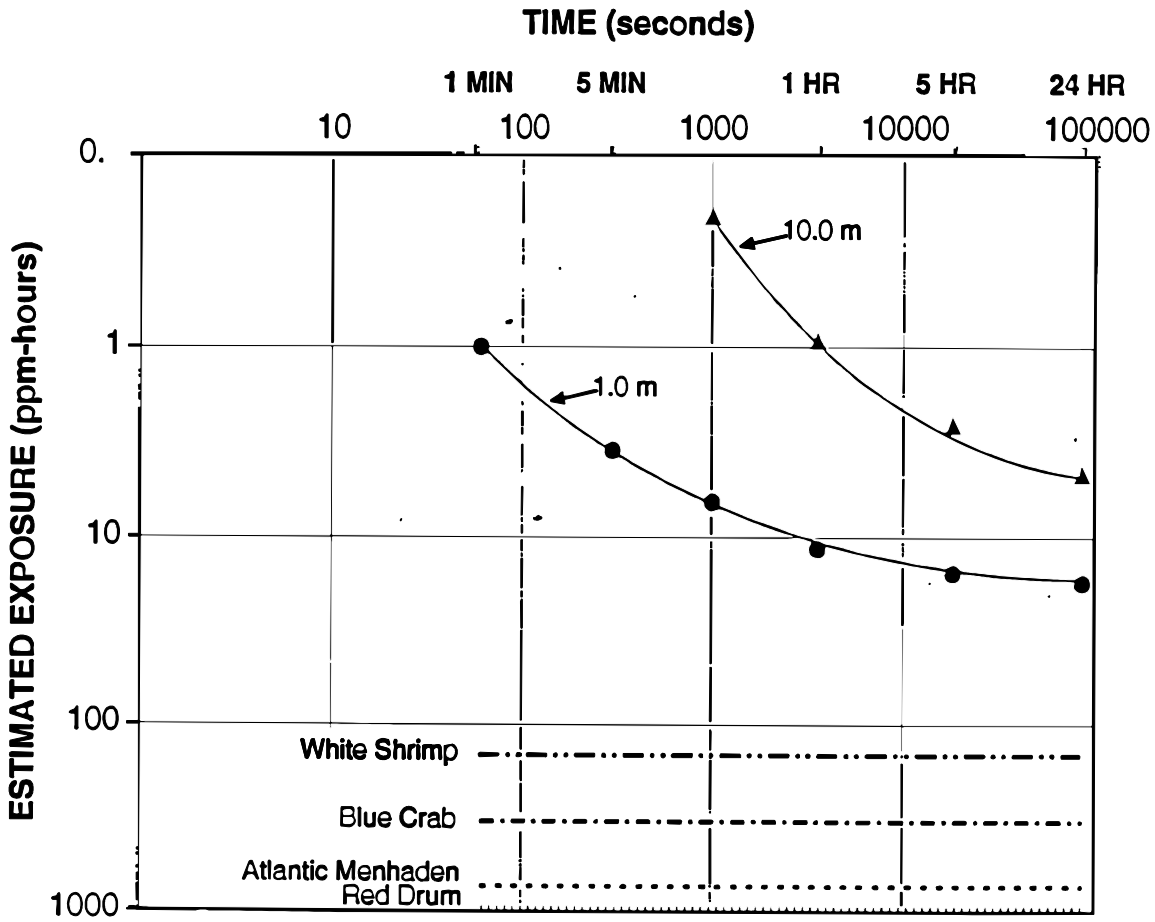


FIGURE 2: Estimated exposure in the water column under a dispersed slick, based on the data in TABLE 2. Also plotted are the toxicity indices for Gulf of Mexico species exposed to dispersed oil as reported in Fucik et al. (1994).

Increased risk of contact with expanding oil slicks after treatment is another concern. Treated slicks are likely to increase in size initially as the interfacial tension at the oil:water surface is reduced. In recent field trials in the United Kingdom, the treated slick increased in size, compared to the control slick, for the time period from 10 to 17 hours after treatment (Lunel, 1994). However, by 18 hours post- treatment, the treated slick had broken up and become smaller in area, compared to the control slick which remained as a coherent slick with thick areas of oil. This increased risk would be more of concern in enclosed bays or rivers where a large percentage of the surface area of a waterbody could be covered by an expanding slick. The actual times of expansion of a slick would be spill-specific, but the net effect of dispersant application is a reduction in the amount of oil on the water surface. Again, in an offshore setting, birds would have to be in close proximity to the oil slick with a high risk of being oiled anyway, for there to be a risk of contact with a dispersed slick.

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APPENDIX E- SECTION 7 CONSULTATION LETTER FROM THE UNITED STATES DEPARTMENT OF THE INTERIOR, FISH & WILDLIFE SERVICE

Letter to be inserted

APPENDIX F - CONCURRENCE LETTER FROM THE NATIONAL MARINE FISHERIES SERVICE

Letter to be inserted

UNH Coastal Response Research Center, NOAA, EPA and Coast Guard Convene Science Meeting to Study Dispersant Use and Ecosystem Impacts of Dispersed Oil in the Gulf of Mexico.

Thursday, over 50 experts and practitioners from government, academia and industry finished a two-day meeting looking at the potential long-term impacts of the prolonged use of large volumes of dispersants in the Deepwater Horizon oil spill response efforts in the Gulf of Mexico. This is the third time NOAA and EPA have gathered top scientists to discuss dispersant use since the spill began. EPA and NOAA scientists are conducting rigorous ongoing monitoring and analysis of the effectiveness and toxicity of the dispersants used.

Should data indicate that the dispersants are causing significant environmental damage that outweighs the benefits of their use, EPA and the Coast Guard reserve the right to discontinue use.

Although the crude oil is more toxic than the authorized dispersants, much is unknown about the long term environmental impacts of dispersants when used in these unprecedented volumes on the surface and in the subsea. Because of this and due to the effectiveness of subsea applications, EPA and the U.S. Coast Guard directed BP to significantly ramp down their use of dispersants. BP has complied and has significantly reduced dispersant use.

The purpose of the two-day meeting was to provide input to the Gulf of Mexico Regional Response Teams (4 and 6) on the use of dispersants and the effects of dispersed oil going forward in the Deepwater Horizon incident. The meeting also identified possible monitoring protocols to be used in the event of continued aerial applications to surface water and subsea use.

"This conference provided us with additional scientific information about potential impacts of prolonged dispersant use that can help guide decision-making as we continue to support the U.S. Coast Guard's response to and clean up of this spill," said Craig Carroll, EPA Co-Chair of the Region 6 Regional Response Team.

“It is the consensus of the group that up to this point, use of dispersants and the effects of dispersing oil into the water column has generally been less environmentally harmful than allowing the oil to migrate on the surface into the sensitive wetlands and near shore coastal habitats,” said Nancy Kinner, University of New Hampshire co-director of the Coastal Response Research Center.

“The meeting is adding to our knowledge, both in terms of helping identify key questions that should be asked and helping identifying new, quality sources of information and relevant expertise to draw on as we make these difficult decisions,” said Charlie Henry, NOAA’s Scientific Support Coordinator for the Unified Command Center in Roberts, La.

“The thoughtful scientific input from this meeting will prove valuable to responders as we continue to do everything possible to minimize damages caused by this unprecedented spill,” said Robert Pond of the US Coast Guard.

This was the third science summit in three weeks that builds on the unprecedented mobilization of science the federal government has brought to this incident. The Administration has engaged some of the world’s brightest scientific minds from the public and private sectors to mitigate the oil’s impact and ensure an effective response.

The results of the meeting will be presented in a report to the Regional Response Teams within the next week. The report will be available on the CRRC website at www.crrc.unh.edu.

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U.S. Department of Homeland Security
United States Coast Guard

Commander
Eighth Coast Guard District

Hale Boggs Federal Building.
500 Poydras Street
New Orleans, LA 70130
Staff Symbol (dl)
Phone: (504) 671-2331

16480
May 21, 2010

Doug Suttles
Chief Operating Officer
Exploration & Production
BP America Inc.
501 WestLake Park Boulevard
Houston, Texas 77079

Re: Request for Temporary Waiver of Dispersant Monitoring

I received your letter request dated May 21, 2010, in which you requested a waiver of the requirement of dispersant monitoring for the period of time required for RV Brooks McCall to return to port, for BP to install required equipment, and return to its station and resume monitoring.

Your request is approved, subject to the estimated schedule outlined in your request, and subject to the following terms: You shall continue to use an integrated management approach to control the oil, including prioritization of offshore response efforts that focuses on mechanical recovery, skimming, and burning on the surface, as well as subsurface dispersant application. If mechanical recovery and other surface efforts are not feasible, you will employ surface application of dispersant. You must minimize, to the maximum extent feasible, application of surface and subsurface dispersants. In coordination with the Coast Guard, you shall immediately comply with the monitoring provisions of the May 9, 2010 Directive, Section II "Special Monitoring of Applied Response Technologies ("SMART") Protocol for Surface Application of Dispersants" to determine efficiency and short term impacts of dispersant application.

Separately, EPA and the Coast Guard will pursue the use of less toxic dispersants with you if feasible.

(b) (6)

MARY E. LANDRY
Rear Admiral, U.S. Coast Guard
Federal On-Scene Coordinator

Statement by EPA Administrator Lisa P. Jackson from Press Conference on Dispersant Use in the Gulf of Mexico with US Coast Guard Rear Admiral Landry

May 24, 2010

- Thank you for joining us. Let me take a moment to thank Admiral Landry for joining us today and for all the work she and all of our Coast Guard responders have been doing.

- They have shown extraordinary resolve in leading this effort. EPA is glad to be in partnership with them.

- Today we want to talk about three elements of our ongoing response and some of the adjustments we are making to this changing situation. But let me first outline what the situation is.

- The BP spill has thrust upon us what could potentially be one of the greatest environmental challenges of our time. More than 20,000 federal responders are continuing their work on creative solutions. Hundreds of EPA staff are focused on this crisis.

- In responding to this spill we have had to make some tough decisions – including the use of dispersant chemical to break up the oil and speed its natural degradation.

- Due to the unprecedented nature of this event, BP has used dispersants in ways never seen before. That is in terms of both the amount applied — which is approaching a world record – and in the method of application.

- A little more than a week ago EPA and the Coast Guard authorized, after testing for effectiveness, a novel use of dispersants underwater at the source of the leak.

- With that authorization, we required the implementation of a rigorous monitoring system, a condition that will ensure that underwater application continues to be effective and track any measurable environmental impacts.

<<P>>

- Under the circumstances, the overall results to-date are positive. Our tracking indicates that the dispersants are breaking up the oil and speeding its bio degradation, with limited environmental impact at this time.

- In other words, dispersants continue to be the best of two very difficult choices. Their use inevitably means that we are making environmental trade-offs.

- But in all of this, it is critical to remember that the Number One enemy is the oil. Until we find a way to stem the flow of oil, we must continue to take any responsible action that will mitigate the impact of the spill. That is what we are doing.

- The steps we have taken are in full recognition of our tradeoffs.

    - We know that dispersants are less toxic than oil.
    - We know that surface use of dispersants decreases the risks to shorelines and organisms at the surface.

- And we know that dispersants breakdown over weeks rather than remaining for several years as untreated oil might.
- After testing and authorizing dispersant use underwater, we also remain optimistic that we are achieving similar results with the use of less chemicals.

<<P>>

- We have put in place an extensive monitoring network to ensure the health of the air and water here. We have numerous stationary and mobile air monitors throughout the region – including a mobile unit that I personally inspected and toured today.

- To ensure the fullest level of transparency, all of the data we collect is being posted on www.epa.gov/bpspill as soon as we gather and analyze it.

<<P>>

- We are still deeply concerned about the things we don't know. The long-term effects on aquatic life are still unknown and we must make sure that the dispersants that are used are as non-toxic as possible.

- Those unknowns – and the lengthening period of this crisis – are why we last week directed BP to look for more effective, less toxic alternative to their current dispersant. We felt it was important to ensure that all possible options were being explored, in the hopes that we might minimize the environmental tradeoffs in whatever ways possible.

- It's also why we have called on BP to be more transparent about their own processes. We have directed them to share information with the American people, who certainly deserve to know what actions we are taking.

- Which brings me to the three points we are here to discuss today.

- First, the federal government, led by the Coast Guard, is today instructing BP to take immediate steps to significantly scale back the overall use of dispersants.

]

- Throughout this process, EPA and the Coast Guard have reserved the authority, in particular, to discontinue the use of underwater dispersants.

- As of today, our data demonstrates that subsea dispersant application is having an effect on the oil at the source of the leak – and thus far has had no significant ecological impact. That's the good news. And we continue to monitor both whether the oil is being dispersed effectively and the impact of dispersant on the environment.

- But given our concerns over the environmental unknowns, we think it is prudent at this time to ramp down overall use of dispersants.

- This is possible because sub sea use appears to be having a positive effect. As a result, we should use no more dispersant than is necessary. By ramping down on the amount of dispersant used, particularly on the surface where we expect less un-dispersed oil because of the sub sea application, we believe we can reduce the amount of dispersant applied by as much as half, and possibly more.

- We will continue to track the effectiveness of this response. Admiral Landry of course reserves command control to decide if it makes sense to resume broader uses of dispersant.

- Second, we have made it clear to BP, including in a meeting Admiral Landry and I held with company officials last night, that we are not satisfied that BP done an extensive enough analysis of other dispersant options. We expect BP to keep evaluating other alternative dispersants.

- BP's response to our directive was insufficient, and we are concerned that BP seemed, in their response, more interested in defending their initial decisions than analyzing possible better options.

- So today we are calling on them to continue searching and studying better possible dispersant options.

<<P>>

- Third, as a result of being dissatisfied with the response, and to ensure that we know everything we can know about the current environmental impact, EPA will be performing our own scientific verification of the data BP presented. We will conduct our own tests to determine the least toxic, most effective dispersant available in the volumes necessary for a crisis of this magnitude. Our toxicity tests will address the claims and conclusions put forth by BP in their response to us late last week. And EPA scientists have been tasked with conducting parallel, independent tests to determine if BP's argument that

Corexit remains the best alternative is accurate and supported by the science.

<<P>>

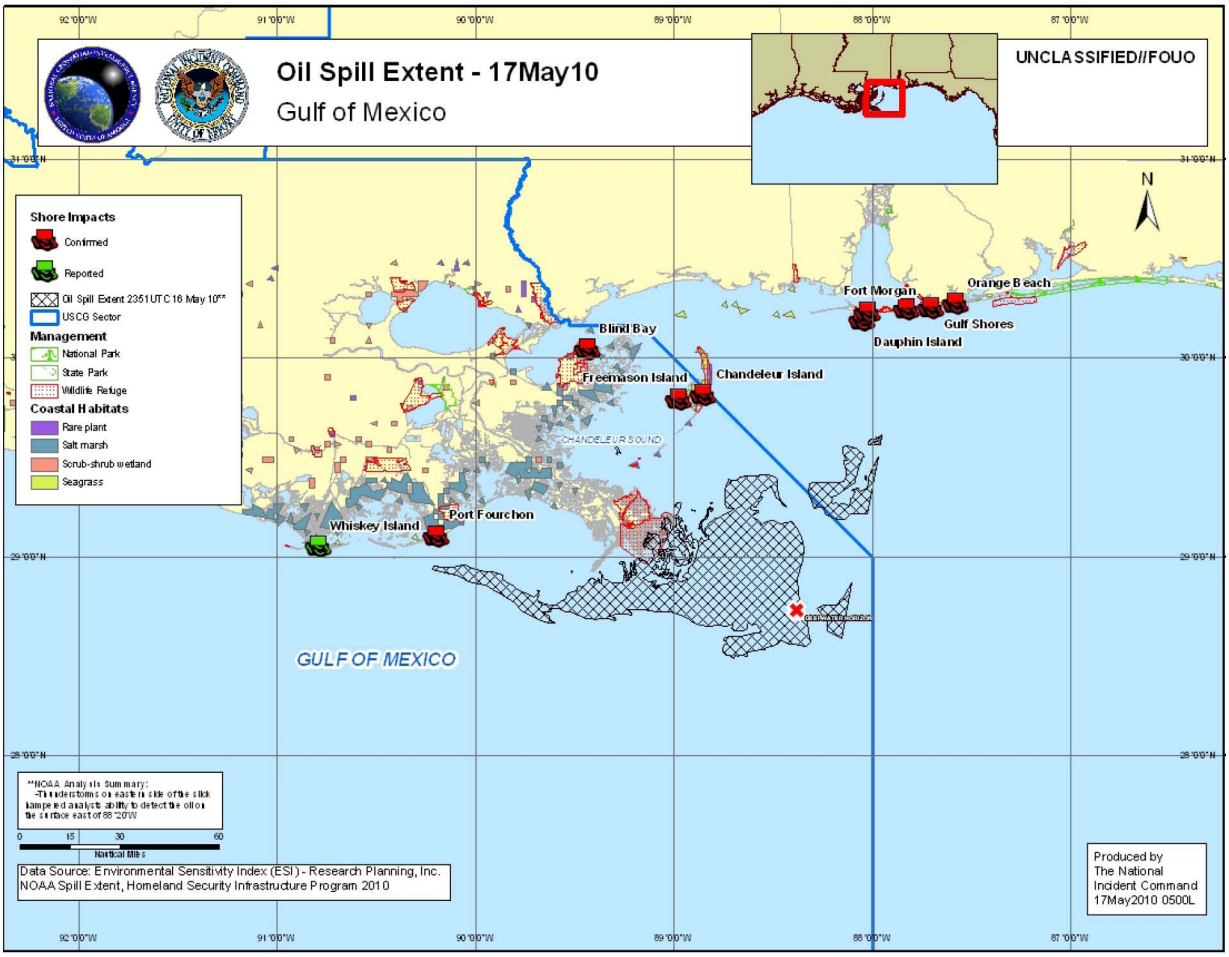
- In the meantime, we will continue to do all we can to address this crisis in the most aggressive and responsible way possible. We will continue to aggressively monitor air quality, water quality and the effect of dispersants used by BP.

- This is unfortunately a tragic situation that presents a grave threat to the environmental, ecological and economic future of the Gulf region – a region I call home.

- The EPA and the entire federal government continue to work around-the-clock to do everything possible to ensure both that the citizens of the Gulf region are protected and that BP is putting every resource at their disposal toward stopping this leak.

- Thank you very much.

National Incident Commander Daily Situation Update
0630 – 17 May 2010
Deepwater Horizon Spill Response
(Updates in RED)



National Incident Commander Objectives:

1. Establish and manage a coordinated interagency response effort to effectively employ all resources required to mitigate current and long term environmental and economic impacts of the incident.
2. Engage and inform the public, stakeholders and the media, keeping them apprised of response activities and plans.
3. Engage across all levels of government to develop courses of action for issues that span multiple agencies and departments.

Field Level Incident Commander Objectives:

1. Stop the leak
2. Fight the spill offshore
3. Protect sensitive areas
4. Mitigate the effects of the spill

National Incident Commander Daily Situation Update
0630 – 17 May 2010
Deepwater Horizon Spill Response
(Updates in RED)

Highlights of the Last Operational Period:

- Riser Insertion Tube Tool (RITT) inserted again with N2 in drill pipe. RITT in place all day with flow to rig. Recovering oil & gas, <1% water. Gas being flared, oil filling process equipment and surge tank, then to storage tank. No confirmation on rates yet. There is still oil & gas coming out of end of riser, continuing increasing trend of gas. Being conservative at the start on opening up choke on drill pipe.

Current Situation:

- Discharge is estimated at 5,000bbls per day; BP currently reevaluating discharge rate.
- During the first RITT insertion, gas began flowing to the surface around 1,400 psi. Initial pressure at the surface for this second insertion was around 1,600 psi, with pressure being bled off at 2.5-3 psi/minute.
- The RITT was inserted into the riser around 2300 on 16 May. Initially they were getting gas back to the ENTERPRISE and 4 ½ hours later they got the first oil back to the ENTERPRISE. A second ROV, being used for subsea dispersant activities, accidentally ran into the RITT and pulled it out of the riser. They noticed the tool had some damage to the rubbers rings used to seal the RITT inside the riser.
- Pressure gauge successfully installed on BOP; BP reported the difference between the top and bottom pressure readings on the BOP indicates restricted flow.
- The result of sonic scan on the Blow Out Preventer (BOP) was inconclusive. The scan was unable to confirm the location of the drill pipe and whether it was in the riser between the kink and the BOP.
- If BP is successful at connecting the RITT and gaining a good seal between the RITT and the discharge pipe, then it may not be necessary to execute the Top Hat option. If the RITT is not successful, then the RITT will be detached from the drill pipe and the Top Hat will be connected for deployment.
- Top Hat remains on the seabed and standing by pending effectiveness of the RITT. Top Kill equipment being staged; commencement of operation scheduled for 18 May. Installing Jumper Hoses from BOP to manifold with ROVs.
- BP is currently conducting analysis to reevaluate discharge rate from source after some in the scientific community disputed the previously established 5,000 bbls per day estimate.
- On 16 May at 0803 (CT), DDII well drill penetrated the seafloor and drilling had progressed to 253 ft below the seafloor as of 1530. Drilling and casing operations continue on the DDIII relief well; depth remains at 3,537 ft below sea floor.
- Drill Rig DDIII is Testing BOP's; Next: Pull test tool, drill out cement in 22", FIT, continue drilling Tuesday/Wednesday.
- Drill Rig DDII Drill-in 36" conductor casing to 5329'; Next: Unlatch drilling assembly and pull out. Suspend to test BOP's.

On Scene Weather:

- Wind – S to SE winds 5-10 kts; Seas – 2-3 ft. Chance of showers and t-storms.

- The National Oceanic and Atmospheric Administration forecasts winds to be predominantly from the southeast over the next few days, becoming progressively weaker less than 5 kts by Monday.

Surface Operations:

- Total vessels assigned: 771 (Ships, Tugs & OSRV)
- 3 CG cutters and 3 commercial vessels are outfitted with VOSS/SORS system and are ready to conduct skimming operations. (Reported by NSF SIT Report 12 May).
- CGC OAK SORS Operations Pensacola, FL U/W from NAS Pensacola.
- CGC CYPRESS SORS Operations Pensacola, FL Staging. Moored homeport; Mobile, AL.
- 0 Air Sorties (NON CG) completed 16 May.
- No IN-SITU burn operations conducted in last 24 hours.
- Skimming operation completed in the past 24 with a total of 6987 gallons recovered.

	Past 24 hours	**Total to Date**
Oily water mixture recovered	6,987 bbls	158,378 bbls
Surface dispersants applied	6,600 gal	582,416 gals
Subsea dispersants applied	4,500 gal	42,313 gals

Resource Summary:

Total Response Personnel assigned: 19,163 (per UAC executive summary, 16 May)
Total Boom assigned: 1,300,110 ft
Sorbent Boom assigned: 418,390 ft
Total Fixed Wing Aircraft assigned: 17
Total Helo Aircraft assigned: 35
Unified Incident Commands: 3
Staging areas: 17

Environmental Impacts:

- Tar balls confirmed at Grand ISLE, LA and Long Beach, MS. Clean up is currently ongoing.
- Navy Cove, AL (Baldwin County Division 1): "Tens of thousands" of silver fingerling minnows 1 to 1.5 inches long found dead. Info was confirmed by Orange Beach Staging Area and witnessed onboard a vessel towing boom from the staging area. This area is inside the baseline area, where they have been no sighted tar balls or oil effects. Unknown if oil caused the kill whether the fish are being collected for testing.
- San Luis Pass, TX: Samples taken from tar balls on Bolivar Peninsular confirm tar balls are NOT associated with the Deepwater Horizon Oil Spill. (Source TX, SOC per 1800 EDT 14 May 2010 SLB)

Wildlife Impacts:

Past 24 Hours: 2 Total: 34
No specific information provided.

Marine Transportation System:

- All shipping channels and ports remain open in the Gulf Coast region.
- There are no reported delays or closures to shipping.
- Mariners advised to avoid areas contaminated with oil.
- No vessels have required cleaning or de-contamination; teams are on standby if the need arises.
- All ports remain open.

Financial Update: (From: NPFC Executive Summary Report 16 May 10)

OSLTF Remaining	$24,686,258.14
Fed Project Ceiling	$85,000,000.00
Obligated funds to Date	$52,571,424.63
Fed project Ceiling Remaining	$32,428,575.37
Estimated Daily Burn Rate	$2,021,977.87

Claims Summary:

	No of Claims	**Dollars Dispersed**	**Claims Denied**	**Claims Closed**
Texas	242	$36,700.00	0	
Louisiana	7490	$5,532,858.31	0	
Mississippi	1954	$1,355,000.00	0	
Alabama	3908	$1,915,653.00	0	2
Florida	1173	$330,279.98	0	1
Georgia	159	$15,000.00	0	
Overall	**14,926**	**$9,185,390.29**	**0**	**3**

Claims Notes:

- A new claim center opened in Santa Rosa, FL on 16 May 10.
- There are currently 347 managers/adjusters working in the field as of 15 May 10.
- The online claims process will be available today.

Future Plans (Next 24-48 hours):

1. Congressional Hearing preparation
2. Flow Rate Technical Team (FRTT) stand up to address flow rates and subsurface oil issues.
3. Top Kill scientific summit

NIC Strategic Efforts: Draft loop current strategic plan under review

Enclosures:

1. JIC Daily Report
2. BP Executive Summary
3. DHS Senior Leadership Briefing
4. UAC External Affairs Report
5. Claims Summary
6. Daily Oil Budget Summary

Deepwater Horizon Incident

Situation Executive Summary	
Operating Period 25	Custodian: Situation Unit Leader UNIFIED AREA COMMAND

Date of Issue:	May 16, 2010	**Period:**	5/15 06:00 to 5/16 06:00
IC :	M. Utsler, S. Toth (Houma); J. Hohle, T. Gray (Houston); D. Foster, B. Byczynski (Mobile); K. Seilhan B. Allan (St. Pete)		

KEY MESSAGES

General

- Total containment boom deployed to date is 1,294,910 ft
  - Louisiana is 433,460 ft
  - Mississippi is 337,700 ft
  - Alabama is 323,050 ft
  - Florida is 200,700 ft
- Total personnel working on response is 19,163
- Total volunteers signed up to date is 11,806, with 2,589 trained
- Subsea dispersant injection restarted; 7,222 gallons injected

Last 24-Hour Operational Period (No. 25)

- Riser Insertion Tube Tool successfully inserted into riser
- 6 surface dispersant flights, 14,208 gallons applied
- Continue preparations for top kill
- Additional jumper installed for subsea dispersant injection
- Dash 8 has been repaired and returned to service

Next 24-Hour Operational Period (No. 26)

- Commission Enterprise containment operations
- Re-establish subsea dispersant injection (after shut down for RITT simops)
- Make up 36” bottomhole assembly and move on location for second relief well (DD-II)
- Preparing for top kill, install jumpers to junk shot skid (as simops with Enterprise allow)

FIELD REPORTS

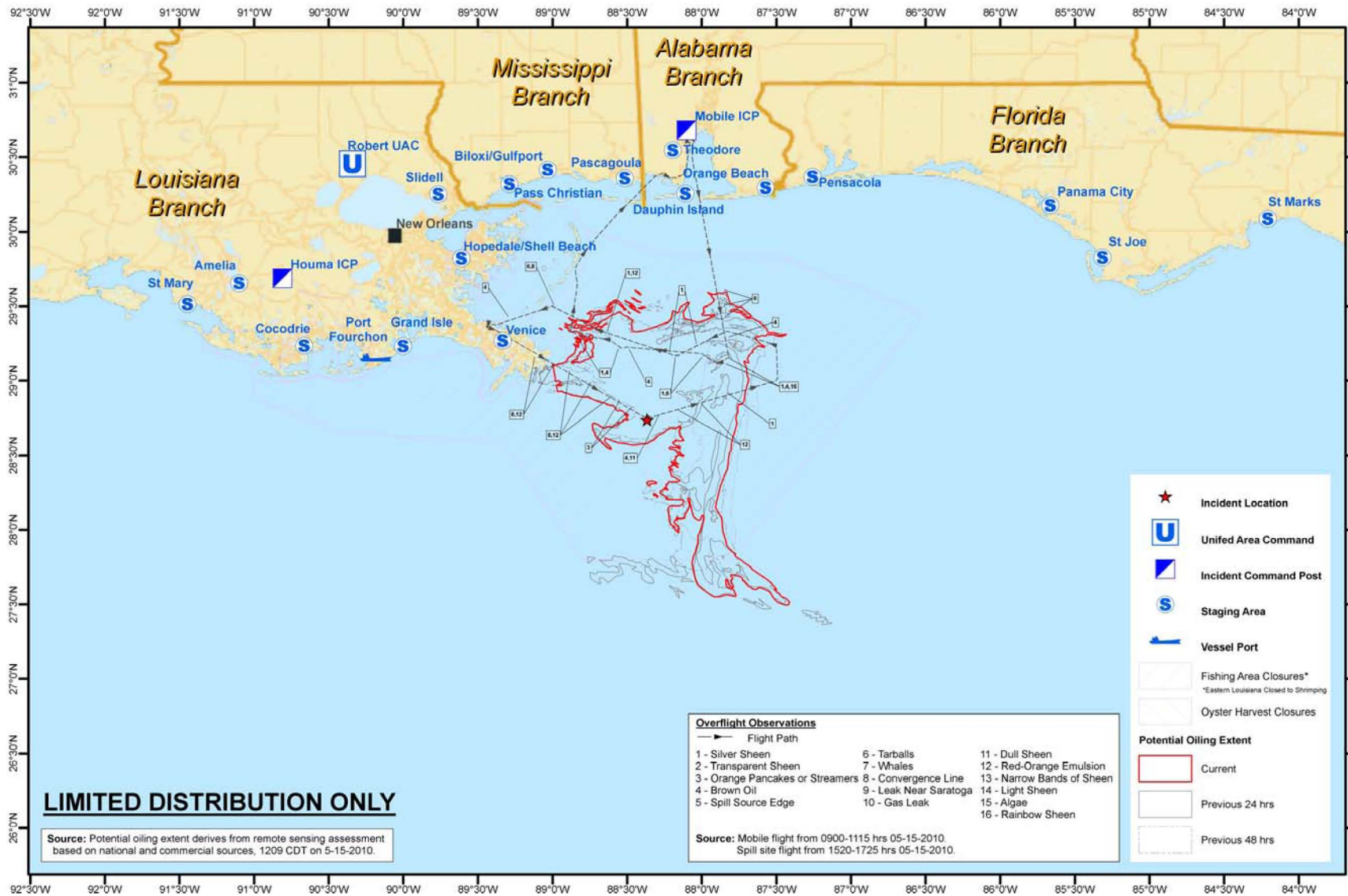
Attached for Each Incident Command Post

- Houma, Louisiana
- Houston, Texas
- Mobile, Alabama
- St. Petersburg, Florida

May 15, 2010			
	Current Period	Previous Period	Cumulative Total
HSSE			
HiPo's*	0	0	2
Near Miss *	4	1	63
First Aid*	4	6	83
Recordable Injuries (lost time/restricted duty/med treatment)*	0/0/0	0/0/1	1/2/37
Vehicle Accident*	0	3	8
Exposure hrs/Man hrs	139,000	127,000	1,376,000
PERSONNEL			
Total	19,163	17,496	
Personnel Command Posts	3,816	3,037	
Personnel Field (incl. Nat Guard)	15,347	14,416	
OPERATIONS			
Vessels Active			
*Offshore	656	627	
*Skimmer	32	30	
Aircraft Active			
-Helicopters	35	26	
-Fixed Wing	17	12	
# Dispersant Flights	6	14	192
# Mapping Flights	0	0	
Surface Dispersant Applied (gal)	14,208	44,031	575,816
Subsea Dispersant Applied (gal)	7,222	0	37,813
Dispersant Available (gal)	282,435	263,346	
Containment Boom Deployed (ft).	18,300	70,760	1,294,910
Containment Boom Staged (ft)	285,558	274,904	
Sorbent Boom Deployed	600	24,800	441,620
Sorbent Boom Staged	649,755***	900,848	
In-Situ Burns Conducted	0	0	10
ENVIRONMENTAL			
Oily Liquid Recovered (bbl)	0	0	151,391
Impacted Wildlife	5	6	32
CALL CENTER			
Total Calls Received (thru 5pm)**	2,993		57,248
Calls Received from Volunteers	188	227	11,862
*HSSE figures as of 2100 May 15			
** Call center numbers adjusted to reflect single calls addressing more than one issue previously being counted as multiple calls			
*** Reflects inventory review at Mobile			

Deepwater Horizon Incident - Situation Status Map

5/16/2010 0600 Hrs



LIMITED DISTRIBUTION ONLY

Source: Potential oiling extent derives from remote sensing assessment based on national and commercial sources, 1209 CDT on 5-15-2010.

For Official Use Only

0 25 50 100 150 200 Miles

N W E S

Houma Daily Operational Report

16-May-10

	Prev 24 Hrs (Period 25)	Prior Period	Cumulative	24-Hour Look Ahead Plan
Safety				
Near Miss Incidents*	1	1	20	Personnel Offshore Air Monitoring
First Aid Incidents	0	0	25	*No sample results received have indicated excursions for VOC's or benzene during this current period.
Recordables	0	0	12	
Boom Deployed (ft)				
Louisiana	1,200	27,360	433,460	Parish Boom Accountability Teams (BAT) to track receipt & deployment of boom- 12 personnel
Mississippi	0	0	0	Set 26" Navy boom for Breton Island
Alabama	0	0	0	Grand Isle- Adjusting booming strategy to move to leeward side of islands
Florida	0	0	0	
Boom Staged (ft)				
Louisiana				Expanding staging areas to west, as needed. Port St. Mary staging area established
Mississippi			0	Incoming boom consolidated at Amelia.
Alabama			0	Sourcing additional OSRV's, awaiting release decision
Florida			0	International Peace- offshore dispersant test platform- ready for service
Sorbent (ft.)				
Deployed	600	24,800	312,170	Commercial vessel in port due to weather
Staged	410,420	387,760		
Active Vessels/Equipment				
Offshore Vessels	396	370		(13) OSRV on scene
Skimmers	19	17		Skimming OPS to resume pending weather
ROVs	0	0		
Spill Containment				
Oily Liquid Recovered (bbls)	0	0	151,391	
In-situ Burns Completed	0	0	14	In-Situ Burn fleet ready pending weather
In-situ Burns (bbls)	0	0	11,642	Vessel applied dispersant test trials will resume, weather permitting
Surface Dispersant Applied (gal)	14,208	44,031	575,816	Dispersant vessel M/V Adriatic- standby at sea
Subsea Dispersant Applied (gal)	0	0	0	Hos Super H - outfitted- departure weather pending
Dispersant Available (gal)	232,435	263,346		
Aircraft				
Active Helicopters	17	17		Aerial dispersant operations continue
Active Fixed Wing	12	12		
# Dispersant Flights	6	14	212	AT802 Ag Tractor H2O spray test conducted. Approved for 75' altitude and 10 miles from shore
# Mapping Over Flights	0	0		Dash 8 has been repaired and returns to service 5/16/10
Personnel				
Personnel Command Post	687	962		
Personnel Field	942	1158		
Volunteers***	81	68		
Wildlife Impact				
Captured	0	1	8	Properly trained wildlife responders to deploy to field for wildlife recon & capture
DoA	3	3	19	Ensure no dispersant spraying within 2 miles of a marine mammal or sea turtle
Shoreline Impacts (feet)				
Louisiana	90,097	0	150,078*	6 SCAT teams (4 on water, 2 in air)
Mississippi	0	0	0	Shoreline cleanup approved SCAT plans- Whiskey Island, Trinity, South Pass, Grand Isle, Fourchon beach
Alabama	0	0	0	
Florida	0	0	0	

Key Priorities for Today

1. Ensure the Health, Safety, & Security of Citizens and Response Personnel.
2. Maximize Protection of Environmentally and Economically Sensitive Areas and Contain and Recover Spilled Material.
3. Recover & Rehabilitate Injured Wildlife.
4. Manage Coordinated Response.
5. Keep Stakeholders and Public Informed.
6. Better coordination and utilization of field data.

Operational Comments

Ramp up shoreline cleanup.

Strategic nearshore booming operations are ongoing based on ACP.

Dash 8 data relevant and timely- resource remains on scene.

Flood tubes being installed at South Pass. Delayed due to weather.

Test approved AT802 dispersant aircraft.

Calibrating ASI Turbo DC3 spray system.

RAT Teams on station. Very responsive and effective regarding validation and field truthing oil etc. Stood down mid-day high seas.

Completed restock of dispersants offshore for restock of dispersant vessels working near the source.

Environmental Comments

Continuing SCAT surveys, wildlife recon & recovery, waste management activities, trajectory forecasts, sampling program implementation, and advanced technology analysis.

Other Comments

* BP HSE statistic definitions apply
** staged hard boom
*** volunteer data still being determined

Deployed boom= to water from each parish (TOTAL)
Staged boom= boom on hand at each parish staging area (TOTAL)

Houston Daily Operational Report

5/16/2010, submitted at 0200 to UAC

	Prev 24 Hrs (Period 24)	Prior Period	Cumulative	24-Hour Look Ahead Plan
Safety				
Near Miss Incidents	0	0	0	Ensure Safety of Response Personnel
First Aid Incidents	1	0	4	Field focus around VOC mitigation
Recordables	0	0	0	Office focus around stress management
Boom Deployed (ft)				
Louisiana	0	0	0	
Mississippi				
Alabama				
Florida				
Boom Staged (ft)				
Louisiana	0	0		
Mississippi				
Alabama				
Florida				
Sorbent (ft.)				
Deployed	0	0	0	
Staged				
Active Vessels/Equipment				
Offshore Vessels	15	12		
Skimmers	0	0		
ROVs	8	8		
Spill Containment				
Oily Liquid Recovered (bbls)	0	0	0	
In-situ Burns Completed	0	0	0	
In-situ Burns (bbls)	0	0	0	
Surface Dispersant Applied (g	0	0	0	Adriatic is on location, Super H is en route
Subsea Dispersant Applied (g	7,222	0	37,813	Subsea Dispersant injected from 0256 to 1419 hrs, suspended for Enterprise simops
Dispersant Available (gal)	100,328	103,274		Pat Tillman transferred 6300 gallons to the Skandi Neptune
Aircraft				
Active Helicopters	0	0		
Active Fixed Wing	0	0		
# Dispersant Flights	0	0	0	
# Mapping Over Flights	0	0		
Personnel				
Personnel Command Post	581	726		
Personnel Field	1,006	1,047		
Volunteers	0	0		
Wildlife Impact				
Captured	0	0	0	
DoA	0	0	0	
Shoreline Impacts (feet)				
Louisiana	0	0	0	
Mississippi				
Alabama				
Florida				

Key Priorities for Today

1. Monitor Riser location and plumes
2. Progress VOC Mitigation Plan (Fire vessel, HVAC charcoal filtration, respirators).
3. Verify Operational Plans are approved and implemented
4. Commission Enterprise containment operations
5. Re-establish sub-sea dispersant injection with the Skandi Neptune (as simops with Enterprise allow)
6. Preparations for top kill, install 150' jumpers between junk shot skid and BOP (as simops with Enterprise allow)
7. Progress plans for other source containment options
8. Relief well drilling: DD3 = BOP testing, DD2 = make up 36" BHA and move on well location
9. VOC communication plans completed and IH and doctor doing offshore engagements

Operational Comments

1. ROV's monitoring BOP stack and plumes
2. Injected 7222 gal of subsea dispersant, suspended at 1419 hrs for Enterprise RITT operations
3. Enterprise successfully inserted RITT into the riser
4. Additional jumper installed for subsea dispersant injection to facilitate simops with Enterprise
5. Enterprise preparing for containment through RITT
6. Install jumpers to the BOP for the Top Kill manifold (prepared and standing by)
7. Progressing various containment options
8. Relief well MC252-3 (DDIII) - preparing to test BOP
9. DDII preparing to move on location with 36" BHA
10. Yellow POD on deck and ready to be installed (as simops with Enterprise allow)

Environmental Comments

• M/V Brooks McCall on location for subsea testing of dispersant

Other Comments

• First aid is twisted ankle aboard Boa Sub C - IP flown to shore for evaluation

Definitions

Deployed boom includes assigned boom
Staged boom is awaiting deployment in warehouses

Mobile, AL Daily Operational Report

15-May-2010

	Period 25	Period 24	Cumulative	24-Hour Look Ahead Plan
Safety				
Near Miss Incidents	2	0	39	
First Aid Incidents	3	2	52	
Recordables	0	0	26	
Boom Deployed (ft)				
Louisiana				
Mississippi	3,200	14,050	337,700	Weather did not allow operations to be completed today. If weather allows operations will continue in Hancock division 1 and Harrison division 2
Alabama	10,900	15,950	323,050	
Florida	3,000	13,400	200,700	
*New formatting for boom data from area command using boom summation form adjusted numbers to operations				
Boom Staged (ft)				
Louisiana				
Mississippi	15,650	16,500		
Alabama	37,450	51,250		
Florida	48,930	61,250		
Sorbent				
Deployed	0	0	129,450	
Active Vessels/Equipment				
Offshore Vessels	245	245		
Skimmers	13	13		
ROVs	0	0		
Spill Containment				
Oily Liquid Recovered (bbls)				
In-situ Burns Completed				
In-situ Burns (bbls)				
Surface Dispersant Applied (gal)				
Subsea Dispersant Applied (gal)				
Dispersant Available (gal)				
Aircraft				
Active Helicopters	9	9		
Active Fixed Wing	0	0		0845 Aircraft overflight with media At Brookley Field
# Dispersant Flights	0	0		
# Mapping Over Flights	0	0		
Personnel				
Personnel Command Post	279	163		
Personnel Field	6,911	6,885		
Volunteers	11,724	11,998		
***(Value represents total registered volunteers for all states)**				
Wildlife Impact				
Captured	1	1	4	
DoA	1	0	1	
Shoreline Impacts (feet)				
Louisiana				
Mississippi	0		0	
Alabama	0		0	
Florida	0		0	

Key Priorities for Today

Safety and welfare of citizens and response personnel
Manage a coordinated prevention, response and recovery effort.
Maximize hiring of local contractors and laborers for oil spill cleanup efforts

Operational Comments

Completed boom deployment for Baldwin County Division 2
Identified the ten most qualified boat operators to maintain and reconfigure boom after all deployments are complete
Apalachicola (Battery Park) and Carrabelle, contracts are finalized

Environmental Comments

Confirmed: 1 Northern Gannet captured today and is alive in Pensacola Rehab Center
Prepared Stakeholder Engagement Plan and submitted it to BP Community outreach
Continued waste stream management reporting through IAP (ICS 209 - Waste Management Estimate report for 5/14/10= only trash no oily waste)

Other Comments

Planning:
Streamlined IAP process and changing to a 48 hour operational period as of Monday
Logistics:
Establish initial stocking at distribution centers
Reassessing security priorities at all sites
Government Affairs Schedule for May 16:
0845 Aircraft overflight with media at Brookley Field
1515 BP COO Doug Suttles will visit Command Center and Field Operations

St. Pete Daily Operational Report

15-May-10

	Prev 24 Hrs (Period 24)	Prior Period	Cumulative	24-Hour Look Ahead Plan
Safety				
Near Miss Incidents	0	0	0	
First Aid Incidents	0	0	0	
Recordables	0	0	0	
Boom Deployed (ft)				
Louisiana	0	0	0	
Mississippi				
Alabama				
Florida				
Boom Staged (ft)				
Louisiana	0	0		
Mississippi				
Alabama				
Florida				
Sorbent (ft.)				
Deployed	0	0	0	
Staged				
Active Vessels/Equipment				
Offshore Vessels	0	0		
Skimmers	0	0		
ROVs	0	0		
Spill Containment				
Oily Liquid Recovered (bbls)	0	0	0	
In-situ Burns Completed	0	0	0	
In-situ Burns (bbls)	0	0	0	
Surface Dispersant Applied (gal)	0	0	0	
Subsea Dispersant Applied (gal)	0	0	0	
Dispersant Available (gal)	0	0		
Aircraft				
Active Helicopters	0	0		
Active Fixed Wing	0	0		
# Dispersant Flights	0	0	0	
# Mapping Over Flights	0	0		
Personnel				
Personnel Command Post	74	42		
Personnel Field	0	0		
Volunteers	0	0		
Wildlife Impact				
Captured	0	0	0	
DoA	0	0	0	
Shoreline Impacts (feet)				
Louisiana	0	0	0	
Mississippi				
Alabama				
Florida				

Key Priorities for Today

1. Complete plan for potential shoreline impacts within Sector St. Petersburg's AOR
2. Refine external communications and public relations program.
3. Complete ship decontamination plan and promulgate extended communication plan
4. Finalize volunteer management plan.
5. Execute SSP Protective Booming Strategy.

Operational Comments

Rapid Response team positioned in Taylor and Dixie country to quickly respond to oil sightings or shoreline impacts, while completing staging area assessments.

Environmental Comments

Environmental Unit Coordinated with Environmental Unit Leader from Sector Key West to offer assistance with ACP Geographic Response Plan Workshops in Monroe County (Florida Keys). Awaiting response from Sector Key West regarding necessary assistance with developing and running the ACP update workshops.

Environmental Unit prepared a summary of the spill trajectory and fate/effects briefing provided by Dr. Jerry Galt of NOAA on Thursday 5/13 and forwarded same to BP Environmental in Houston. NOAA PowerPoint Presentation delivered by Dr. Galt provides spill impact probabilities and estimated transport times for a consolidated analysis of 500 spill transport scenarios.

Environmental Unit provided an initial analysis of the results of the NOAA long term transport modeling with a focus on the potential timing and impacts within the Sector St Petersburg AOR

Environmental Unit worked with FWC GIS staff IN St Petersburg to develop a daily GIS product that will assist the Unified Command in tracking the movement of the NOAA Spill Trajectory "Line of Uncertainty" and spill boundaries so that the "Speed of Advance" can be effectively tracked. The Unified Command is using the spill's speed of advance and estimated time of potential landfall w

Other Comments

Finance:
Continue to support Legal as they work with Ops, JIC, Mobile, Houston and Louisiana on standardize claims process.
Worked with JIC and Legal to finalize details and issued check to Florida Keys Community College to support Hazmat training in Key West area.
Developed a cost tracking spreadsheet for all contractors based on Resource Group ICS 211P

Definitions

Deployed boom includes assigned boom
Staged boom is awaiting deployment in warehouses

OIL BUDGET (Best Estimate) EXECUTIVE SUMMARY

OP DAY: 5/14/2010

	Total in bbls	Last OPS Day	Current Assumptions
Discharged	**118,000**	**5,000**	**5K bbls/day**
Dispersed Naturally (Surface & Subsurface)	8,135	446	10% by volume of surface oil
Evaporated	24,406	1,339	30% per volume of available surface oil
Amount Available for Recovery	**85,458**	**3,214**	
Skimmed	699	699	10% of water collected is oil
Burned	0	0	Based on surface area and thickness calculations on site before burning
Dispersed Chemically (Surface & Subsurface)	47,420	654	Surface: oil dispersed = dispersant X 3 Surface: dispersant impacts 25% of treatable oil Subsurface: oil dispersed = dispersant X 5
Total Dispersant Used	**21,694**	**264**	**note: converted fm gals to bbls**
Sorbents	2	0	5% of oily solid waste is oil
Remaining	**37,338**	**1,862**	
	% change	5%	

1 bbl = 42 gals

Note: Assumptions vetted through the Interagency Solutions Group and will be updated with new information/developments. These are best estimates and not exact quantities and are based on conservative estimates of potential volume and/or visual observations.

This information is based on most current information available at 0500; update will also be provided at 1700.

Produced by National Incident Command

Not for release without NIC approval

On-Scene/RFA Approved

UAC #	213RR #	Capability	Description	Status	EPA Region	Memo Status	Estimated Cost
UAC0001		Defense Coordination Officer	Defense Coordinating Officer (DCO): Includes Contingency Command Post (CCP) and 2 Defense Coordinating Elements (DCEs) staffed and augmented as required to Unified Area Command in Robert, LA	Deployed to Unified Command	4, 6	Signed	$79,000.00
UAC0003		Public Affairs Personnel	Public Affairs Personnel: 4 Public Affairs Officers (media ops team), 3 combat camera teams (5 PAX each), 1 Defense Visual Information Distribution System (DVIDS),	Deployed to Joint Information Center	6	Signed	$100,000.00
UAC0005		Navy Supervisor of Salvage	66K feet of 42" boom, nineteen (19) Skimmer systems and associated equipment , fifty eight (58) personnel in theater.	85 of 85 trucks arrived from Port Hueneme, CA and Cheatham Annex, VA. Fifty eight (58) PAX. Equipment being deployed in theater.	4, 6	Signed	$3,500,000.00
UAC0006	D0136	Two C-130 aircraft capable of Mobile Aerial Spray System (MASS)	RFA transmitted by FOSC & received by Joint Staff	2 Aircraft on scene	4, 6	Signed	TBD
UAC0007		Activation of Louisiana National Guard	National Guard Forces for LA	1,049 supporting mission (out of 1100 authorized by FOSC).	6	Signed	$7,000,000.00

RFA In Progress

UAC #	213RR #	Capability	Description	Status	EPA	Memo	Estimated Cost
UAC0028	Received	1 spare C-130 aircraft to supplement the existing 2 C-130s. Critical asset in support of DEEP WATER HORIZON oil spill response activities.	1 aircraft to supplement existing 2 aerial spray aircraft to support deployment of oil-dispersing chemicals into the Gulf of Mexico. Spare aircraft is required in order to insure maximum operational availability and chemical dispersant placement for	Awaiting OSD approval	4, 6	Draft	TBD
UAC0031	Full Routing	Boom and skimmer equipment	RFA: supervisor of salvage, boom and boom moorings, 136,000 oil storage bladder, 2 tow boats	In coordination		Signed	
UAC0032	Full Routing	ALNG	10-005AL 125 Soldiers to assist in the movement, emplacement, repair and monitoring of all protective barriers as required by the Incident Commander for 30 days.	In coordination		Signed	$712,500.00
UAC0033	Full Routing	MSNG	1 additional LNO to UAC Robert to augment existing LNO	In coordination		Signed	$7,857.00
UAC0035	Full Routing		DCO Amendment, to facilitate engagement, coordination and requests for support between DoD partners and other Unified Area Command members and incident responders.	In coordination	4, 6	Signed	$151,250.00
UAC0037	KO for procurement	Vessel w/ side scan sonar & survey capability	Vessel with side scan sonar and hydrographic survey capability for West Bay shipping channel for decontamination station. Max depth: 15 fathoms (90ft) Estimate: 4 day requirement	In coordination	4, 6	Draft	$43,500.00
UAC0038	Full Routing	FLNG	FLNG 10-001FL Amendment 1. Soldier will assist with receipt, tracking, processing, and oversight of mission requests submitted by the FOSC by the State of Florida National Guard through the ICP	In coordination	4, 6	Signed	$18,500.00
UAC0040	Full Routing	Public Affairs/Media Support	5 public affairs officers (media ops team), 3 combat camera teams (5 personnel each), 1 Defense Visual Information Distribution System (DVIDS), 1 DVIDS operator. Mobile equipped, scalable, expeditionary Joint Public Affairs and imagery collection capabilities to operate in support of response operations in areas affected by the oil spill.	Under Consideration	4,6	Signed	$151,150.00
UAC0043	Full Routing	Incident staging base (ISB) at Naval Air Station Pensacola FL, in response and recovery operations	Incident staging base @ NAS Pensacola FL , to stage booms, boats and equipment for oil prevention.	DOD On Scene	4,6	Draft	$15,000.00

RFA In Progress

UAC #	213RR #	Capability	Description	Status	EPA	Memo	Estimated Cost
UAC0050	213 Received	Activate and deploy DoD to support USCG in response to Deepwater Horizon Oil Spill Event to Unified Command, Robert, Louisiana and Incident Command Post in Mobile, Alabama. Provide Region IV and Region VI Defense Coordinating Officers (DCOs) and ARNORTH CCP with	To facilitate engagement, coordination and requests for support between DoD partners and other Unified Area Command members and incident responders, as well as provide command and control of DoD units in AO.		4,6	Draft	$14,961.00
UAC0051	FOSC	C-130 military aircraft (x2) configured to spray dispersants, with accompanying crews, and support equipment, to augment aerial dispersant spraying operations. This request is in addition to the C-130 military aircraft (x2) already enroute from 917 Airlift Wing.	Two C-130 military aircrafts used to spray dispersants with accompany crews, support equipment, and for spraying operations.	DOD On Scene	4,6	Draft	(Waiting on cost estimate.)

RFA/Under Consideration

UAC #	213RR #	Capability	Description	Status	EPA Region	Memo Status	Estimated Cost
		Two Additional C-130 aircraft capable of Mobile Aerial Spray System (MASS) and delivery of 2,000 gallon spray capacity per sortie.	Increase aircraft capacity for dispersant deployment	Pends FOSC requirements determination.			
		Naval Surface Combatant (Amphibious)	Includes LCAC (Hovercraft x3) Embarked Helo Detachment. Provides sea-bearing capability	Pends FOSC requirements determination.			
		P-3C Aircraft (AIP Variant) with Tactical Common Data Link (TCDL) Equipment/Personnel (Jacksonville, FL)	P-3C AIP Aircraft & TCDL Ground Equipment	Available			
		LCAC / LCU (Little Creek, VA)	Aboard LHA	Available			
		Naval Mobile Construction Battalion Air Detachment (Task Tailored NMCB DET) (Gulfport, MS)	89 Personnel plus selected civil engineering equipment	Available			
		Fleet Survey Team (Stennis AFB, MS)	Hydrographic Survey Capability for Impacted Ports	Available			
		Beach Group TWO (Little Creek, VA)	Logistics Over the Shore (LOTS)	Available			
		E-2C HAWKEYE (Norfolk, VA)	Surface Surveillance and Air Control	Available			
		C-2A GREYHOUND (Norfolk, VA)	Logistics Support	Available			
		Naval Station Pensacola, FL	Logistics Support Base	Available			
		Joint Reserve Base New Orleans, LA	Logistics Support Base (APOD)	Available			
		Naval Air Station Key West, FL	Logistics Support Base (APOD)	Available			
		Naval Support Activity Panama City, FL	Logistics Support Base (SPOD)	Available			
		USAF Aux/Civil Air Patrol	GA-8 Archer – 12 hrs	Available			
		USAF Aux/Civil Air Patrol	C-182 – 6 hrs	Available			
		Unmanned Aerial Aircraft (UAV) / Remote Piloted Aircraft (RPA)	Surrogate Predator – 48 hrs	Available			
		Naval Support Activity Panama City	Immediate	Available			
		Marine Corps Logistics Base, Albany GA	48-hrs	Available			

DEEPWATER HORIZON Response
Resource Summary (0400 EDT 13 MAY10)

Essential Elements	USCG Today	USCG To-Date	DOD Today	Other Today	Other To-Date	Totals To-date
Personnel						
Assigned in the Field						9,316
Assigned to Command Post						720
Total						10,036
Boom (Combined total of sorbent and surface) (ft)						
Ordered						1,521,239
Available/Staged						1,531,006
In Use						1,410,500
Dispersant Materials (gal)						
Ordered						750,000
Available/Staged						120,471
In Use						267,264
Recovery Barges						
Ordered						1091
Available/Staged						102
In Use						27
Skimmers						
Ordered						129
Available/Staged						173
In Use						20
Oil Spill Response Vessels						
Ordered						3
Available/Staged						2
In Use						18
Tugs						
Ordered						26
Available/Staged						22
In Use						4
Other Support Vessels						
Ordered						455
Available/Staged						31940
In Use						526
Remotely Operated Vehicles						
Ordered						4
Available/Staged						0
In Use						12
Fixed-wing Aircraft						
Ordered						15
Available/Staged						4
In Use						12
Helicopters						
Ordered						5
Available/Staged						2
In Use						28

DEEPWATER HORIZON Response
Resource Summary (0400 EDT 13 MAY10)

Essential Elements	USCG Today	USCG To-Date	DOD Today	Other Today	Other To-Date	Totals To-date
Personnel						
Assigned in the Field						9,316
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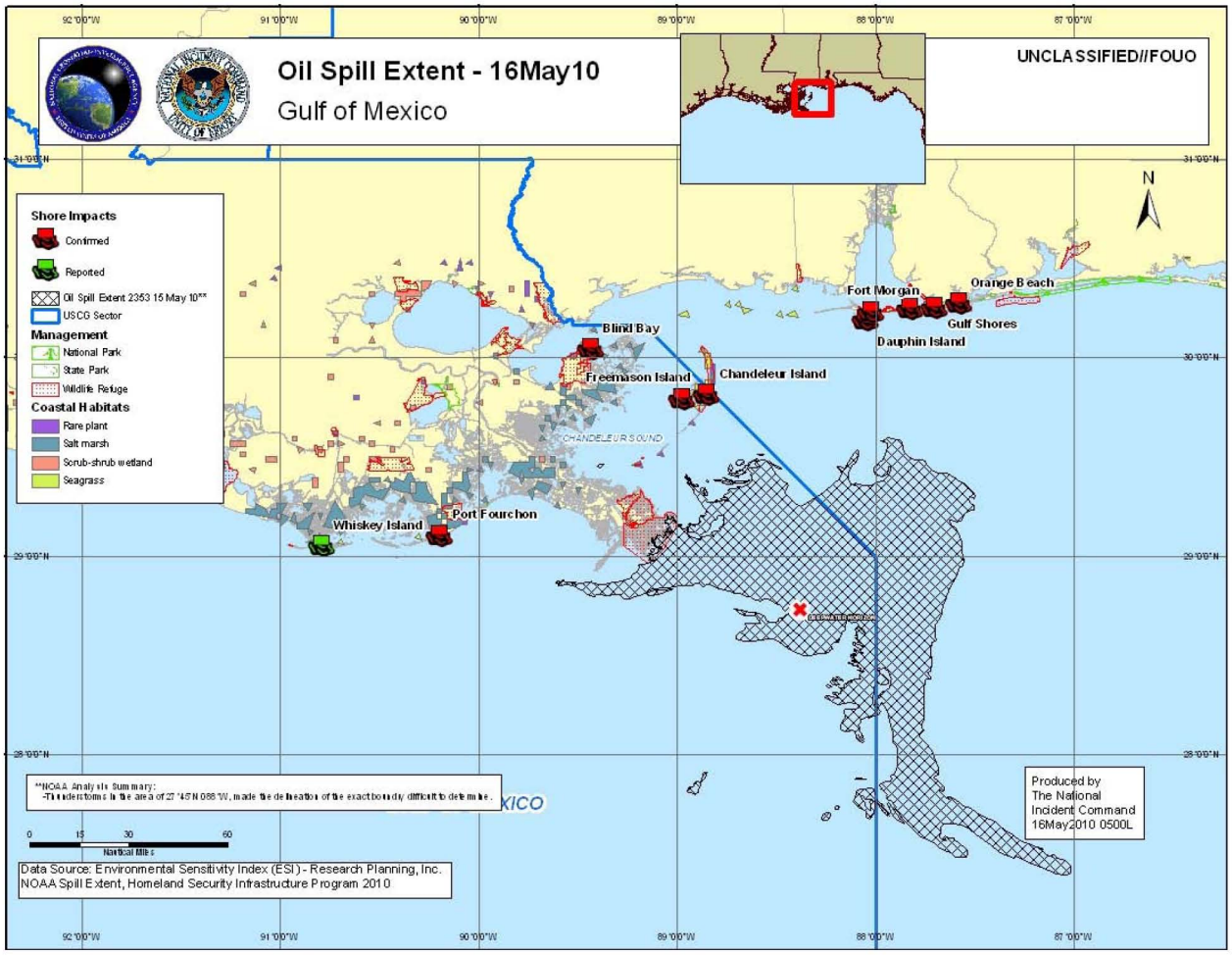
In Use						12
Helicopters						
Ordered						5
Available/Staged						2
In Use						28

Incident Brief: Deepwater Horizon Oil Spill
(Updates in RED)



National Incident Commander Objectives:

1. Establish and manage a coordinated interagency response effort to effectively employ all resources required to mitigate current and long term environmental and economic impacts of the incident.
2. Engage and inform the public, stakeholders, and the media, keeping them apprised of response activities and plans.
3. Engage across all necessary levels of government to develop courses of action for issues that span multiple agencies and departments.

Area Command/Incident Commander Objectives:

1. Stop the leak
2. Fight the spill offshore
3. Protect sensitive areas
4. Mitigate the effects

Current Situation:

- Well head discharge rate still estimated at approximately 5,000 bbls per day, however BP is currently conducting analysis to reevaluate oil discharge rate.
- The result of sonic scan on the Blow Out Preventer (BOP) is inconclusive. The scan was unable to confirm the location of the drill pipe and whether it was in the riser between the kink and the BOP.
- No skimming operations 15 May 2010 due to weather conditions.

Oil Stoppage

- Enterprise drilling rig has inserted the RITT into the riser. The Riser Insertion Tube Tool (RITT) is the primary source mitigation option. Top Hat remains on the seabed and standing by pending effectiveness of the RITT. Well head discharge rate still estimated at approximately 5,000 bbls per day, however BP is currently conducting analysis to reevaluate oil discharge rate. The National Oceanic and Atmospheric Administration forecasts winds to be predominantly from the southeast over the next few days, becoming progressively weaker less than 5 kts by Monday.
- Top Kill equipment being staged; commencement of operation scheduled for 18 May.
- BP is currently conducting analysis to reevaluate discharge rate from source after some in the scientific community disputed the previously established 5,000 bbls per day estimate.
- DDII arrived on scene 13 May. Anticipate drilling a second relief well will commence on 16 May.
- Sonic scan performed to analyze riser integrity, results are pending.
- Conditional approval granted for undersea dispersant while EPA determines environmental impact.

Environmental Impact

- Tar balls confirmed at Grand ISLE, LA and Long Beach, MS. Clean up is currently ongoing. Tar balls confirmed along a 2 mile stretch of beach at Bon Secour National Wildlife Refuge, AL.
- Holly Beach, LA: Tar patties reported. Sampling is being conducted to determine if they are result of current spill. San Luis Pass, TX: Samples taken from tar balls on Bolivar Peninsular confirm tar balls are associated with the Deepwater Horizon Oil Spill.
- Port Fourchon, Louisiana: Shoreline Cleanup and Assessment Team (SCAT) reported a 4 kilometer stretch of tar balls and patties with approximately 5% coverage. Within that 4 kilometer area there was a 100 meter by 1.5 meter stretch of shoreline with approximately 50% coverage. Samples are being taken.
- Navy Cove, AL (Baldwin County Division 1): "Tens of thousands" of silver fingerling minnows 1 to 1.5 inches long found dead. Info was confirmed by Orange Beach Staging Area and witnessed onboard a vessel towing boom from the staging area. This area is inside the baseline area, where they have been no sighted tar balls or oil effects. Unknown if oil caused the kill whether the fish are being collected for testing.
- Egmont Key, FL: Source reported 4 or 5 large tar balls on a sand bar just south of Egmont Key, FL. Tar balls varied in size from “baseball” to “football” size. Further investigation yielded negative results. 13 May, the US Coast Guard reported 4-inch tar balls along beaches in eastern Alabama as prevailing ocean current steers the spilled oil toward the north and east. However, those current will have a seasonal shift to the south that could impact the coastlines Texas and Mexico by August.

Response/ Clean-up

- 06 Air Sorties (NON CG) completed 15 May. 14,208 gallons of Dispersant (9500) applied. Sorties completed by US Air Force Reserve, International Air Response, MSRC.
- 3 CG cutters and 3 commercial vessels are outfitted with VOSS/SORS system and are ready to conduct skimming operations. (Reported by NSF SIT Report 12 May).
- All shipping channels and ports remain open in the Gulf Coast Region.

Numerical Summaries of Response

Total Boom assigned: 1,294,910 ft
Sorbent Boom assigned: 418,390 ft
Oily water mixture recovered: 0 bbls Total: 151,391bbls
Surface dispersants applied: 14,208 gal Total: 575, 816 gal
Subsea dispersants applied: 7,222 gal Total: 35,931 gal
Wildlife Impact: 07 Total: 31
Total vessels assigned: 2,106
Total Fixed Wing Aircraft assigned: 17
Total Helo Aircraft assigned: 35
Total Response Personnel assigned: 11,039
On-scene weather: Wind – SE winds 10-15 kts; Seas – 3-5 ft choppy. Chance of showers and t-storms.
Unified Incident Commands: 3
Staging areas: 17

DATE: May 15, 2010 17:33:50 CST

The Ongoing Administration-Wide Response to the Deepwater Horizon Oil Spill

Key contact numbers

- Report oiled shoreline or request volunteer information: (866) 448-5816
- Submit alternative response technology, services or products: (281) 366-5511
- Submit your vessel for the Vessel of Opportunity Program: (281) 366-5511
- Submit a claim for damages: (800) 440-0858
- Report oiled wildlife: (866) 557-1401

Deepwater Horizon Incident Joint Information Center

Phone: (985) 902-5231
(985) 902-5240

The Ongoing Administration-Wide Response to the Deepwater BP Oil Spill

Prepared by the Joint Information Center

UPDATED May 15, 2010 5 PM

**** For a full timeline of the Administration-wide response, visit the White House Blog.***

PAST 24 HOURS

Secretaries Napolitano and Salazar Seek Clarification of BP's Redress Intentions

Secretary Napolitano and Secretary Salazar sent a letter to BP CEO Tony Hayward publicly holding BP's feet to fire. As the President said yesterday, this administration is committed to ensuring that those affected are compensated. The Secretaries reiterated that as a responsible party for this event, BP is accountable to the American public for the full clean up of this spill and all the economic loss caused by the spill and related events.

Coast Guard and EPA Approve Use of Dispersant Subsea

The U.S. Coast Guard and U.S. Environmental Protection Agency (EPA) announced they have authorized BP to use dispersants underwater, at the source of the Deepwater Horizon leak. Oil spill dispersants are chemicals that attempt to break down the oil into small drops and prevent it from reaching the surface or the U.S. shoreline. Dispersants are generally less harmful than the highly toxic oil leaking from the source and biodegrade in a much shorter time span.

The use of the dispersant at the source of the leak represents a novel approach to addressing the significant environmental threat posed by the spill. Preliminary testing results indicate that subsea use of the dispersant is effective at reducing the amount of oil from reaching the surface—and can do so with the use of less dispersant than is needed when the oil does reach the surface.

This is an important step to reduce the potential for damage from oil reaching fragile wetlands and coastal areas.

This course of action was decided upon with thorough evaluation and consideration of many factors as well as consultation with stakeholders. While BP pursues the use of subsea dispersants, the federal government will require regular analysis of its effectiveness and impact on the environment, water and air quality, and human health through a rigorous monitoring program. EPA's directive to BP, including the monitoring plan the company must adhere to in order to ensure the protection of the environment and public health, is publicly available at www.epa.gov/bpspill/dispersants.

Secretary Salazar Visits Wildlife Rehabilitations Center

Secretary Salazar visited Fort Jackson Wildlife Rehabilitation Center in Buras, La., today to examine efforts being undertaken by the U.S. Fish and Wildlife Service and its partners to protect and rehabilitate wildlife affected by the BP oil spill. Salazar also visited the Unified Area Command facility in Robert, La., for a briefing.

Fishing Restrictions Extended; More Than 92 Percent Remains Open

NOAA Fisheries revised the federal fishery closure boundaries late on May 14. The new closure will cover is a precautionary measure to ensure public safety and assure consumer confidence of Gulf of Mexico seafood. These changes will leave more than 92 percent of the Gulf's federal waters open for fishing, and supporting productive fisheries and tourism. More details can be found here.

Staging Area Total Grows to 17

17 staging areas are in place and ready to protect sensitive shorelines, including: Dauphin Island, Ala., Orange Beach, Ala., Theodore, Ala., Panama City, Fla., Pensacola, Fla., Port St. Joe, Fla., St. Marks, Fla., Amelia, La., Cocodrie, La., Grand Isle, La., Shell Beach, La., Slidell, La., St. Mary, La.; Venice, La., Biloxi, Miss., Pascagoula, Miss., and Pass Christian, Miss.

Progress Made in Relief Well Drilling Preparations

The *Development Driller III*, which will dig the first relief well, is lowering the blowout preventer stack and riser. The report depth was nearly 3,000 feet as of 7 p.m. EDT on Friday, May 14. After initial review by MMS, BP revised and resubmitted the Application for Permit to Drill the second relief well, which will be undertaken by the *Development Driller II*—which is on location and making preparations for initiating the drilling process.

Wildlife Hotline Taking Calls

The Wildlife Hotline has received a total of 17 calls for birds, fish, marine mammals, and reptiles which have not been confirmed. The Wildlife Rehabilitation Centers in Mississippi, Alabama, and Florida have received wildlife and have been conducting to treatment and rehabilitation.

Water Contamination Devices Installed in Everglades

A National Park Service crew installed three Semi-Permeable Membrane Devices in the Gulf Coast District of Everglades National Park to detect contamination in the water.

Mussel Watch Team is Dispatched

Deepwater Horizon Incident

Situation Executive Summary	
Operating Period 24	Custodian: Situation Unit Leader UNIFIED AREA COMMAND

Date of Issue:	May 15, 2010	**Period:**	5/14 06:00 to 5/15 06:00
IC :	M. Utsler, S. Toth (Houma); J. Hohle, T. Gray (Houston); D. Foster, B. Byczynski (Mobile); K. Seilhan B. Allan (St. Pete)		

KEY MESSAGES

General

- Total containment boom deployed to date is 1,271,560 ft
  - Louisiana is 425,310 ft
  - Mississippi is 334,500 ft
  - Alabama is 311,950 ft
  - Florida is 199,800 ft
- Total personnel working on response is 17,496
- Total volunteers signed up to date is 11,998, with 1,593 trained
- Subsea dispersant injection to restart May 15

Last 24-Hour Operational Period (No. 24)

- Riser Insertion Tube Tool returned to surface for refit in cradle
- 14 Surface dispersant flights, 44,031 gallons applied
- Continue preparations for top kill
- Press Teleconference at St. Pete; approx. 65 media called in.
- St. Pete visited by Florida Attorney General and staff of US Representative Castor

Next 24-Hour Operational Period (No. 25)

- Repair Riser Insertion Tube Tool, lay down additional mud mat, rig up to Enterprise
- Begin subsea dispersant injection
- Jetting in 36” casing with DD-II Rig to begin second relief well
- Preparing for top kill, install jumpers to junk shot skid
- Relief well MC252-3 (DD-III) to resume drilling
- Florida Attorney General McCollum to visit St. Pete Unified Command Center

FIELD REPORTS

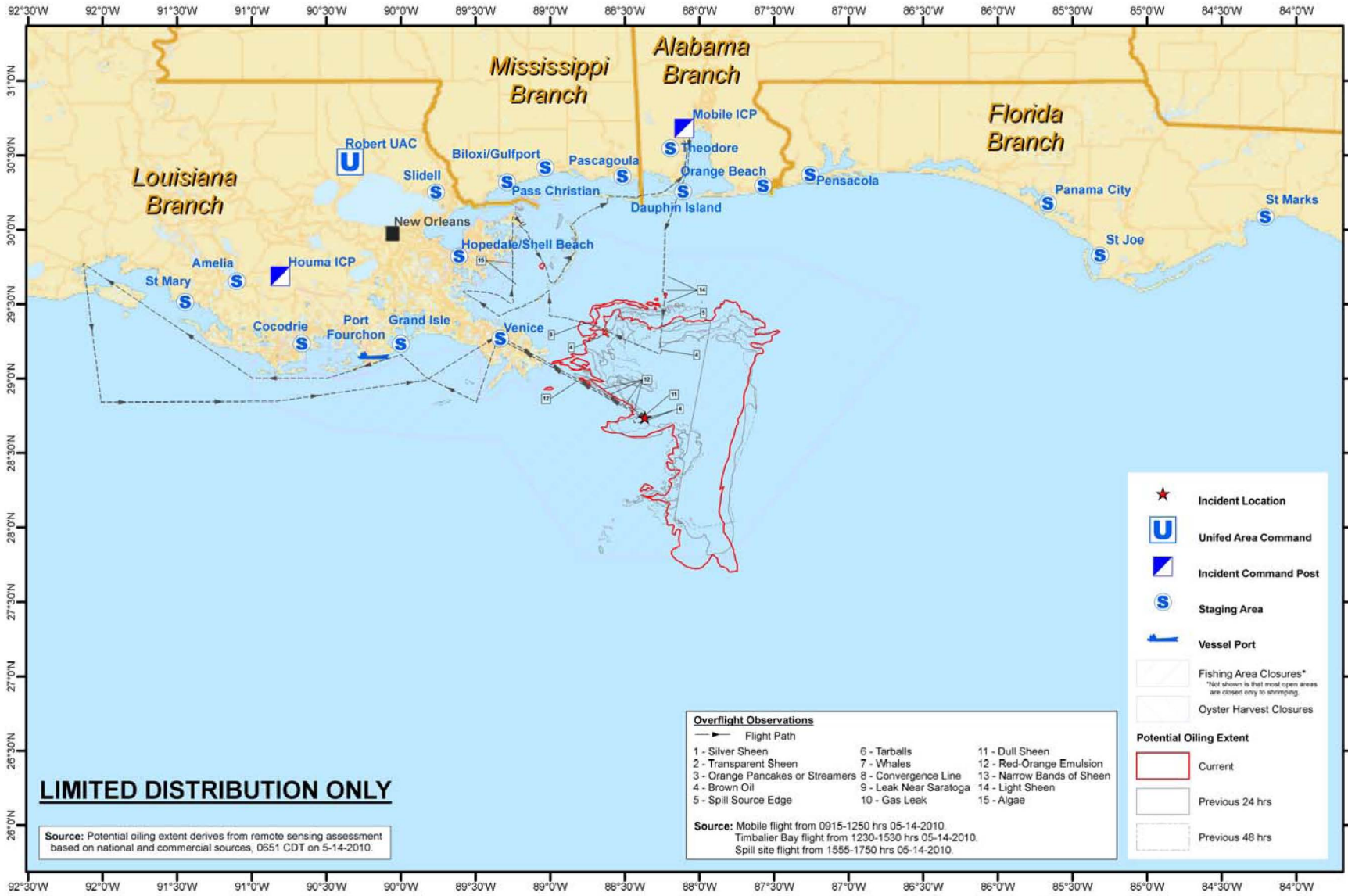
Attached for Each Incident Command Post

- Houma, Louisiana
- Houston, Texas
- Mobile, Alabama
- St. Petersburg, Florida

May 15, 2010			
	Current Period	Previous Period	Cumulative Total
HSSE			
HiPo's*	0	0	2
Near Miss *	1	5	59
First Aid*	6	4	79
Recordable Injuries (lost time/restricted duty/med treatment)*	0/0/0	0/0/1	1/2/37
Vehicle Accident*	0	3	8
Exposure hrs/Man hrs	127,000	99,000	1,237,000
PERSONNEL			
Total	17,496	17,444	
Personnel Command Posts	3,037	3,028	
Personnel Field (incl. Nat Guard)	14,459	14,416	
OPERATIONS			
Vessels Active			
*Offshore	627	573	
*Skimmer	30	30	
Aircraft Active			
-Helicopters	26	26	
-Fixed Wing	12	12	
# Dispersant Flights	14	15	192
# Mapping Flights	0	1	
Surface Dispersant Applied (gal)	44,031	41,620	561,608
Subsea Dispersant Applied (gal)	0	0	28,709
Dispersant Available (gal)	263,346	258,981	
Containment Boom Deployed (ft).	70,760	61,300	1,271,560**
Containment Boom Staged (ft)	274,904	178,832	
Sorbent Boom Deployed	24,800		418,300
Sorbent Boom Staged	900,848	873,876	
In-Situ Burns Conducted	0	0	10
ENVIRONMENTAL			
Oily Liquid Recovered (bbl)	0	0	151,391
Impacted Wildlife	6	2	28
CALL CENTER			
Total Calls Received (thru 5pm)	4,149	3,861	58,622
Calls Received from Volunteers	227	262	11,674
*HSSE figures as of 0530 May 15			
** Numbers adjusted for field information			

Deepwater Horizon (MC-252) - Situation Status Map

5/15/2010 0600 Hrs



Incident Location
Unifed Area Command
Incident Command Post
Staging Area
Vessel Port
Fishing Area Closures*
*Not shown is that most open areas are closed only to shrimping.
Oyster Harvest Closures

Potential Oiling Extent
Current
Previous 24 hrs
Previous 48 hrs

Overflight Observations

Flight Path

1 - Silver Sheen	6 - Tarballs	11 - Dull Sheen
2 - Transparent Sheen	7 - Whales	12 - Red-Orange Emulsion
3 - Orange Pancakes or Streamers	8 - Convergence Line	13 - Narrow Bands of Sheen
4 - Brown Oil	9 - Leak Near Saratoga	14 - Light Sheen
5 - Spill Source Edge	10 - Gas Leak	15 - Algae

Source: Mobile flight from 0915-1250 hrs 05-14-2010.
Timbalier Bay flight from 1230-1530 hrs 05-14-2010.
Spill site flight from 1555-1750 hrs 05-14-2010.

LIMITED DISTRIBUTION ONLY

Source: Potential oiling extent derives from remote sensing assessment based on national and commercial sources, 0651 CDT on 5-14-2010.

Miles
0 25 50 100 150 200

N W E S

The Response Group
Emergency Response | Pre-Planning & Support

For Official Use Only

Houma Daily Operational Report

15-May-10

	Prev 24 Hrs (Period 24)	Prior Period	Cumulative	24-Hour Look Ahead Plan
Safety				
Near Miss Incidents*	1	0	19	
First Aid Incidents	0	4	25	
Recordables	0	0	12	
Boom Deployed (ft)				
Louisiana	27,360	24,350	425,210	Parish Boom Accountability Teams (BAT) to track receipt & deployment of boom- 12 personnel
Mississippi	0	0	0	
Alabama	0	0	0	
Florida	0	0	0	
Boom Staged (ft)				
Louisiana				Expanding staging areas to west, as needed. Port St. Mary staging area established.
Mississippi			0	Incoming boom consolidated at Amelia.
Alabama			0	Sourcing additional OSRV's, awaiting release decision
Florida			0	International Peace- offshore dispersant test platform- temporarily out of service
Sorbent (ft.)				
Deployed	24,800	13,260	288,850	Add task force 6- commercial fishing fleet
Staged	387,760	354,310		
Active Vessels/Equipment				
Offshore Vessels	370	333		Seacor Lee- On Station, M/V Mississippi & Gulf Coast- On location
Skimmers	17	17		All on water recovery assets outbound to spill site eta 0600 05/15/10
ROVs	0	0		
Spill Containment				
Oily Liquid Recovered (bbls)	0	0	151,391	
In-situ Burns Completed	0	0	14	In-Situ Burn fleet ready pending weather
In-situ Burns (bbls)	0	0	11,642	Vessel applied dispersant test trials will resume, weather permitting.
Surface Dispersant Applied (gal)	44,031	41,620	517,577	Dispersant vessel M/V Adriatic had fuel pump failure- repaired and outbound at 2230
Subsea Dispersant Applied (gal)	0	0	0	Hos Super H - outfitting AM 5/15/10 - fit for duty PM 5/15/10
Dispersant Available (gal)	263,346	258,981		
Aircraft				
Active Helicopters	17	17		Aerial dispersant operations continue.
Active Fixed Wing	12	12		
# Dispersant Flights	14	15	206	AT802 Ag Tractor H2O spray test conducted. Additional testing at 75' 5/16/10
# Mapping Over Flights	0	1		Dash 8 had down gear problems. Will resume at 1300 05/15/10
Personnel				
Personnel Command Post	962	803		
Personnel Field	1158	595		
Volunteers*	68	57		
Wildlife Impact				
Captured	1	0	8	Properly trained wildlife responders to deploy to field for wildlife recon & capture
DoA	3	0	16	Ensure no dispersant spraying within 2 miles of a marine mammal or sea turtle.
Shoreline Impacts (feet)				
Louisiana	0	0	59981*	6 SCAT teams (4 on water, 2 in air)
Mississippi	0	0	0	**Air Recon 1**- 0800- Grand Isle, Marsh Island, Racoon Island **Air Recon 2**- 0800- Brush, Chandeleur, Birds Foot
Alabama	0	0	0	**SCAT 1**: Fourchon- 0800 **SCAT 2**: Grand Isle- 0700 **SCAT 3**: Timbalier 0800 **SCAT 4**: On Stand By
Florida	0	0	0	

Key Priorities for Today

1. Ensure the Health, Safety, & Security of Citizens and Response Personnel.
2. Maximize Protection of Environmentally and Economically Sensitive Areas and Contain and Recover Spilled Material.
3. Recover & Rehabilitate Injured Wildlife.
4. Manage Coordinated Response.
5. Keep Stakeholders and Public Informed.
6. Better coordination and utilization of field data.

Operational Comments

Shoreline cleanup continues based on confirmed impact- SCAT survey.

Strategic nearshore booming operations are ongoing based on ACP.

Dash 8 data relevant and timely- resource remains on scene.

Flood tubes being installed at South Pass.

Testing AT802 dispersant aircraft.

Calibrating ASI Turbo DC3 spray system.

RAT Teams on station. Very responsive and effective regarding validation and field truthing oil etc.

Coordinate restock of dispersants offshore for restock of dispersant vessels working near the source.

Environmental Comments

Continuing SCAT surveys, wildlife recon & recovery, waste management activities, trajectory forecasts, sampling program implementation, and advanced technology analysis.

Other Comments

* staged hard boom
* BP HSE statistic definitions apply
* mathematical error difference of 100 ft from yesterday's operational report, updated to reflect current data
* volunteer data still being determined

Deployed boom= to water from each parish (TOTAL)
Staged boom= boom on hand at each parish staging area (TOTAL)

Houston Daily Operational Report

5/15/2010, submitted at 0200 to UAC

	Prev 24 Hrs	Prior Period	Cumulative	24-Hour Look Ahead Plan
Safety				
Near Miss Incidents	0	0	0	Ensure Safety of Response Personnel
First Aid Incidents	0	0	0	Field focus around VOC mitigation
Recordables	0	0	0	Office focus around stress management
Boom Deployed (ft)				
Louisiana	0	0	0	
Mississippi				
Alabama				
Florida				
Boom Staged (ft)				
Louisiana	0	0		
Mississippi				
Alabama				
Florida				
Sorbent (ft.)				
Deployed	0	0	0	
Staged				
Active Vessels/Equipment				
Offshore Vessels	12	14		
Skimmers	0	0		
ROVs	8	8		
Spill Containment				
Oily Liquid Recovered (bbls)	0	0	0	
In-situ Burns Completed	0	0	0	
In-situ Burns (bbls)	0	0	0	
Surface Dispersant Applied (g	0	0	0	Dispersant boat Adriatic en route, ETA 0830, May 15, Super H vessel mobilizing
Subsea Dispersant Applied (g	0	0	30,591	Verbal approval to restart received
Dispersant Available (gal)	101,200	103,274		No dispersant applied offshore, amount corrected for tote size on vessel Pat Tillman
Aircraft				
Active Helicopters	0	0		
Active Fixed Wing	0	0		
# Dispersant Flights	0	0	0	
# Mapping Over Flights	0	0		
Personnel				
Personnel Command Post	726	629		
Personnel Field	1,047	1,026		
Volunteers	0	0		
Wildlife Impact				
Captured	0	0	0	
DoA	0	0	0	
Shoreline Impacts (feet)				
Louisiana	0	0	0	
Mississippi				
Alabama				
Florida				

Key Priorities for Today

1. Monitor Riser location and plumes
2. Progress VOC Mitigation Plan (Fire vessel, HVAC charcoal filtration, respirators).
3. Verify Operational Plans are approved and implemented
4. Begin sub-sea dispersant injection with the Skandi Neptune
5. Repair RITT tool, laydown additional mud mat with the Poseidon
6. Preparations for top kill, install 150' jumpers between junk shot skid and BOP
7. Enterprise to rig up to the RITT when ready
8. Progress plans for other source containment options
9. Relief well drilling with DD-III rig, jetting in the 36" casing with the DDII rig to begin the second relief well
10. VOC communication plans completed and IH and doctor doing offshore engagements

Operational Comments

1. ROV's monitoring BOP stack and plumes
2. Verbal approval to restart received
3. Surface dispersant approved for fire/boom vessels as needed
4. RITT returned to surface for refit in cradle prior to hook-up
5. Enterprise preparing for production and containment through RITT
6. Continuing ongoing connection of jumpers to the BOP for the Top Kill manifold
7. Progressing various containment options
8. Relief well MC252-3 (DDIII) running BOP's and riser
9. DDII in Safe Zone to prepare for relief well no. 2

Environmental Comments

Other Comments

Mobile, AL Daily Operational Report

14-May-2010

	Period 24	Period 23	Cumulative	24-Hour Look Ahead Plan
Safety				
Near Miss Incidents	0	2	35	
First Aid Incidents	2	2	40	
Recordables	0	0	25	
Boom Deployed (ft)				
Louisiana				
Mississippi	14,050	600	334,500	
Alabama	15,950	18,150	311,950	
Florida	13,400	18,200	199,800	
*New formatting for boom data from area command using boom summation form adjusted numbers to operations				
Boom Staged (ft)				
Louisiana				
Mississippi	16,450	31,750		
Alabama	51,250	123,350		
Florida	61,700	17,750		
Sorbent				
Deployed	0	129,450		
Active Vessels/Equipment				
Offshore Vessels	245	226		
Skimmers	13	13		
ROVs	0	0		
Spill Containment				
Oily Liquid Recovered (bbls)				
In-situ Burns Completed				
In-situ Burns (bbls)				
Surface Dispersant Applied (gal)				
Subsea Dispersant Applied (gal)				
Dispersant Available (gal)				
Aircraft				
Active Helicopters	9	9		
Active Fixed Wing	0	0		1030 Helo flight with Congressman Taylor MS
# Dispersant Flights	0	0		
# Mapping Over Flights	0	0		
Personnel				
Personnel Command Post	279	163		
Personnel Field	6,911	6,885		
Volunteers	11,998	11,755		
***(Value represents total registered volunteers for all states)**				
Wildlife Impact				
Captured	1	2	3	
DoA	1	0	1	
Shoreline Impacts (feet)				
Louisiana				In response to the 1042 tar balls found along the shores of Pass Christian and Long Beach, will be cleaned by NOP
Mississippi	0		0	
Alabama	0		0	
Florida	0		0	

Key Priorities for Today

Safety and welfare of citizens and response personnel.
Manage a coordinated prevention, response and recovery effort.
Continue enhancing the use of qualified local labor resources in respective states.
Maintain proactive forward leaning community outreach program down to county and city levels.
Embed robust process that provides feedback from responsible parties/agencies on final disposition of impacted wildlife

Operational Comments

Percentage of boom deployed: 95% Mississippi, 70% Alabama, and Mobile Bay Division 3 has been completed as of 5-14-10
Report of possible petroleum smells oil impact on south side of ship Island. Fly over was inconclusive. Will deploy ERT team NOP.
We had the following # of VOO's in our AOR: Alabama-22, Mississippi-65, Florida-0
Had the following ERT responses: Report of tar balls pass Christian and Long Beach 1042 tar balls total at both locations.

Environmental Comments

SCAT initiating additional field team as identified by UC; one team will be based out of Panama City
Incorporate EPA comments to decon plan; decon plan distributed to states for review and commenting period
Requisitioned water treatment systems for Pensacola and Panama City

Other Comments

Planning:

Logistics:

Staging area scouting, screening, and leasing remaining sites identified for distribution centers, staging areas in eastern sector, and deployment sites

Government Affairs Schedule for May 15:

1030 USCG Helo flight with Congressman Gene Taylor from MS at Deputy USCG IC and MS IC
1100 USCG boat trip with media from USCG station Dauphin Island

St. Pete Daily Operational Report

14-May-10

	Prev 24 Hrs (Period 23)	Prior Period	Cumulative	24-Hour Look Ahead Plan
Safety				
Near Miss Incidents	0	0	0	
First Aid Incidents	0	0	0	
Recordables	0	0	0	
Boom Deployed (ft)				
Louisiana	0	0	0	
Mississippi				
Alabama				
Florida				
Boom Staged (ft)				
Louisiana	0	0		
Mississippi				
Alabama				
Florida				
Sorbent (ft.)				
Deployed	0	0	0	
Staged				
Active Vessels/Equipment				
Offshore Vessels	0	0		
Skimmers	0	0		
ROVs	0	0		
Spill Containment				
Oily Liquid Recovered (bbls)	0	0	0	
In-situ Burns Completed	0	0	0	
In-situ Burns (bbls)	0	0	0	
Surface Dispersant Applied (gal)	0	0	0	
Subsea Dispersant Applied (gal)	0	0	0	
Dispersant Available (gal)	0	0		
Aircraft				
Active Helicopters	0	0		
Active Fixed Wing	0	0		
# Dispersant Flights	0	0	0	
# Mapping Over Flights	0	0		
Personnel				
Personnel Command Post	90	74		
Personnel Field	0	0		
Volunteers	0	0		
Wildlife Impact				
Captured	0	0	0	
DoA	0	0	0	
Shoreline Impacts (feet)				
Louisiana	0	0	0	
Mississippi				
Alabama				
Florida				

Key Priorities for Today

1. Ensure continuity of shoreline response activities between St. Petersburg and Mobile
2. Track resources and capabilities available throughout the AOR
3. Rapid Response team established for potential shoreline impacts within Sector St. Petersburg's AOR
4. Define, procure and deploy resources to implement external relations program
5. Liaise with state emergency management representatives to include periodic communications at city/county level as needed
6. Develop ship decontamination plan and promulgate extended communication plan
7. Enlist local resources (governmental/academic) through Environmental Unit
8. Develop a training matrix to summarize requirements and training offerings.

Operational Comments

Rapid Response team positioned in Taylor and Dixie country to quickly respond to oil sightings or shoreline impacts, while completing staging area assessments.

Environmental Comments

Completed workshops with representatives from Pinellas and Manatee counties to review the ACP and develop/revise prioritized booming strategies.
9 of 13 counties now complete.
Workshops with all counties within Sector St. Pete AOR scheduled to be completed by 18 May.
Updated Geographic Response maps for all counties; scheduled to be available as electronic files by 5/21/2010.
Sector Key West environmental unit to facilitate similar ACP update meetings for Florida Keys/Monroe county.

Other Comments

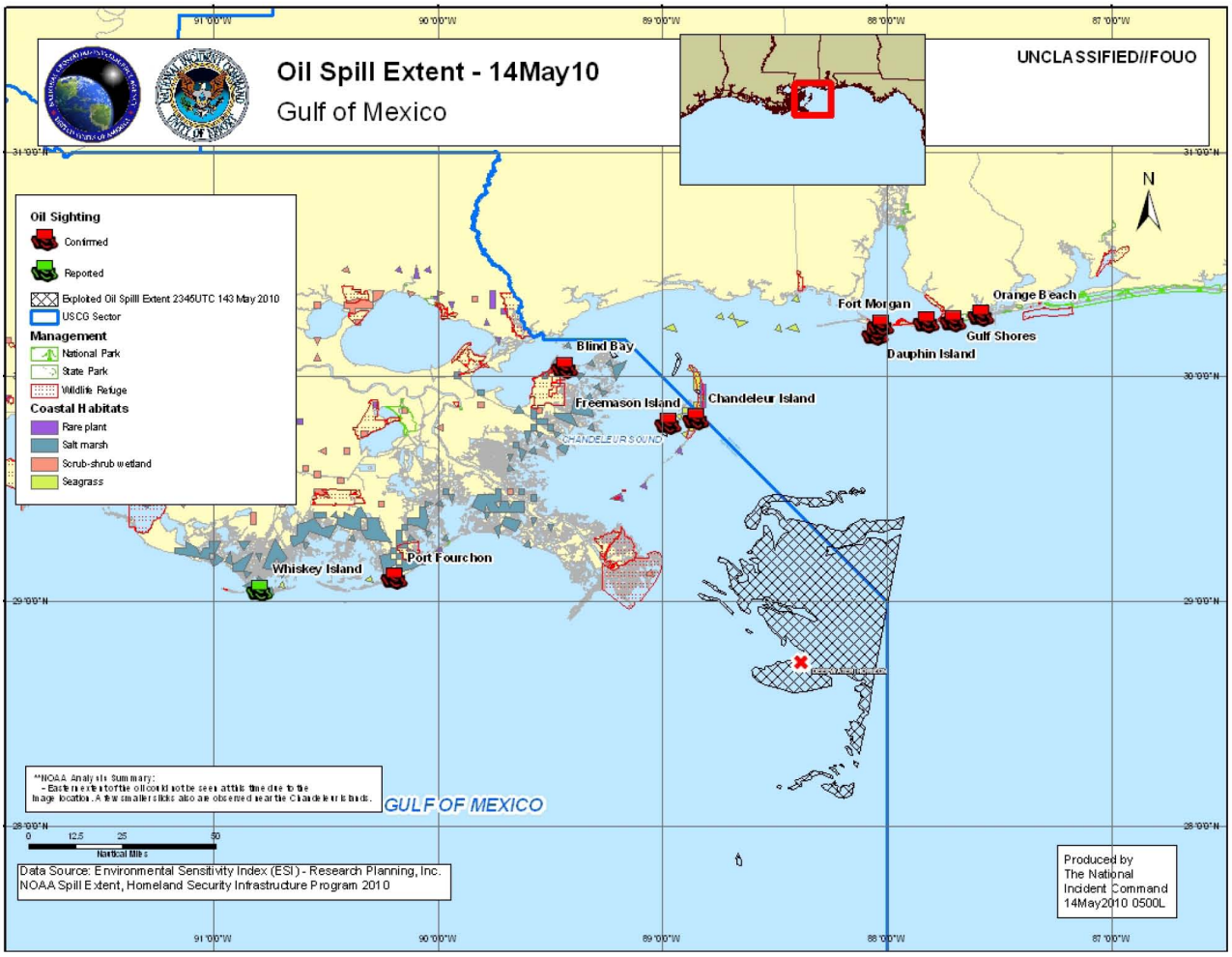
Unified Command conducted a press teleconference at 11:30am EDT. Approximately 65 media called in.
VIP Visits – Unified Command Briefings
- Two staff members from US Representative Castor (tour and briefing)
- Florida Attorney General McCollum (tour and briefing). The AG held a brief press conference in the Command Center atrium at the end of his visit.

Media calls – 11
Coordinated with "Keep Pinellas Beautiful" to establish beach cleanup program

Definitions

Deployed boom includes assigned boom
Staged boom is awaiting deployment in warehouses

Incident Brief: Deepwater Horizon Oil Spill
(Updates in RED)



National Incident Commander Objectives:

1. Establish and manage a coordinated interagency response effort to effectively employ all resources required to mitigate current and long term environmental and economic impacts of the incident.
2. Engage and inform the public, stakeholders, and the media, keeping them apprised of response activities and plans.
3. Engage across all necessary levels of government to develop courses of action for issues that span multiple agencies and departments.

Area Command/Incident Commander Objectives:

1. Stop the leak
2. Fight the spill offshore
3. Protect sensitive areas
4. Mitigate the effects

Current Situation:

Prep work and staging for both top hat and top kill continue. Top hat has been placed on the seabed, expected to be put in place 13/14 May. Pressure gauge successfully installed on BOP, BP reported the difference between the top and bottom pressure readings on the BOP indicates a restriction in the flow. No in situ burns scheduled for 13 May due to weather conditions; no subsea dispersants scheduled. Well head continues to discharge approximately 5,000 bbls per day.

Oil Stoppage

Top Hat placed on seabed 12 May. A riser insertion tube tool to be inserted in riser 14 May as primary option. The Top Hat may be used pending effectiveness of the riser insertion tube tool.

Top Kill equipment being staged; commencement of operation scheduled for 18 May.

Pressure gauge installed on BOP, BP reported 2600-2800 psi reading at the top and 3800 psi reading at the bottom of the BOP. The difference between the top and bottom psi readings indicates a restriction in the flow. Estimated flow restricted to 6 inches.

DDII arrived on scene 13 May. Anticipate drilling a second relief well will commence on 16 May.

Drilling and casing operations continue on the DDIII relief well.

In the absence of success, BP is also contemplating forcing debris such as golf balls and rubber tires into the well head to stem the oil flow.

Environmental Impact

Port Fourchon, Louisiana: Shoreline Cleanup and Assessment Team (SCAT) reported a 4 kilometer stretch of tar balls and patties with approximately 5% coverage. Within that 4 kilometer area there was a 100 meter by 1.5 meter stretch of shoreline with approximately 50% coverage. Samples were being taken.

Fort Morgan, Alabama: Local Fish & Wildlife confirmed a report of small quantities of tar balls impacting the shoreline. No further information was reported.

Navy Cove, AL (Baldwin County Division 1): "Tens of thousands" of silver fingerling minnows 1 to 1.5 inches long found dead. Info was confirmed by Orange Beach Staging Area and witnessed onboard a vessel towing boom from the staging area. This area is inside the baseline area, where they have been no sighted tar balls or oil effects. Unknown if oil caused the kill whether the fish are being collected for testing.

Egmont Key, FL: Source reported 4 or 5 large tar balls on a sand bar just south of Egmont Key, FL. Tar balls varied in size from “baseball” to “football” size. Further investigation yielded negative results.

Response/ Clean-up
No confirmation of tar balls in Destin, FL, despite media reports.

13 May, the US Coast Guard reported 4-inch tar balls along beaches in eastern Alabama as prevailing ocean current steers the spilled oil toward the north and east. However, those current will have a seasonal shift to the south that could impact the coastlines Texas and Mexico by August.

Tar balls confirmed along a 2 mile stretch of beach at Bon Secour National Wildlife Refuge, AL.

Orange Beach AL (Baldwin Divisions 1 and 2- Gulf Shores) conducted appx 25 miles of survey work on 12 May. The patties and balls were cleaned up, more assessments and clean ups planned for 13 May.

Response/ Clean-up

Two C-17's, Mission #'s LMZN111HG134 and LMZN112HG134, are scheduled to depart Elmendorf to Belle Chase on 14 May at 0615Z (0215 EDT) and 1000Z (0600 EDT) to deliver the last of the AK boom material.

15 Air Sorties (NON CG) completed 13 May. 41,620 gallons of Dispersant (9500) applied covering 8,324 acres (5gal/acre application rate). Sorties completed by US Air Force Reserve, International Air Response, MSRC.

14 Air Sorties scheduled for 14 May. Aircraft spotters should be on site in their zone at 0800 and spray aircraft may pre-stage to the site at 0830. Spray operations to commence approximately 0900.

No skimming operations conducted on 13 May due to weather. Operations pending weather Conditions

3 CG cutters and 3 commercial vessels are outfitted with VOSS/SORS system and are ready to conduct skimming operations. (Reported by NSF SIT Report 12 May).

All shipping channels and ports remain open in the Gulf Coast Region.

No vessels have required cleaning or de-contamination; teams are on standby if the need arises.

Numerical Summaries of Response
Boom assigned: 1,210,150ft
Sorbent Boom assigned: 385,820ft
Total Boom assigned: 1,219,783ft
Oily water mixture recovered: 27,697 bbls Total: 151,391bbls
Surface dispersants applied: 41,620 gal Total: 517,577 gal
Subsea dispersants applied:0 Total: 28,709 gal (updated based on 1200 UAC SIT Update Deliverables)
Wildlife Impact: 2 Total: 22
(updated based on 1200 UAC SIT Update Deliverables)

Total vessels assigned: 559
Total Fixed Wing Aircraft assigned: 12
Total Helo Aircraft assigned: 26
Total Response Personnel assigned: 12,742
On-scene weather: Wind – SE winds 15-20 kts; Seas – 4-5 ft choppy
Unified Incident Commands: 3
Staging areas: 15

DEEPWATER HORIZON Response
Resource Summary (0400 EDT 13 MAY10)

Essential Elements	USCG Today	USCG To-Date	DOD Today	Other Today	Other To-Date	Totals To-date
Personnel						
Assigned in the Field						9,316
Assigned to Command Post						720
Total						10,036
Boom (Combined total of sorbent and surface) (ft)						
Ordered						1,521,239
Available/Staged						1,531,006
In Use						1,410,500
Dispersant Materials (gal)						
Ordered						750,000
Available/Staged						120,471
In Use						267,264
Recovery Barges						
Ordered						1091
Available/Staged						102
In Use						27
Skimmers						
Ordered						129
Available/Staged						173
In Use						20
Oil Spill Response Vessels						
Ordered						3
Available/Staged						2
In Use						18
Tugs						
Ordered						26
Available/Staged						22
In Use						4
Other Support Vessels						
Ordered						455
Available/Staged						31940
In Use						526
Remotely Operated Vehicles						
Ordered						4
Available/Staged						0
In Use						12
Fixed-wing Aircraft						
Ordered						15
Available/Staged						4
In Use						12
Helicopters						
Ordered						5
Available/Staged						2
In Use						28

Worse Case Scenarios (2 week planning window)

Scenario	Details	Impact on							Mitigation Options
		Discharge Rate	Surface Operations			Sub-surface Operations		Shoreline Cleanup	
			Skimming	Dispersant Use	In-Situ Burning	Dispersant Use	ROV Repair Activities		
Dome Failures	Dome impacts BOP during installation resulting in unrestricted discharge	Significant Increase	Add'l sorties	Add'l sorties	Add'l sorties	Add'l sorties	Ineffective	Add'l Activity Expected[1]	1. Increase Relief Well Operations
	Dome installation fails to secure source	Decreased (if flow restricted)	Add'l sorties	Add'l sorties	Add'l sorties	Add'l sorties	Unchanged	Unchanged	
Riser Failures	Riser continues to settle and fails in additional places	Increase	Add'l sorties	Add'l sorties	Add'l sorties	Add'l sorties	Increase	Add'l Activity Expected[1]	
	Riser integrity degrades resulting in additional leaks	Increase	Add'l sorties	Add'l sorties	Add'l sorties	Add'l sorties	Increase	Add'l Activity Expected[1]	
Relief Well Failures	Relief well operation extends beyond 90 days	Unchanged	Add'l sorties	Add'l sorties	Add'l sorties	Add'l sorties	Increase	Add'l Activity Expected[1]	
	Critical drill rig equipment failure	Unchanged	Add'l sorties	Add'l sorties	Add'l sorties	Add'l sorties	Increase	Add'l Activity Expected[1]	
	Drill rig forced to relocate for health/safety concerns	Unchanged	Limited	Limited	Limited	Limited	Limited	Add'l Activity Expected[1]	
Man-made Disaster	Additional rig failures in Gulf of Mexico	Unchanged[2]	Add'l sorties	Add'l sorties	Add'l sorties	Add'l sorties	Limited	Add'l Activity Expected[1]	
	Domestic terrorism incident in maritime domain	Unchanged	Add'l sorties	Add'l sorties	Add'l sorties	Add'l sorties	Limited	Add'l Activity Expected[1]	
Natural Disaster	Hurricane in the Gulf of Mexico	Unknown	Ineffective	Ineffective	Ineffective	Ineffective	Ineffective	Add'l Activity Expected[1]	
	Earthquake in Caribbean	Unknown	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	

[1] Additional teams, boom, equipment may be required to address larger affected area
[2] Multiple sources and expanded spill locations likely

DATE: May 13, 2010 19:03:31 CST

The Ongoing Administration-Wide Response to the Deepwater Horizon Oil Spill

Report oiled shoreline or request volunteer information: (866)-448-5816
Submit alternative response technology, services or products: (281) 366-5511
Submit your vessel for the Vessel of Opportunity Program: (281) 366-5511
Submit a claim for damages: (800) 440-0858
Report oiled wildlife: (866) 557-1401

Deepwater Horizon Incident Joint Information Center

Phone: (985) 902-5231
(985) 902-5240

Key contact numbers

- Report oiled shoreline or request volunteer information: (866) 448-5816
- Submit alternative response technology, services or products: (281) 366-5511
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Prepared by the Joint Information Center

UPDATED May 13, 2010 7 PM

**** For a full timeline of the Administration-wide response, visit the White House Blog.***

PAST 24 HOURS

Secretary Salazar Announces First Steps in MMS Restructuring

As the federal government continues its relentless response to the Deepwater BP Oil Spill and investigates the cause of the explosion and oil spill, Secretary Salazar directed Assistant Secretary for Policy, Management and Budget Rhea Suh and Senior Advisor Chris Henderson to oversee a restructuring of the Minerals Management Service that will ensure the independence of the agency's inspections and enforcement mission.

Secretary Salazar also sent a letter to Congressional leaders asking for their ideas and input on his plan to reform the agency.

Officials Inspect Rig Preparing to Drill Relief Well
National Incident Commander and Coast Guard Commandant Admiral Thad Allen and Federal On-Scene Coordinator Rear Admiral Mary Landry inspected the Development Driller II, which is set to begin drilling the second relief well shortly to permanently cap the leaking well.

BP's "Top Hat" Containment System Approaches Completion
MMS reports that BP has approached completion of the "top hat" containment system, and expects an update from BP as early as tomorrow on its operational status.

Community Town Hall Held in Port Sulpher and Dulac, La.
Representatives from the Coast Guard, EPA, NOAA, the Department of the Interior, the Department of Labor, the Agency for Toxic Substance and Disease Registry and BP participated town hall meetings in Port Sulpher and Dulac, La., to provide an update on the response to the oil spill and continue the dialogue with members of the community, local business leaders and other organizations.

Shoreline Cleanup Teams Continue to Assess Impact
Shoreline Cleanup and Assessment Teams (SCAT) surveyed 19 miles of Dauphin Island, Ala., and the Jackson County shoreline with minimal tarball findings. An additional five teams were deployed to Bon Secour National Wildlife Refuge to recovery tarballs.

The Department of the Interior has deployed 568 total personnel to the affected area to assist in cleanup, wildlife protection and rehabilitation, and shoreline assessment efforts.

Unified Area Command Continues to Build Web and New Media Engagement
The Unified Area Command in Robert, La., continues to grow its public engagement via its website (www.deepwaterhorizonresponse.com), which has received more than 19 million hits since it was launched on April 23, as well as Facebook (18,277 users) and Twitter (3,707 followers). These resources contain information about response efforts, jobs, volunteer opportunities, impacts to wildlife and other important public information.

DOD Aircraft Conduct Dispersant Spray Missions
The Department of Defense's Modular Aerial Spray System (MASS) aircraft flew multiple missions—dispensing the same dispersant chemicals being used by BP and federal responders. These systems are capable of covering up to 250 acres per flight, and flights are coordinated with the EPA and the State of Louisiana to ensure all environmental concerns are addressed. Since MASS flights began on

May 1, a total of 47 missions have been flown and nearly 70,000 gallons of dispersant have been applied.

National Guard Support Continues to Build
1,304 National Guard personnel are currently supporting oil response—952 from the Louisiana National Guard are providing Command and Control and sandbagging support to St. Bernard and Plaquemines parishes, supporting marina operations and conducting HAZMAT training; 323 from the Alabama National Guard are deploying protective barriers around Dauphin Island and conducting sandbag and security operations; 25 from the Mississippi National Guard personnel are providing helicopter support and liaison officers to aid local officials with emergency response; and four from the Florida National Guard are performing liaison duties in support of the response effort to the Unified Command Center in Alabama and to its own emergency operations center in Tallahassee.

Five Oil Platforms Have Been Evacuated to Ensure Health and Safety
A total of five platforms have been evacuated in order to ensure the safety and health of rig workers. Estimated oil production shut-in is 2,300 barrels a day (0.14 percent of the Gulf ‘s oil production) and approximately 1.2 million cubic feet of gas (0.02 percent of the Gulf’s gas production).

Joint Bird Rescue Operations Are Dispatched
U.S. Fish and Wildlife Services and the National Parks Services dispatched a joint boat operation to Horn Island, Miss., to recover potentially oiled wildlife and transport them to a wildlife rehabilitation center for treatment. Treatment and rehabilitation operations are also ongoing on Chandeleur Island.

By the Numbers to Date:
- Personnel were quickly deployed and approximately 13,000 are currently responding to protect the shoreline and wildlife.

- More than 520 vessels are responding on site, including skimmers, tugs, barges, and recovery vessels to assist in containment and cleanup efforts—in addition to dozens of aircraft, remotely operated vehicles, and multiple mobile offshore drilling units.

- More than 1.4 million feet of boom (regular and sorbent) have been deployed to contain the spill—and approximately 1 million feet are available.

- Approximately 5 million gallons of an oil-water mix have been recovered.

- Approximately 476,000 gallons of dispersant have been deployed. More than 217,000 gallons are available.

- 14 staging areas have been set up to protect vital shoreline in all potentially affected Gulf Coast states (Biloxi, Miss., Pascagoula, Miss., Pensacola, Fla., Panama City, Fla., Dauphin Island, Ala., Grand Isle, La., Shell Beach, La., Slidell, La., Venice, La., Orange Beach, Ala., Theodore, Ala., Pass Christian, Miss., Amelia, La., and Cocodrie, La.).

Resources:

- For information about the response effort, visit www.deepwaterhorizonresponse.com.

- For specific information about the federal-wide response, visit http://www.whitehouse.gov/deepwater-bp-oil-spill.

- To contact the Deepwater Horizon Joint Information Center, call (985) 902-5231.

- To volunteer, or to report oiled shoreline, call (866) 448-5816. Volunteer opportunities can also be found here.

- To submit your vessel as a vessel of opportunity skimming system, or to submit alternative response technology, services, or products, call 281-366-5511.

- To report oiled wildlife, call (866) 557-1401. Messages will be checked hourly.

- For information about validated environmental air and water sampling results, visitwww.epa.gov/bpspill.

- For National Park Service updates about potential park closures, resources at risk, and NPS actions to protect vital park space and wildlife, visit http://www.nps.gov/aboutus/oil-spill-response.htm.

- For daily updates on fishing closures, visit http://sero.nmfs.noaa.gov.

- To file a claim, or report spill-related damage, call BP's helpline at (800) 440-0858. A BP fact sheet with additional information is available here. For those who have already pursued the BP claims process and are not satisfied with BP's resolution, can call the Coast Guard at (800) 280-7118. More information about what types of damages are eligible for compensation under the Oil Pollution Act as well as guidance on procedures to seek that compensation can be found here.

Deepwater Horizon Incident

Situation Executive Summary	
Operating Period 22	Custodian: Situation Unit Leader UNIFIED AREA COMMAND

Date of Issue:	May 13, 2010	**Period:**	5/12 06:00 to 5/13 06:00
IC :	M. Utsler, S. Toth (Houma); J. Hohle, T. Gray (Houston); D. Foster, B. Byczynski (Mobile); K. Seilhan B. Allan (St. Pete)		

KEY MESSAGES

General

- Total containment boom deployed to date is 1,210, 150)
  - Louisiana is 376,600 ft
  - Mississippi is 321,400 ft
  - Alabama is 271,000 ft
  - Florida is 171,600 ft
  - Federal is 69,550 ft as of May 11
- Total personnel working on response is 13,436
- Total volunteers signed up to date is 14,500; 1,586 trained
- Waiting on approval to restart subsea dispersant injection
- Dash 8 schedule reduced to one flight per day to allow maintenance time

Last 24-Hour Operational Period (No. 21)

- DD-II rig in route, ETA May 13 pm
- Obtained boost line pressure data from MC252 #1 stack
- Running riser on Enterprise for RITT operation
- Surface dispersant flights resumed, 27,697 gallons applied
- Preparing to reinstall Yellow Control Pod and jumpers for BOP in preparation for junk shot
- Continue preparations for top kill

Next 24-Hour Operational Period (No. 22)

- Running drill pipe in riser on Enterprise for RITT operation
- Relief well MC252-3 (DD-III) preparing to run riser and BOP
- Aerial dispersant flights to resume today
- In situ Burn fleet to be deployed, weather permitting
- 6 SCAT teams operating in Mobile

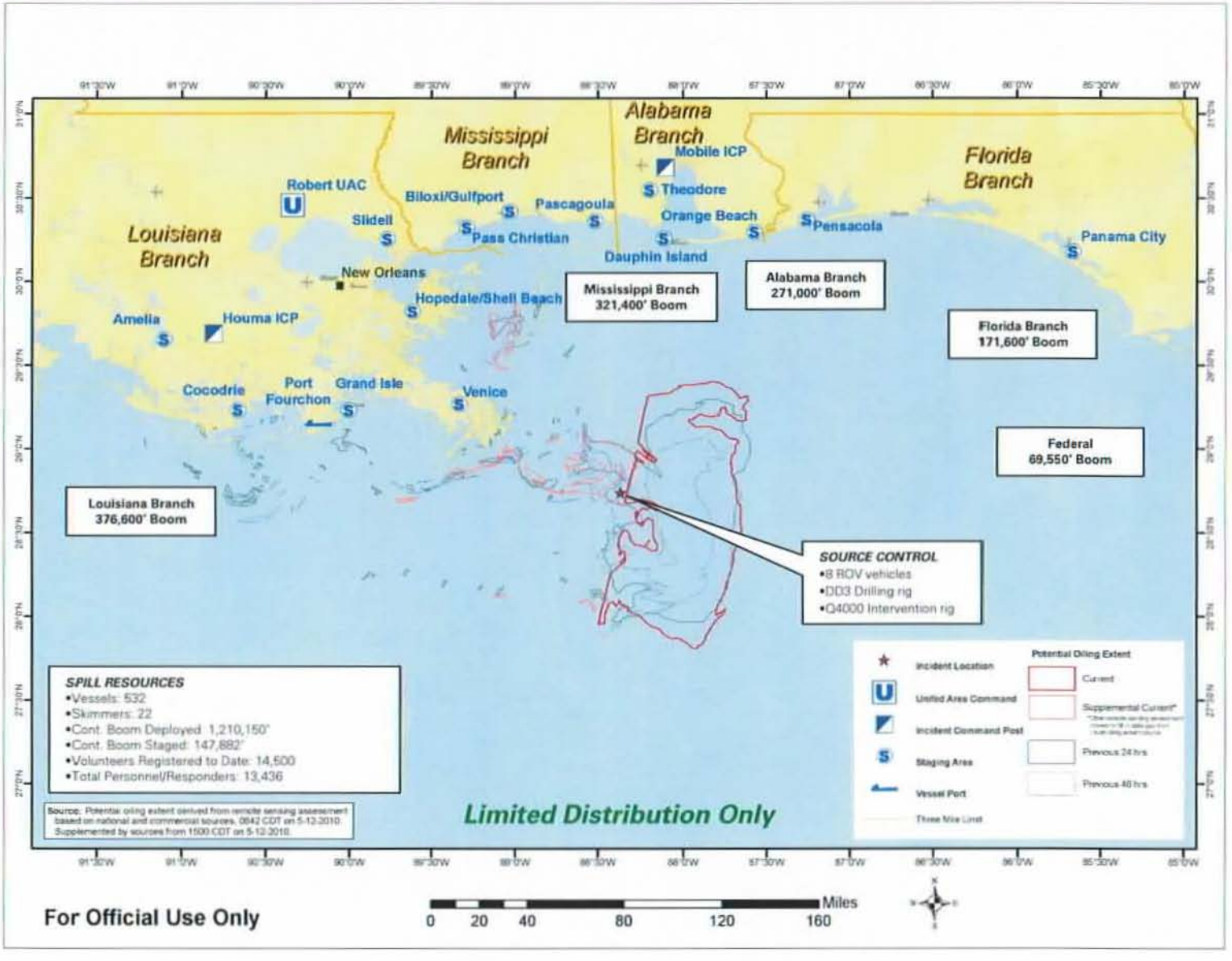
FIELD REPORTS

Attached for Each Incident Command Post

- Houma, Louisiana
- Houston, Texas
- Mobile, Alabama
- St. Petersburg, Florida

May 13, 2010			
	Current Period	Previous Period	Cumulative Total
HSSE			
HiPo's*	0		2
Near Miss *	5		46
First Aid*	4		49
Recordable Injuries (lost time/restricted duty/med treatment)*	0/0/1		1/2/31
Vehicle Accident*	1		4
Exposure hrs/Man hrs	103,000	88,000	1,011,000
PERSONNEL			
Total	14,542	13,436	
Personnel Command Posts	3,055	3,703	
Personnel Field (incl. Nat Guard)	11,487	9,733	
OPERATIONS			
Vessels Active			
*Offshore	529	532	
*Skimmer	20	22	
Aircraft Active			
-Helicopters	28	23	
-Fixed Wing	10	10	
# Dispersant Flights	1	22	165
# Mapping Flights	2	1	
Surface Dispersant Applied (gal)	39,710	7,940	475,957
Subsea Dispersant Applied (gal)	0	12,310	28,709
Dispersant Available (gal)	217,465	120,471	
Containment Boom Deployed (ft).	39,400	78,083	1,210,150**
Containment Boom Staged (ft)	219,882	393,292	
Sorbent Boom Deployed			323,090
Sorbent Boom Staged	867,398		
In-Situ Burns Conducted	0	0	10
ENVIRONMENTAL			
Oily Liquid Recovered (bbl)	27,697	0	125,385
Impacted Wildlife	2	1	22
CALL CENTER			
Total Calls Received (thru 5pm)	4049	4,241	50,612
Calls Received from Volunteers	336	340	11,185
*HSSE figures as of 0530 May 12			
** Numbers adjusted for field information			

Deepwater Horizon Incident (data from 05/12/2010)



Houma Daily Operational Report
13-May-10

	Prev 24 Hrs	Prior Period	Cumulative	24-Hour Look Ahead Plan
Safety				
Near Miss Incidents	1	0	18	
First Aid Incidents	1	0	21	
Recordables	0	0	12	
Boom Deployed (ft)				
Louisiana	24,700	16,500	376,600	Parish Boom Accountability Teams (BAT) to track reciept & deployment of boom- 12 personnel
Mississippi	0	0	0	
Alabama	0	0	0	
Florida	0	0	0	
Boom Staged (ft)				
Louisiana			72,682*	Expanding staging areas to west, Port St. Mary & others as needed.
Mississippi			0	Incoming boom consolidated at Amelia.
Alabama			0	Additional OSRV's sourced- western coastline
Florida			0	
Sorbent				
Deployed	13,260	37,380	239,070	
Active Vessels/Equipment				
Offshore Vessels	322	312		Offshore skimming fleet will be on location near source available to skim, conditions permitting.
Skimmers	17	17		Resume shoreline clean up, weather permitting.
ROVs	0	0		
Spill Containment				
Oily Liquid Recovered (bbls)	27,697	0	125,385	
In-situ Burns Completed	0	0	14	In-Situ Burn fleet to be deployed, weather permitting.
In-situ Burns (bbls)	0	0	9,150	
Surface Dispersant Applied (gal)	39,710	7,940	475,957	Vessel applied dispersant trials will resume, weather permitting.
Subsea Dispersant Applied (gal)	0	0	16,399	
Dispersant Available (gal)*	217,465	120,471		Mobilizing/outfitting two vessels for dispersant application.
Aircraft				
Active Helicopters	19	19		Aerial dispersant operations continue.
Active Fixed Wing	12	10		
# Dispersant Flights	12	2	177	Dash 8 is now scheduled for 1 flight per day to allow maintenance time.
# Mapping Over Flights	1	2		
Personnel				
Personnel Command Post	721	915		
Personnel Field	985	1,265		
Volunteers	53	59		
Wildlife Impact				
Captured	0	0	7	Properly trained wildlife responders to deploy to field for wildlife recon & capture
DoA	0	0	13	Ensure no dispersant spraying within 2 miles of a marine mammal or sea turtle.
Shoreline Impacts (feet)				
Louisiana	-	-	TBD	Based on trajectories and potentially impacted shoreline, survey shorelines from air and water
Mississippi	0	0	0	6 SCAT teams (4 on water, 2 in air)
Alabama	0	0	0	
Florida	0	0	0	

Key Priorities for Today

1. Ensure the Health, Safety, & Security of Citizens and Response Personnel.
2. Maximize Protection of Environmentally and Economically Sensitive Areas and Contain and Recover Spilled Material.
3. Recover & Rehabilitate Injured Wildlife.
4. Manage Coordinated Response.
5. Keep Stakeholders and Public Informed.

Operational Comments

Environmental Comments

Other Comments

* staged hard boom

Definitions

Deployed boom= to water from each parish (TOTAL)
Staged boom= boom on hand at each parish staging area (TOTAL)

Houston Daily Operation Report

May 13, 2010

	Prev 24 Hrs (Period 22)	Prior Period	Cumulative	24-Hour Look Ahead Plan
Safety				
Near Miss Incidents	0	0	0	Ensure Safety of Response Personnel
First Aid Incidents	0	0	3	Field focus around VOC mitigation
Recordables	0	0	0	Office focus around stress management
Active Vessels/Equipment				
Offshore Vessels	13	14		
Skimmers	0	0		
ROVs	8	9		
Tugs	1	1		
Spill Containment				
Oily Liquid Recovered (bbls)				
In-situ Burns Completed				
In-situ Burns (bbls)				
Surface Dispersant Applied (gal)				
Subsea Dispersant Applied (gal)	0	0	30,591	Restart approval pending, awaiting evaluation of samples from Test #3
Dispersant Available (gal)	117,488	101,141		
Aircraft				
Active Helicopters				
Active Fixed Wing				
# Dispersant Flights				
# Mapping Over Flights				
Personnel				
Personnel Command Post	587	564		
Personnel Field	1,031	1,070		
Volunteers	0	0		
Wildlife Impact				
Captured	0	0	0	
DoA	0	0	0	

Key Priorities for Today

1. Monitor Riser location and plumes
2. Progress VOC Mitigation Plan (Fire vessel, HVAC charcoal filtration, respirators).
3. Verify Operational Plans are approved and implemented
4. Progress plans for source containment (Riser Insertion Tube Tool (RITT) and Top Hat options)
5. Run riser on Enterprise rig in preparation for RITT operation
6. Preparations for top kill (continue demolition of choke and kill lines at BOP)
7. Relief well drilling with DD-III rig and second relief well planning with DD-II rig
8. Progress plan for flowback operations to the Enterprise.

Operational Comments

- Relief well MC252-3 (DD III) preparing to run riser and BOP.
- ROV's monitoring BOP stack and plumes
- Obtained boost line pressure data from MC252 #1 BOP stack.
- Progressing various containment options.
- Preparation ongoing for readiness to connect BOP with Junk shot manifold.
- Waiting on approval to restart subsea dispersant injection
- DDII in route to location for 2nd Relief Well, ETA May 13-PM
- Preparing to reinstall Yellow Control Pod and jumpers for MC252 #1 BOP in preparation for junk shot
- Enterprise running drill pipe in riser for RITT operations.

Environmental Comments

- Water column samples acquired during subsea dispersant test #3 arrived at LSU for testing.
- Developing correlation of response vessel VOC's with meteorological conditions at spill site

Mobile Daily Operational Report

12-May-2010

	Period 22	Period 21	Cumulative	24-Hour Look Ahead Plan	Data Source
Safety					
Near Miss Incidents	2	0	35		Daily HSSE performance update
First Aid Incidents	2	6	38		Daily HSSE performance update
Recordables	0	0	25		Daily HSSE performance update
Boom Deployed (ft)	**(Values exclude Federal)**				
Louisiana					ICS 209 (from 2200 hrs)
Mississippi	2,400	17,100	321,400	Deployed 5,400 feet of Boom in North Mobile Bay in Baldwin County, with planned deployment of 7800 feet in NOP for Mobile Bay	ICS 209 (from 2200 hrs)
Alabama	8,000	18,000	271,000		ICS 209 (from 2200 hrs)
Florida	4,300	16,000	171,600		ICS 209 (from 2200 hrs)
Boom Staged (ft)	**(Values exclude Federal)**				
Louisiana				Began setting up new Staging Area in St. Joe's, Florida, will be in full operation by End of Day 5-13-10	ICS 209 (from 2200 hrs)
Mississippi	27,650	20,788			ICS 209 (from 2200 hrs)
Alabama	7,300	122,000			ICS 209 (from 2200 hrs)
Florida	40,250	54,414			ICS 209 (from 2200 hrs)
Sorbent	**(Values exclude Federal)**				
Deployed	84,020	106,327			ICS 209 (from 2200 hrs)
Active Vessels/Equipment					
Offshore Vessels	204	205		Will deploy 20 VOO's in Florida in NOP All number of VOO's will increase in NOP	ICS 209 (from 2200 hrs)
Skimmers	3	5			ICS 209 (from 2200 hrs)
ROVs	0	0			ICS 209 (from 2200 hrs)
Spill Containment					
Oily Liquid Recovered (bbls)					ICS 209 (from 2200 hrs)
In-situ Burns Completed					IC Situation Unit Leader
In-situ Burns (bbls)					ICS 209 (from 2200 hrs)
Surface Dispersant Applied (gal)					Dispersant summary report
Subsea Dispersant Applied (gal)					Dispersant summary report
Dispersant Available (gal)					Dispersant summary report
Aircraft					
Active Helicopters	9	4			ICS 209 (from 2200 hrs)
Active Fixed Wing	0	0			ICS 209 (from 2200 hrs)
# Dispersant Flights	0	0			IC Situation Unit Leader
# Mapping Over Flights	0	0			IC Situation Unit Leader
Personnel					
Personnel Command Post	298	211			ICS 209 (from 2200 hrs)
Personnel Field	3,991	4,232			ICS 209 (from 2200 hrs)
Volunteers	*14,500	*14,500			
Wildlife Impact					
Captured	2	1	1		Wildlife template
DoA	0	0	0		Wildlife template
Shoreline Impacts (feet)					
Louisiana					
Mississippi	0		0		
Alabama	0		0		
Florida	0		0		

*(Value represents total registered volunteers for all states)

Key Priorities for Today

Ensure the safety of citizens and response personnel
Advance the GRP percentage of shoreline boom deployment for Alabama, Mississippi, and Florida.
Effect the orderly increase of personnel, equipment and resources
Implement shoreline clean-up plans as required
Advance program for maintaining displace boom
Keep stakeholders and public informed of response activities

Operational Comments

Continue to tighten field reporting process
Cleared tar balls washed ashore in Baldwin County (approximately 10 gallons)
Responded to report of dead dolphin on Horn Island, no dolphin was found
Responded to report of dead Wildlife near Waveland, MS. Found 100+ catfish, 2 stingrays, 1 turtle. No visible sign of oiling, Wildlife Branch handled
OPS Section Chief toured Staging Areas near Dauphin Island
Deployed 99 VOO's in Mississippi, 53 VOO's in Alabama.

Environmental Comments

Developed one system to track all air, water, wildlife, waste events and sampling
Conduct environmental screenings at sites Heritage has demobilized
Working with waste management and operations to evaluate treatment criteria for near shore skimming
Distinguishing and mapping NRDA vs. response sampling
Developing central warehouse process for analytical response data
Conducted flight inventory of various waste staging areas
Prepared release/receiving forms for equipment at decontamination stations
Prepared manifest signature authority letter and had it signed by BP legal
Revised Decon Plan and distributed to Agencies

Daily Operational Report

St. Pete, FL
May 12, 2010

	Prev 24 Hrs (Period 21)	Prior Period	Cumulative	24-Hour Look Ahead Plan	Data Source
Safety					
Near Miss Incidents	0	0	0		Daily HSSE performance update
First Aid Incidents	0	0	0		Daily HSSE performance update
Recordables	0	0	0		Daily HSSE performance update
Boom Deployed (ft)					
Louisiana	0	0	0		ICS 209 (from 2200 hrs)
Mississippi	0	0	0		ICS 209 (from 2200 hrs)
Alabama	0	0	0		ICS 209 (from 2200 hrs)
Florida	0	0	0		ICS 209 (from 2200 hrs)
Boom Staged (ft)					
Louisiana	0	0	0		ICS 209 (from 2200 hrs)
Mississippi	0	0	0		ICS 209 (from 2200 hrs)
Alabama	0	0	0		ICS 209 (from 2200 hrs)
Florida	0	0	0		ICS 209 (from 2200 hrs)
Sorbent					
Deployed	0	0	0		ICS 209 (from 2200 hrs)
Active Vessels/Equipment					
Offshore Vessels	0	0			ICS 209 (from 2200 hrs)
Skimmers	0	0			ICS 209 (from 2200 hrs)
ROVs	0	0			ICS 209 (from 2200 hrs)
Spill Containment					
Oily Liquid Recovered (bbls)	0	0	0		ICS 209 (from 2200 hrs)
In-situ Burns Completed	0	0	0		IC Situation Unit Leader
In-situ Burns (bbls)	0	0	0		ICS 209 (from 2200 hrs)
Surface Dispersant Applied (gal)	0	0	0		Dispersant summary report
Subsea Dispersant Applied (gal)	0	0	0		Dispersant summary report
Dispersant Available (gal)	0	0			Dispersant summary report
Aircraft					
Active Helicopters	0	0			ICS 209 (from 2200 hrs)
Active Fixed Wing	0	0			ICS 209 (from 2200 hrs)
# Dispersant Flights	0	0	0		IC Situation Unit Leader
# Mapping Over Flights	0	0			IC Situation Unit Leader
Personnel					
Personnel Command Post	64	70			ICS 209 (from 2200 hrs)
Personnel Field	0	0			ICS 209 (from 2200 hrs)
Volunteers	0	0			
Wildlife Impact					
Captured	0	0	0		Wildlife template
DoA	0	0	0		Wildlife template
Shoreline Impacts (feet)					
Louisiana	0	0	0		
Mississippi	0	0	0		
Alabama	0	0	0		
Florida	0	0	0		

Key Priorities for Today

1. Ensure continuity of shoreline response activities between St. Petersburg and Mobile
2. Track resources and capabilities available throughout the AOR
3. Rapid Response team established for potential shoreline impacts within Sector St. Petersburg's AOR
4. Define, procure and deploy resources to implement external relations program
5. Liaise with state emergency management representatives to include periodic communications at city/county level as needed
6. Develop ship decontamination plan and promulgate extended communication plan
7. Enlist local resources (governmental/academic) through Environmental Unit
8. Develop a training matrix to summarize requirements and training offerings.

Operational Comments

Rapid Response team positioned in Taylor and Dixie country to quickly respond to oil sightings or shoreline impacts.

Environmental Comments

EUL completed workshops with representaties from Taylor, Dixie and Levy counties to review the ACP and develop/revise prioritized booming strategies.
ACP booming strategy workshops with Citrus, Hernando and Pasco county representatives scheduled for 13 May.
Workshops with all counties within St. Petersburg AOR scheduled to be completed by 18 May.

Other Comments

Finance Section - Worked with Houma and Mobile IMTs to establish a consistant Claims Process Workflow. Process has been provided to SSP JIC for review.
Disseminated news release on Area Contingency Plan workshops with county EOC responders. Conducted press conference, focused on workshops, guests included Gov. Crist, State Reps. Bembry and Rouson; all major network affiliates and print news outlets in attendance; interest focused on tourism impact, governor's request for $35 million, volunteerism, training, resource shortages, timing of impact to Florida.
Conducted conference call with PIOs of county EOCs; all SSP counties in attendance.
Draft volunteer plan being reviewed by external affairs reps in JIC.
Conducted radio interview with Commander Riley, Ops Section Chief, and George Henderson, Research Scientist, for WUSF Public Radio.
Indentified e-NGOs for partnership volunteer opportunities.
Media inquiries increasing as public learns of UC's setup in St. Petersburg.

Definitions

Deployed boom includes assigned boom
Staged boom is awaiting deployment in warehouses

FOR INTERNAL USE ONLY

UNIFIED AREA COMMAND EXTERNAL AFFAIRS SUMMARY
FRIDAY, MAY 14

DISPERSANTS

There is a list of dispersants authorized for use as part of what is called the "National Contingency Plan Product Schedule" which is overseen by EPA. The dispersant being used on-site at the BP spill is on that approved list.

There are two ways dispersants can be used: (1) on the water's surface, dropped by planes and (2) below the water's surface, through injections using remote-control devices (sub-surface).

- When this crisis occurred, Coast Guard and EPA gave BP immediate authorization to move forward with the use of this approved dispersant on the affected water's surface in an effort to mitigate the impact of the spill.

- This authorization included specific conditions to ensure the protection of the health of residents in the affected areas and the environment.

- With our approval, BP continues to use this dispersant on the surface of the water (BP will have to provide further information about how effective the dispersant has been).

The Coast Guard and EPA also authorized BP to conduct three tests of a novel approach to use this dispersant sub-surface, at the source of the leak. The tests were done to determine if the dispersant would be effective in breaking up the oil and helping to control the leaks, as well as to monitor any adverse effects this tactic may have on the environment.

- We are awaiting from BP the complete results of the tests.

- No further use of the dispersant sub-surface will take place until the results of these tests are provided to us and reviewed.

- If the tests demonstrate that the sub-surface dispersant was effective, we may authorize its use along with ongoing monitoring of its effects on the environment.

- We also reserve the right to withdraw our approval of its use sub-surface at any time if we determine that the negative impacts on the environment outweigh the benefits.

The federal government is constantly monitoring air quality in the area to ensure that nearby residents are informed and protected. EPA is conducting air monitoring through the use of aircraft as well as fixed and mobile air monitoring stations on land, and our procedure are regularly reevaluated so we can make any necessary adjustments. EPA has

a dedicated Web site providing daily updates of its air monitoring data (www.epa.gov/bpspill).

At any time, we reserve the right to stop BP from continuing to use the dispersant on the water's surface if we determine air quality is being adversely affected.

TOP HAT

- BP will attempt to install a "top hat" dome over the main source of the leak. The "top hat" is a smaller containment dome, designed to mitigate the formation of hydrates, which prevented the success of the first containment dome.

- We said from the beginning that there is no silver bullet to stop this leak. We were moving forward from the beginning under the assumption this tactic may not be successful.

- BP will continue to drill the relief well to permanently stop the leak.

- BP and industry partners have a team of experts from across the private sector working around the clock in Houston with one responsibility: discover alternative solutions to permanently stop this leak.

- DOI Secretary Ken Salazar dispatched U.S. Geological Service Director Marcia McNutt to oversee this process.

- On May 12, at the request of the President, Secretary Salazar and Secretary Chu traveled to Houston to participate in meetings with DOE and national lab staff, industry officials and other engineers and scientists involved in finding solutions to cap the flow of oil and contain the spill.

- Secretary Salazar and Secretary Chu conferred at the BP Command Center in Houston with teams of federal and industry scientists and engineers who are using cutting-edge technological resources and innovative ideas to find solutions to containing the oil spill and protecting Gulf Coast communities.

- They will continue to work hard to provide BP with alternative ideas.

BOOM

- As of the end of May 13, over X.X million feet of boom deployed and nearly X million feet available that will continue to be strategically deployed.

- We continue to work to identify additional sources of boom for delivery.

- The Coast Guard is aggressively overseeing BP efforts to ensure the appropriate type of boom is available for approved deployments as dictated by this dynamic situation.

- The Unified Command will continue to work with state, local and community leadership to ensure that needs are met and that appropriate steps are taken to stop the source of the leak, mitigate the spill and deploy the necessary resources in the Gulf.

If asked about boom shortage:
"As of last night there was over XX million feet of boom deployed and nearly X million feet available that will continue to be strategically deployed. The Unified Command is aggressively overseeing BP efforts to ensure the appropriate type of boom is available for approved deployments as dictated by this dynamic situation. The Coast Guard will continue to work with state, local, and community leadership to ensure that needs are met and urge BP to take the appropriate steps to stop the source of the leak, mitigate the spill and deploy the necessary resources in the gulf."

THURSDAY, MAY 13 STATISTICS

Total response vessels: 526
Containment Boom deployed: over 1.1 million feet
Containment boom available: over 300,000 feet
Sorbent boom deployed: over 320,000 feet
Sorbent boom available: over 850,000 feet
Boom deployed: over 1.4 million feet (regular plus sorbent and fire boom)
Boom available: over 1 million feet (regular plus sorbent and boom)
Oily water recovered: more than 5 million gallons
Dispersant used: over 475,000 gallons
Dispersant available: more than 215,000 gallons
Overall personnel responding: more than 13,000

FRIDAY, MAY 14 EVENTS

0815	Governors' teleconference – ADM Allen and Watson
0900	Admiral Allen will participate in a media availability at Dauphin Island
1100	Governor Jindal, Senators Landrieu and Vitter (LA), and Congressman Scalise (LA) press conference in Slidell, LA
1300	Senate Homeland Security Staff visit to Robert UAC
1400	Local Official's teleconference – CAPT Hanzalik
1400	Congressional teleconference
1400	RADM Landry and BP Suttles will participate in a media availability
1400	ADM Allen will participate in media availability in Biloxi
1500	Florida Attorney General McCollum briefing/tour of St. Petersburg ICP
TBD	Representative Miller visit to USCG Station Destin
TBD	Baldwin County, AL (14) mayors to visit Mobile ICP

METRICS

- 18,746 Facebook followers the Deepwater Horizon Response Facebook page.
- Twitter has 3,796 followers.

- The www.deepwaterhorizonresponse.com site has over 19 million hits since it was initiated.
- Top Topics via website:
    - Jobs
    - Dispersant
    - Vessels of Opportunity
    - X fact sheet; X media advisories; X press releases; X image releases, XX images uploaded and X videos were posted.

THURSDAY, MAY 13 EVENTS

Engagement with Government Officials

- Governors' Call: Governors Barbour, Jindal, Perry, and Riley participated:
    - Monica Medina of NOAA provided an update on observations trajectory projections, and fisheries closures
    - ADM Watson, UAC Robert provided an update on response operations, including leak stabilization activities
    - EPA Administrator Jackson provided an update on subsea dispersant testing
    - FWS Deputy Asst. Secretary Sobeck provided an update on wildlife impacts
- Governor Riley met with CPTN Poulin at Mobile IPC
- Governor Jindal and local government official conducted overflight of St. Mary Parish and held press conference
- Governor Jindal call with USACE Colonel Lee regarding dredging proposal.
- Local Official's teleconference - ADM Watson briefed
- Congressional teleconference - Questions received from Speaker Pelosi (CA), Senator Landrieu (LA), Congressman Bilirakis (FL), and Senate Appropriations Committee staff
- NOAA Asst. Secretary Larry Robinson and Asst. Administrator David Kennedy visited Mobile ICP
- DOI Asst. Secretary and COS Strickland visited Mobile IPC
- MS National Guard visit to Mobile IPC - Colonels Smith, Bryan, and Smithson
- National Geospatial-Intelligence Agency (NGA) Directors visited Houma ICP
- EPA Assistant Administrator Stanislaur, Solid Waste Emergency Response, and EPA Senior Advisor Garcia, Environmental Justice, toured the Houma ICP and met with imbedded EPA staff.
- Town hall meetings held in Port Sulphur and Dulac - CAPT Stanton (Port Sulphur) and CDR Cooper (Dulac) attended.
- LA State Senator A.G. Crowe made an impromptu visit to Robert ICP and met with BP and RADM Watson.

FUTURE EVENTS AND ISSUES

Friday, May 14

TBD Senate Homeland Security Staff visit

DEEPWATER HORIZON Response
Resource Summary (0400 EDT 13 MAY10)

Essential Elements	USCG Today	USCG To-Date	DOD Today	Other Today	Other To-Date	Totals To-date
Personnel						
Assigned in the Field						9,316
Assigned to Command Post						720
Total						10,036
Boom (Combined total of sorbent and surface) (ft)						
Ordered						1,521,239
Available/Staged						1,531,006
In Use						1,410,500
Dispersant Materials (gal)						
Ordered						750,000
Available/Staged						120,471
In Use						267,264
Recovery Barges						
Ordered						1091
Available/Staged						102
In Use						27
Skimmers						
Ordered						129
Available/Staged						173
In Use						20
Oil Spill Response Vessels						
Ordered						3
Available/Staged						2
In Use						18
Tugs						
Ordered						26
Available/Staged						22
In Use						4
Other Support Vessels						
Ordered						455
Available/Staged						31940
In Use						526
Remotely Operated Vehicles						
Ordered						4
Available/Staged						0
In Use						12
Fixed-wing Aircraft						
Ordered						15
Available/Staged						4
In Use						12
Helicopters						
Ordered						5
Available/Staged						2
In Use						28

On-Scene/RFA Approved

UAC #	213RR #	Capability	Description	Status	EPA Region	Memo Status	Estimated Cost
UAC0001		Defense Coordination Officer	Defense Coordinating Officer (DCO): Includes Contingency Command Post (CCP) and 2 Defense Coordinating Elements (DCEs) staffed and augmented as required to Unified Area Command in Robert, LA	Deployed to Unified Command	4, 6	Signed	$79,000
UAC0003		Public Affairs Personnel	Public Affairs Personnel: 4 Public Affairs Officers (media ops team), 3 combat camera teams (5 PAX each), 1 Defense Visual Information Distribution System (DVIDS),	Deployed to Joint Information Center	6	Signed	$100,000
UAC0005		Navy Supervisor of Salvage	66K feet of 42" boom, nineteen (19) Skimmer systems and associated equipment , fifty eight (58) personnel in theater.	85 of 85 trucks arrived from Port Hueneme, CA and Cheatham Annex, VA. Fifty eight (58) PAX. Equipment being deployed in theater.	4, 6	Signed	$3.5M
UAC0006	D0136	Two C-130 aircraft capable of Mobile Aerial Spray System (MASS)	RFA transmitted by FOSC & received by Joint Staff	2 Aircraft on scene	4, 6	Signed	TBD
UAC0007		Activation of Louisiana National Guard	National Guard Forces for LA	Nine hundred fifty-two (952) total activated thus far (out of 1100 authorized by FOSC).	6	Signed	$7M

RFA/Under Consideration

UAC #	213RR #	Capability	Description	Status	EPA Region	Memo Status	Estimated Cost
		Two Additional C-130 aircraft capable of Mobile Aerial Spray System (MASS) and delivery of 2,000 gallon spray capacity per sortie.	Increase aircraft capacity for dispersant deployment	Pends FOSC requirements determination.			
		Naval Surface Combatant (Amphibious)	Includes LCAC (Hovercraft x3) Embarked Helo Detachment. Provides sea-bearing capability	Pends FOSC requirements determination.			
		P-3C Aircraft (AIP Variant) with Tactical Common Data Link (TCDL) Equipment/Personnel (Jacksonville, FL)	P-3C AIP Aircraft & TCDL Ground Equipment	Available			
		LCAC / LCU (Little Creek, VA)	Aboard LHA	Available			
		Naval Mobile Construction Battalion Air Detachment (Task Tailored NMCB DET) (Gulfport, MS)	89 Personnel plus selected civil engineering equipment	Available			
		Fleet Survey Team (Stennis AFB, MS)	Hydrographic Survey Capability for Impacted Ports	Available			
		Beach Group TWO (Little Creek, VA)	Logistics Over the Shore (LOTS)	Available			
		E-2C HAWKEYE (Norfolk, VA)	Surface Surveillance and Air Control	Available			
		C-2A GREYHOUND (Norfolk, VA)	Logistics Support	Available			
		Naval Station Pensacola, FL	Logistics Support Base	Available			
		Joint Reserve Base New Orleans, LA	Logistics Support Base (APOD)	Available			
		Naval Air Station Key West, FL	Logistics Support Base (APOD)	Available			

RFA/Under Consideration

UAC #	213RR #	Capability	Description	Status	EPA Region	Memo Status	Estimated Cost
		Naval Support Activity Panama City, FL	Logistics Support Base (SPOD)	Available			
		USAF Aux/Civil Air Patrol	GA-8 Archer – 12 hrs	Available			
		USAF Aux/Civil Air Patrol	C-182 – 6 hrs	Available			
		Unmanned Aerial Aircraft (UAV) / Remote Piloted Aircraft (RPA)	Surrogate Predator – 48 hrs	Available			
		Naval Support Activity Panama City	Immediate	Available			
		Marine Corps Logistics Base, Albany GA	48-hrs	Available			
		1 Subsurface damage control expert	Subsurface damage control expert to deploy to TransOcean/BP ICP in Houston, TX				
		Air Force Lift Support	Oil boom from airports near pre-staged equipment location on east coast to oil spill region.				
		Air Force Lift Support	Oil boom from airports near pre-staged equipment location on west coast to oil spill region.				
		Air Force Lift Support	Vessel of Opportunity Skimmer System (VOSS) from airports near pre-staged equipment location on east coast to oil spill region				
		Air Force Lift Support	VOSS from airports near pre-staged equipment location on east coast to oil spill region				

Cancelled

UAC #	213RR #	Capability	Description	Status	EPA Region	Memo Status	Estimated Cost
UAC0009		Airspace Coordination Planner	Located at Incident Command Post in Houma, LA	CANCELLED – DCO determined this was a redundant request that was filled from the ACCE request (UAC0008).	6	In Work	TBD
UAC0013	A0510	1 X USAF Aviation Weather Briefer/Observer	USAF aviation weather briefer/observer to conduct daily planning for operational decision making	CANCELLED – DCO determined NOAA is on-scene providing requested capability.	6	Signed	$5,000

Demobilized

UAC #	213RR #	Capability	Description	Status	EPA Region	Memo Status	Estimated Cost
		Heavy Lift Helicopters H-53 Series (Norfolk, VA)	4x H-53 Series Helicopters	Available			
		Medium Lift Helicopters H-60 (Norfolk, VA and Mayport, FL)	8x H-60 Helicopters (Mission Specific)	Available			
		6 X Medium Lift Helos (SH-60)	72 hours	Available			

TO Time	Aircraft	Tail #	Squawk	Base/Operator
USCBP				
0600	P3	Omaha 99		USCBP Jacksonville, FL
1200	P3	Omaha 99		USCBP Corpus Christi, TX
USCG				
BP/PHI				
0600	S-76	759P		Houma
0630	King Air	727B		Houma
0630	S-76	725P		Houma
0630	King Air	655BA		Houma
0630	S-76	790P		Venice
0700	S-76	519AL		HOUMA
0700	S-76			Houma
0700	206L	32041		Shoreline-Cocodrie-from Houma
0700	EC-135	335BG		Shoreline-Grand Isle-from exxon Mobil
0700	EC-135	935AL		Houma
0700	EC-135	4180F		HOUMA
0700	206L	203PH		
0800	EC-135	323PH		HOUMA
0800	S-76	522AL		Houma
0800	EC-135	326PH		SCAT Survey
0900	206L-3	8587X		Shoreline-Hopedale-TOCA Gas Plant
0930	S-76	522AL		HOUMA
1300	S-76	794P		Houma
Dispersants				
0530	BE90	37H	SPOTTER	Houma
0600	BE90	39Q	SPOTTER	Houma
0620	C130	N117TG	SPRAY	STENNIS
0625	C130	N403LC	SPRAY	STENNIS
1125	Aero Cmdr	N547GA	SPOTTER	Houma
0720	BT67	N932H	SPRAY	Houma
0724	DC3	N64766	SPRAY	Houma
0815	BE90	98Y	SPOTTER	Houma
0830	C130	106	SPRAY	STENNIS
0845	C130	108	SPRAY	STENNIS
0955	BE90	41J	SPOTTER	Houma
1000	C130	N117TG	SPRAY	STENNIS
1005	C130	N403LC	SPRAY	STENNIS
1125	Aero Cmdr	N547GA	SPOTTER	Houma
1100	BT67	N932H	SPRAY	Houma
1105	DC3	N64766	SPRAY	Houma
1150	BE90	89N	SPOTTER	Houma
1215	C130	106	SPRAY	STENNIS
1218	C130	108	SPRAY	STENNIS

1207	BE90	79W	SPOTTER	Houma
1237	AT802	02K	SPRAY	Houma
1355	BE90	N7198Y	SPOTTER	Houma
1400	C130	N117TG	SPRAY	STENNIS
1400	C130	N403LC	SPRAY	STENNIS
1510	Aero Cmdr	N547GA	SPOTTER	Houma
1500	BT67	N932H	SPRAY	Houma
1505	DC3	N64766	SPRAY	Houma
1655	BE90	80Y	SPOTTER	Houma
1700	C130	N117TG	SPRAY	STENNIS
1700	C130	N403LC	SPRAY	STENNIS
1745	BE90	89N	SPOTTER	Houma
1805	C130	106	SPRAY	STENNIS
1807	C130	108	SPRAY	STENNIS
F&W				
Transport Canada				
0600	Dash 8	950		Houma

Recon/Mapping			

Aerial Dispersants Operations - Houma Status Report

May 13, 2010

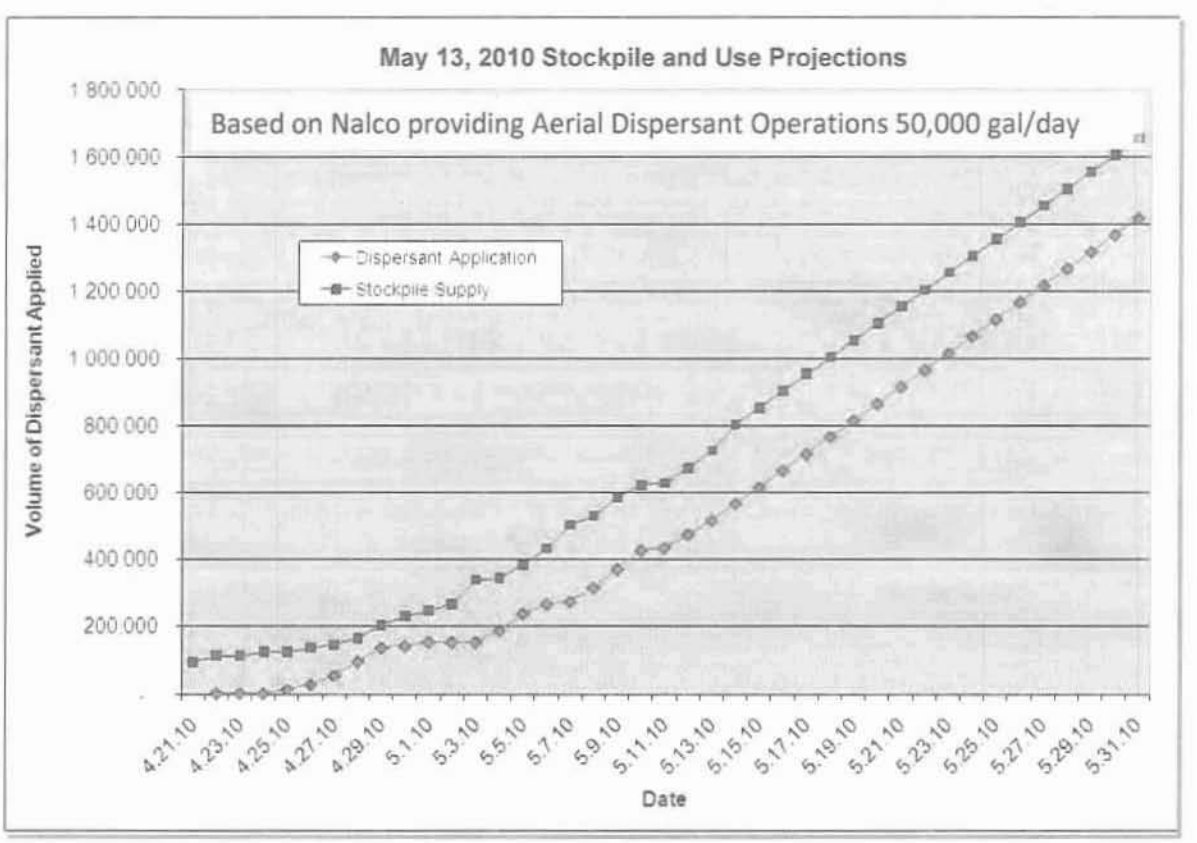
Note: This information is the reporting for aerial dispersant spraying

Dispersant Aerial Spray Summary:

1. **Total Amount of Dispersant Applied on May 13, 2010 (gallons):**	41,620
2. **Total Sorties on May 13, 2010:**	15
3. **Total Amount of Dispersant Applied to date (gallons):**	517,577
4. **Total Sorties to date:**	192
5. **Total Area Covered by Dispersant Applications to date (mi^2):**	161.7
6. **Total Dispersant Stockpiles on the ground as of 5.13.2010 – 1200 PM (gallons):**	208,981*
7. **Dispersant Stockpile Expected Arrival as of 5.14.10 – 1200 PM (gallons):**	50,000
8. **Estimated Total Dispersant as of 5.14.2010 - 1200 PM (gallons):**	258,981*
9. **Projected Days Operational at maximum rate of 50,000 gal/day (days):**	unlimited

* This volume is still being reconciled and verified with procurement, staging, receiving and finance.

Dispersant Stockpile Supply and Use Projections



Asset Summary On Scene	
Spray Aircraft:	
C-130 – Stennis (1 IAR, 1 Lynden, 3 USAF)	5
DC-3 - Houma	2
BT-67 - Houma	1
King Air – 2 – Stennis (can be used for spotting)	2
AT-802 – Stennis	1
TOTAL:	11
Spotter Aircraft:	
King Air – 5 – Stennis	5
Aztec - Houma	1
Aero COMDR - Houma	1
TOTAL:	7
TOTAL AIRCRAFT:	18
PRIORITY Spray Assets Identified*	
Spray Aircraft:	LEAD TIME
C-130 – OSR-UK (20,000 gal/day) + 8-person support team with 2 flight crews	1 – 28 hours
C-130 – OSR-Singapore - (20,000 gal/day)	1 – 72 hours
C-130 – Lynden (Alaska) - (20,000 gal/day)	1 – 5+days
C-130 – IAR (15,000 gal/day)	1 – TBD
AT 802 (Agriculture Spray Planes) (5,000 gal/day)	1
*NOTE: These assets will not be activated until sufficient stockpile of dispersants are available for their use. Estimate that dispersant operations will need approximately 75,000 gallons per day of dispersant for these air craft spray systems.	
Additional Spray Assets Identified	
Neat Sweep	In area

Activity Update:

1. In response to report of fumes causing evacuation of a manned platform off of SE Pass on May 12th a GIS map was prepared of the aerial dispersant spray sorties showing the location, quantities and start/stop times. This graphic clearly showed that aerial dispersant operations were 50 nm or more from the subject platform and therefore were not the cause of the reported incident. Additionally, the USAFR prepared a drift chart to show at a maximum crosswind of 30 knots the drift for a C-130 would only travel ½ mile. Dispersant spraying is always done into the wind which would reduce drift to much less than ½ mile. GIS chart attached.

2. Published preliminary findings for selection of an alternate dispersant to Corexit 9500. Findings were based on the published literature (NCP information, material safety data sheets), preliminary laboratory effectiveness evaluation, and limited field trials. We will update the report as soon as the field trials are completed. The recommended alternate dispersant to use is SEA Brat #4. This dispersant was successful in the field trials for dispersing oil, has sufficient manufacturing capability, and lower toxicity than other dispersants. The manufacturer claims SEA Brat #4 does not rely on the same raw material stocks as Corexit 9500.

3. Because SEA Brat #4 is water-based, its viscosity is lower than the Corexit products, it is more appropriate for well injection, rather than aerial spraying. The reason for this is that the aerial spray systems have been calibrated for applying Corexit. New calibration charts would need to be prepared.

4. ASI Houma contracted with Leading Edge Technologies to conduct flow rate and spray droplet characterization for the BT-67 and DC-3. Testing is scheduled for Friday May 14th.

5. Arranged for M/V Adriatic and Hos Super H to be available to apply dispersant at the source site in support of source control efforts. One vessel is equipped with a Sea Spray 50 system from OSR and the other an Ayles-Fernie Afedo system from CCA. These systems spray neat so that there is no water intake which would contaminate the system with oil. Both vessels have secondary eductor spray systems from CGA. First boat is to depart first light on May 14th and the other to shortly follow.

6. M/V International Peace is ready to sail May 14th to collect water samples for chemical analysis and toxicity testing and conduct SMART Tier 2 flourometry.

7. Prepared draft water sampling plan for review by Operations Technical Committee.

8. Identified technical specifications for deepwater Autonomous Underwater Vehicle (AUV) plume sampling.

Objectives

Objectives for May 14th were to focus spraying on thick oil areas outside of 5 nm radius around spill source.

Requirements

Aircraft spotters should be on site in their zone at 0800 and spray aircraft may pre-stage to the site at 0830. Spray operations to commence approximately 0900.

DISPERSANT APPLICATION GUIDANCE FOR 13 MAY

May 14 2010
Don Toenshoff and Brad Barker, please acknowledge receipt to Dave Garner (b) (6) .
Disseminate to all pilots.

Schedule attached on .xls
Op Areas are depicted on attached map .pdf.

Mission Targeting start of the day:

Stennis: Primary zones AC and AN. Secondary zones AD and AO. (blue letter borders on map).
Houma: Spotter and Surveillance flights as may be required by Incident Command.

Maintain **3 nm** boundary separation if unable to coordinate air-to-air with other spotter or OMAHA 99.

Spotters should recon area inbound and outbound for subsequent targets. Report new targets to Dispersant Group via base manager.

Notes: Changes to previous orders are underlined.

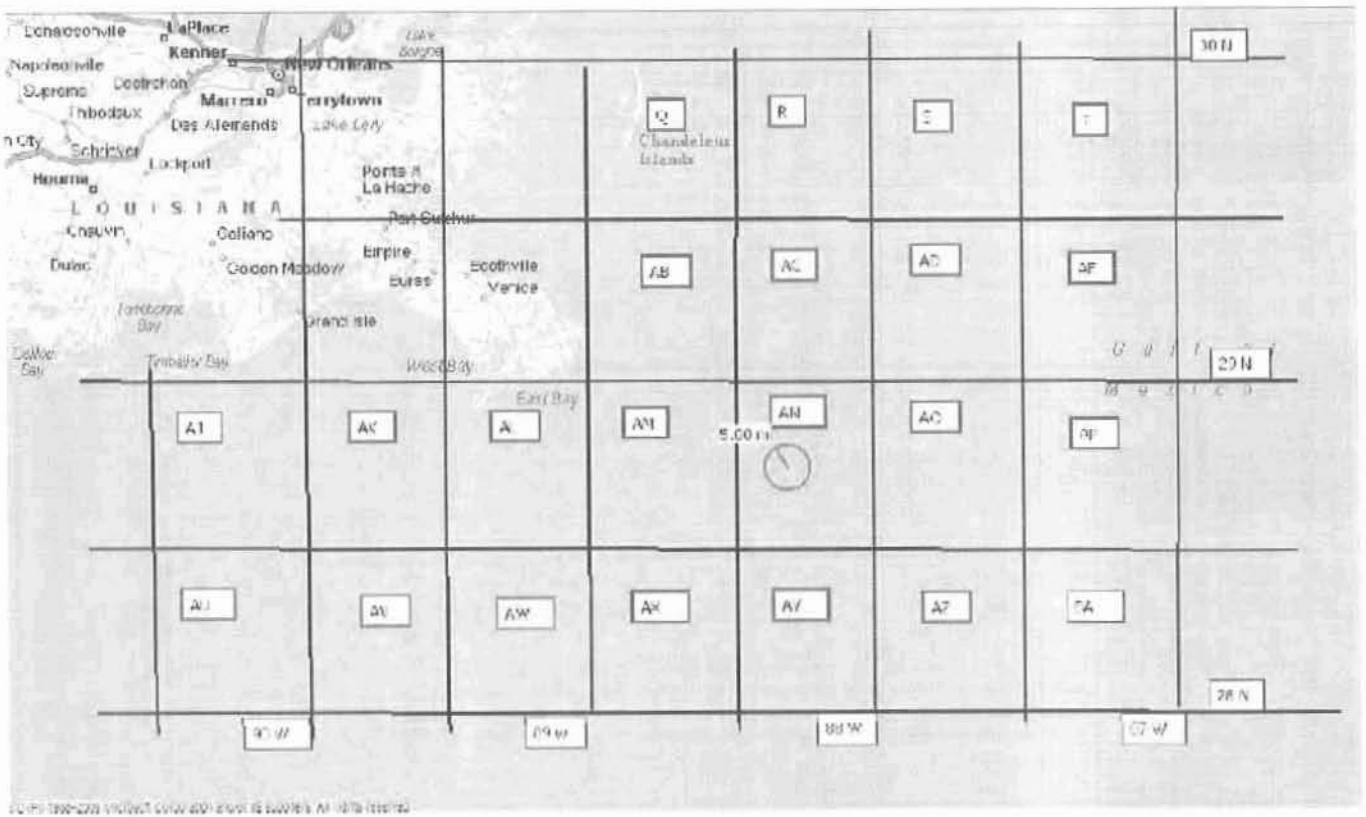
1. Zone AB is closed for dispersant ops until further notice.
2. FOSC approval has been granted since 22 April for application of dispersants in pre-approved areas.
3. No dispersant spraying within the greater of **3 nm** offshore or depths less than **10 meters.**
4. No dispersant flying within **5 nm** of the spill source at surface:
   28 45.2 N 88 18.9 W
5. Remai n **2 nm** from boats, platforms, and marine mammals.
6. Target black and brown oil as this is the freshest and most dispersible oil. Rate is 5 gallons per acre. Quality versus Quantity. Do not target Red/Pink emulsified oil.
7. Spotter aircraft remain on site up to 30 minutes to visually assess effects on dispersed area and document with photographs. Complete spotter debrief form and turn in to base operations.
8. Report takeoff and landing times to assigned coordinators as they occur to the best of your abilities.
9. Primary air to air communication frequency is 126.4. Secondary is 123.45.
   Primary surface to air frequency is 122.9. Secondary is 123.45.
   a. Contact P3 aircraft "Omaha 99" for flight advisories.
   b. Also SMART vessels, Surveillance "Transport 950", "Seacor Lee" command vessel, and other Spotters.
10. Use discreet IFF codes as provided on separate correspondence. This removes need to file DVFR flight plans.
11. Stennis tasking Smart Mission 06 Warrior. M/V "Warrior" will arrive at intersection of zone AN and AC at 29 00 N 88 30 W to conduct SMART dispersant effectiveness tests in vicinity. Stennis Base send spotter (with marine radio) to arrive at 0830 to coordinate. Coordination on 122.9 primary, Marine Channel 81a Secondary.

Primary emphasis is always on Safety: **Aviate, Navigate, Communicate**!

AFF Automatic Flight Following:

- Air Force North - https://www.aff.gov/afn/afnorth.kmz
- Civilian - https://www.aff.gov/cgi-bin/aff.dll

Aerial Dispersant Operations Divisions:



Remain 5 nm from spill
source: 28 45.2 N
88 18.9 W

14 May

Dispersant Spray Assets

Aircraft Information –May 13, 2010						
Type	**Owner/ Operator**	**Tail #**	**Payload (gal)**	**Airport / Status**	**Purpose & Altitude**	**Comments**
Spotters						
King Air	MSRC (Dynamic)	N39Q		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N98N		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N41J		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N79W		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N37H		Stennis	Spotter – 1,000' to 1,500'	
Aztec (PA 23)	ASI N14	1183		Houma	Backup Spotter	
Aero COMDR	ASI N38	WA		Houma	Spotter	
Recon						
King Air	ASI	N275		Houma	Recon	
Helo	ASI 759P			Houma	Recon	
Sprayers						
King Air	MSRC (Dynamic)	N7198Y	240	Stennis	Spray: 75'	Available for both Spray and Spotter duties
King Air	MSRC (Dynamic)	N71999D	240	Stennis	Spray: 75'	Available for both Spray and Spotter duties
C-130	IAR N11	7TG	3,000	Stennis	Spray: 75'	
C-130	MSRC (Lynden)	N403LC	5,000	Stennis	Spray: 75'	Plus 5 other crew members
C-130	Air Force	105	1,675	Stennis	Spray: 75'	
C-130	Air Force	106	1,675	Stennis	Spray: 75'	Cargo ops with spray capability
C-130	Air Force	107	1,750	Stennis	Spray: 75'	
AT-802		N9002K	800	Stennis	Spray: 50'	
BT-67	ASI	N932H	1,800	Houma	Spray: 75'	
DC-3	ASI	N64766	1,000	Houma	Spray: 75'	
DC-3	ASI N64	767	1,000	Houma – Standby	Spray: 75'	

Dispersant Application Totals

Dispersant Statistics Applied by Day						
Date	Dispersant Type (gallons)		Daily Totals	# Sorties	Acres Covered (5 gal/acre application rate)	Square Miles covered
	9500	9527				
21 April 2010	Initial Response Date					
22 April 2010	0	1,800	1,800	1	360	0.56
23 April 2010	0	0	0	0	0	0
24 April 2010	0	0	0	0	0	0
25 April 2010	0	11,604	11,604	9	2,320.8	3.7
26 April 2010	0	14,486	14,486	10	2,897.2	4.5
27 April 2010	11,191	15,887	27,078	5	5,415.6	8.5
28 April 2010	27,269	14,874	42,143	15	8,428.6	13.2
29 April 2010	36,913	4,000	40,913	13	8,182.6	12.8
30 April 2010	4,900	0	4,900	1	980.0	1.5
1 May 2010	3,550	8,103	11,653	4	2,330.6	3.6
2 May 2010	0	0	0	0	0	0
3 May 2010	0	0	0	0	0	0
4 May 2010	10,561	23,712	34,273	12	6,854.6	10.7
5 May 2010	30,905	18,670	49,575	18	9915	15.5
6 May 2010	13,032	15,738	28,770	11	5,754	9.0
7 May 2010	5,582	1,688	7,270	4	1,454	2.3
8 May 2010	17,813	23,877	41,690	17	8,338	13.0
9 May 2010	29,034	26,898	55,932	21	11,186.4	17.5
10 May 2010	29,240	26,980	56,220	22	11,244	17.6
11 May 2010	7,940	0	7,940	2	1,588	2.5
12 May 2010	39,710	0	39,710	12	7,942	12.4
13 May 2010	41,620	0	41,620	15	8,324	161.7
TOTALS	**309,260**	**208,317**	**517,577**	**192**	**103,515**	**310.56**

DAILY AERIAL DISPERSANT APPLICATION PLAN

DATE: 5/13/2010	TIME: 0530 local	STAGING AIRPORTS: Stennis Int'l / Houma	AIRPORT ID: KHSA / KHUM

DISP. STAGING APT SPVSR (Name & Phone #): (Stennis)Tim Spoerl (b) (6) / (Houma) Mark Cochrane (b) (6)

SPILL SITE INFORMATION:

SPILL LOCATION	Latitude: 28 55 N	Longitude: 87 21 W N	Size: 40 mi radius
GEOGRAPHICAL REFERENCE:	112 nm SSE Stennis Airport		

SPILL SITE APPROACH INFORMATION:

ENTRY POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude:	See OPS Chart ft
EXIT POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude:	See OPS Chart ft
HOLDING AREA:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude:	See OPS Chart ft

SPILL SITE WX:	WIND: SE 10-26	CLG: UNL	VIS: 10 nm	SUNRISE: 0605	SUNSET: 1937

(Attach Wilken's Weather Report for weather at the spill site and the staging airport)

DOSAGE (GPA): 5	ADD'L INST: See required setbacks and no fly area's on operational plan

COMMS	PRIMARY VHF COM: 126.40 MHz	SECONDARY VHF COM: 123.45 MHz	EMERGENCY VHF COM: 121.5 MHz
	PRIMARY VHF COM: Surface to Air 122.9 MHz / SECONDARY VHF COM: Surface to Air 123.45 MHz		
	MARINE RADIO: Channel 16 then switch to Channel 9/ SATELLITE PHONE: Aircraft will contact through the Disp. Staging Airport Supervisor		

AIRCRAFT INFORMATION:

Type:	Tail #:	Call Sign:	Airport ETA:	Purpose & Altitude:	PIC/Crew:	Passengers:
King Air Dynamic	N7198Y	98Y	Stennis	Spotter: 1000'-1500'	PIC: Vince Kane Kevin Smith	None
King Air Dynamic	N39Q	39Q	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot:	None
King Air Dynamic	N7199D	99D	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N98N	98N	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N41J	41J	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N79W	79W	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N37H	37H	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
C-130 IAR	N117TG	7TG	Stennis	Spray: 75'	PIC: Dave Kunz Co-pilot: TBD	None
C-130 Lynden	N403LC	3LC	Stennis	Spray: 75'	PIC: Capt Redman Co-pilot	plus 5 other crew members
AT 802	N9002K	02K	Stennis	Spray 50'	PIC: TBD Co-pilot: TBD	None
C-130 USAFR	105	105	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 USAFR	106	106	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 USAFR	107	107	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
BT-67 ASI	N932H	32H	Houma	Spray: 75'	Co-pilot: TBD	None
DC-3 ASI	N64767	767	Houma Standby	Spray: 75'	PIC: TBD	None
DC-3 ASI	N64766	766	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
Aztec ASI	N141183	183	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Aero CMDRA ASI	N547GA	7GA	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Aircraft below are not directly part of the Dispersant Group / Cordination and assistance from the aircraft below is nessasary.						
King Air	N275	N275	Houma Jet	Recon		
Helo PHI	759P		Houma	Recon		
NOAA		NOAA 46		Surveillance		
U.S. Customs	P-3	Omaha 99		Communications		
Canada	Transport 950		Houma	Surveillance		

DAILY ACTIVITY SCHEDULE FOR __13 MAy_2010__ (Date)		Dispersant Group Staging Airport Supervisor (DGSAS):
TIME	ACTIVITY	
	Report to Airfield	All aircraft
	Pilot and Support Team Daily Operational Briefing (mandatory)	0600 local
	Commence Flight Operations	0630 local
	Terminate Flight Operations	2000 local
	Pilot and Support Team Daily Debriefing on Operations	2030 local

DAILY OPERATIONAL BRIEFING AGENDA:

Safety Issues:	SAR flights beware of and check in onsite
Weather:	See Wilkins Wx and airport weather service
Communications Air and Ground:	Sat Comm and standard freq
Application Dosage and Pattern to be used:	5.0 gpa racetrack
Approach Information:	TBD
Oil Spill Location and Description:	TBD
Operational Procedures and Changes:	None at this time
Flight Schedule:	See schedule page 2

FUELING/FBO:

Contact Name: Tim Spoerl Stennis Airport acting as FBO
Contact Phone: (b) (6)
Business Hours Services: 0500 - 2000
After Hours Services:

DESIGNATED DISPERSANT LOADING AREA:

Location: ramp off the end of the runway
Contractor Name: Steve Henne MSRC in charge
Contractor Phone: (b) (6)

REPORTING REQUIREMENTS AND PROCEDURES*:

SatLoc Files:
Photographs and Videos:
Observation Logs:

* MSRC aircraft are responsible to ensure SatLoc files, photographs, videos and observation logs are provided to the Dispersant Group Staging Airport Supervisor (DGSAS) after every sortie or at the end of the operational period. Other aircraft operators are responsible to maintain and submit logs after each sortie or daily which state the amount of dispersant applied, number of passes, dosage rates, altitude and speeds dispersant was applied and the time for starting and stopping dispersant application for each pass.

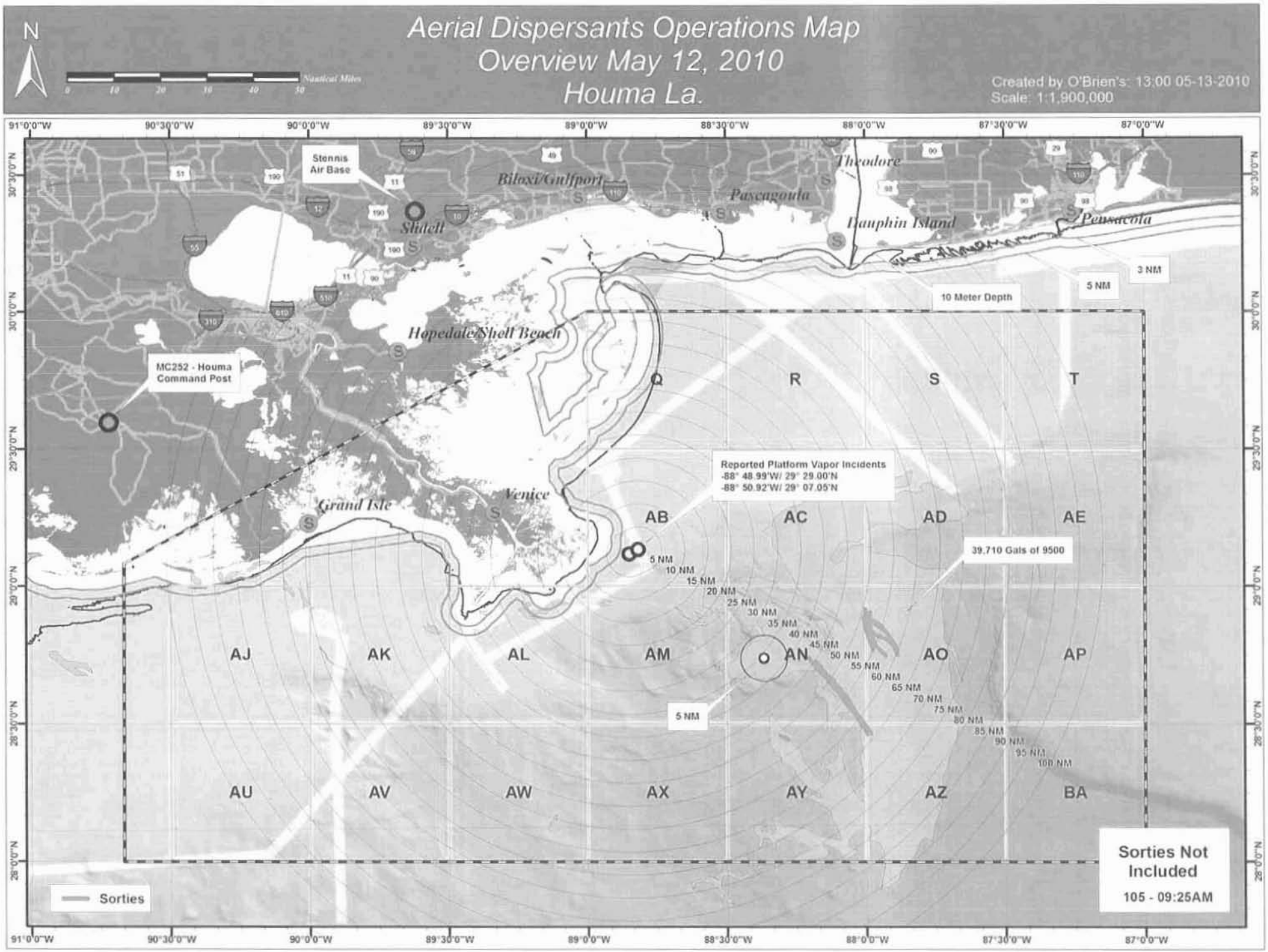
TSA/AIRPORT SECURITY REQUIREMENTS: Hangar door to be kept locked, no entry without MSRC person escort

DATE: May 13, 2010

Payload #	TYPE A/C	TAIL #	PURPOSE	FUEL LOAD (#/Hrs:Min)	PAYLOAD GAL & TYPE	TOTAL FLT TIME	DPT TIME EST/ACT	ENTRY ETA EST/ACT	EXIT ETA EST/ACT	RETURN ETA EST/ACT
	BE90	79W	Weather/Spotter	4	0	2:50	0530/0630	0615	0810	0850/0847
	BE90	39Q	Spotter	6	0	2:50	0600/0650	0615	0810	0920/1048
1	C-130	N117TG	Spray	4	3075/9500	2:10	0620/0714	0640	0810	0830/0920
2	C-130	N403LC	Spray	4	5002/9500	2:10	0625/0733	0645	0815	0835/1018
	AZTEC	183	Spotter	Vessel Disp. Spray Spotter			0740/0852	0815	0905	0950/1059
3	BT-67	N923H	Spray	4	0	2:40	0720	0825	0935	0935
4	DC-3	N84700	Spray	4	0	2:50	0724	0824	0942	0942
	BE90	98V	Spotter	4	0	2:50	0815/0800	0900	1015	1135/1047
5	C-130	106	Spray	4	1950/9500	2:30	0830/0755	0900	0930	1001/1043
	BE90	41J	Spotter	4	0	2:50	0820/0950	0902	1017	1145/1234
6	C-130	105	Spray	4	1897/9500	2:30	0845/0830	0915	0945	1015/1028
	BE90	79W	Spotter	6	0	2:35	0955/0920	0925	1205	1240/1305
7	C-130	N117TG	Spray	4	3067/9500	2:30	1000/1030	1030	1200	1230/1221
8	C-130	N403LC	Spray	4	5000/9500	2:30	1005/1113	1035	1205	1235/1314
	Aero Cmdr	N547GA	Sp-ff	5	0	2:40	1025	1205	1250	1325
9	BT-67	N923H	Spray	4	0	2:05	1100	1205	1220	1305
10	DC-3	N84766	Spray	4	0	2:30	1105	1210	1230	1330
	BE90	37H	Spotter	4	0	2:50	1150/1106	1220	1345	1430/1451
11	C-130	105	Spray	4	1905/9500	2:30	1215/1035	1245	1320	1400/1156
	BE90	39Q	Spotter	4	0	2:50	1140/1143	1222	1345	1410/1536
12	C-130	106	Spray	4	1950/9500	2:30	1218/1058	1247	1325	1355/1220
	BE90	41J	Spotter	6	0	2:40	1355/1352	1425	1505	1540/1727
13	C-130	N117TG	Spray	4	3093/9500	2:30	1400/1317	1430	1505	1540/1605
14	C-130	N403LC	Spray	4	5000/9500	2:30	1400/1403	1430	1505	1535/1653
	Aero Cmdr	N547GA	Sp-ff	5	0	2:20	1510	1605	1645	1720
15	BT-67	N923H	Spray	4	0	2:35	1600	1605	1635	1705
16	DC-3	N84700	Spray	4	0	2:50	1505	1605	1640	1740
	BE90		Spotter	6	0	1:55	1655/1552	1725	1810	1845
17	C-130	N117TG	Spray	4	3000	2:30	1700	1730	1805	1835
18	C-130	N403LC	Spray	4	5000	2:40	1700	1735	1810	1840
	BE90	39Q	Spotter	4	0	2:50	1745/1143	1830	1907	2000/1536
19	C-130	105	Spray	4	1954/9500	2:30	1805/1210	1835	1905	1945/1331
	BE90	79W	Spotter	4	0	2:50	1750/1409	1830	1907	2030/1738
20	C-130	106	Spray	4	1943/9500	2:30	1807/1350	1835	1907	1937/1535
	BE90	37H	Spotter	4	0	2:50	1409			1809
21	C-130	105	Spray	4	1908/9500		1440			1615
22	C-130	106	Spray	4	1950/9500		1540			1710
23	C-130	105	Spray	4	1926/9500		1625			1746

Combined SiteTotals		9500	9527	Totals by Site
	Stennis	41,620	0	41,620
	Houma	0	0	0

Flights in yellow / lined out were canceled


Aerial Dispersants Operations Map
Overview May 12, 2010
Houma La.
Created by O'Brien's: 13:00 05-13-2010
Scale: 1:1,900,000
N
Nautical Miles
0 10 20 30 40 50
Stennis Air Base
Biloxi/Gulfport
Pascagoula
Theodore
Dauphin Island
Pensacola
Slidell
Hopedale/Shell Beach
MC252 - Houma Command Post
Grand Isle
Venice
3 NM
5 NM
10 Meter Depth
Q
R
S
T
Reported Platform Vapor Incidents
-88° 48.99'W/ 29° 29.00'N
-88° 50.92'W/ 29° 07.05'N
AB
AC
AD
AE
39,710 Gals of 9500
5 NM
10 NM
15 NM
20 NM
25 NM
30 NM
35 NM
40 NM
45 NM
50 NM
55 NM
60 NM
65 NM
70 NM
75 NM
80 NM
85 NM
90 NM
95 NM
100 NM
AJ
AK
AL
AM
AN
AO
AP
5 NM
AU
AV
AW
AX
AY
AZ
BA
Sorties Not Included
105 - 09:25AM
Sorties
91°0'0"W
90°30'0"W
90°0'0"W
89°30'0"W
89°0'0"W
88°30'0"W
88°0'0"W
87°30'0"W
87°0'0"W
30°0'0"N
29°30'0"N
29°0'0"N
28°30'0"N
28°0'0"N

DAILY AERIAL DISPERSANT APPLICATION PLAN

DATE: 5/14/2010	TIME: 0530 local	STAGING AIRPORTS Stennis Int'l / Houma	AIRPORT ID: KHSA / KHUM

DISP. STAGING APT SPVSR (Name & Phone #): (Stennis) Tim Spoerl (b) (6) / (Houma) Mark Cochrane (b) (6)

SPILL SITE INFORMATION:

SPILL LOCATION:	Latitude:	28 55 N	Longitude	87 21 W	N	Size:	40 mi radius
GEOGRAPHICAL REFERENCE:	112 nm SSE Stennis Airport						

SPILL SITE APPROACH INFORMATION:

ENTRY POINT:	Latitude:	See OPS Chart	N	Longitude	See OPS Chart	W	Altitude	See OPS Chart ft
EXIT POINT:	Latitude:	See OPS Chart	N	Longitude	See OPS Chart	W	Altitude	See OPS Chart ft
HOLDING AREA:	Latitude:	See OPS Chart	N	Longitude	See OPS Chart	W	Altitude	See OPS Chart ft

SPILL SITE WX	WIND: SE 12-17	CLG: UNL	VIS: 10 nm	SUNRISE: 0604	SUNSET 1938

(Attach Wilken's Weather Report for weather at the spill site and the staging airport)

DOSAGE (GPA): 5 **ADD'L INST:** See required setbacks and no fly area's on operational plan

COMMS			
	PRIMARY VHF COM: 126.40 MHz	SECONDARY VHF COM: 123.45 MHz	EMERGENCY VHF COM: 121.5 MHz
	PRIMARY VHF COM: Surface to Air 122. 9 MHz / SECONDARY VHF COM: Surface to Air 123.45 MHz		
	MARINE RADIO: Channel 16 then switch to Channel 9/ SATELLITE PHONE: Aircraft will contact through the Disp. Staging Airport Supervisor		

AIRCRAFT INFORMATION:

Type:	Tail #:	Call Sign:	Airport ETA:	Purpose & Altitude:	PIC/Crew:	Passengers:
King Air Dynamic	N7198Y	98Y	Stennis	Spotter: 1000'-1500'	PIC: Vince Kane Kevin Smith	None
King Air Dynamic	N39Q	39Q	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot:	None
King Air Dynamic	N7199D	99D	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N89N	89N	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N41J	41J	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N79W	79W	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N37H	37H	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
C-130 IAR	N117TG	7TG	Stennis	Spray: 75'	PIC: Dave Kunz Co-pilot: TBD	None
C-130 Lynden	N403LC	3LC	Stennis	Spray: 75'	PIC: Capt Redman Co-pilot:	plus 5 other crew members
AT 802	N9002K	02K	Stennis	Spray 75'	PIC: TBD Co-pilot: TBD	None
C-130 USAFR	105	105	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 USAFR	106	106	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 USAFR	108	108	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
BT-67 ASI	N932H	32H	Houma Standby	Spray: 75'	Co-pilot: TBD	None
DC-3 ASI	N64767	767	Houma Standby	Spray: 75'	PIC: TBD	None
DC-3 ASI	N64766	766	Houma Standby	Spray: 75'	PIC: TBD Co-pilot: TBD	None
Aztec ASI	N141183	183	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Aero CMDR A ASI	N547GA	7GA	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Aircraft below are not directly part of the Dispersant Group / Cordination and assistance from the aircraft below is nessasary.						
King Air	N275	N275	Houma Jet	Recon		
Helo PHI	759P		Houma	Recon		
NOAA		NOAA 46		Surveillance		
U S Customs	P-3	Omaha 99		Communications		
Canada	Transport 950		Houma	Surveillance		

DAILY ACTIVITY SCHEDULE FOR __14 May_2010__ (Date)		Dispersant Group Staging Airport Supervisor (DGSAS):
TIME	ACTIVITY	
	Report to Airfield	All aircraft
	Pilot and Support Team Daily Operational Briefing (mandatory)	0600 local
	Commence Flight Operations	0630 local
	Terminate Flight Operations	2000 local
	Pilot and Support Team Daily Debriefing on Operations	2030 local

DAILY OPERATIONAL BRIEFING AGENDA:

Safety Issues:	SAR flights beware of and check in onsite
Weather:	See Wilkins Wx and airport weather service
Communications Air and Ground:	Sat Comm and standard freq
Application Dosage and Pattern to be used:	5.0 gpa racetrack
Approach Information:	TBD
Oil Spill Location and Description:	TBD
Operational Procedures and Changes:	None at this time
Flight Schedule:	See schedule page 2

FUELING/FBO:

Contact Name: Tim Spoerl Stennis Airport acting as FBO — Business Hours Services: 0500 - 2000

Contact Phone: (b) (6) — After Hours Services:

DESIGNATED DISPERSANT LOADING AREA:

Location: ramp off the end of the runway

Contractor Name: Steve Henne MSRC in charge

Contractor Phone: (b) (6)

REPORTING REQUIREMENTS AND PROCEDURES*:

SatLoc Files:

Photographs and Videos:

Observation Logs:

* MSRC aircraft are responsible to ensure SatLoc files, photographs, videos and observation logs are provided to the Dispersant Group Staging Airport Supervisor (DGSAS) after every sortie or at the end of the operational period. Other aircraft operators are responsible to maintain and submit logs after each sortie or daily which state the amount of dispersant applied, number of passes, dosage rates, altitude and speeds dispersant was applied and the time for starting and stopping dispersant application for each pass.

TSA/AIRPORT SECURITY REQUIREMENTS: Hangar door to be kept locked, no entry without MSRC person escort

DATE: May 14, 2010

Payload #	TYPE A/C	TAIL #	PURPOSE	FUEL LOAD (#/Hrs:Min)	PAYLOAD GAL & TYPE	TOTAL FLT TIME	DPT TIME EST/ACT	ENTRY ETA EST/ACT	EXIT ETA EST/ACT	RETURN ETA EST/ACT
	BE90	79W	Weather/Spotter	4	0	2:50	0530	0615	0810	0850
	BE90	39Q	Spotter	6	0	2:50	0600	0615	0810	0920
1	C-130	N117TG	Spray	4	3000	2:10	0620	0640	0810	0830
2	C-130	N403LC	Spray	4	5000	2:10	0625	0645	0815	0835
	BE90	98Y	Spotter	4	0	2:50	0815	0900	1015	1135
5	C-130	105	Spray	4	1900	2:30	0830	0900	0930	1001
	BE90	39Q	Spotter	4	0	2:50	0820	0902	1017	1145
6	C-130	106	Spray	4	1900	2:30	0845	0915	0945	1015
	BE90	41J	Spotter	6	0	2:35	0955	0925	1205	1240
7	C-130	N117TG	Spray	4	3000	2:30	1000	1030	1200	1230
8	C-130	N403LC	Spray	4	5000	2:30	1005	1035	1205	1235
	BE90	39Q	Spotter	4	0	2:50	1150	1220	1345	1430
11	C-130	105	Spray	4	1900	2:30	1215	1245	1320	1400
	BE90	79W	Spotter	4	0	2:50	1140	1222	1345	1410
12	C-130	106	Spray	4	1900	2:30	1218	1247	1325	1355
	BE90	41J	Spotter	6	0	2:40	1355	1425	1505	1540
13	C-130	N117TG	Spray	4	3000	2:30	1400	1430	1505	1540
14	C-130	N403LC	Spray	4	5000	2:30	1400	1430	1505	1535
	BE90	39Q	Spotter	6	0	1:55	1655	1725	1810	1845
17	C-130	N117TG	Spray	4	3000	2:30	1700	1730	1805	1835
18	C-130	N403LC	Spray	4	5000	2:40	1700	1735	1810	1840
	BE90	89N	Spotter	4	0	2:50	1748	1830	1907	2000
19	C-130	105	Spray	4	1900	2:30	1805	1835	1905	1945
	BE90	79W	Spotter	4	0	2:50	1750	1830	1907	2030
20	C-130	106	Spray	4	1900	2:30	1807	1835	1907	1937

Combined SiteTotals		9500	9527	Totals by Site
	Stennis			
	Houma			

Aerial Dispersants Operations - Houma Status Report

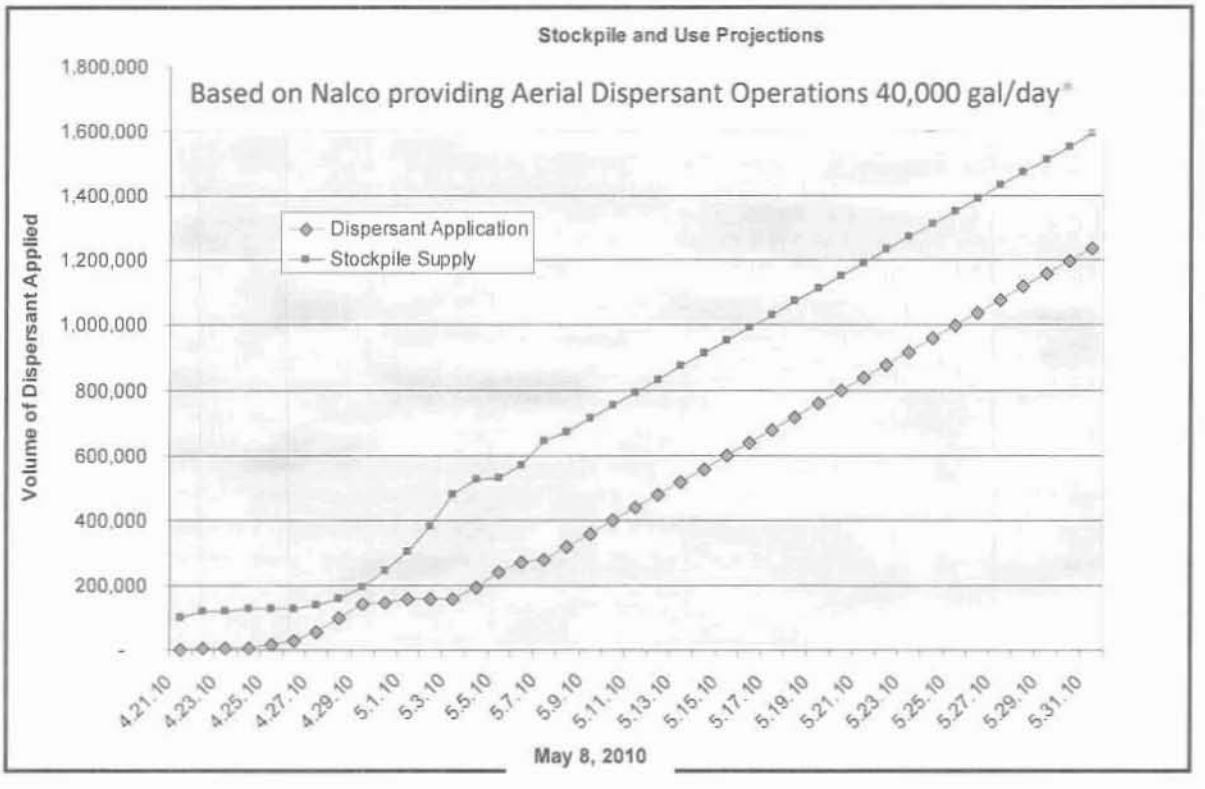
May 8, 2010

Note: This information is the reporting for aerial dispersant spraying

Dispersant Aerial Spray Summary:

1. Total Amount of Dispersant Applied on May 8, 2010 (gallons):	41,690
2. Total Sorties on May 8, 2010 :	17
3. Total Amount of Dispersant Applied to date (gallons):	316,155
4. Total Sorties to date:	120
5. Total Area Covered by Dispersant Applications to date (mi^2):	99.25
6. Total Dispersant Stockpiles on the ground as of 5.8.2010 – 1200 PM (gallons):	456,349
7. Dispersant Stockpile Expected Arrival as of 5.9.10 – 1200 PM (gallons):	40,000
8. Estimated Total Dispersant as of 5.9.2010 - 1200 PM (gallons):	496,349
9. Projected Days Operational at maximum rate of 40,000 gal/day (days):	unlimited

Dispersant Stockpile Supply and Use Projections



*Includes stock pile arrivals from Saudi Arabia and Hawaii.

Asset Summary On Scene	
Spray Aircraft:	
C-130 – Stennis (1 IAR, 1 Lynden, 3 USAF)	5
DC-3 - Houma	2
BT-67 - Houma	1
King Air – 2 – Stennis (can be used for spotting)	2
AT-802 – Stennis	1
TOTAL:	11
Spotter Aircraft:	
King Air – 5 – Stennis	5
Aztec - Houma	1
Aero COMDR - Houma	1
TOTAL:	7
TOTAL AIRCRAFT:	18
PRIORITY Spray Assets Identified*	
Spray Aircraft:	LEAD TIME
C-130 – OSR-UK (20,000 gal/day) + 8-person support team with 2 flight crews	1 – 28 hours
C-130 – OSR-Singapore - (20,000 gal/day)	1 – 72 hours
C-130 – Lynden (Alaska) - (20,000 gal/day)	1 – 5+days
C-130 – IAR (15,000 gal/day)	1 – TBD
Boat Spray 50 and 100 Systems	2
AT 802 (Agriculture Spray Planes) (5,000 gal/day)	1
*NOTE: These assets will not be activated until sufficient stockpile of dispersants are available for their use. Estimate that dispersant operations will need approximately 75,000 gallons per day of dispersant for these air craft spray systems.	
Additional Spray Assets Identified	
Neat Sweep	In area
Identification of Additional NCP-List Dispersants for Consideration	
• Sea Brat #4 (D-10) • JD -2000™ (D-7) • Dispersit SPC 1000™ (D-5) • NOKOMIS 3-AA (D-14) • Biodispers (D-9) • SAF-RON Gold (D-12)	

Activity Update:

- Requested a source oil sample from the subsea riser to allow chemical characterization of the source oil to assist in evaluation of dispersant effectiveness.
- Developing sampling program and chain of custody for Tier 2 / 3 SMART samples.
- Evaluated preliminary data on dispersant candidate effectiveness and toxicity and prioritized samples for field trials. Based on our evaluations, we recommended that SEA BRAT #4 be the first alternate dispersant to evaluate effectiveness in field trials.
- Established new Surface to Air Frequency at 127.85. Hand held aviation frequency radios are being supplied to SMART teams for surface to air communication to better coordinate operations with spotter aircraft.
- Evaluated logistics for establishing forward staging location and accommodations for SMART teams
- AT-802 is being reposition at Stennis and is going through Pilot review and spray system calibration. Anticipate training operations to commence on May 10, 2010.
- Two additional Ayles Fernie Boat Spray 50 systems and additional resources and SMART Teams enroute from OSRL.
- Requested the Region VI Regional Response Team (RRT) modify the existing dispersant pre-authorization document to include the use of boat spray application operations within the pre-authorized zone under the current application rates and conditions when approved will request vessel assets to commence near shore operations.
- Identifying boat spray equipment which sprays neat and developing operations plan and procedures for boat spray operations.
- Conducting boat spray test of four NCP dispersant products to determine their efficacy in the field on both emulsified and fresh oils.
- Today, a worker was injured during routine stockpile transfer operations. The worker reported for medical treatment and returned to duty. The incident is under review.
- Initial operating procedures for coordinating spraying with SMART teams was successful and will be used for future joint operations.

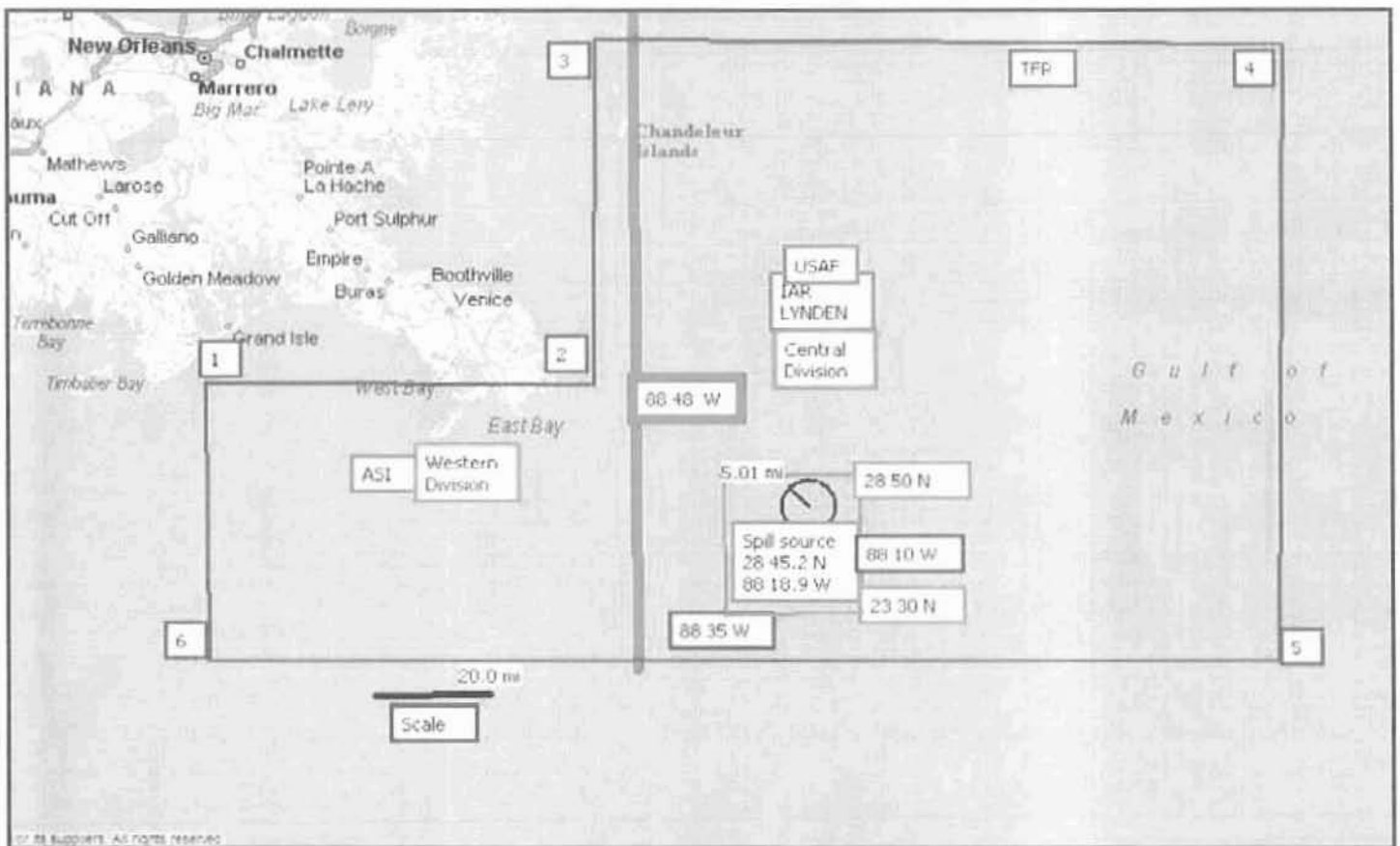
Objectives

Objectives for May 8th are to focus spraying on thick oil areas outside of 5 nm radius around spill source and to evaluate the efficacy of the other likely dispersants candidates from the NCP Product Schedule. Additionally, boat spray testing of alternate dispersants will continue new Chandeleur Islands and the source area.

Requirements

Aircraft spotters should be on site in their zone at 0600 and spray aircraft may pre-stage to the site at 0645. Spray operations to commence approximately 0700.

Aerial Dispersant Operations Divisions:



TFR	1. 29 05 N 90 40 W	4. 30 00N 87 00 W
	2. 29 05 N 89 00 W	5. 28 20 N 87 00 W
	3. 30 00 N 89 00 W	6. 28 20 N 90 40 W

DISPERSANT APPLICATION GUIDANCE FOR 8 MAY

1. In situ burn operations were cancelled for today; therefore, the "No Fly / Spray" boundary box was removed for today's spray operations.
2. Maintain buffer of **3 nm** each side of division boundary.
3. No dispersant spraying within the greater of **3 nm** offshore or depths less than **10 meters.**
4. Remai n **2 nm** from boats, platforms, and marine mammals.
5. Target black and brown oil as this is the freshest and most dispersible oil.
6. Target reddish brown oil further away from the source and apply double spray passes
7. Report takeoff and land times to assigned coordinators as they occur. Report areas sprayed Latitude/Longitude, Time started spraying, number of passes, and gallons applied.
8. Coordination Frequency 126.70
    a. Contact vessel "Seacor Lee" to announce spray operations.
    b. Contact P3 aircraft "Omaha 99" for flight advisories. (Sec. freq. 123.45)
    c. VHF Channel 127.85 is now available for comms between surface SMART teams and overhead spotting aircraft.
9. Use discrete IFF codes as provided on separate correspondence.

Primary emphasis is always on Safety
Emphasis of the day is on SMART inclusion in our dispersant effort.

Dispersant Spray Assets

Aircraft Information –May 8, 2010						
Type	**Owner/ Operator**	**Tail #**	**Payload (gal)**	**Airport / Status**	**Purpose & Altitude**	**Comments**
Spotters						
King Air	MSRC (Dynamic)	N39Q		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N98N		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N41J		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N79W		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N37H		Stennis	Spotter – 1,000' to 1,500'	
Aztec (PA 23)	ASI N14	1183		Houma	Backup Spotter	
Aero COMDR	ASI N38	WA		Houma	Spotter	
Recon						
King Air	ASI	N275		Houma	Recon	
Helo	ASI 759P			Houma	Recon	
Sprayers						
King Air	MSRC (Dynamic)	N7198Y	240	Stennis	Spray: 75'	Available for both Spray and Spotter duties
King Air	MSRC (Dynamic)	N71999D	240	Stennis	Spray: 75'	Available for both Spray and Spotter duties
C-130	IAR N11	7TG	3,000	Stennis	Spray: 75'	
C-130	MSRC (Lynden)	N403LC	5,000	Stennis	Spray: 75'	Plus 5 other crew members
C-130	Air Force	105	1675	Stennis	Spray: 75'	
C-130	Air Force	106	1675	Stennis	Spray: 75'	Cargo ops with spray capability
C-130	Air Force	107	1750	Stennis	Spray: 75'	
AT-802		N9002K	800	Stennis	Spray: 90'	
BT-67	ASI	N932H	1,800	Houma	Spray: 75'	
DC-3	ASI	N64766	1,000	Houma	Spray: 75'	
DC-3	ASI N64	767	1,000	Houma – Standby	Spray: 75'	

Dispersant Application Totals

Dispersant Statistics Applied by Day						
Date	Dispersant Type (gallons)		Daily Totals	# Sorties	Acres Covered (5 gal/acre application rate)	Square Miles covered
	9500	9527				
21 April 2010	Initial Response Date					
22 April 2010	0	1,800	1,800	1	360	0.56
23 April 2010	0	0	0	0	0	0
24 April 2010	0	0	0	0	0	0
25 April 2010	0	11,604	11,604	9	2,320.8	3.7
26 April 2010	0	14,486	14,486	10	2,897.2	4.5
27 April 2010	11,191	15,887	27,078	5	5,415.6	8.5
28 April 2010	27,269	14,874	42,143	15	8,428.6	13.2
29 April 2010	36,913	4,000	40,913	13	8,182.6	12.8
30 April 2010	4,900	0	4,900	1	980.0	1.5
1 May 2010	3,550*	8,103	*11,653	4	2,330.6	3.6
2 May 2010	0	0	0	0	0	0
3 May 2010	0	0	0	0	0	0
4 May 2010	10,561	23,712	34,273	12	6,854.6	10.7
5 May 2010	30,905*	18,670	*49,575	18	9915	15.5
6 May 2010	13,032	15,738	28,770	11	5,754	9.0
7 May 2010	5,582	1,688	7,270	4	1,454	2.3
8 May 2010	17,813	23,877	41,690	17	8,338	13.0
TOTALS	**161,716**	**154,439**	**316,155**	**120**	**63,231**	**98.86**

*Correction – revised to reflect information transposition.

Distribution List

BP Operations Section - Dispersant Group members – Houma
(b) (6) – Operations Section – Houston (b) (6)
Lt. (b) (6) (USCG) – Operations Section – Houma (b) (6)
LCDR (b) (6) (USCG) – Operations Section – Houma (b) (6)
Gary McLain (BP) – (b) (6)
Don Toenshoff, Jr. (MSRC) – Dispersants Staging Site Manager – Stennis (b) (6)
Tim Spoerl (MSRC) – Dispersants Staging Site Supervisor – Stennis (b) (6)
ASI – Houma Airport (airbourne@airbournesupport.com)
D. Hill – TRG (b) (6)
Alistair Murdoch – BP – Houston (b) (6)
Bonnie Myers – BP –Area Command (b) (6)
Nelson Fetgatter – Deputy OPS – Houma (b) (6)
Burt Littlefield – Ops Section Chief – (b) (6)
Theresa Wise - BP Planning Section Chief – (b) (6)
Lou Weltzer, BP Planning, Critical Resources – Area – (b) (6)
David Barker, BP Logistics - Procurement - (b) (6)
Paula Skryja – BP Situation UL – (b) (6)
Valerie Jackson – BP Planning Situation – (b) (6)
Sean Kavanagh – USAF – (b) (6)
Trygve Enger - (b) (6)
Mike Reese – (b) (6)
Jordan Stout – NOAA SSC - (b) (6)
Brian Harrison – BP Houston – (b) (6)
Al Hielscher – BP Houma – Environmental - (b) (6)
Gary Moore – EPA – Area - (b) (6)
Nancy Jones – EPA – Area - (b) (6)
Ed Gautier – ISB Operations - (b) (6)
Tim Rush – ISB Operations – (b) (6)
Mark Skelton – BP- (b) (6)
Marian Macey – Logistics – (b) (6)
Dawn Summers – BP Situation Unit Leader - (b) (6)
USCG SITL – Houma – uscgsitl@gmail.com
USCG Planning Section - NOLAOPSPLAN@USCG.mil

DATE: May 8, 2010

Payload #	TYPE A/C	TAIL #	PURPOSE	FUEL LOAD (#/Hrs:Min)	PAYLOAD GAL & TYPE	TOTAL FLT TIME	DPT TIME EST/ACT	ENTRY ETA EST/ACT	EXIT ETA EST/ACT	RETURN ETA EST/ACT
	BE90	89N	Spotter	6	0	2:50	0530/0657	0615	0810	0850/1100
1	C-130	N117TG	Spray	4	3000/9527	2:10	0620/0748	0640	0810	0830/1031
2	C-130	N403LC	Spray	4	5000/9527	2:10	0625/0830	0645	0815	0835/1150
	Aero Cmdr	N64766	Spotter	5	0	2:10	0740/0717	0815	0905	0950/1104
3	BT-67	N932H	Spray	4	1844/9500	2:15	0720/0841	0820	0835	0935/1032
4	DC-3	N64766	Spray	4	990/9500	2:30	0724/0857	0824	0845	0945/1128
	BE90	98Y	Spotter	4	0	2:50	0815/0901	0900	1015	1135/1140
5	C-130	105	Spray	4	1728/9500	2:30	0830/0915	0900	0930	1001/1300
	BE90	39Q	Spotter	4	0	2:50	0820/1004	0902	1017	11451401
6	C-130	107	Spray	4	1792/9500	2:30	0845/1048	0915	0945	1015/1244
	BE90	37H	Spotter	6	0	2:35	0955/1115	0925	1205	1240/1501
7	C-130	N117TG	Spray	4	2948/9527	2:30	1000/1145	1030	1200	1230/1351
8	C-130	N403LC	Spray	4	5003/9527	2:30	1005/1245	1035	1205	1235/1433
	Aero Cmdr	N64766	Spotter	5	0	2:10	1125/1240	1205	1250	1335/1408
9	BT-67	N932H	Spray	4	1853/9500	2:05	1100/1232	1205	1220	1305/1409
10	DC-3	N64766	Spray	4	1000	2:30	1105	1140	1235	1320
	BE90	89N	Spotter	4	0	2:50	1150/1330	1220	1345	1430/1739
11	C-130	105	Spray	4	1675/9500	2:30	1215/1427	1245	1320	1400/1545
	BE90	79W	Spotter	4	0	2:50	1140/1550	1222	1345	1410/1825
12	C-130	107	Spray	4	1750/9500	2:30	1218/1351	1247	1325	1355/1500
	BE90	N932H	Spotter	6	0	2:40	1520/	1425	1505	1540
13	C-130	N117TG	Spray	4	2926/9527	2:30	1400/1457	1430	1505	1540/1639
14	C-130	N403LC	Spray	4	5000/9527	2:30	1400/1545	1430	1505	1535/1735
	Aero Cmdr	N64766	Spotter	5	0	2:20	1510/1507	1605	1645	1730/1750
15	BT-67	N932H	Spray	4	1852/9500	2:25	1500/1508	1605	1625	1725/1740
	DC-3	N64766	Spray	4	904/9500	2:30	1505/1549	1605	1640	1740/1745
	BE90	39Q	Spotter	6	0	1:55	1625	1725	1810	1845
16	C-130	N117TG	Spray	4	3000	2:30	1700	1730	1805	1835
17	C-130	N403LC	Spray	4	3000	2:40	1700	1735	1810	1840
	BE90	N7409D	Spotter	4	0	2:50	1745	0830	1907	2000
18	C-130	105	Spray	4	1675/9500	2:30	1805/1600	1835	1905	1945/1801
	BE90	79W	Spotter	4	0	2:50	1750	0830	1907	2020
19	C-130	107	Spray	4	1750/9500	2:30	1807/1622	1835	1907	1937/1830
				Total	41,690	9500	17,813			
						9527	23,877			

DAILY AERIAL DISPERSANT APPLICATION PLAN

DATE:	5/9/2010	TIME:	0530 local	STAGING AIRPORTS	Stennis Int'l / Houma	AIRPORT ID:	KHSA / KHUM

DISP. STAGING APT SPVSR (Name & Phone #): (Stennis)Tim Spoerl (b) (6) (Houma) Mark Cochrane (b) (6)

SPILL SITE INFORMATION:

SPILL LOCATION	Latitude	28 55 N	Longitude	87 21 W	N	Size	40 mi radius
GEOGRAPHICAL REFERENCE			112 nm SSE Stennis Airport				

SPILL SITE APPROACH INFORMATION:

ENTRY POINT	Latitude	See OPS Chart	N	Longitude	See OPS Chart	W	Altitude	See OPS Chart	ft
EXIT POINT	Latitude	See OPS Chart	N	Longitude	See OPS Chart	W	Altitude	See OPS Chart	ft
HOLDING AREA	Latitude	See OPS Chart	N	Longitude	See OPS Chart	W	Altitude	See OPS Chart	ft

SPILL SITE WX:	WIND	ENE 15-23	CLG	UNL	VIS	10 nm	SUNRISE	0607	SUNSET	1935

(Attach Wilken's Weather Report for weather at the spill site and the staging airport)

DOSAGE (GPA): 5 **ADD'L INST:** See requested setbacks and no fly area's on operational plan

COMMS

PRIMARY VHF COM: 126.40 MHz	SECONDARY VHF COM: 123.45 MHz	EMERGENCY VHF COM: 121.5 MHz
Surface to Air VHF COM: 127.85		
MARINE RADIO: Channel 16 then switch to Channel 9/ SATELLITE PHONE: Aircraft will contact through the Disp. Staging Airport Supervisor		

AIRCRAFT INFORMATION:

Type:	Tail #:	Call Sign:	Airport ETA:	Purpose & Altitude:	PIC/Crew:	Passengers:
King Air Dynamic	N719SY	9SY	Stennis	Spotter 1000'-1500'	PIC Vince Kane Kevin Smith	None
King Air Dynamic	N39Q	39Q	Stennis	Spotter 1000'-1500'	PIC TBD Co-pilot	None
King Air Dynamic	N719SD	9SD	Stennis	Spotter 1000'-1500'	PIC TBD Co-pilot TBD	None
King Air Dynamic	N98N	98N	Stennis	Spotter 1000'-1500'	PIC TBD Co-pilot TBD	None
King Air Dynamic	N41J	41J	Stennis	Spotter 1000'-1500'	PIC TBD Co-pilot TBD	None
King Air Dynamic	N79W	79W	Stennis	Spotter 1000'-1500'	PIC TBD Co-pilot TBD	None
King Air Dynamic	N37H	37H	Stennis	Spotter 1000'-1500'	PIC TBD Co-pilot TBD	None
C-130 IAR	N117TG	7TG	Stennis	Spray 75'	PIC Dave Kunz Co-pilot TBD Flt Eng Loadmaster	None
C-130 Lynden	N403LC	3LC	Stennis	Spray 75'	PIC Capt Redman Co-pilot Flt Eng Loadmaster	plus 5 other crew members
AT 802	N9002K	02K	Stennis	Spray 90'	PIC TBD Co-pilot TBD	None
C-130 USAFR	105	105	Stennis	Spray 75'	PIC TBD Co-pilot TBD	None
C-130 USAFR	106	106	Stennis	Spray 75'	PIC TBD Co-pilot TBD	None
C-130 USAFR	107	107	Stennis	Spray 75'	PIC TBD Co-pilot TBD	None
BT-67 ASI	N932H	32H	Houma	Spray 75'	Co-pilot TBD	None
DC-3 ASI	N64767	7n7	Houma Standby	Spray 75'	PIC TBD Co-pilot TBD	None
DC-3 ASI	N64766	766	Houma	Spray 75'	PIC TBD Co-pilot TBD	None
Aztec ASI	N141183	183	Houma	Spotter	PIC TBD Co-pilot TBD	None
Aero CMDRA ASI	N547GA	8WA	Houma	Spotter	PIC TBD Co-pilot TBD	None
King Air Houma Jet	N275	N275	Houma	Recon	PIC TBD Co-pilot TBD	
Helo PHI	759P		Houma	Recon	PIC TBD Co-pilot TBD	

DATE: May 9, 2010

Payload #	TYPE A/C	TAIL #	PURPOSE	FUEL LOAD (#/Hrs:Min)	PAYLOAD GAL & TYPE	TOTAL FLT TIME	DPT TIME EST/ACT	ENTRY ETA EST/ACT	EXIT ETA EST/ACT	RETURN ETA EST/ACT
	BE90	N7198Y	Spotter	6	0	2:50	0530	0615	0810	0850
1	C-130	N117TG	Spray	4	3000	2:10	0620	0640	0810	0830
2	C-130	N4031C	Spray	4	5000	2:10	0625	0645	0815	0835
	Aero Cmdr	N547GA	Spotter	5	0	2:10	0740	0815	0905	0950
3	BT-67	N932H	Spray	4	2000	2:15	0720	0820	0835	0935
4	DC-3	N64766	Spray	4	1000	2:30	0724	0824	0845	0945
	BE90	N7199D	Spotter	4	0	2:50	0815	0900	1015	1135
5	C-130	105	Spray	4	1675	2:30	0830	0900	0930	1001
	BE90	79W	Spotter	4	0	2:50	0820	0902	1017	1145
6	C-130	107	Spray	4	1750	2:30	0845	0915	0945	1015
	BE90	39Q	Spotter	6	0	2:35	0955	0925	1205	1240
7	C-130	N117TG	Spray	4	3000	2:30	1000	1030	1200	1230
8	C-130	N4031A	Spray	4	5000	2:30	1005	1035	1205	1235
	Aero Cmdr	N547GA	Spotter	5	0	2:10	1125	1205	1250	1335
9	BT-67	N932H	Spray	4	2000	2:05	1100	1205	1220	1305
10	DC-3	N64766	Spray	4	1000	2:30	1105	1110	1230	1330
	BE90	N7199D	Spotter	4	0	2:50	1150	1220	1345	1430
11	C-130	105	Spray	4	1675	2:30	1215	1245	1320	1400
	BE90	79W	Spotter	4	0	2:50	1140	1222	1345	1410
12	C-130	107	Spray	4	1750	2:30	1218	1247	1325	1355
	BE90	N7198Y	Spotter	6	0	2:40	1355	1425	1505	1540
13	C-130	N117TG	Spray	4	3000	2:30	1400	1430	1505	1540
14	C-130	N4031A	Spray	4	5000	2:30	1400	1430	1505	1535
	Aero Cmdr	N547GA	Spotter	5	0	2:20	1510	1605	1645	1730
15	BT-67	N932H	Spray	4	2000	2:25	1500	1605	1625	1725
16	DC-3	N64766	Spray	4	1000	2:30	1505	1605	1640	1740
	BE90	39Q	Spotter	6	0	1:55	1655	1725	1810	1845
17	C-130	N117TG	Spray	4	3000	2:30	1700	1730	1805	1835
18	C-130	N4031C	Spray	4	5000	2:40	1700	1735	1810	1840
	BE90	N7199D	Spotter	4	0	2:50	1745	1830	1907	2000
19	C-130	105	Spray	4	1675	2:30	1805	1835	1905	1945
	BE90	79W	Spotter	4	0	2:50	1750	1830	1907	2030
20	C-130	107	Spray	4	1750	2:30	1807	1835	1907	1937

Aerial Dispersants Operations – Houma Status Report

July 10, 2010

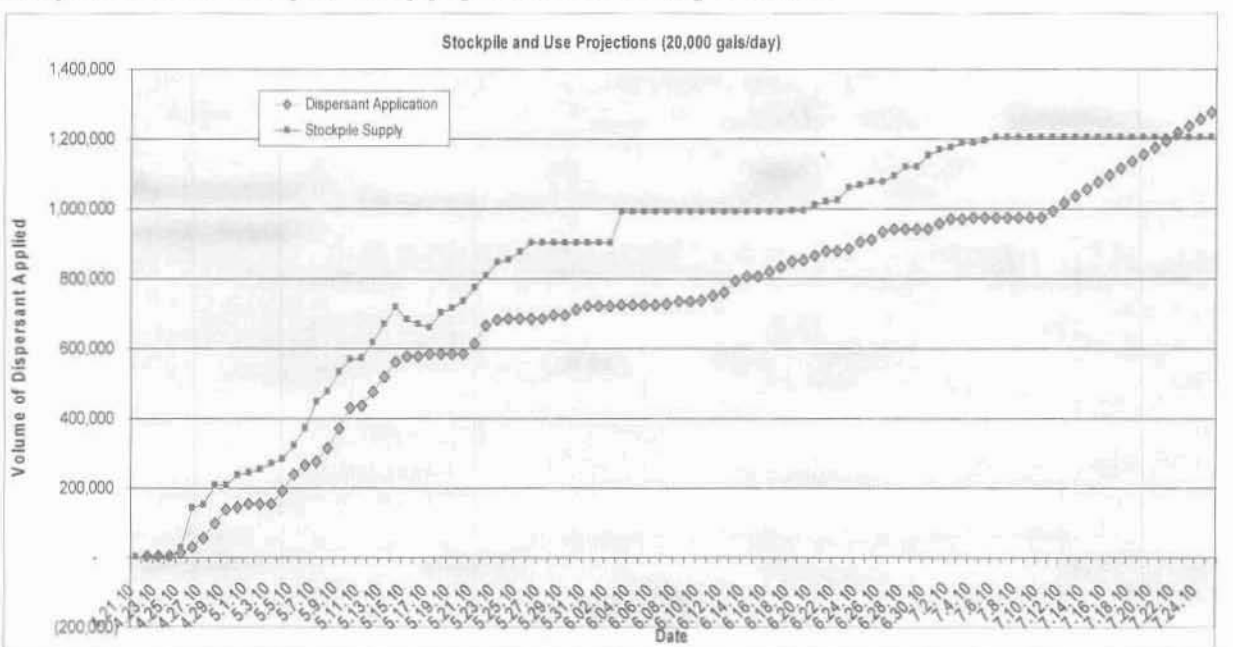
This report presents a snapshot of the aerial dispersant applications conducted on this date and summarizes the associated support activities. Aerial application of dispersants are being conducted under the direction of Unified Command and are targeting dispersible oil to minimize surface oil slicks impacting the environmentally sensitive shoreline ecosystem.

Dispersant Aerial Spray Summary:

1. FOSC approved Application Volume for July 10, 2010 (gallons):	10,000 @ 07:01 AM
2. Total Amount of Dispersant Applied on July 10, 2010 (gallons):	0
3. Total Sorties on July 10, 2010:	0
4. Total Amount of Dispersant Applied to date (gallons):	975,038
5. Total Sorties to date:	404
6. Total Area Covered by Dispersant Applications to date (mi^2):	305
7. Total Dispersant Stockpiles on the ground as of 7.10.2010 – 1200 PM (gallons):	216,859
8. Dispersant Stockpile Expected Arrival as of 7.10.10 – 1200 PM (gallons)*:	0
9. Estimated Total Dispersant as of 7.11.2010 - 1200 PM (gallons):	216,859
10. Projected Days Operational at maximum rate of 20,000 gal/day (days):	11

* Future estimates for the delivery of EC9500A are based on production schedules provided by Procurement on 7.10.10 via email and discussions with Nalco.

Dispersant Stockpile Supply and Use Projections



Asset Summary On Scene	
Spray Aircraft:	
C-130 – Stennis (2 Lynden, 1 IAR, 1 OSR)	4
DC-3 – Houma	2
BT-67 – Houma	1
King Air – 2 – Stennis (can be used for spotting)	2
AT-802 – Houma	3
TOTAL:	12
Spotter Aircraft:	
King Air – 5 – Stennis	5
King Air – 1 – Houma	1
Aztec – Houma	1
Turbo COMDR – Houma	1
TOTAL:	8
TOTAL AIRCRAFT:	20
PRIORITY Spray Assets Identified***	
Spray Aircraft:	LEAD TIME
C-130 – OSR-Singapore - (20,000 gal/day)	1 in 72+ hours
C-130 – IAR (15,000 gal/day)	1 – TBD
AT 802 (Agriculture Spray Planes) (5,000 gal/day)	3 in 6+ hours
***NOTE: These assets will not be activated until sufficient stockpile of dispersants are available for their use. Estimate that dispersant operations will need approximately 75,000 gallons per day of dispersant for these air craft spray systems.	
Additional Spray Assets Identified	
Neat Sweep	In area

Aerial Dispersant Activity Update for July 10, 2010:

- At 07:01 local time 10 July 2010, RADM Watson gave approval to apply an initial 10,000 g of dispersants to targeted dispersible oil.
- Thirteen overflights were conducted throughout the day. Dispersible oil slicks were identified in Zone AN and were already being recovered by skimmers and burned by the ISB vessels. By the time the spray aircraft arrived on scene, the aircraft was required to return to Stennis airbase fully loaded.

M/V International Peace Research Activity Update for July 10, 2010:

- Today the M/V IP collected samples pre and post-dispersant application using a boat spray system. Field measurements included use of dual C-3s towed simultaneously, LISST particle size analyzer and field viscometry. Water samples were collected at 1 and 10 meter depths at background, pre- and post-dispersant spray for chemical analysis and toxicity testing. The vessel will remain offshore tonight and tomorrow morning will meet a spotter plane in the SE corner of zone AN to continue its mission.
- The MV IP is scheduled to come to port on Monday evening (7.13.10). Once in port, data will be uploaded for evaluation and samples shipped to laboratories for analysis.

SMART Tier 1 Update for July 10, 2010:

- There were no SMART Tier 1 observations as there were no dispersant applications conducted this day.

Aerial Dispersant Group Operations Plan for July 11th:
Dated 10 July, 2010

Tim Spoerl, Brad Barker, and Scotty Meador, please acknowledge receipt. Disseminate to all pilots. Op Areas are depicted on attached map .pdf; schedule on attached .xls

Mission Targeting start of the day: 07-11-2010

The following zones are assigned for early morning surveillance and initial spray targets. Expect early authorization for 10,000 gallons. For Stennis base of 6,000 gallons and for Houma 4,000 gallons (This is not a given authorization).

Communicate dispersible oil as soon as possible in assigned zones. Spotters, please provide a photo if possible with your reports.

Stennis: Primary zones AN, AC. Secondary zones, AD, AO, AY, R, S (RED indicators on map).
Houma ASI: Primary zones AM, AX. Secondary zones, AK, AW, AV (BLUE indicators on map).
Houma AT-802: Primary zones AB, Z. Secondary zones Y, AL, AA, Q [Limited to within 40 NM from the shoreline] (GREEN indicators on map).

Maintain 3 nm boundary separation if unable to coordinate air-to-air with other spotter or OMAHA 99.

Notes: Changes to previous orders are underlined.

1. **Required Equipment:** Functioning spray tracking units (GPS, Sat Lock) if not equipped, do not fly.
2. **As of 28 May 2010 FOSC approval is required each day for application of Corexit EC9500A dispersant in pre-approved areas.**
3. **Restrictions to aerial dispersant spraying:**
   a. No aerial dispersant spraying within the greatest of 3 nm offshore or depths less than 10 meters.
   b. No dispersant spraying within 5 nm of the spill source at surface: **28 45 12N - 88 18 53 W as defined in the FAA NOTAM.**

FOR DOCUMENTATION PURPOSES (FUTURE REVIEW) WE WILL LIST THE FAA NOTAM **28 45 12N -88 18 53 W** AS THE OFFICIAL LOCATION.

   c. No aerial dispersant spraying 2nm of vessels, platforms, and 3nm from marine mammals.
   d. SMART and Scientific Support Missions may spray within 1nm of SMART/ SSM vessel; positive ID required.
   e. Target black and brown oil. This is the freshest/most dispersible oil. Dosage is 5 gallons per acre. ***Quality not Quantity***. Do not target Red/Reddish emulsified oil.
   f. Spotter aircraft remain on site to visually assess effects on dispersed area and document with photographs. Complete spotters debrief form and turn in to base operations on a daily bases.
   g. Report takeoff and landing times to assigned coordinators as they occur.

5. **Aircraft Communications:**
   a. **Primary air-to-air communication frequency in TFR West of 89° W is 126.4, East of 89° W is 135.65 AND 132.6 in the source area.**
   Secondary is 123.45 all zones.
   b. Contact P3 aircraft "Omaha 99" for flight advisories.
   c. Discreet IFF codes are permanently assigned to each aircraft must be used to enter TFR. This removes need to file DVFR flight plans.
   It is absolutely essential that each flight each day calls Tyndall to advise them prior to takeoff (b) (6)
   d. Advise SMART 1 prior to spray aircraft departure.
   e. Primary surface to air frequency is 122.9. Secondary is 123.45.

Ancillary operations:

1. **SMART Team:** Will be working on defined and approved sites. Details to be developed with spotter findings.
2. **In Situ Burning:** The burn box is as depicted on the operational chart, however, note, the burn box location is subject to change. We will coordinate with the burn boys in the morning and advise if any location adjustment has been made.
3. **Skimmers:** Normal operations are to be conducted with 2nm separation for spray application.

4 **"A Whale"** is still operating position varies but usually W-NW quadrants of the source in Zones AN & AM. Allow 2nm separation.

5. **Stennis Tasking:** Scientific Support Mission: The IP will require a recon/spotter in the morning. Tentative rendezvous location will again be 0700 at 28◦ 30' N-88◦ 00' W. The Determination is being instructed to be at 29◦ 00' N-89◦ 45' W. Ken Schacht is the POC/Liaison between the Determination and Aerial Dispersants. Vince Kane/79W will overfly the Determination at or about 0700 at the Determination location. Vince will attempt to contact the Determination on 122.9 (primary) or 123.45 (secondary). The 79W does not have a marine VHF. Once Vince contacts the Determination he will direct them to the nearest emulsified oil in the area, after which he will continue on his recon patrol. If Vince fails to communicate with the Determination, Vince will continue on his routine recon route.

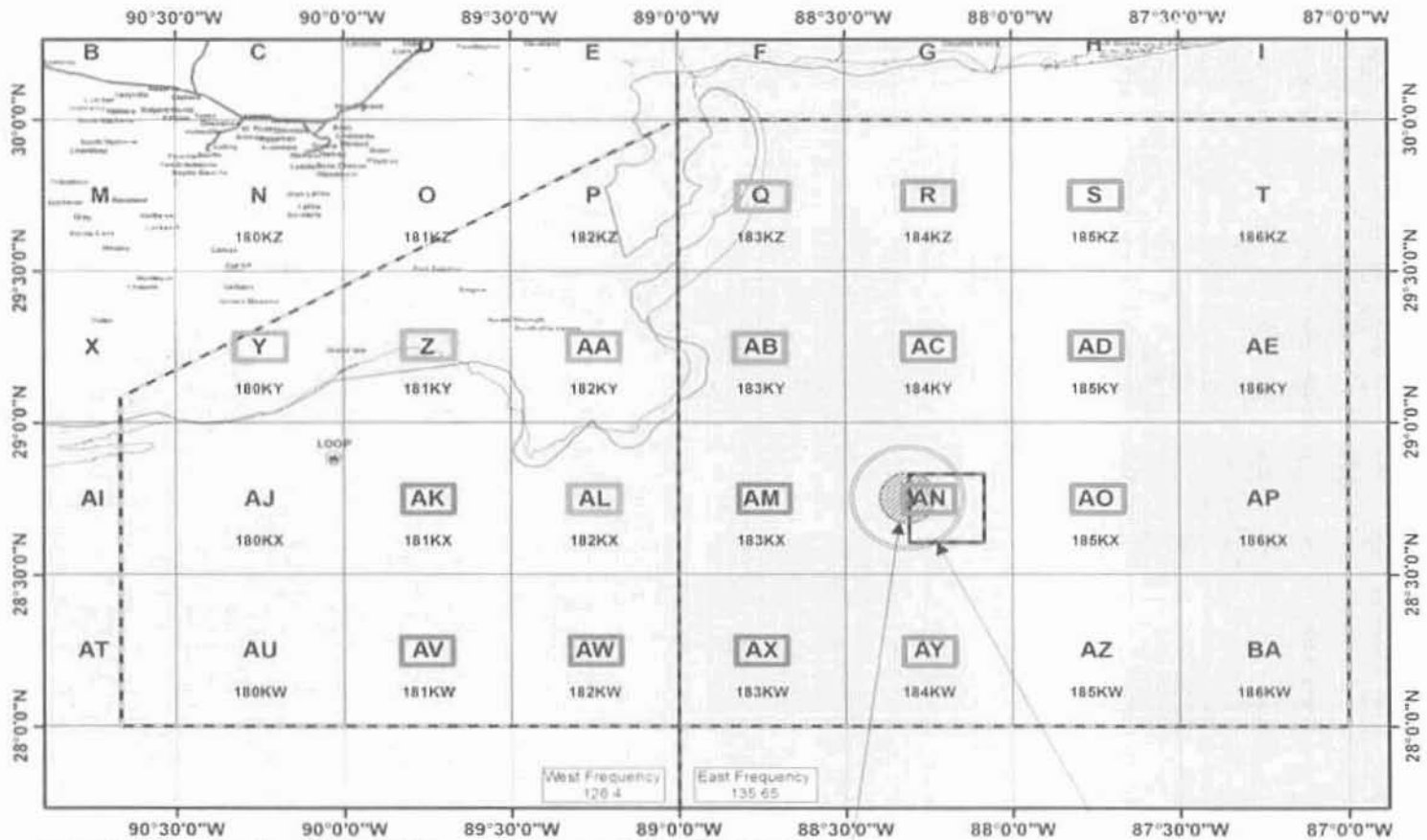
Dispersant Group conference call today. It will be held @ 1530 Dial in (b) (6) participant code (b) (6) (Stennis use moderator number).

Richard Advises as follows;

BLIMP S & BALLONS:

- Be advised that there will be a new element coming into the aviation mix.
- Planned are the introduction of multiple balloons types operated by NOAA in the burn area to monitor air quality, these will be tethered to the burn boats.
- Also planned, a bigger air ship type, also operated by NOAA and tethered to a ship that will be flying at between 300' and 1000"...there will be a 3 mile restriction around this aircraft.

Aerial Dispersants Operational Areas July 11, 2010



Note 1: No Dispersant Flying Within 5 NM from the Spill Source 28°45'12"N / -88°18'53"W

Stennis

ASI Houma

AT Houma

-88 18 32.894W	-88 05 07.739W
28 49 56.136N	28 49 56.136N
BURN BOX	
-88 18 32.894W	-88 05 07.739W
28 36 21.226N	28 36 21.226N

JULY 11, 2010
START

TFR is 10 NMs
Contact OMAHA 99
on 132.6

Dispersant Spray Assets

Aircraft Information						
Type	**Owner/ Operator**	**Tail #**	**Payload (gal)**	**Airport**	**Purpose & Altitude**	**Comments**
Spotters						
King Air	MSRC (Dynamic)	N39Q		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N89N		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N41J		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N37H		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N80Y		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N79W		Houma	Spotter – 1,000' to 1,500'	
Aztec (PA 23)	ASI	N141183		Houma	Backup Spotter	
Turbo COMDR	ASI	N112EM		Houma	Spotter	
Sprayers						
King Air	MSRC (Dynamic)	N7198Y	240	Stennis	Spray: 75'	Available for both Spray and Spotter duties
King Air	MSRC (Dynamic)	N7199D	240	Stennis	Spray: 75'	Available for both Spray and Spotter duties
C-130	IAR	N117TG	3,000	Stennis	Spray: 75'	
C-130	MSRC (Lynden)	N403LC	5,000	Stennis	Spray: 75'	ADDS Pack (CCA)
C-130	MSRC (Lynden)	N401LC	5,000	Stennis	Spray: 75'	ADDS Pack (Alyeska)
C-130	OSR	EIJIV	5,000	Stennis	Spray: 75'	ADDS Pack (OSR)
AT-802	Lane (NRC)	N9002K	800	Houma	Spray: 75'	2-Seater / Training
AT-802	Lane (NRC)	N802BG	800	Houma	Spray: 75'	
AT-802	Lane (NCR)	N950HC	800	Houma	Spray: 75'	
BT-67	ASI	N932H	1,800	Houma	Spray: 75'	
DC-3	ASI	N64766	1,000	Houma	Spray: 75'	
DC-3	ASI	N64767	1,000	Houma	Spray: 75'	Standby
Operational Spray Volume (1 load per plane) (gal)			24,680			
Total Operational Spray Maximum (gal) (4 sorties/ plane / day)			98,720			

Dispersant Application Totals

Dispersant Statistics Applied by Day						
Date	Dispersant Type (gallons)		Daily Totals	# Sorties	Acres Covered (5 gal/acre application rate)	Square Miles covered
	9500	9527				
21 April 2010	Initial Response Date					
22 April 2010	0	1,800	1,800	1	360	0.6
23 April 2010	0	0	0	0	0	0
24 April 2010	0	0	0	0	0	0
25 April 2010	0	11,604	11,604	9	2,321	3.7
26 April 2010	0	14,486	14,486	10	2,897	4.5
27 April 2010	11,191	15,887	27,078	11	5,416	8.5
28 April 2010	27,269	14,874	42,143	15	8,429	13.2
29 April 2010	36,913	4,000	40,913	13	8,183	12.8
30 April 2010	4,900	0	4,900	1	980	1.5
1 May 2010	3,550	8,103	11,653	4	2,331	3.6
2 May 2010	0	0	0	0	0	0
3 May 2010	0	0	0	0	0	0
4 May 2010	10,561	23,712	34,273	12	6,855	10.7
5 May 2010	30,905	18,670	49,575	18	9915	15.5
6 May 2010	13,032	15,738	28,770	11	5,754	9.0
7 May 2010	5,582	1,688	7,270	4	1,454	2.3
8 May 2010	17,813	23,877	41,690	17	8,338	13.0
9 May 2010	29,034	26,898	55,932	21	11,186	17.5
10 May 2010	29,240	26,980	56,220	22	11,244	17.6
11 May 2010	7,940	0	7,940	2	1,588	2.5
12 May 2010	39,710	0	39,710	12	7,942	12.4
13 May 2010	41,620	0	41,620	15	8,324	13.0
14 May 2010	44,031	0	44,031	14	8,806	13.8
15 May 2010	14,208	0	14,208	6	2,842	4.4
16 May 2010	0	0	0	0	0	0
17 May 2010	6,591	0	6,591	4	1,318	2.1
18 May 2010	209	0	209	1	42	0.1

Dispersant Statistics Applied by Day						
Date	Dispersant Type (gallons)		Daily Totals	# Sorties	Acres Covered (5 gal/acre application rate)	Square Miles covered
	9500	9527				
19 May 2010	0	0	0	0	0	0
20 May 2010	0	0	0	0	0	0
21 May 2010	25,233	4,659	29,892	14	5,978	9.3
22 May 2010	51,353	1,593	52,946	22	10,589	16.6
23 May 2010	18,104	0	18,104	11	3,621	5.7
24 May 2010	630	0	630	1	126	0.2
25 May 2010	200	0	200	1	40	0.1
26 May 2010	229	0	229	1	46	0.1
27 May 2010	200	0	200	1	40	0.1
28 May 2010	10,259	0	10,259	4	2,052	3.2
29 May 2010	0	0	0	0	0	0
30 May 2010	15,131	0	15,131	6	3,026	4.7
31 May 2010	11,676	0	11,676	7	2,335	3.7
1 June 2010	0	0	0	0	0	0
2 June 2010	0	0	0	0	0	0
3 June 2010	1,900	0	1,900	1	380	0.6
4 June 2010	0	0	0	0	0	0
5 June 2010	125	0	125	1	24	0
6 June 2010	0	0	0	0	0	0
7 June 2010	3,998	0	3,998	2	800	1.3
8 June 2010	5,505	0	5,505	3	1,101	1.7
9 June 2010	0	0	0	0	0	0
10 June 2010	4,506	0	4,506	2	901	1.4
11 June 2010	14,305	0	14,305	6	2,861	4.5
12 June 2010	6,996	0	6,996	2	1,399	2.2
13 June 2010	35,212	0	35,212	13	7,042	11.0
14 June 2010	10,703	0	10,703	7	2,141	3.3
15 June 2010	2,608	0	2,608	3	522	0.8
16 June 2010	13,380	0	13,380	7	2,676	4.2

Dispersant Statistics Applied by Day						
Date	Dispersant Type (gallons)		Daily Totals	# Sorties	Acres Covered (5 gal/acre application rate)	Square Miles covered
	9500	9527				
17 June 2010	12,123	0	12,123	6	2,425	3.8
18 June 2010	15,564	0	15,564	8	3,113	4.9
19 June 2010	2,604	0	2,604	2	521	0.8
20 June 2010	15,403	0	15,403	6	3,081	4.8
21 June 2010	10,355	0	10,355	4	2,071	3.2
22 June 2010	2,008	0	2,008	2	402	0.6
23 June 2010	5,099	0	5,099	3	1,020	1.6
24 June 2010	21,088	0	21,088	10	4,218	6.6
25 June 2010	4,633	0	4,633	2	927	1.5
26 June 2010	23,022	0	23,022	12	4,605	7.2
27 June 2010	6,623	0	6,623	3	1325	2.07
28 June 2010	0	0	0	0	0	0
29 June 2010	0	0	0	0	0	0
30 June 2010	0	0	0	0	0	0
01 July 2010	17,852	0	17,852	5	3570	6
02 July 2010	12,737	0	12,737	7	2547	3
03 July 2010	0	0	0	0	0	0
04 July 2010	3,000	0	3,000	1	600	1
05 July 2010	803	0	803	1	161	.25
06 July 2010	0	0	0	0	0	0
07 July 2010	1,000	0	1,000	1	200	0.3
08 July 2010	0	0	0	0	0	0
09 July 2010	0	0	0	0	0	0
10 July 2010	0	0	0	0	0	0
TOTALS	**760,469**	**214,569**	**975,038**	**404**	**195,008**	**304.7**

Due to the time for spray mission completion, the graphic showing the spray missions will be included in tomorrow's report.

DAILY AERIAL DISPERSANT APPLICATION PLAN

DATE: 7/10/2010	TIME: 0600 local	STAGING AIRPORTS Stennis Int'l / Houma	AIRPORT ID: KHSA / KHUM

DISP. STAGING APT SPVSR (Name & Phone #): (Stennis) Gerry Nielsen (b) (6) / (Houma) Mark Cochrane (b) (6)

SPILL SITE INFORMATION:

SPILL LOCATION:	Latitude: 28.55 N	N	Longitude: 88.21 W	W	Size:
GEOGRAPHICAL REFERENCE:	112 nm SSE Stennis Airport				

SPILL SITE APPROACH INFORMATION:

ENTRY POINT:	Latitude: See OPS Chart	N	Longitude: See OPS Chart	W	Altitude See OPS Chart	ft.
EXIT POINT:	Latitude: See OPS Chart	N	Longitude: See OPS Chart	W	Altitude See OPS Chart	ft.
HOLDING AREA:	Latitude: See OPS Chart	N	Longitude: See OPS Chart	W	Altitude See OPS Chart	ft.

SPILL SITE WX:	WIND: WSW 8 - 10'	CLG: 5,000	VIS: 15 nm	SUNRISE: 0602	SUNSET: 1953
SEA STATE:	Swell: SSE - 1.0'	Wind Waves: WSW 1.5'		Combined Seas 2.0'	

(Attach Wilken's Weather Report for weather at the spill site and the staging airport)

DOSAGE (GPA): 5 **ADD'L INST:** See required setbacks and no fly area's on operational plan

COMMS

PRIMARY VHF COM: 126.40 MHz, W of 88	PRIMARY VHF COM: 135.65 MHz, E of 88-30	EC. VHF COM: 123.45 / EMERG COM: 121.5 MHz
PRIMARY VHF COM: Surface to Air 122. 9 MHz / SECONDARY VHF COM: Surface to Air 123.45 MHz / Marine primary VHF 81A		
MARINE RADIO: Channel 16 then switch to Channel 9/ SATELLITE PHONE: Aircraft will contact through the Disp. Staging Airport Supervisor.		

AIRCRAFT INFORMATION:

Type:	Tail #:	Call Sign:	Airport ETA:	Purpose & Altitude:	PIC/Crew:	Passengers:
King Air Dynamic	N7198Y	98Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N80Y	80Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N39Q	39Q	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N7199D	99D	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N89N	89N	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N41J	41J	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N79W	79W	Houma	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N37H	37H	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
C-130 IAR	N117TG	7TG	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 Lynden	N403LC	3LC	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N9002K	02K	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N802BG	2BG	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N950HC	0HC	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
C-130 Lynden	401LC	1LC	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 OSR	EIJIV	JIV	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
BT-67 ASI	N932H	32H	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
DC-3 ASI	N64767	767	Houma Standby	Spray: 75'	PIC: TBD Co-pilot: TBD	
DC-3 ASI	N64766	766	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
Aztec ASI	N141183	183	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Turbo Cmdr ASI	N112EM	2EM	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Aircraft below are not directly part of the Dispersant Group / Cordination and assistance from the aircraft below is nessasary.						
King Air	N275	275	Houma Jet	Recon		
Helo PHI	759P		Houma	Recon		
U.S. Customs	P-3	Omaha 99		Communications		
Canada	Transport 950		Houma	Surveillance		

DATE: July 10, 2010											
SORTIE	TYPE A/C	TAIL #	PURPOSE	FUEL LOAD (#/Hrs:Min)	PAYLOAD GAL	PAYLOAD TYPE	TOTAL FLT TIME	DPT TIME EST/ACT	ENTRY EST/ACT	EXIT ETA EST/ACT	RETURN ETA EST/ACT
	BE90	39Q	Recon / Spotter	4	0			0600 / 0624			0945 / 1034
	BE90	89N	Recon / Spotter	4	0			0610 / 0640			0950 / 1040
	Turbo Cmdr	N112EM	Recon / Spotter	5	0			0610 / 0610			0910 / 0824
	Aztec	183	Recon / Spotter	4	0			0620 / 0618			0920 / 0921
	BE90	79W	Recon / Spotter	4	0			0630 / 0648			0930 / 0911
	BE90	37H	Spotter	4	0			0800 / 1355			1200 / 1738
1	C-130	N117FG	Spray	4	0			0830 / 1500			1030 / 1630
	Turbo Cmdr	N112EM	Spotter	5	0			1205			1540
2	BT-67	N932H	Spray	4	0			1200			1425
3	DC-3	566	Spray	4	0			1230			1432
	BE90	89N	Spotter	4	0			0803			1206
4	C-130	403LC	Spray	4	0			0834			1035
	BE90	80Y	Spotter	4	0			1245			1545
5	C-130	401LC	Spray	4	0			1300			1455
	BE90	98Y	Spotter	4	0			1200			1600
6	C-130	JIV	Spray	4	0			1303			1457
	BE90	39Q	Spotter	4	0			1200			1600
7	AT-802	02K	Spray	4	0			1245			1500
	BE90	98Y	SSM 16 / Spotter	4	0			0000 / 0615			0000 / 0916
	BE90	37H	Recon / Spotter	4	0			0000 / 0855			0000 / 1255
	BE90	99D	Recon / Spotter	4	0			0000 / 0916			0000 / 1244
	BE90	80Y	Recon / Spotter	4	0			0000 / 1131			0000 / 1540
	BE90	89N	Recon / Spotter	4	0			0000 / 1126			0000 / 1502
	BE90	98Y	Recon / Spotter	4	0			0000 / 1342			0000 / 1718
	BE90	79W	Recon / Spotter	4	0			0000 / 1429			0000 / 1641

Combined SiteTotals	0	9500
	Stennis	0
	Houma	0

Flights in yellow were canceled.

Vessels were located in all disperible oil slicks identified today. NO spray missions completed. Sortie number one was launched and vessels moved into the oil slick, no dispersant was sprayed. SSM 16 (scientific support mission) was completed with 98Y and the vessel International Peace.

DAILY AERIAL DISPERSANT APPLICATION PLAN

DATE:	7/11/10	TIME:	0600 local	STAGING AIRPORTS:	Stennis Int'l / Houma	AIRPORT ID:	KHSA / KHUM

DISP. STAGING APT SPVSR (Name & Phone #): (Stennis) Gerry Nielsen (b) (6) / (Houma) Mark Cochrane (b) (6)

SPILL SITE INFORMATION:

SPILL LOCATION:	Latitude:	28 55 N	N	Longitude:	88 21 W	W	Size:
GEOGRAPHICAL REFERENCE:	112 nm SSE Stennis Airport						

SPILL SITE APPROACH INFORMATION:

ENTRY POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude: See OPS Chart	ft
EXIT POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude: See OPS Chart	ft
HOLDING AREA:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude: See OPS Chart	ft

SPILL SITE WX:	WIND: WSW 10 - 16	CLG: UNL	VIS: 8 - 15 nm	SUNRISE: 0601	SUNSET: 1953
SEA STATE:	Swell: CONF 5 - 1'	Wind Waves: WSW 1 5' - 2'		Combined Seas 4 3'	

(Attach Wilken's Weather Report for weather at the spill site and the staging airport)

DOSAGE (GPA): 5 **ADD'L INST:** See required setbacks and no fly area's on operational plan

COMMS

PRIMARY VHF COM: 126 40 MHz, W of 88-30 | PRIMARY VHF COM: 135 65 MHz, E of 88-30 | SEC VHF COM: 123 45 / EMERG COM: 121 5 MHz

PRIMARY VHF COM: Surface to Air 122 9 MHz / SECONDARY VHF COM: Surface to Air 123 45 MHz / Marine primary VHF 81A

MARINE RADIO: Channel 16 then switch to Channel 9/ SATELLITE PHONE: Aircraft will contact through the Disp Staging Airport Supervisor

AIRCRAFT INFORMATION:

Type:	Tail #:	Call Sign:	Airport ETA:	Purpose & Altitude:	PIC/Crew:	Passengers:
King Air Dynamic	N7198Y	98Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N80Y	80Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N39Q	39Q	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N7199D	99D	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N89N	89N	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N41J	41J	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N79W	79W	Houma	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N37H	37H	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
C-130 IAR	N117TG	7TG	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 Lynden	N403LC	3LC	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N9002K	02K	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N802BG	2BG	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N950HC	0HC	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
C-130 Lynden	401LC	1LC	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 OSR	EIJIV	JIV	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
BT-67 ASI	N932H	32H	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
DC-3 ASI	N64767	767	Houma Standby	Spray: 75'	PIC: TBD Co-pilot: TBD	
DC-3 ASI	N64766	766	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
Aztec ASI	N141183	183	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Turbo Cmdr ASI	N112EM	2EM	Houma	Spotter	PIC: TBD Co-pilot: TBD	None

Aircraft below are not directly part of the Dispersant Group / Cordination and assistance from the aircraft below is nessasary.

King Air	N275	275	Houma Jet	Recon		
Helo PHI	759P		Houma	Recon		
U S Customs	P-3	Omaha 99		Communications		
Canada	Transport 950		Houma	Surveillance		

DATE: July 11, 2010											
SORTIE	TYPE A/C	TAIL #	PURPOSE	FUEL LOAD (#/Hrs:Min)	PAYLOAD GAL	PAYLOAD TYPE	TOTAL FLT TIME	DPT TIME EST/ACT	ENTRY EST/ACT	EXIT ETA EST/ACT	RETURN ETA EST/ACT
	BE90	371I	Recon / Spotter	4	0			0600			0945
	BE90	98Y	Recon / Spotter	4	0			0610			0950
	Turbo Cmdr	N112EM	Recon / Spotter	5	0			0610			0910
	Aztec	183	Recon / Spotter	4	0			0620			0920
	BE90	79W	Recon / Spotter	4	0			0630			0930
	BE90	80Y	Spotter	4	0			0800			1200
1	C-130	N117TG	Spray	4	3000			0830			1030
	Turbo Cmdr	N112EM	Recon / Spotter	5	0			1205			1540
2	BT-67	N932H	Spray	4	2000			1200			1425
3	DC-3	766	Spray	4	1000			1230			1432
	BE90	89N	Spotter	4	0			0803			1206
4	C-130	403LC	Spray	4	5000			0834			1035
	BE90	80Y	Spotter	4	0			1245			1545
5	C-130	401LC	Spray	4	5000			1300			1455
	BE90	98Y	Spotter	4	0			1200			1600
6	C-130	JIV	Spray	4	5000			1303			1457
	BE90	39Q	Spotter	4	0			1200			1600
7	AT-802	02K	Spray	4	800			1245			1500

Combined SiteTotals		9500
	Stennis	0
	Houma	0

Aerial Dispersants Operations – Houma Status Report

July 11, 2010

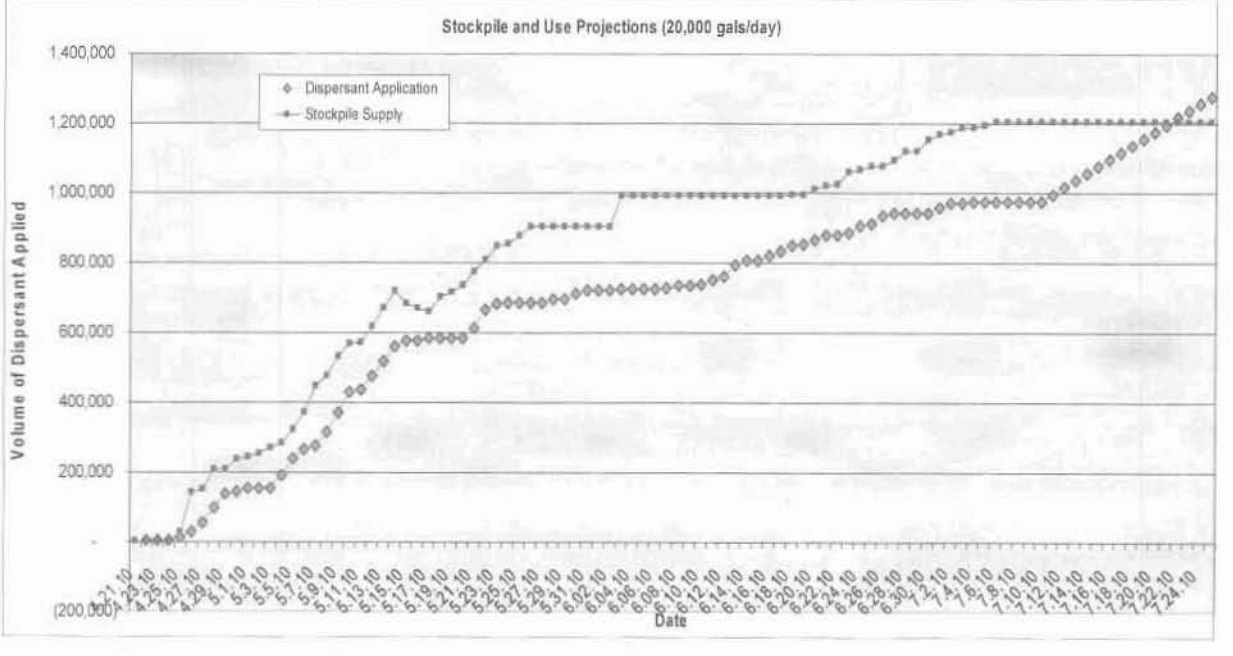
This report presents a snapshot of the aerial dispersant applications conducted on this date and summarizes the associated support activities. Aerial application of dispersants are being conducted under the direction of Unified Command and are targeting dispersible oil to minimize surface oil slicks impacting the environmentally sensitive shoreline ecosystem.

Dispersant Aerial Spray Summary:

1. FOSC approved Application Volume for July 11, 2010 (gallons):	10,000 @ 08:22 AM
2. Total Amount of Dispersant Applied on July 11, 2010 (gallons):	0
3. Total Sorties on July 11, 2010:	0
4. Total Amount of Dispersant Applied to date (gallons):	975,038
5. Total Sorties to date:	404
6. Total Area Covered by Dispersant Applications to date (mi^2):	305
7. Total Dispersant Stockpiles on the ground as of 7.11.2010 – 1200 PM (gallons):	216,859
8. Dispersant Stockpile Expected Arrival as of 7.11.10 – 1200 PM (gallons)*:	0
9. Estimated Total Dispersant as of 7.12.2010 - 1200 PM (gallons):	216,859
10. Projected Days Operational at maximum rate of 20,000 gal/day (days):	11

* Future estimates for the delivery of EC9500A are based on production schedules provided by Procurement on 7.10.10 via email and discussions with Nalco.

Dispersant Stockpile Supply and Use Projections



Asset Summary On Scene	
Spray Aircraft:	
C-130 – Stennis (2 Lynden, 1 IAR, 1 OSR)	4
DC-3 – Houma	2
BT-67 – Houma	1
King Air – 2 – Stennis (can be used for spotting)	2
AT-802 – Houma	3
TOTAL:	12
Spotter Aircraft:	
King Air – 5 – Stennis	5
King Air – 1 – Houma	1
Aztec – Houma	1
Turbo COMDR – Houma	1
TOTAL:	8
TOTAL AIRCRAFT:	20
PRIORITY Spray Assets Identified* **	
Spray Aircraft:	LEAD TIME
C-130 – OSR-Singapore - (20,000 gal/day)	1 in 72+ hours
C-130 – IAR (15,000 gal/day)	1 – TBD
AT 802 (Agriculture Spray Planes) (5,000 gal/day)	3 in 6+ hours
***NOTE: These assets will not be activated until sufficient stockpile of dispersants are available for their use. Estimate that dispersant operations will need approximately 75,000 gallons per day of dispersant for these air craft spray systems.	
Additional Spray Assets Identified	
Neat Sweep	In area

Aerial Dispersant Activity Update for July 11, 2010:

- At 08:22 local time 11 July 2010, RADM Watson gave approval to apply an initial 10,000 g of dispersants to targeted dispersible oil.
- Thirteen overflights were conducted throughout the day. Dispersible oil slicks were identified but were already being recovered by skimmers in the area.
- Aerial Dispersant Group Houma gave a briefing on the dispersant operations and a tour of the ASI and AT-802 spray assets and participated in an overflight tour of the source site and offshore areas for USCG and USEPA HQ / Region VI personnel.

M/V International Peace Research Activity Update for July 11, 2010:

- After looking and failing to find a suitable oil patch to sample, the M/V IP collected reference samples and returned to port. The field data collected yesterday (July 10, 2010) has already been uploaded on the EPA website.
- The M/V IP will be taking on supplies and going out late in the day tomorrow.

SMART Tier 1 Update for July 11, 2010:

- There were no SMART Tier 1 observations as there were no dispersant applications conducted this day.

Aerial Dispersant Group Operations Plan for July 12th:
Dated 11 July, 2010

Tim Spoerl, Brad Barker, and Scotty Meador, please acknowledge receipt. Disseminate to all pilots. Op Areas are depicted on attached map .pdf; schedule on attached .xls

Mission Targeting start of the day: 07-12-2010

The following zones are assigned for early morning surveillance and initial spray targets. Expect early authorization for 10,000 gallons. For Stennis base of 6,000 gallons and for Houma 4,000 gallons (This is not a given authorization).

Communicate dispersible oil as soon as possible in assigned zones. Spotters, please provide a photo if possible with your reports.

Stennis: Primary zones AN, AC. Secondary zones, AD, AO, AY, R, S (RED indicators on map).
Houma ASI: Primary zones AM, AX. Secondary zones, AK, AW, AV (BLUE indicators on map).
Houma AT-802: Primary zones AB, Z. Secondary zones Y, AL, AA, Q [Limited to within 40 NM from the shoreline] (GREEN indicators on map).

Maintain 3 nm boundary separation if unable to coordinate air-to-air with other spotter or OMAHA 99.

Notes: Changes to previous orders are underlined.

1. **Required Equipment:** Functioning spray tracking units (GPS, Sat Lock) if not equipped, do not fly.
2. **As of 28 May 2010 FOSC approval is required each day for application of Corexit EC9500A dispersant in pre-approved areas.**
3. **Restrictions to aerial dispersant spraying:**
   a. No aerial dispersant spraying within the greatest of 3 nm offshore or depths less than 10 meters.
   b. No dispersant spraying within 5 nm of the spill source at surface: **28 45 12N - 88 18 53 W as defined in the FAA NOTAM.**

FOR DOCUMENTATION PURPOSES (FUTURE REVIEW) WE WILL LIST THE FAA NOTAM **28 45 12N -88 18 53 W** AS THE OFFICIAL LOCATION.

   c. No aerial dispersant spraying 2nm of vessels, platforms, and 3nm from marine mammals.
   d. SMART and Scientific Support Missions may spray within 1nm of SMART/ SSM vessel; positive ID required.
   e. Target black and brown oil. This is the freshest/most dispersible oil. Dosage is 5 gallons per acre. ***Quality not Quantity***. Do not target Red/Reddish emulsified oil.
   f. Spotter aircraft remain on site to visually assess effects on dispersed area and document with photographs. Complete spotters debrief form and turn in to base operations on a daily bases.
   g. Report takeoff and landing times to assigned coordinators as they occur.

5. **Aircraft Communications:**
   a. **Primary air-to-air communication frequency in TFR West of 89° W is 126.4, East of 89° W is 135.65 AND 132.6 in the source area.**
   Secondary is 123.45 all zones.
   b. Contact P3 aircraft "Omaha 99" for flight advisories.
   c. Discreet IFF codes are permanently assigned to each aircraft must be used to enter TFR. This removes need to file DVFR flight plans.
   It is absolutely essential that each flight each day calls Tyndall to advise them prior to takeoff (b) (6)
   d. Advise SMART 1 prior to spray aircraft departure.
   e. Primary surface to air frequency is 122.9. Secondary is 123.45.

Continued next page →

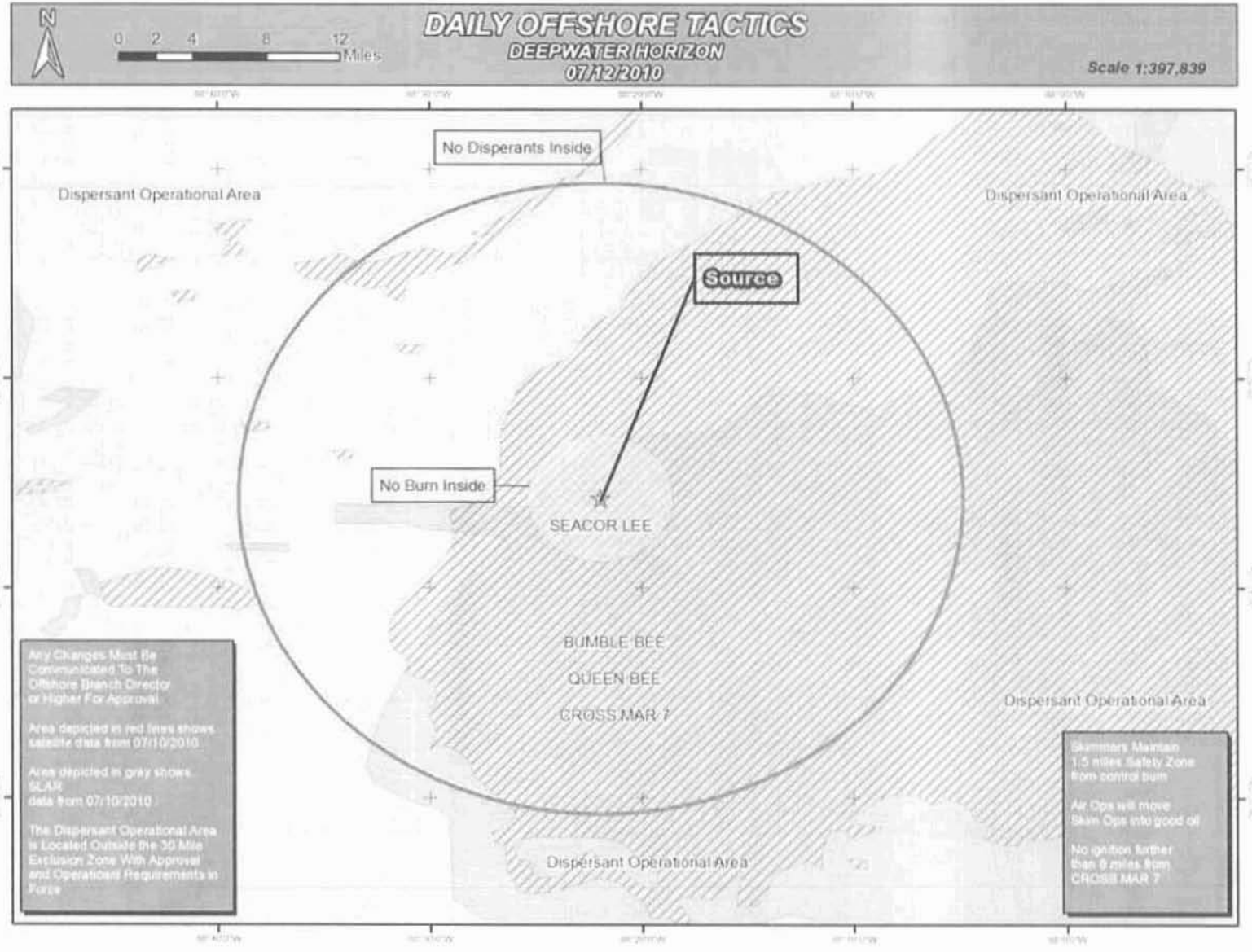
Ancillary operations:

1. **SMART Team:** Will be working on defined and approved sites. Details to be developed with spotter findings.
2. **In Situ Burning:** The burn box/circle is as depicted on the operational chart, however, note, the burn box location is subject to change. We will coordinate with the burn in the morning and advise if any location adjustment has been made.
3. **Skimmers:** Normal operations are to be conducted with 2nm separation for spray application. Offshore Operations has set a 15 nm radius around the source. Tentatively all boats and burns will take place inside of that 15nm and no dispersant application will take place within that circle.
4. **Stennis Tasking:** Scientific Support Mission: The IP **will not require** a recon/spotter in the morning. Vessel will be in port and will sail tomorrow evening and will require a spotter for Tuesday morning. Rendezvous point and time for Tuesday will be advised Monday evening. The Determination will be at 29◦ 00' N - 88◦ 00' W (NE Quadrant Zone AN). 98Y is tentatively arranged to rendezvous with the Determination at 0700 tomorrow morning.

Dispersant Group conference call tomorrow @ 1530. Dial in (b) (6) participant code (b) (6) (Stennis use moderator number).

BLIMP S & BALLONS:

- NOTAM still being drafted. All will be advised when NOTAM is issued.


DAILY OFFSHORE TACTICS
DEEPWATER HORIZON
07/12/2010
Scale 1:397,839
0 2 4 8 12 Miles
No Disperants Inside
Dispersant Operational Area
Dispersant Operational Area
Source
No Burn Inside
SEACOR LEE
BUMBLE BEE
QUEEN BEE
CROSS MAR 7
Dispersant Operational Area
Dispersant Operational Area
Any Changes Must Be Communicated To The Offshore Branch Director or Higher For Approval.
Area depicted in red lines shows satellite data from 07/10/2010.
Area depicted in gray shows SLAR data from 07/10/2010.
The Dispersant Operational Area is Located Outside the 20 Mile Exclusion Zone With Approval and Operational Requirements in Force
Skimmers Maintain 1.5 miles Safety Zone from control burn
Air Ops will move Skim Ops into good oil
No ignition further than 9 miles from CROSS MAR 7

Dispersant Spray Assets

Aircraft Information						
Type	**Owner/ Operator**	**Tail #**	**Payload (gal)**	**Airport**	**Purpose & Altitude**	**Comments**
Spotters						
King Air	MSRC (Dynamic)	N39Q		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N89N		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N41J		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N37H		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N80Y		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N79W		Houma	Spotter – 1,000' to 1,500'	
Aztec (PA 23)	ASI	N141183		Houma	Backup Spotter	
Turbo COMDR	ASI	N112EM		Houma	Spotter	
Sprayers						
King Air	MSRC (Dynamic)	N7198Y	240	Stennis	Spray: 75'	Available for both Spray and Spotter duties
King Air	MSRC (Dynamic)	N7199D	240	Stennis	Spray: 75'	Available for both Spray and Spotter duties
C-130	IAR	N117TG	3,000	Stennis	Spray: 75'	
C-130	MSRC (Lynden)	N403LC	5,000	Stennis	Spray: 75'	ADDS Pack (CCA)
C-130	MSRC (Lynden)	N401LC	5,000	Stennis	Spray: 75'	ADDS Pack (Alyeska)
C-130	OSR	EIJIV	5,000	Stennis	Spray: 75'	ADDS Pack (OSR)
AT-802	Lane (NRC)	N9002K	800	Houma	Spray: 75'	2-Seater / Training
AT-802	Lane (NRC)	N802BG	800	Houma	Spray: 75'	
AT-802	Lane (NCR)	N950HC	800	Houma	Spray: 75'	
BT-67	ASI	N932H	1,800	Houma	Spray: 75'	
DC-3	ASI	N64766	1,000	Houma	Spray: 75'	
DC-3	ASI	N64767	1,000	Houma	Spray: 75'	Standby

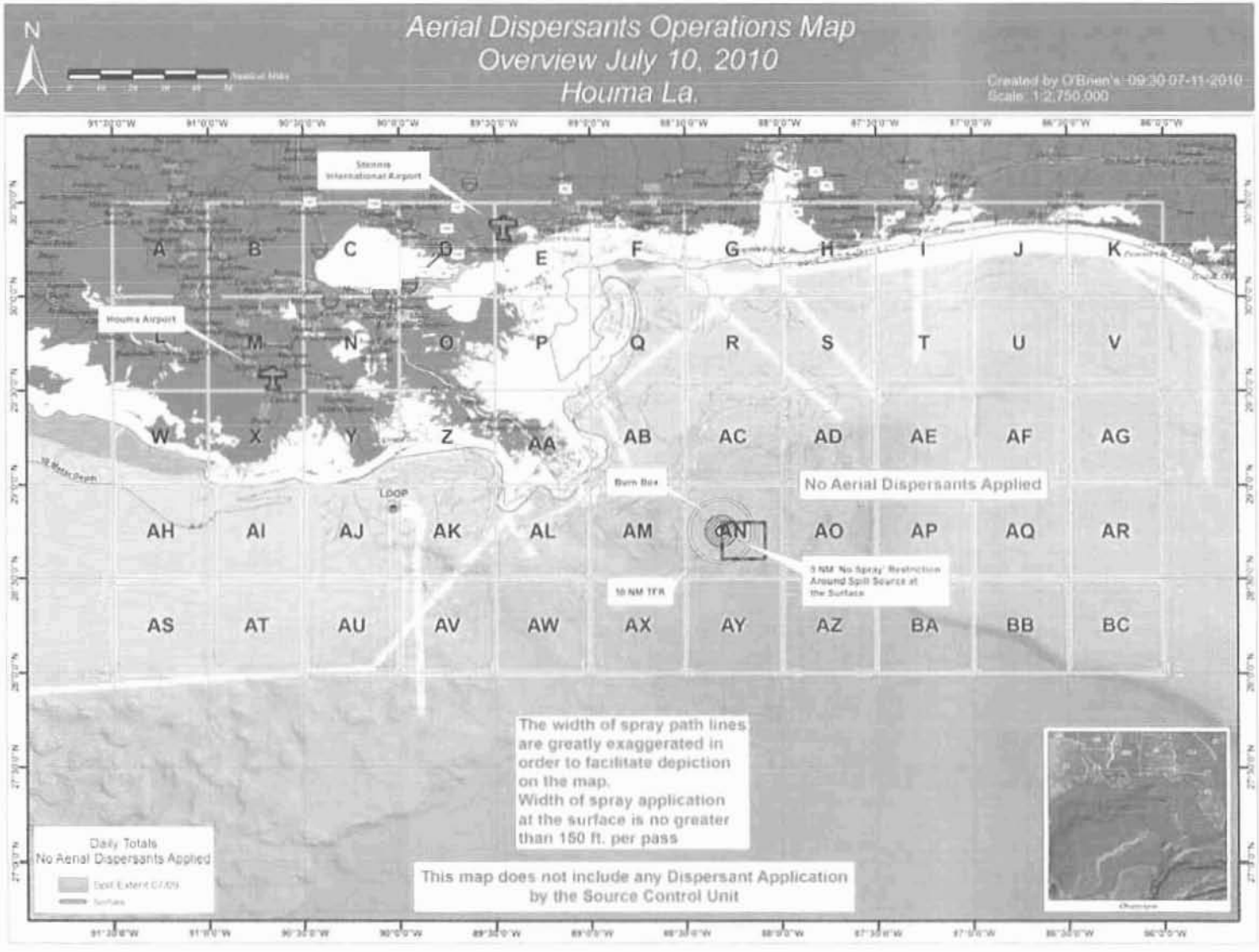
Operational Spray Volume (1 load per plane) (gal)	24,680
Total Operational Spray Maximum (gal) (4 sorties/ plane / day)	98,720

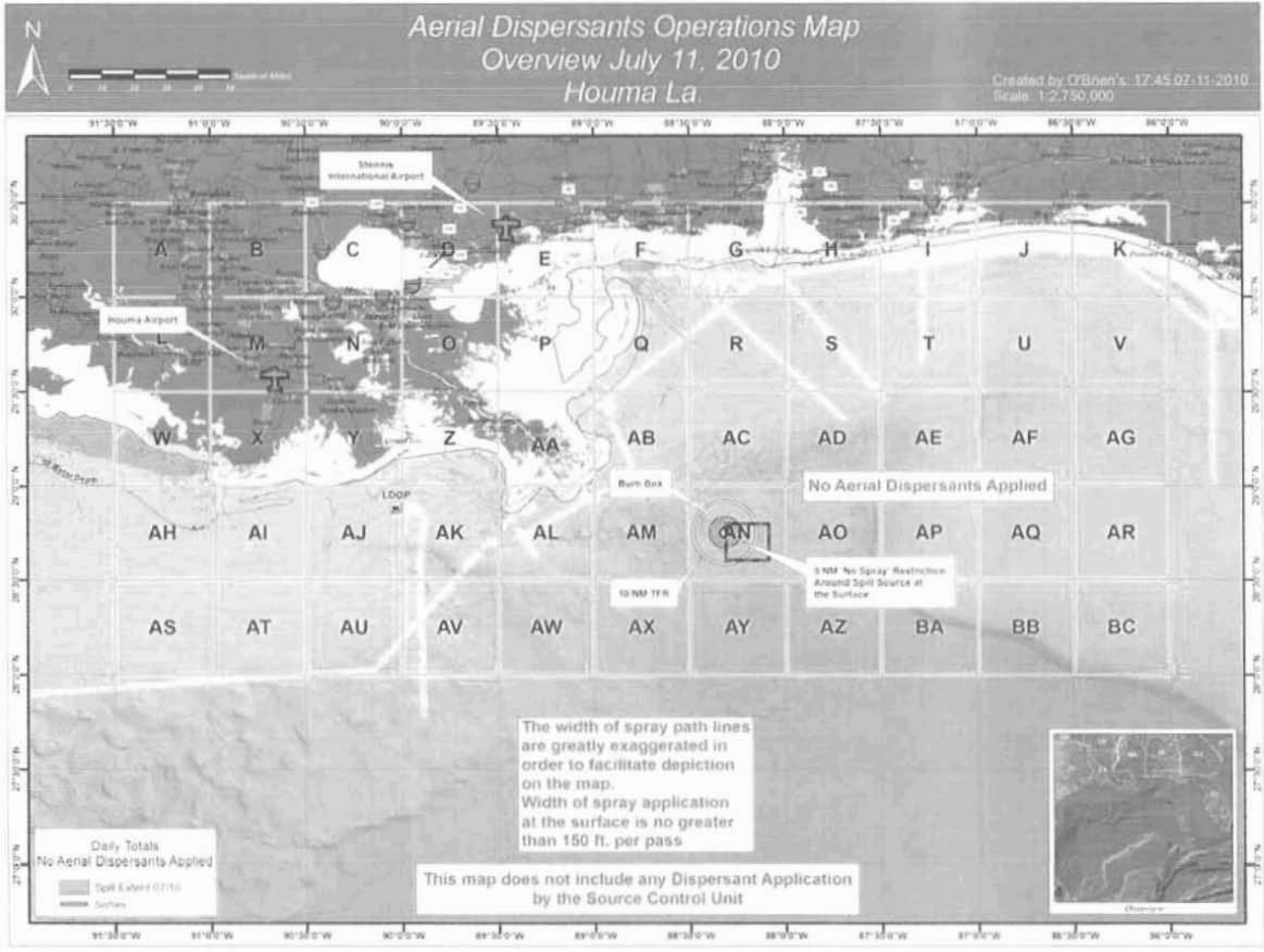
Dispersant Application Totals

Dispersant Statistics Applied by Day						
Date	Dispersant Type (gallons)		Daily Totals	# Sorties	Acres Covered (5 gal/acre application rate)	Square Miles covered
	9500	9527				
21 April 2010	Initial Response Date					
22 April 2010	0	1,800	1,800	1	360	0.6
23 April 2010	0	0	0	0	0	0
24 April 2010	0	0	0	0	0	0
25 April 2010	0	11,604	11,604	9	2,321	3.7
26 April 2010	0	14,486	14,486	10	2,897	4.5
27 April 2010	11,191	15,887	27,078	11	5,416	8.5
28 April 2010	27,269	14,874	42,143	15	8,429	13.2
29 April 2010	36,913	4,000	40,913	13	8,183	12.8
30 April 2010	4,900	0	4,900	1	980	1.5
1 May 2010	3,550	8,103	11,653	4	2,331	3.6
2 May 2010	0	0	0	0	0	0
3 May 2010	0	0	0	0	0	0
4 May 2010	10,561	23,712	34,273	12	6,855	10.7
5 May 2010	30,905	18,670	49,575	18	9915	15.5
6 May 2010	13,032	15,738	28,770	11	5,754	9.0
7 May 2010	5,582	1,688	7,270	4	1,454	2.3
8 May 2010	17,813	23,877	41,690	17	8,338	13.0
9 May 2010	29,034	26,898	55,932	21	11,186	17.5
10 May 2010	29,240	26,980	56,220	22	11,244	17.6
11 May 2010	7,940	0	7,940	2	1,588	2.5
12 May 2010	39,710	0	39,710	12	7,942	12.4
13 May 2010	41,620	0	41,620	15	8,324	13.0
14 May 2010	44,031	0	44,031	14	8,806	13.8
15 May 2010	14,208	0	14,208	6	2,842	4.4
16 May 2010	0	0	0	0	0	0
17 May 2010	6,591	0	6,591	4	1,318	2.1
18 May 2010	209	0	209	1	42	0.1

Dispersant Statistics Applied by Day						
Date	Dispersant Type (gallons)		Daily Totals	# Sorties	Acres Covered (5 gal/acre application rate)	Square Miles covered
	9500	9527				
19 May 2010	0	0	0	0	0	0
20 May 2010	0	0	0	0	0	0
21 May 2010	25,233	4,659	29,892	14	5,978	9.3
22 May 2010	51,353	1,593	52,946	22	10,589	16.6
23 May 2010	18,104	0	18,104	11	3,621	5.7
24 May 2010	630	0	630	1	126	0.2
25 May 2010	200	0	200	1	40	0.1
26 May 2010	229	0	229	1	46	0.1
27 May 2010	200	0	200	1	40	0.1
28 May 2010	10,259	0	10,259	4	2,052	3.2
29 May 2010	0	0	0	0	0	0
30 May 2010	15,131	0	15,131	6	3,026	4.7
31 May 2010	11,676	0	11,676	7	2,335	3.7
1 June 2010	0	0	0	0	0	0
2 June 2010	0	0	0	0	0	0
3 June 2010	1,900	0	1,900	1	380	0.6
4 June 2010	0	0	0	0	0	0
5 June 2010	125	0	125	1	24	0
6 June 2010	0	0	0	0	0	0
7 June 2010	3,998	0	3,998	2	800	1.3
8 June 2010	5,505	0	5,505	3	1,101	1.7
9 June 2010	0	0	0	0	0	0
10 June 2010	4,506	0	4,506	2	901	1.4
11 June 2010	14,305	0	14,305	6	2,861	4.5
12 June 2010	6,996	0	6,996	2	1,399	2.2
13 June 2010	35,212	0	35,212	13	7,042	11.0
14 June 2010	10,703	0	10,703	7	2,141	3.3
15 June 2010	2,608	0	2,608	3	522	0.8
16 June 2010	13,380	0	13,380	7	2,676	4.2

Dispersant Statistics Applied by Day						
Date	Dispersant Type (gallons)		Daily Totals	# Sorties	Acres Covered (5 gal/acre application rate)	Square Miles covered
	9500	9527				
17 June 2010	12,123	0	12,123	6	2,425	3.8
18 June 2010	15,564	0	15,564	8	3,113	4.9
19 June 2010	2,604	0	2,604	2	521	0.8
20 June 2010	15,403	0	15,403	6	3,081	4.8
21 June 2010	10,355	0	10,355	4	2,071	3.2
22 June 2010	2,008	0	2,008	2	402	0.6
23 June 2010	5,099	0	5,099	3	1,020	1.6
24 June 2010	21,088	0	21,088	10	4,218	6.6
25 June 2010	4,633	0	4,633	2	927	1.5
26 June 2010	23,022	0	23,022	12	4,605	7.2
27 June 2010	6,623	0	6,623	3	1325	2.07
28 June 2010	0	0	0	0	0	0
29 June 2010	0	0	0	0	0	0
30 June 2010	0	0	0	0	0	0
01 July 2010	17,852	0	17,852	5	3570	6
02 July 2010	12,737	0	12,737	7	2547	3
03 July 2010	0	0	0	0	0	0
04 July 2010	3,000	0	3,000	1	600	1
05 July 2010	803	0	803	1	161	.25
06 July 2010	0	0	0	0	0	0
07 July 2010	1,000	0	1,000	1	200	0.3
08 July 2010	0	0	0	0	0	0
09 July 2010	0	0	0	0	0	0
10 July 2010	0	0	0	0	0	0
11 July 2010	0	0	0	0	0	0
TOTALS	**760,469**	**214,569**	**975,038**	**404**	**195,008**	**304.7**


Aerial Dispersants Operations Map
Overview July 10, 2010
Houma La.
Created by O'Brien's 09:30 07-11-2010
Scale 1:2,750,000
N
Houma Airport
Loop
Burn Box
No Aerial Dispersants Applied
5 NM 'No Spray' Restriction Around Spill Source at the Surface
10 NM TFR
The width of spray path lines are greatly exaggerated in order to facilitate depiction on the map.
Width of spray application at the surface is no greater than 150 ft. per pass
This map does not include any Dispersant Application by the Source Control Unit
Daily Totals
No Aerial Dispersants Applied


Aerial Dispersants Operations Map
Overview July 11, 2010
Houma La.
Created by OBrien's: 17:45:07-11-2010
Scale 1:2,750,000
N
Houma Airport
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R
S
T
U
V
W
X
Y
Z
AA
AB
AC
AD
AE
AF
AG
LDOP
Burn Box
No Aerial Dispersants Applied
AH
AI
AJ
AK
AL
AM
AN
AO
AP
AQ
AR
5 NM 'No Spray' Restriction Around Spill Source at the Surface
10 NM TFR
AS
AT
AU
AV
AW
AX
AY
AZ
BA
BB
BC
The width of spray path lines are greatly exaggerated in order to facilitate depiction on the map.
Width of spray application at the surface is no greater than 150 ft. per pass
Daily Totals
No Aerial Dispersants Applied
This map does not include any Dispersant Application by the Source Control Unit

DAILY AERIAL DISPERSANT APPLICATION PLAN

DATE:	7/11/10	TIME:	0600 local	STAGING AIRPORTS:	Stennis Int'l / Houma	AIRPORT ID:	KHSA / KHUM

DISP. STAGING APT SPVSR (Name & Phone #): (Stennis) Gerry Nielsen (b) (6) / (Houma) Mark Cochrane (b) (6)

SPILL SITE INFORMATION:

SPILL LOCATION:	Latitude:	28 55 N	N	Longitude:	88 21 W	W	Size:
GEOGRAPHICAL REFERENCE:	112 nm SSE Stennis Airport						

SPILL SITE APPROACH INFORMATION:

ENTRY POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude: See OPS Chart	ft
EXIT POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude: See OPS Chart	ft
HOLDING AREA:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude: See OPS Chart	ft

SPILL SITE WX:	WIND: WSW 10 - 16	CLG: UNL	VIS: 8 - 15 nm	SUNRISE: 0601	SUNSET: 1953
SEA STATE:	Swell: CONF 5 - 1'	Wind Waves: WSW 1 5' - 2'		Combined Seas 4 3'	

(Attach Wilken's Weather Report for weather at the spill site and the staging airport)

DOSAGE (GPA):	5	ADD'L INST:	See required setbacks and no fly area's on operational plan

COMMS	
	PRIMARY VHF COM: 126 40 MHz, W of 88-30 / PRIMARY VHF COM: 135 65 MHz, E of 88-30 / SEC VHF COM: 123 45 / EMERG COM: 121 5 MHz
	PRIMARY VHF COM: Surface to Air 122 9 MHz / SECONDARY VHF COM: Surface to Air 123 45 MHz / Marine primary VHF 81A
	MARINE RADIO: Channel 16 then switch to Channel 9/ SATELLITE PHONE: Aircraft will contact through the Disp Staging Airport Supervisor

AIRCRAFT INFORMATION:

Type:	Tail #:	Call Sign:	Airport ETA:	Purpose & Altitude:	PIC/Crew:	Passengers:
King Air Dynamic	N7198Y	98Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N80Y	80Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N39Q	39Q	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N7199D	99D	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N89N	89N	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N41J	41J	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N79W	79W	Houma	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N37H	37H	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
C-130 IAR	N117TG	7TG	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 Lynden	N403LC	3LC	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N9002K	02K	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N802BG	2BG	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N950HC	0HC	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
C-130 Lynden	401LC	1LC	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 OSR	EIJIV	JIV	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
BT-67 ASI	N932H	32H	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
DC-3 ASI	N64767	767	Houma Standby	Spray: 75'	PIC: TBD Co-pilot: TBD	
DC-3 ASI	N64766	766	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
Aztec ASI	N141183	183	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Turbo Cmdr ASI	N112EM	2EM	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Aircraft below are not directly part of the Dispersant Group / Cordination and assistance from the aircraft below is nessasary.						
King Air	N275	275	Houma Jet	Recon		
Helo PHI	759P		Houma	Recon		
U S Customs	P-3	Omaha 99		Communications		
Canada	Transport 950		Houma	Surveillance		

DATE: July 11, 2010											
SORTIE	TYPE A/C	TAIL #	PURPOSE	FUEL LOAD (#/Hrs:Min)	PAYLOAD GAL	PAYLOAD TYPE	TOTAL FLT TIME	DPT TIME EST/ACT	ENTRY EST/ACT	EXIT ETA EST/ACT	RETURN ETA EST/ACT
	BE90	39Q	Recon / Spotter	4	0			0600 / 0627			0945 / 1042
	BE90	89N	Recon / Spotter	4	0			0610 / 0645			0950 / 1046
	Turbo Cmdr	N112EM	Recon / Spotter	5	0			0610 / 0634			0910 / 0814
	Aztec	183	Recon / Spotter	4	0			0620 / 0641			0920 / 0940
	BE90	79W	Recon / Spotter	4	0			0630 / 0631			0930 / 0922
	BE90	80Y	Spotter	4	0			0800			1200
1	C-130	N117TG	Spray	4	0			0830			1040
	Turbo Cmdr	N112EM	Recon / Spotter	5	0			1205			1540
2	BT-67	N932H	Spray	4	0			1200			1425
3	DC-3	766	Spray	4	0			1250			1432
	BE90	89N	Spotter	4	0			0803			1206
4	C-130	403LC	Spray	4	0			0834			1035
	BE90	80Y	Spotter	4	0			1245			1545
5	C-130	401LC	Spray	4	0			1300			1455
	BE90	98Y	Spotter	4	0			1200			1600
6	C-130	70Y	Spray	4	0			1303			1457
	BE90	39Q	Spotter	4	0			1200			1600
7	AT - 802	025L	Spray	4	0			1245			1500
	BE90	98Y	SSM 17 / Spotter	4	0			0000 / 0615			0000 / 0943
	BE90	37H	Recon / Spotter	4	0			0000 / 0853			0000 / 1254
	BE90	41J	Recon / Spotter	4	0			0000 / 0915			0000 / 1259
	BE90	80Y	Recon / Spotter	4	0			0000 / 1129			0000 / 1514
	BE90	39Q	Recon / Spotter	4	0			0000 / 1145			0000 / 1545
	BE90	79W	Recon / Spotter	4	0			0000 / 1351			0000 / 1732
	BE90	89N	Recon / Spotter	4	0			0000 / 1358			0000 / 1800
	BE90	37H	Recon / Spotter	4	0			0000 / 1406			0000 / 1747

Combined SiteTotals	0	9500
	Stennis	0
	Houma	0

No dispersant was applied today

Flights in yellow were canceled, dispersible oil was discovered by spotter / recon aircraft, but several vessels were in the area of the oil slilcks skimming. Scientific Support Mission 17 with 98Y and the International Peace was completed today.

DAILY AERIAL DISPERSANT APPLICATION PLAN

DATE:	7/12/10	TIME:	0600 local	STAGING AIRPORTS:	Stennis Int'l / Houma	AIRPORT ID:	KHSA / KHUM

DISP. STAGING APT SPVSR (Name & Phone #): (Stennis) Gerry Nielsen (b) (6) / (Houma) Mark Cochrane (b) (6)

SPILL SITE INFORMATION:

SPILL LOCATION:	Latitude:	28 55 N	N	Longitude:	88 21 W	W	Size:
GEOGRAPHICAL REFERENCE:				112 nm SSE Stennis Airport			

SPILL SITE APPROACH INFORMATION:

ENTRY POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude: See OPS Chart	ft
EXIT POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude: See OPS Chart	ft
HOLDING AREA:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude: See OPS Chart	ft

SPILL SITE WX:	WIND: WSW 10 - 20	CLG: UNL	VIS: 8 - 20 nm	SUNRISE: 0603	SUNSET: 1953	
SEA STATE:	Swell: CONF 5	Wind Waves: WSW 2 - 2.5'		Combined Seas 5 1'		

(Attach Wilken's Weather Report for weather at the spill site and the staging airport)

DOSAGE (GPA): 5 **ADD'L INST:** See required setbacks and no fly area's on operational plan

COMMS

PRIMARY VHF COM: 126.40 MHz, W of 88-30 | PRIMARY VHF COM: 135.65 MHz, E of 88-30 | SEC VHF COM: 123.45 / EMERG COM: 121.5 MHz

PRIMARY VHF COM: Surface to Air 122 .9 MHz / SECONDARY VHF COM: Surface to Air 123.45 MHz / Marine primary VHF 81A

MARINE RADIO: Channel 16 then switch to Channel 9/ SATELLITE PHONE: Aircraft will contact through the Disp Staging Airport Supervisor

AIRCRAFT INFORMATION:

Type:	Tail #:	Call Sign:	Airport ETA:	Purpose & Altitude:	PIC/Crew:	Passengers:
King Air Dynamic	N7198Y	98Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N80Y	80Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N39Q	39Q	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N7199D	99D	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N89N	89N	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N41J	41J	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N79W	79W	Houma	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N37H	37H	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
C-130 IAR	N117TG	7TG	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 Lynden	N403LC	3LC	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N9002K	02K	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N802BG	2BG	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N950HC	0HC	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
C-130 Lynden	401LC	1LC	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 OSR	EIJIV	JIV	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
BT-67 ASI	N932H	32H	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
DC-3 ASI	N64767	767	Houma Standby	Spray: 75'	PIC: TBD Co-pilot: TBD	
DC-3 ASI	N64766	766	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
Aztec ASI	N141183	183	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Turbo Cmdr ASI	N112EM	2EM	Houma	Spotter	PIC: TBD Co-pilot: TBD	None

Aircraft below are not directly part of the Dispersant Group / Cordination and assistance from the aircraft below is nessasary.

King Air	N275	275	Houma Jet	Recon		
Helo PHI	759P		Houma	Recon		
U S Customs	P-3	Omaha 99		Communications		
Canada	Transport 950		Houma	Surveillance		

DATE: July 12, 2010											
SORTIE	TYPE A/C	TAIL #	PURPOSE	FUEL LOAD (#/Hrs:Min)	PAYLOAD GAL	PAYLOAD TYPE	TOTAL FLT TIME	DPT TIME EST/ACT	ENTRY EST/ACT	EXIT ETA EST/ACT	RETURN ETA EST/ACT
	BE90	37H	Recon / Spotter	4	0			0600			0945
	BE90	98Y	Recon / Spotter	4	0			0610			0950
	Turbo Cmdr	N112EM	Recon / Spotter	5	0			0610			0910
	Aztec	183	Recon / Spotter	4	0			0620			0920
	BE90	79W	Recon / Spotter	4	0			0630			0930
	BE90	80Y	Spotter	4	0			0800			1200
1	C-130	N117TG	Spray	4	3000			0830			1030
	Turbo Cmdr	N112EM	Recon / Spotter	5	0			1205			1540
2	BT-67	N932H	Spray	4	2000			1200			1425
3	DC-3	766	Spray	4	1000			1230			1432
	BE90	89N	Spotter	4	0			0803			1206
4	C-130	403LC	Spray	4	5000			0834			1035
	BE90	80Y	Spotter	4	0			1245			1545
5	C-130	401LC	Spray	4	5000			1300			1455
	BE90	98Y	Spotter	4	0			1200			1600
6	C-130	JIV	Spray	4	5000			1303			1457
	BE90	39Q	Spotter	4	0			1200			1600
7	AT-802	02K	Spray	4	800			1245			1500

Combined SiteTotals		9500
	Stennis	0
	Houma	0

Aerial Dispersants Operations – Houma Status Report

July 12, 2010

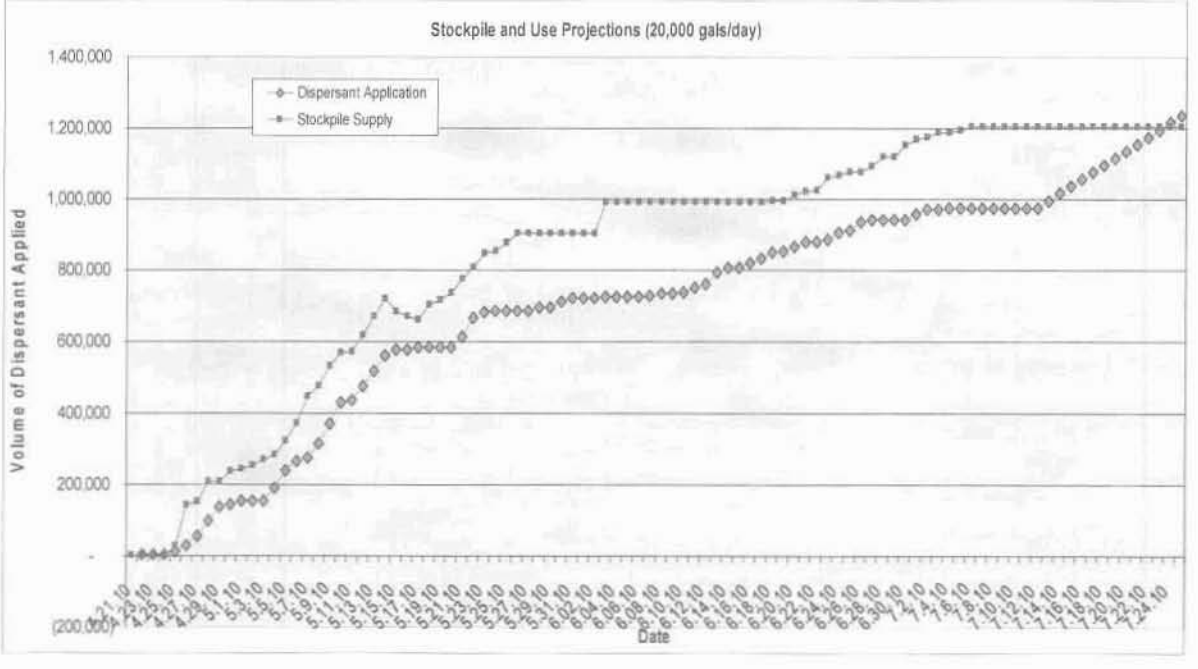
This report presents a snapshot of the aerial dispersant applications conducted on this date and summarizes the associated support activities. Aerial application of dispersants are being conducted under the direction of Unified Command and are targeting dispersible oil to minimize surface oil slicks impacting the environmentally sensitive shoreline ecosystem.

Dispersant Aerial Spray Summary:

1. FOSC approved Application Volume for July 12, 2010 (gallons):	10,000 @ 07:50 AM
2. Total Amount of Dispersant Applied on July 12, 2010 (gallons):	0
3. Total Sorties on July 12, 2010:	0
4. Total Amount of Dispersant Applied to date (gallons):	975,038
5. Total Sorties to date:	404
6. Total Area Covered by Dispersant Applications to date (mi^2):	305
7. Total Dispersant Stockpiles on the ground as of 7.12.2010 – 1200 PM (gallons):	216,859
8. Dispersant Stockpile Expected Arrival as of 7.12.10 – 1200 PM (gallons)*:	0
9. Estimated Total Dispersant as of 7.13.2010 - 1200 PM (gallons):	216,859
10. Projected Days Operational at maximum rate of 20,000 gal/day (days):	11

* Future estimates for the delivery of EC9500A are based on production schedules provided by Procurement on 7.10.10 via email and discussions with Nalco.

Dispersant Stockpile Supply and Use Projections



Asset Summary On Scene	
Spray Aircraft:	
C-130 – Stennis (2 Lynden, 1 IAR, 1 OSR)	4
DC-3 – Houma	2
BT-67 – Houma	1
King Air – 2 – Stennis (can be used for spotting)	2
AT-802 – Houma	3
TOTAL:	12
Spotter Aircraft:	
King Air – 5 – Stennis	5
King Air – 1 – Houma	1
Aztec – Houma	1
Turbo COMDR – Houma	1
TOTAL:	8
TOTAL AIRCRAFT:	20
PRIORITY Spray Assets Identified***	
Spray Aircraft:	LEAD TIME
C-130 – OSR-Singapore - (20,000 gal/day)	1 in 72+ hours
C-130 – IAR (15,000 gal/day)	1 – TBD
AT 802 (Agriculture Spray Planes) (5,000 gal/day)	3 in 6+ hours
***NOTE: These assets will not be activated until sufficient stockpile of dispersants are available for their use. Estimate that dispersant operations will need approximately 75,000 gallons per day of dispersant for these air craft spray systems.	
Additional Spray Assets Identified	
Neat Sweep	In area

Aerial Dispersant Activity Update for July 12, 2010:

- At 07:50 local time 12 July 2010, RADM Watson gave approval to apply an initial 5,000 g of dispersants to targeted dispersible oil.
- Fourteen overflights and one training flight were conducted throughout the day. No dispersible oil slicks were identified outside of the 30 nm exclusion zone about the source so no dispersants were applied.
- The Unified Area Commander, RADM Watson delegated aerial dispersant application approval authority for up to 10,000 gallons a day to FOSCR, ICP Houma in a memorandum dated 11 July 2010. A copy showing the details of this authority is attached.

M/V International Peace Research Activity Update for July 12, 2010:

- The M/V IP was in port today, taking on supplies and will be going out tonight to be in place for tomorrow's operations. No samples were collected this day.

SMART Tier 1 Update for July 12, 2010:

- There were no SMART Tier 1 observations as there were no dispersant applications conducted this day.

Aerial Dispersant Group Operations Plan for July 13th:
Dated 12 July, 2010

Tim Spoerl, Brad Barker, and Scotty Meador, please acknowledge receipt. Disseminate to all pilots. Op Areas are depicted on attached map .pdf; schedule on attached .xls

Mission Targeting start of the day: 07-13-2010

The following zones are assigned for early morning surveillance and initial spray targets. Expect early authorization for 10,000 gallons. For Stennis base of 6,000 gallons and for Houma 4,000 gallons (This is not a given authorization).

Communicate dispersible oil as soon as possible in assigned zones. Spotters, please provide a photo if possible with your reports.

Stennis: Primary zones AN, AC. Secondary zones, AD, AO, AZ, R, S (RED indicators on map).
Houma ASI: Primary zones AM, AX. Secondary zones, AK, AW, AV, AY (BLUE indicators on map).
Houma AT-802: Primary zones AB, Z. Secondary zones Y, AL, AA, Q [Limited to within 40 NM from the shoreline] (GREEN indicators on map).

Maintain 3 nm boundary separation if unable to coordinate air-to-air with other spotter or OMAHA 99.

Notes: Changes to previous orders are underlined.

1. **Required Equipment:** Functioning spray tracking units (GPS, Sat Lock) if not equipped, do not fly.
2. **As of 28 May 2010 FOSC approval is required each day for application of Corexit EC9500A dispersant in pre-approved areas.**
3. **Restrictions to aerial dispersant spraying:**
   a. No aerial dispersant spraying within the greatest of 3 nm offshore or depths less than 10 meters.
   b. No dispersant spraying within 5 nm of the spill source at surface: **28 45 12N -88 18 53 W as defined in the FAA NOTAM.**

FOR DOCUMENTATION PURPOSES (FUTURE REVIEW) WE WILL LIST THE FAA NOTAM **28 45 12N -88 18 53 W** AS THE OFFICIAL LOCATION.

   c. No aerial dispersant spraying 2nm of vessels, platforms, and 3nm from marine mammals.
   d. SMART and Scientific Support Missions may spray within 1nm of SMART/ SSM vessel; positive ID required.
   e. Target black and brown oil. This is the freshest/most dispersible oil. Dosage is 5 gallons per acre. ***Quality not Quantity***. Do not target Red/Reddish emulsified oil.
   f. Spotter aircraft remain on site to visually assess effects on dispersed area and document with photographs. Complete spotters debrief form and turn in to base operations on a daily bases.
   g. Report takeoff and landing times to assigned coordinators as they occur.

5. **Aircraft Communications:**
   a. **Primary air-to-air communication frequency in TFR West of 89° W is 126.4, East of 89° W is 135.65 AND 132.6 in the source area.**
   Secondary is 123.45 all zones.
   b. Contact P3 aircraft "Omaha 99" for flight advisories.
   c. Discreet IFF codes are permanently assigned to each aircraft must be used to enter TFR. This removes need to file DVFR flight plans.
   It is absolutely essential that each flight each day calls Tyndall to advise them prior to takeoff (b) (6)
   d. Advise SMART 1 prior to spray aircraft departure.
   e. Primary surface to air frequency is 122.9. Secondary is 123.45.

Continued next page →

Ancillary operations:

1. **SMART Team:** Will be working on defined and approved sites. Details to be developed with spotter findings.
2. **In Situ Burning:** The burn activities are within the circle is as depicted on the operational chart, however, ***burn location within that circle is subject to continuous change and we will not be given a specific burn location within the circle.*** The intent is for the burn to rotate within the circle.
3. **Skimmers:** Normal operations are to be conducted with 2nm separation for spray application. Offshore Operations has set a 15 nm radius around the source. Tentatively all skimming boats and burn activities will take place inside of that 15nm and no dispersant application will take place within that circle.
4. **Stennis Tasking:** Scientific Support Mission: The IP **will require** a recon/spotter Tuesday morning. Rendezvous point and time for Tuesday will be advised Monda0700 @ the SE corner of AN, 28◦ 30" N -88◦ 00' W. Weather and sea state is provided for why selected targets cannot be skimmed, addressed by other mechanical means or in situ. The spotter support mission for tomorrow for the Determination is unknown at the moment. If needed, Ken will arrange in the morning or later this evening if the situation becomes clarified.

Dispersant Group conference call tomorrow @ 1530. Dial in (b) (6) participant code (b) (6) (Stennis use moderator number).

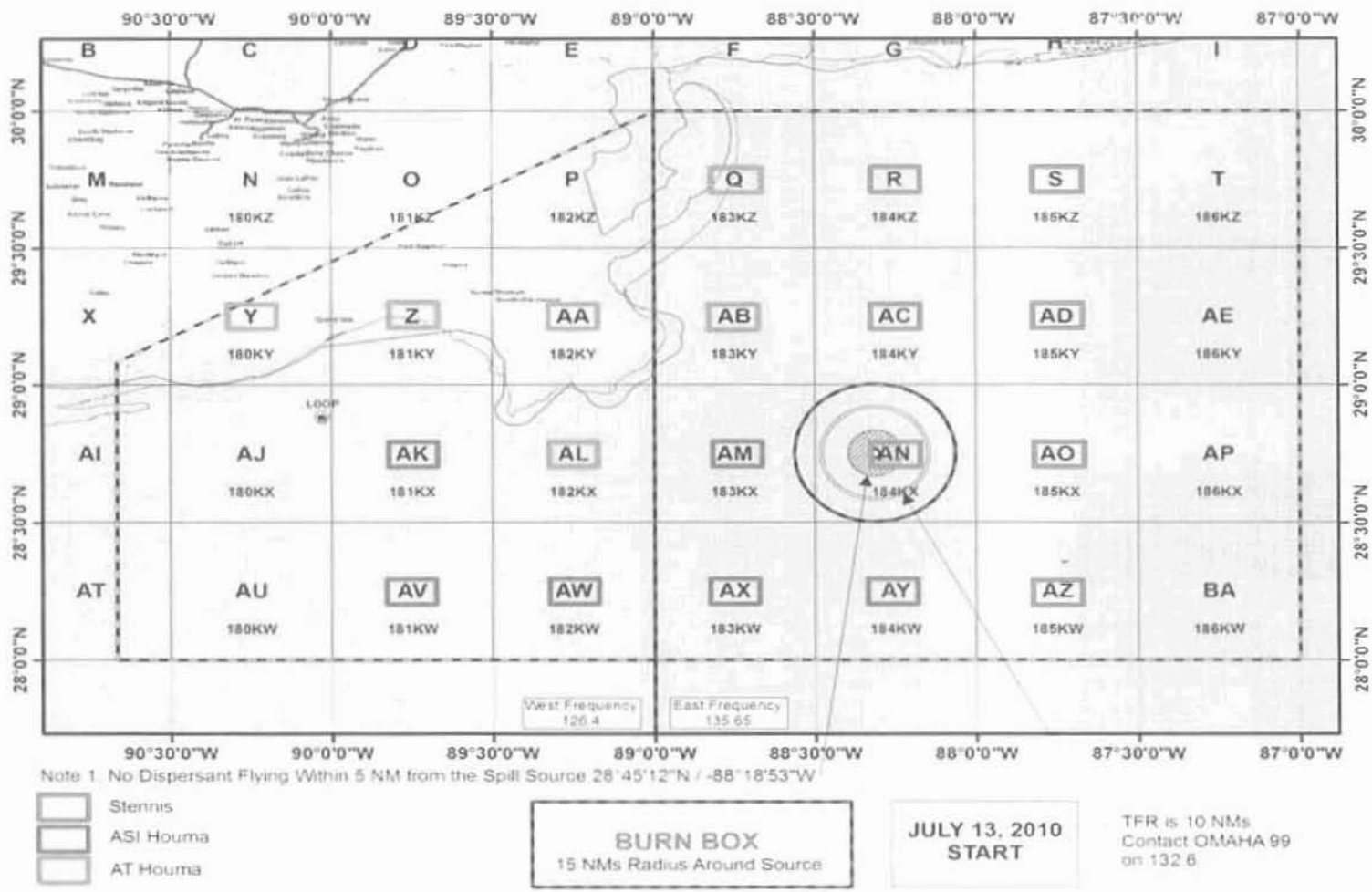
BLIMP_____S & BALLONS:

As earlier noted there are increasing balloon efforts in support of the spill. Here is the latest two we encountered.

FDC 0/1159 ZHU ..SPECIAL NOTICE.. GULF OF MEXICO. DEEPWATER HORIZON/MISSISSIPPI CANYON INCIDENT CLEANUP AND RECONSTITUTION OPERATIONS. EFFECTIVE IMMEDIATELY UNTIL FURTHER NOTICE. TETHERED BALLOON AND BURN OPERATIONS. PILOTS SHOULD USE EXTREME CAUTION WHEN OPERATING WITHIN A 15 NM RADIUS OF 284512N/0881853W DUE TO SIGNIFICANT OIL BURN OPERATIONS IN PROGRESS. BURN AREA MAY CAUSE THICK SMOKE TO BE PRODUCED AND HAS A POTENTIAL TO REDUCE FLIGHT VISIBILITY. WITHIN THIS AREA A 14 FT TETHERED BALLOON MAY BE OPERATING FROM THE SURFACE TO 1000 FT AGL. THE BALLOON WILL ONLY BE OPERATING WITHIN ACTIVE BURN PLUMES AND PILOTS ARE ADVISED TO AVOID ALL ACTIVE BURN PLUMES BY 2 NM. OMAHA WILL BE ADVISED OF BALLOON LOCATION AT ALL TIMES. QUESTIONS ABOUT BALLOON OPERATIONS SHOULD BE DIRECTED TO THE FAA REPRESENTATIVE AT THE TYNDALL DEEPWATER HORIZON INCIDENT AIR OPERATIONS CENTER AT 850-282-0928.

In addition to this NOTAM there are night time launches off the R/V Brooks (mostly around the spill area) conducting weather balloon operations...while not an issue for us we are trying to track all the changing mix in the airspace.

Aerial Dispersants Operational Areas July 13, 2010



Note 1. No Dispersant Flying Within 5 NM from the Spill Source 28°45'12"N / -88°18'53"W

Sterrnis
ASI Houma
AT Houma

BURN BOX
15 NMs Radius Around Source

JULY 13, 2010
START

TFR is 10 NMs
Contact OMAHA 99
on 132.6

Dispersant Spray Assets

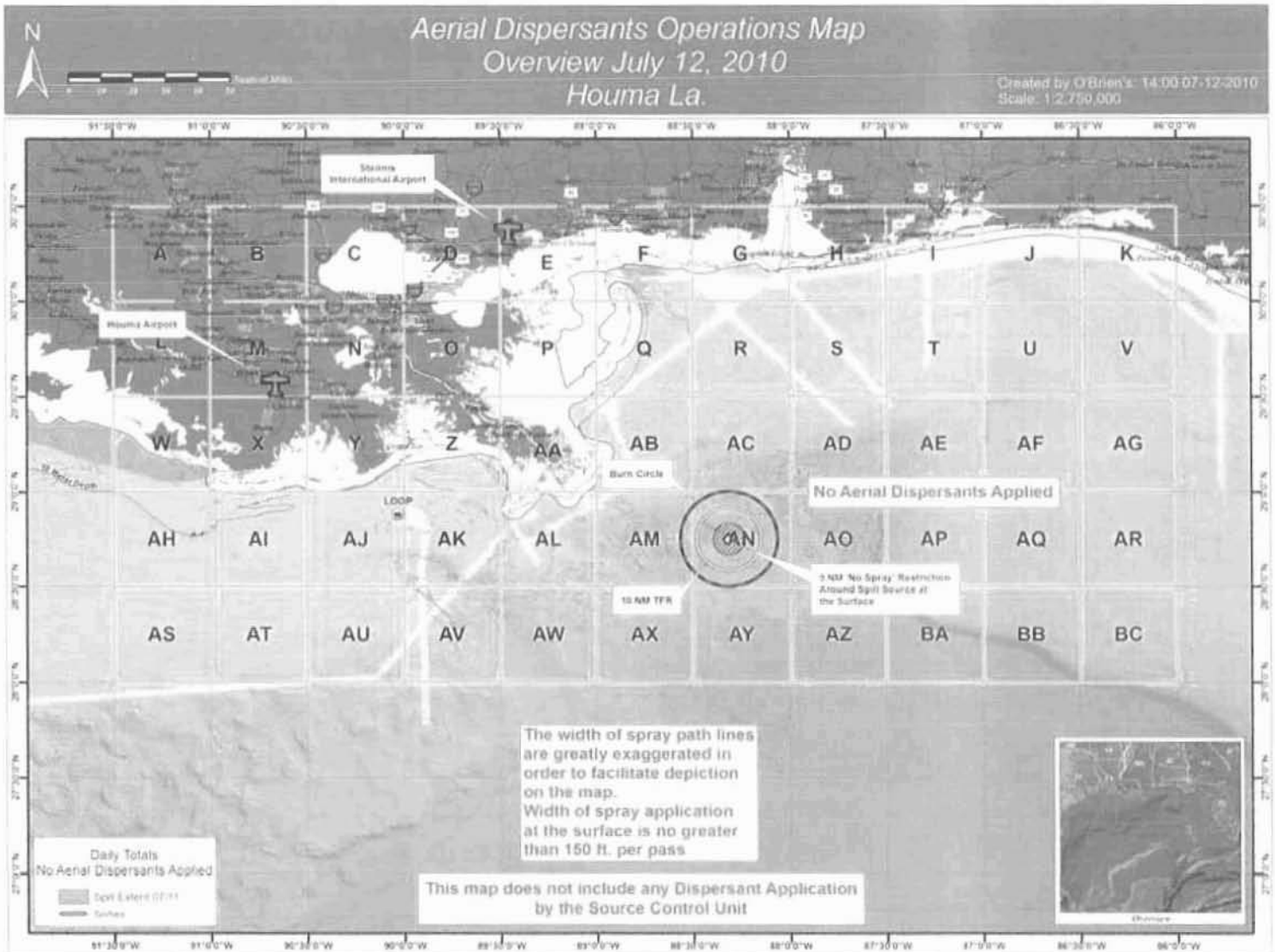
Aircraft Information						
Type	**Owner/ Operator**	**Tail #**	**Payload (gal)**	**Airport**	**Purpose & Altitude**	**Comments**
Spotters						
King Air	MSRC (Dynamic)	N39Q		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N89N		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N41J		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N37H		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N80Y		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N79W		Houma	Spotter – 1,000' to 1,500'	
Aztec (PA 23)	ASI	N141183		Houma	Backup Spotter	
Turbo COMDR	ASI	N112EM		Houma	Spotter	
Sprayers						
King Air	MSRC (Dynamic)	N7198Y	240	Stennis	Spray: 75'	Available for both Spray and Spotter duties
King Air	MSRC (Dynamic)	N7199D	240	Stennis	Spray: 75'	Available for both Spray and Spotter duties
C-130	IAR	N117TG	3,000	Stennis	Spray: 75'	
C-130	MSRC (Lynden)	N403LC	5,000	Stennis	Spray: 75'	ADDS Pack (CCA)
C-130	MSRC (Lynden)	N401LC	5,000	Stennis	Spray: 75'	ADDS Pack (Alyeska)
C-130	OSR	EIJIV	5,000	Stennis	Spray: 75'	ADDS Pack (OSR)
AT-802	Lane (NRC)	N9002K	800	Houma	Spray: 75'	2-Seater / Training
AT-802	Lane (NRC)	N802BG	800	Houma	Spray: 75'	
AT-802	Lane (NCR)	N950HC	800	Houma	Spray: 75'	
BT-67	ASI	N932H	1,800	Houma	Spray: 75'	
DC-3	ASI	N64766	1,000	Houma	Spray: 75'	
DC-3	ASI	N64767	1,000	Houma	Spray: 75'	Standby
Operational Spray Volume (1 load per plane) (gal)			24,680			
Total Operational Spray Maximum (gal) (4 sorties/ plane / day)			98,720			

Dispersant Application Totals

Dispersant Statistics Applied by Day						
Date	Dispersant Type (gallons)		Daily Totals	# Sorties	Acres Covered (5 gal/acre application rate)	Square Miles covered
	9500	9527				
21 April 2010	Initial Response Date					
22 April 2010	0	1,800	1,800	1	360	0.6
23 April 2010	0	0	0	0	0	0
24 April 2010	0	0	0	0	0	0
25 April 2010	0	11,604	11,604	9	2,321	3.7
26 April 2010	0	14,486	14,486	10	2,897	4.5
27 April 2010	11,191	15,887	27,078	11	5,416	8.5
28 April 2010	27,269	14,874	42,143	15	8,429	13.2
29 April 2010	36,913	4,000	40,913	13	8,183	12.8
30 April 2010	4,900	0	4,900	1	980	1.5
1 May 2010	3,550	8,103	11,653	4	2,331	3.6
2 May 2010	0	0	0	0	0	0
3 May 2010	0	0	0	0	0	0
4 May 2010	10,561	23,712	34,273	12	6,855	10.7
5 May 2010	30,905	18,670	49,575	18	9915	15.5
6 May 2010	13,032	15,738	28,770	11	5,754	9.0
7 May 2010	5,582	1,688	7,270	4	1,454	2.3
8 May 2010	17,813	23,877	41,690	17	8,338	13.0
9 May 2010	29,034	26,898	55,932	21	11,186	17.5
10 May 2010	29,240	26,980	56,220	22	11,244	17.6
11 May 2010	7,940	0	7,940	2	1,588	2.5
12 May 2010	39,710	0	39,710	12	7,942	12.4
13 May 2010	41,620	0	41,620	15	8,324	13.0
14 May 2010	44,031	0	44,031	14	8,806	13.8
15 May 2010	14,208	0	14,208	6	2,842	4.4
16 May 2010	0	0	0	0	0	0
17 May 2010	6,591	0	6,591	4	1,318	2.1
18 May 2010	209	0	209	1	42	0.1

Dispersant Statistics Applied by Day						
Date	Dispersant Type (gallons)		Daily Totals	# Sorties	Acres Covered (5 gal/acre application rate)	Square Miles covered
	9500	9527				
19 May 2010	0	0	0	0	0	0
20 May 2010	0	0	0	0	0	0
21 May 2010	25,233	4,659	29,892	14	5,978	9.3
22 May 2010	51,353	1,593	52,946	22	10,589	16.6
23 May 2010	18,104	0	18,104	11	3,621	5.7
24 May 2010	630	0	630	1	126	0.2
25 May 2010	200	0	200	1	40	0.1
26 May 2010	229	0	229	1	46	0.1
27 May 2010	200	0	200	1	40	0.1
28 May 2010	10,259	0	10,259	4	2,052	3.2
29 May 2010	0	0	0	0	0	0
30 May 2010	15,131	0	15,131	6	3,026	4.7
31 May 2010	11,676	0	11,676	7	2,335	3.7
1 June 2010	0	0	0	0	0	0
2 June 2010	0	0	0	0	0	0
3 June 2010	1,900	0	1,900	1	380	0.6
4 June 2010	0	0	0	0	0	0
5 June 2010	125	0	125	1	24	0
6 June 2010	0	0	0	0	0	0
7 June 2010	3,998	0	3,998	2	800	1.3
8 June 2010	5,505	0	5,505	3	1,101	1.7
9 June 2010	0	0	0	0	0	0
10 June 2010	4,506	0	4,506	2	901	1.4
11 June 2010	14,305	0	14,305	6	2,861	4.5
12 June 2010	6,996	0	6,996	2	1,399	2.2
13 June 2010	35,212	0	35,212	13	7,042	11.0
14 June 2010	10,703	0	10,703	7	2,141	3.3
15 June 2010	2,608	0	2,608	3	522	0.8
16 June 2010	13,380	0	13,380	7	2,676	4.2

Dispersant Statistics Applied by Day						
Date	Dispersant Type (gallons)		Daily Totals	# Sorties	Acres Covered (5 gal/acre application rate)	Square Miles covered
	9500	9527				
17 June 2010	12,123	0	12,123	6	2,425	3.8
18 June 2010	15,564	0	15,564	8	3,113	4.9
19 June 2010	2,604	0	2,604	2	521	0.8
20 June 2010	15,403	0	15,403	6	3,081	4.8
21 June 2010	10,355	0	10,355	4	2,071	3.2
22 June 2010	2,008	0	2,008	2	402	0.6
23 June 2010	5,099	0	5,099	3	1,020	1.6
24 June 2010	21,088	0	21,088	10	4,218	6.6
25 June 2010	4,633	0	4,633	2	927	1.5
26 June 2010	23,022	0	23,022	12	4,605	7.2
27 June 2010	6,623	0	6,623	3	1325	2.07
28 June 2010	0	0	0	0	0	0
29 June 2010	0	0	0	0	0	0
30 June 2010	0	0	0	0	0	0
01 July 2010	17,852	0	17,852	5	3570	6
02 July 2010	12,737	0	12,737	7	2547	3
03 July 2010	0	0	0	0	0	0
04 July 2010	3,000	0	3,000	1	600	1
05 July 2010	803	0	803	1	161	.25
06 July 2010	0	0	0	0	0	0
07 July 2010	1,000	0	1,000	1	200	0.3
08 July 2010	0	0	0	0	0	0
09 July 2010	0	0	0	0	0	0
10 July 2010	0	0	0	0	0	0
11 July 2010	0	0	0	0	0	0
12 July 2010	0	0	0	0	0	0
TOTALS	**760,469**	**214,569**	**975,038**	**404**	**195,008**	**304.7**


Aerial Dispersants Operations Map
Overview July 12, 2010
Houma La.
Created by O'Brien's: 14:00 07-12-2010
Scale: 1:2,750,000
N
Houma Airport
A B C D E F G H I J K
L M N O P Q R S T U V
W X Y Z AA AB AC AD AE AF AG
AH AI AJ AK AL AM AN AO AP AQ AR
AS AT AU AV AW AX AY AZ BA BB BC
Burn Circle
No Aerial Dispersants Applied
10 NM TFR
The width of spray path lines are greatly exaggerated in order to facilitate depiction on the map.
Width of spray application at the surface is no greater than 150 ft. per pass
This map does not include any Dispersant Application by the Source Control Unit
Daily Totals
No Aerial Dispersants Applied

DAILY AERIAL DISPERSANT APPLICATION PLAN

DATE:	7/12/10	TIME:	0600 local	STAGING AIRPORTS:	Stennis Int'l / Houma	AIRPORT ID:	KHSA / KHUM

DISP. STAGING APT SPVSR (Name & Phone #): (Stennis) Gerry Nielsen (b) (6) (Houma) Mark Cochrane (b) (6)

SPILL SITE INFORMATION:

SPILL LOCATION:	Latitude:	28.55 N	N	Longitude:	88.21 W	W	Size:
GEOGRAPHICAL REFERENCE:	112 nm SSE Stennis Airport						

SPILL SITE APPROACH INFORMATION:

ENTRY POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude: See OPS Chart	ft.
EXIT POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude: See OPS Chart	ft.
HOLDING AREA:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude: See OPS Chart	ft.

SPILL SITE WX:	WIND:	WSW 10 - 20	CLG:	UNL	VIS:	8 - 20 nm	SUNRISE:	0603	SUNSET:	1953
SEA STATE:	Swell: CONF 5		Wind Waves: WSW 2 - 2.5'			Combined Seas 5.1'				

(Attach Wilken's Weather Report for weather at the spill site and the staging airport)

DOSAGE (GPA): 5 **ADD'L INST:** See required setbacks and no fly area's on operational plan

COMMS

PRIMARY VHF COM: 126.40 MHz, W of 88-30	PRIMARY VHF COM: 135.65 MHz, E of 88-30	SEC. VHF COM: 123.45 / EMERG COM: 121.5 MHz
PRIMARY VHF COM: Surface to Air 122. 9 MHz / SECONDARY VHF COM: Surface to Air 123.45 MHz / Marine primary VHF 81A		
MARINE RADIO: Channel 16 then switch to Channel 9/ SATELLITE PHONE: Aircraft will contact through the Disp. Staging Airport Supervisor.		

AIRCRAFT INFORMATION:

Type:	Tail #:	Call Sign:	Airport ETA:	Purpose & Altitude:	PIC/Crew:	Passengers:
King Air Dynamic	N7198Y	98Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N80Y	80Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N39Q	39Q	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N7199D	99D	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N89N	89N	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N41J	41J	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N79W	79W	Houma	Sponer: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N37H	37H	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
C-130 IAR	N117TG	7TG	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 Lynden	N403LC	3LC	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N9002K	02K	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N802BG	2BG	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N950HC	0HC	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
C-130 Lynden	401LC	1LC	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 OSR	EIJIV	JIV	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
BT-67 ASI	N932H	32H	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
DC-3 ASI	N64767	767	Houma Standby	Spray: 75'	PIC: TBD Co-pilot: TBD	
DC-3 ASI	N64766	766	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
Aztec ASI	N141183	183	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Turbo Cmdr ASI	N112EM	2EM	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Aircraft below are not directly part of the Dispersant Group / Cordination and assistance from the aircraft below is nessasary.						
King Air	N275	275	Houma Jet	Recon		
Helo PHI	759P		Houma	Recon		
U.S. Customs	P-3	Omaha 99		Communications		
Canada	Transport 950		Houma	Surveillance		

DATE: July 12, 2010											
SORTIE	TYPE A/C	TAIL #	PURPOSE	FUEL LOAD (#/Hrs:Min)	PAYLOAD GAL	PAYLOAD TYPE	TOTAL FLT TIME	DPT TIME EST/ACT	ENTRY EST/ACT	EXIT ETA EST/ACT	RETURN ETA EST/ACT
				Recon / Spotter flights							
	BE90	39Q	Recon / Spotter	4	0			0600 / 0627			0945 / 1031
	BE90	89N	Recon / Spotter	4	0			0610 / 0643			0950 / 1050
	Turbo Cmdr	N112EM	Recon / Spotter	5	0			0610 / 0635			0910 / 0854
	Aztec	183	Recon / Spotter	4	0			0620 / 0631			0920 / 0948
	BE90	79W	Recon / Spotter	4	0			0630 / 0823			0930 / 1041
	BE90	80Y	Spotter	4	0			0800			1200
1	C-130	N117TG	Spray	4	0			0830			1030
	Turbo Cmdr	N112EM	Recon / Spotter	5	0			1205			1540
2	BT-67	N932H	Spray	4	0			1200			1425
3	DC-3	766	Spray	4	0			1230			1432
	BE90	89N	Spotter	4	0			0803			1206
4	C-130	403LC	Spray	4	0			0834			1035
	BE90	80Y	Spotter	4	0			1245			1545
5	C-130	401LC	Spray	4	0			1300			1455
	BE90	98Y	Spotter	4	0			1200			1600
6	C-130	41Y	Spray	4	0			1303			1457
	BE90	39Q	Spotter	4	0			1200			1600
7	AT-802	02K	Spray	4	0			1245			1500
				Pilot / AT 802 aircraft training flights, NO dispersant was applied							
	AT 802	02K	Spray	4	0			0000 / 0905			0000 / 1020
	AT 802	02K	Spray	4	0			0000 / 1310			0000 / 1410
	AT 802	02K	Spray	4	0			0000 / 1420			0000 / 1520
	AT 802	02K	Spray	4	0			0000 / 1528			0000 / 1630
				Recon / Spotter flights							
	BE90	98Y	SSM 18 / Spotter	4	0			0000 / 0614			0000 / 1000
	BE90	37H	Recon / Spotter	4	0			0000 / 0857			0000 / 1258
	BE90	41J	Recon / Spotter	4	0			0000 / 0914			0000 / 1310
	BE90	80Y	Recon / Spotter	4	0			0000 / 1129			0000 / 1543
	BE90	39Q	Recon / Spotter	4	0			0000 / 1140			0000 / 1550
	BE90	79W	Recon / Spotter	4	0			0000 / 1349			0000 / 1619
	Aztec	183	Recon / Spotter	4	0			0000 / 1449			0000 / 1610

DAILY AERIAL DISPERSANT APPLICATION PLAN

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SPILL SITE WX:	WIND: SW 10 - 19	CLG: UNL	VIS: 20 nm	SUNRISE: 0604	SUNSET: 1952		
SEA STATE:	Swell: SW 5	Wind Waves: SW 1.5 - 3'		Combined Seas 6.1'			

(Attach Wilken's Weather Report for weather at the spill site and the staging airport)

DOSAGE (GPA): 5 **ADD'L INST:** See required setbacks and no fly area's on operational plan

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Helo PHI	759P		Houma	Recon		
U.S. Customs	P-3	Omaha 99		Communications		
Canada	Transport 950		Houma	Surveillance		

DATE: July 13, 2010											
SORTIE	TYPE A/C	TAIL #	PURPOSE	FUEL LOAD (#/Hrs:Min)	PAYLOAD GAL	PAYLOAD TYPE	TOTAL FLT TIME	DPT TIME EST/ACT	ENTRY EST/ACT	EXIT ETA EST/ACT	RETURN ETA EST/ACT
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	BE90	98Y	Recon / Spotter	4	0			0610			0950
	Turbo Cmdr	N112EM	Recon / Spotter	5	0			0610			0910
	Aztec	183	Recon / Spotter	4	0			0620			0920
	BE90	79W	Recon / Spotter	4	0			0630			0930
	BE90	80Y	Spotter	4	0			0800			1200
1	C-130	N117TG	Spray	4	3000			0830			1030
	Turbo Cmdr	N112EM	Recon / Spotter	5	0			1205			1540
2	BT-67	N932H	Spray	4	2000			1200			1425
3	DC-3	766	Spray	4	1000			1230			1432
	BE90	89N	Spotter	4	0			0803			1206
4	C-130	403LC	Spray	4	5000			0834			1035
	BE90	80Y	Spotter	4	0			1245			1545
5	C-130	401LC	Spray	4	5000			1300			1455
	BE90	98Y	Spotter	4	0			1200			1600
6	C-130	JIV	Spray	4	5000			1303			1457
	BE90	39Q	Spotter	4	0			1200			1600
7	AT-802	02K	Spray	4	800			1245			1500

Combined SiteTotals		9500
	Stennis	0
	Houma	0

U.S. Department of Homeland Security

United States Coast Guard

Federal On-Scene Coordinator

Unified Area Command
1250 Poydras Street
New Orleans, LA 70113

16451
11 JUL 2010

MEMORANDUM

From: (b) (6) J. A. Watson, RADM

Reply to Attn of: (b) (6)

To: R. R. Laferriere, CAPT

Subj: DELEGATION OF AERIAL DISPERSANT APPLICATION APPROVAL AUTHORITY TO FOSCR, ICP HOUMA

Ref: (a) CCG memo 16451 dated 31 May 2010, Senior Officer Duties
(b) National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (40 CFR Part 300) (*et seq.)*
(c) FOSC Memo 1651 dated 29 June 2010, Designation of Senior Officers

1. This delegates aerial dispersant application pre-approval authority up to 10,000 gallons per day to the Federal On-Scene Coordinator Representative (FOSCR), Incident Command Post Houma for the Deepwater Horizon Oil Spill Response. Dispersant application over 10,000 gallons per day must be requested and approved in advance by the FOSC. This delegation is pursuant to the Dispersant Monitoring and Assessment Directive dated May 20, 2010, as amended, and this delegation letter.

2. Reference (a) designated me as the Unified Area Commander and FOSC for the Deepwater Horizon Oil Spill Response per Reference (b). Reference (c) designated you as a Federal On-Scene Coordinator Representative (FOSCR), Incident Command Post Houma. This delegation will enable the Unified Area Command to focus on providing guidance and strategic oversight, to maintain complete documentation of the decision making process, and to further the goal of reducing the dispersant application by 75% from the maximum daily amount used.

3. Every effort shall be made to limit the total amount of aerial dispersant applied each day to the minimum amount possible At a minimum the following elements shall be considered and documented in deciding whether to pre-approve the use of aerial dispersant applications each day.

a. The NOAA Surface Oil Forecast shows extensive areas of heavy and medium oil that may adversely impact the shoreline, including sensitive resources.
b. Forecasted adverse winds, sea states, and wind directions dictate that the use of dispersants is the most viable means of response to reduce the risk of oil land fall and/or impacts to sensitive resources. Explicit justification is provided for why selected targets cannot be skimmed, addressed by other mechanical means or in situ burned.
c. The weather and forecasted weather is favorable to support both reconnaissance flights and dispersant spray missions.

d. Spotters aboard reconnaissance flights are able to identify oil slicks estimated to require a specific number of gallons of dispersants.
e. Within 6 hours of the dispersant spray operations, spotter aircraft must identify high value targeted slicks and prepare a report specifying the location and dispersant volumes needed for each application.
f. Conditions under which dispersants will not be applied, such as in areas where dispersants have already been applied or where vessels and other on-water operations are on-going, are identified.
g. Additional rare conditions that cumulatively justify an exemption are specified.
h. Concurrent written, signed approval is obtained from the cognizant State, EPA, and NOAA representatives at the ICP.
i. Provisions to be put in place to apply SMART Protocols are specified.

4. Pre-approval of a specific pre-approved daily aerial dispersant application rate will require a consensus decision by the FOSCR, State On-Scene Coordinator, and senior EPA representative serving at the Incident Command Post and must be signed by each of these representatives on behalf of their agencies.

5. In exercising this delegation, you are to report to the FOSC on a daily basis the amount of dispersant approved, provide a copy of the signed approval and supporting documentation, and the amount of dispersant actually applied.

#

Copy: P. F. Zukunft, RADM

Aerial Dispersants Operations – Houma Status Report

July 13, 2010

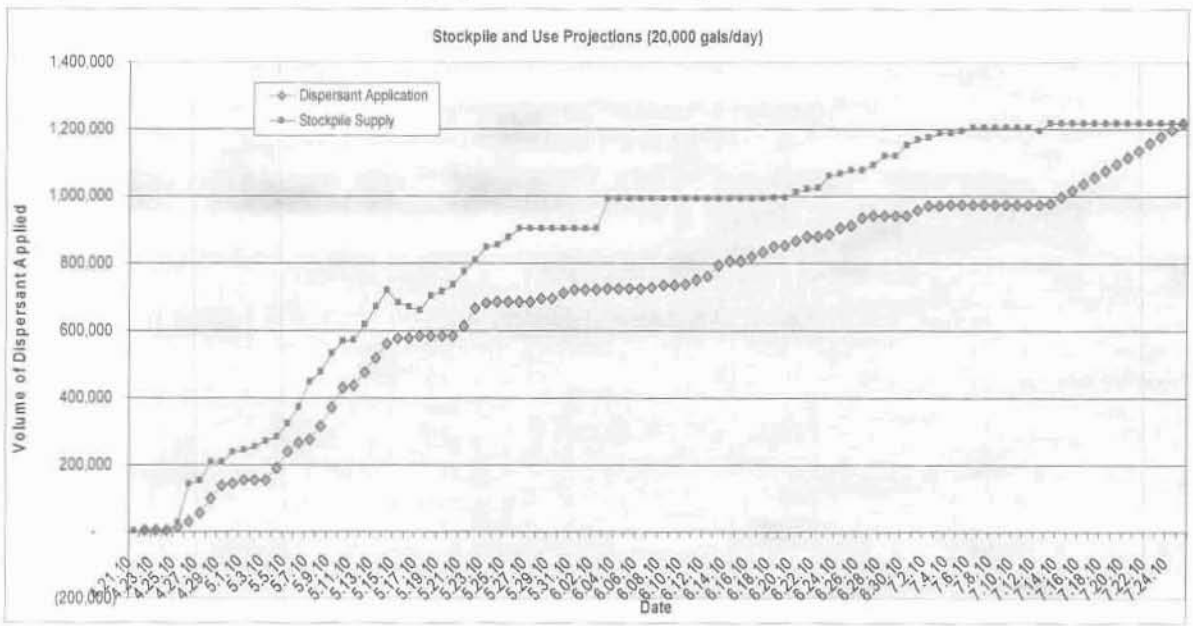
This report presents a snapshot of the aerial dispersant applications conducted on this date and summarizes the associated support activities. Aerial application of dispersants are being conducted under the direction of Unified Command and are targeting dispersible oil to minimize surface oil slicks impacting the environmentally sensitive shoreline ecosystem.

Dispersant Aerial Spray Summary:

1. FOSC approved Application Volume for July 13, 2010 (gallons):	5,000 @ 12:25 PM
2. Total Amount of Dispersant Applied on July 13, 2010 (gallons):	999
3. Total Sorties on July 12, 2010:	1
4. Total Amount of Dispersant Applied to date (gallons):	976,037
5. Total Sorties to date:	405
6. Total Area Covered by Dispersant Applications to date (mi^2):	305
7. Total Dispersant Stockpiles on the ground as of 7.13.2010 – 1200 PM (gallons):	216,859
8. Dispersant Stockpile Expected Arrival as of 7.13.10 – 1200 PM (gallons)*:	24,000
9. Estimated Total Dispersant as of 7.14.2010 - 1200 PM (gallons):	239,860
10. Projected Days Operational at maximum rate of 20,000 gal/day (days):	11

* Future estimates for the delivery of EC9500A are based on production schedules provided by Procurement on 7.12.10 via email and discussions with Nalco.

Dispersant Stockpile Supply and Use Projections



Asset Summary On Scene	
Spray Aircraft:	
C-130 – Stennis (2 Lynden, 1 IAR, 1 OSR)	4
DC-3 – Houma	2
BT-67 – Houma	1
King Air – 2 – Stennis (can be used for spotting)	2
AT-802 – Houma	3
TOTAL:	12
Spotter Aircraft:	
King Air – 5 – Stennis	5
King Air – 1 – Houma	1
Aztec – Houma	1
Turbo COMDR – Houma	1
TOTAL:	8
TOTAL AIRCRAFT:	20
PRIORITY Spray Assets Identified* **	
Spray Aircraft:	LEAD TIME
C-130 – OSR-Singapore - (20,000 gal/day)	1 in 72+ hours
C-130 – IAR (15,000 gal/day)	1 – TBD
AT 802 (Agriculture Spray Planes) (5,000 gal/day)	3 in 6+ hours
***NOTE: These assets will not be activated until sufficient stockpile of dispersants are available for their use. Estimate that dispersant operations will need approximately 75,000 gallons per day of dispersant for these air craft spray systems.	
Additional Spray Assets Identified	
Neat Sweep	In area

Aerial Dispersant Activity Update for July 13, 2010:

- At 12:25 local time 13 July 2010, Capt Laferriere gave approval after completing the EPA consultation process to apply an initial 5,000 g of dispersants to targeted dispersible oil in zone AY.
- Thirteen overflights were conducted throughout the day. Dispersible oil slicks were identified outside of the 30 nm exclusion zone and were sprayed by Houma spray aircraft.

M/V International Peace Research Activity Update for July 13, 2010:

- Today the M/V IP collected samples pre and post-dispersant application using a boat spray system. Field measurements included use of dual C-3s towed simultaneously, LISST particle size analyzer and field viscometry. Water samples were collected for background, pre- and post-dispersant spray for chemical analysis and toxicity testing. The vessel will remain offshore tonight and tomorrow morning will meet a spotter plane in the SE corner of zone AN to continue its mission.
- The M/V IP is scheduled to come back into port tomorrow night (7.14.10). Once in port, data will be uploaded for evaluation and samples shipped to laboratories for analysis.

SMART Tier 1 Update for July 13, 2010:

- SMART Team 1 conducted on Tier 1 observation on the Houma spray mission today in zone AY. The data has been uploaded to the EPA OSC Deepwater SMART website.

Aerial Dispersant Group Operations Plan for July 14th:
Dated 13 July, 2010

Tim Spoerl, Brad Barker, and Scotty Meador, please acknowledge receipt. Disseminate to all pilots. Op Areas are depicted on attached map .pdf; schedule on attached .xls.

Mission Targeting start of the day: 07-14-2010

The following zones are assigned for early morning surveillance and initial spray targets. Expect early authorization for 10,000 gallons. For Stennis base of 6,000 gallons and for Houma 4,000 gallons (This is not a given authorization).

Communicate dispersible oil as soon as possible in assigned zones. Spotters, please provide a photo if possible with your reports.

Stennis: Primary zones AN, AC. Secondary zones, AD, AO, AZ, R, S (RED indicators on map).
Houma ASI: Primary zones AM, AX. Secondary zones, AK, AW, AV, AY (BLUE indicators on map).
Houma AT-802: Primary zones AB, Z. Secondary zones Y, AL, AA, Q [Limited to within 40 NM from the shoreline] (GREEN indicators on map).

Continued next page →

Maintain 3 nm boundary separation if unable to coordinate air-to-air with other spotter or OMAHA 99.

Notes: Changes to previous orders are underlined.

1. **Required Equipment:** Functioning spray tracking units (GPS, Sat Lock) if not equipped, do not fly.
2. **As of 28 May 2010 FOSC approval is required each day for application of Corexit EC9500A dispersant in pre-approved areas.**
3. **Restrictions to aerial dispersant spraying:**
   a. No aerial dispersant spraying within the greatest of 3 nm offshore or depths less than 10 meters.
   b. No dispersant spraying within 5 nm of the spill source at surface: **28 45 12N -88 18 53 W as defined in the FAA NOTAM.**

FOR DOCUMENTATION PURPOSES (FUTURE REVIEW) WE WILL LIST THE FAA NOTAM **28 45 12N -88 18 53 W** AS THE OFFICIAL LOCATION.

   c. No aerial dispersant spraying 2nm of vessels, platforms, and 3nm from marine mammals.
   d. SMART and Scientific Support Missions may spray within 1nm of SMART/ SSM vessel; positive ID required.
   e. Target black and brown oil. This is the freshest/most dispersible oil. Dosage is 5 gallons per acre. ***Quality not Quantity***. Do not target Red/Reddish emulsified oil.
   f. Spotter aircraft remain on site to visually assess effects on dispersed area and document with photographs. Complete spotters debrief form and turn in to base operations on a daily bases.
   g. Report takeoff and landing times to assigned coordinators as they occur.

5. **Aircraft Communications:**
   a. **Primary air-to-air communication frequency in TFR West of 89° W is 126.4, East of 89° W is 135.65 AND 132.6 in the source area.**
   Secondary is 123.45 all zones.
   b. Contact P3 aircraft "Omaha 99" for flight advisories.
   c. Discreet IFF codes are permanently assigned to each aircraft must be used to enter TFR. This removes need to file DVFR flight plans.
   It is absolutely essential that each flight each day calls Tyndall to advise them prior to takeoff (b) (6)
   d. Advise SMART 1 prior to spray aircraft departure.
   e. Primary surface to air frequency is 122.9. Secondary is 123.45.

Continued next page →

Ancillary operations:

1. **SMART Team:** Will be working on defined and approved sites. Details to be developed with spotter findings.
2. **In Situ Burning:** The burn activities are within the circle is as depicted on the operational chart, however, *burn location within that circle is subject to continuous change and we will not be given a specific burn location within the circle*. The intent is for the burn to rotate within the circle.
3. **Skimmers:** Normal operations are to be conducted with 2nm separation for spray application. Offshore Operations has set a 15 nm radius around the source. Tentatively all skimming boats and burn activities will take place within that circle, however, boats are skimming outside the circle. Boats may be skimming outside the circle but we have been able to work with Offshore operations to move away from potential spray operations.
4. **Stennis Tasking:** Scientific Support Mission: The IP **will require** a recon/spotter Wednesday morning. will be 0700 @ 28◦ 37' 33" N, 87◦ 59' 50" W. A spotter scientific support mission for tomorrow for the Determination will be required, rendezvous @ 0700 at 28◦ 30' N, 88◦ 15' W. The Determination is looking for a "football size" slick where they will place a buoy and follow it for 3 days. It is anticipated that one spotter aircraft from Stennis would be appropriate for both scientific support mission.

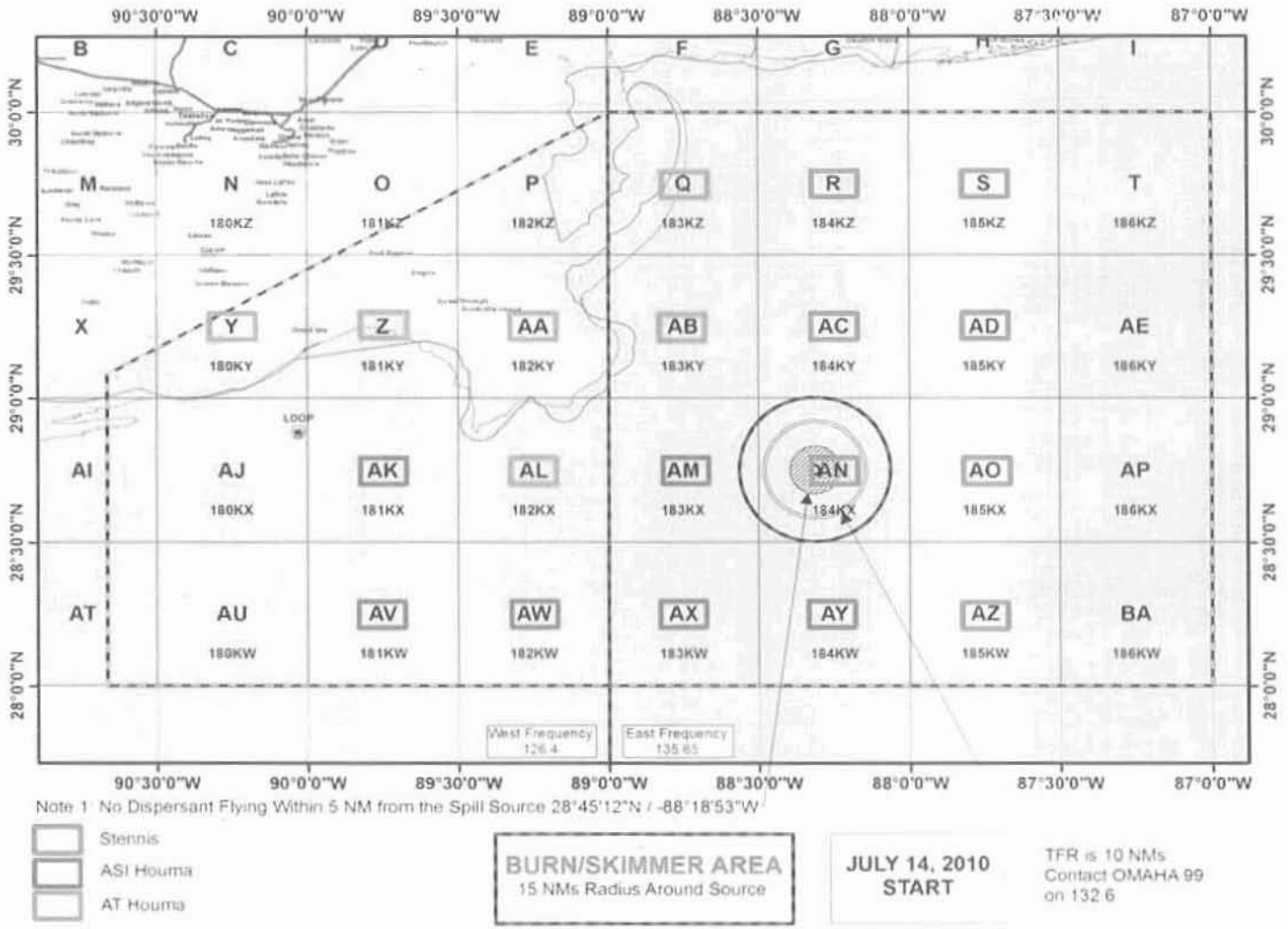
Dispersant Group conference call tomorrow @ 1530. Dial in (b) (6) participant code (b) (6) (Stennis use moderator number).

BLIMP_____S & BALLONS:

As earlier noted there are increasing balloon efforts in support of the spill. Here is the latest two we encountered.

FDC 0/1159 ZHU ..SPECIAL NOTICE.. GULF OF MEXICO. DEEPWATER HORIZON/MISSISSIPPI CANYON INCIDENT CLEANUP AND RECONSTITUTION OPERATIONS. EFFECTIVE IMMEDIATELY UNTIL FURTHER NOTICE. TETHERED BALLOON AND BURN OPERATIONS. PILOTS SHOULD USE EXTREME CAUTION WHEN OPERATING WITHIN A 15 NM RADIUS OF 284512N/0881853W DUE TO SIGNIFICANT OIL BURN OPERATIONS IN PROGRESS. BURN AREA MAY CAUSE THICK SMOKE TO BE PRODUCED AND HAS A POTENTIAL TO REDUCE FLIGHT VISIBILITY. WITHIN THIS AREA A 14 FT TETHERED BALLOON MAY BE OPERATING FROM THE SURFACE TO 1000 FT AGL. THE BALLOON WILL ONLY BE OPERATING WITHIN ACTIVE BURN PLUMES AND PILOTS ARE ADVISED TO AVOID ALL ACTIVE BURN PLUMES BY 2 NM. OMAHA WILL BE ADVISED OF BALLOON LOCATION AT ALL TIMES. QUESTIONS ABOUT BALLOON OPERATIONS SHOULD BE DIRECTED TO THE FAA REPRESENTATIVE AT THE TYNDALL DEEPWATER HORIZON INCIDENT AIR OPERATIONS CENTER AT 850-282-0928.

Aerial Dispersants Operational Areas July 14, 2010



Note 1: No Dispersant Flying Within 5 NM from the Spill Source 28°45'12"N / -88°18'53"W

Stennis
ASI Houma
AT Houma

BURN/SKIMMER AREA
15 NMs Radius Around Source

JULY 14, 2010
START

TFR is 10 NMs
Contact OMAHA 99
on 132.6

Dispersant Spray Assets

Aircraft Information						
Type	**Owner/ Operator**	**Tail #**	**Payload (gal)**	**Airport**	**Purpose & Altitude**	**Comments**
Spotters						
King Air	MSRC (Dynamic)	N39Q		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N89N		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N41J		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N37H		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N80Y		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N79W		Houma	Spotter – 1,000' to 1,500'	
Aztec (PA 23)	ASI	N141183		Houma	Backup Spotter	
Turbo COMDR	ASI	N690GG		Houma	Spotter	
Sprayers						
King Air	MSRC (Dynamic)	N7198Y	240	Stennis	Spray: 75'	Available for both Spray and Spotter duties
King Air	MSRC (Dynamic)	N7199D	240	Stennis	Spray: 75'	Available for both Spray and Spotter duties
C-130	IAR	N117TG	3,000	Stennis	Spray: 75'	
C-130	MSRC (Lynden)	N403LC	5,000	Stennis	Spray: 75'	ADDS Pack (CCA)
C-130	MSRC (Lynden)	N401LC	5,000	Stennis	Spray: 75'	ADDS Pack (Alyeska)
C-130	OSR	EIJIV	5,000	Stennis	Spray: 75'	ADDS Pack (OSR)
AT-802	Lane (NRC)	N9002K	800	Houma	Spray: 75'	2-Seater / Training
AT-802	Lane (NRC)	N802BG	800	Houma	Spray: 75'	
AT-802	Lane (NCR)	N950HC	800	Houma	Spray: 75'	
BT-67	ASI	N932H	1,800	Houma	Spray: 75'	
DC-3	ASI	N64766	1,000	Houma	Spray: 75'	
DC-3	ASI	N64767	1,000	Houma	Spray: 75'	Standby
Operational Spray Volume (1 load per plane) (gal)			24,680			
Total Operational Spray Maximum (gal) (4 sorties/ plane / day)			98,720			

Dispersant Application Totals

Dispersant Statistics Applied by Day						
Date	Dispersant Type (gallons)		Daily Totals	# Sorties	Acres Covered (5 gal/acre application rate)	Square Miles covered
	9500	9527				
21 April 2010	Initial Response Date					
22 April 2010	0	1,800	1,800	1	360	0.6
23 April 2010	0	0	0	0	0	0
24 April 2010	0	0	0	0	0	0
25 April 2010	0	11,604	11,604	9	2,321	3.7
26 April 2010	0	14,486	14,486	10	2,897	4.5
27 April 2010	11,191	15,887	27,078	11	5,416	8.5
28 April 2010	27,269	14,874	42,143	15	8,429	13.2
29 April 2010	36,913	4,000	40,913	13	8,183	12.8
30 April 2010	4,900	0	4,900	1	980	1.5
1 May 2010	3,550	8,103	11,653	4	2,331	3.6
2 May 2010	0	0	0	0	0	0
3 May 2010	0	0	0	0	0	0
4 May 2010	10,561	23,712	34,273	12	6,855	10.7
5 May 2010	30,905	18,670	49,575	18	9915	15.5
6 May 2010	13,032	15,738	28,770	11	5,754	9.0
7 May 2010	5,582	1,688	7,270	4	1,454	2.3
8 May 2010	17,813	23,877	41,690	17	8,338	13.0
9 May 2010	29,034	26,898	55,932	21	11,186	17.5
10 May 2010	29,240	26,980	56,220	22	11,244	17.6
11 May 2010	7,940	0	7,940	2	1,588	2.5
12 May 2010	39,710	0	39,710	12	7,942	12.4
13 May 2010	41,620	0	41,620	15	8,324	13.0
14 May 2010	44,031	0	44,031	14	8,806	13.8
15 May 2010	14,208	0	14,208	6	2,842	4.4
16 May 2010	0	0	0	0	0	0
17 May 2010	6,591	0	6,591	4	1,318	2.1
18 May 2010	209	0	209	1	42	0.1

Dispersant Statistics Applied by Day						
Date	Dispersant Type (gallons)		Daily Totals	# Sorties	Acres Covered (5 gal/acre application rate)	Square Miles covered
	9500	9527				
19 May 2010	0	0	0	0	0	0
20 May 2010	0	0	0	0	0	0
21 May 2010	25,233	4,659	29,892	14	5,978	9.3
22 May 2010	51,353	1,593	52,946	22	10,589	16.6
23 May 2010	18,104	0	18,104	11	3,621	5.7
24 May 2010	630	0	630	1	126	0.2
25 May 2010	200	0	200	1	40	0.1
26 May 2010	229	0	229	1	46	0.1
27 May 2010	200	0	200	1	40	0.1
28 May 2010	10,259	0	10,259	4	2,052	3.2
29 May 2010	0	0	0	0	0	0
30 May 2010	15,131	0	15,131	6	3,026	4.7
31 May 2010	11,676	0	11,676	7	2,335	3.7
1 June 2010	0	0	0	0	0	0
2 June 2010	0	0	0	0	0	0
3 June 2010	1,900	0	1,900	1	380	0.6
4 June 2010	0	0	0	0	0	0
5 June 2010	125	0	125	1	24	0
6 June 2010	0	0	0	0	0	0
7 June 2010	3,998	0	3,998	2	800	1.3
8 June 2010	5,505	0	5,505	3	1,101	1.7
9 June 2010	0	0	0	0	0	0
10 June 2010	4,506	0	4,506	2	901	1.4
11 June 2010	14,305	0	14,305	6	2,861	4.5
12 June 2010	6,996	0	6,996	2	1,399	2.2
13 June 2010	35,212	0	35,212	13	7,042	11.0
14 June 2010	10,703	0	10,703	7	2,141	3.3
15 June 2010	2,608	0	2,608	3	522	0.8
16 June 2010	13,380	0	13,380	7	2,676	4.2

Dispersant Statistics Applied by Day						
Date	Dispersant Type (gallons)		Daily Totals	# Sorties	Acres Covered (5 gal/acre application rate)	Square Miles covered
	9500	9527				
17 June 2010	12,123	0	12,123	6	2,425	3.8
18 June 2010	15,564	0	15,564	8	3,113	4.9
19 June 2010	2,604	0	2,604	2	521	0.8
20 June 2010	15,403	0	15,403	6	3,081	4.8
21 June 2010	10,355	0	10,355	4	2,071	3.2
22 June 2010	2,008	0	2,008	2	402	0.6
23 June 2010	5,099	0	5,099	3	1,020	1.6
24 June 2010	21,088	0	21,088	10	4,218	6.6
25 June 2010	4,633	0	4,633	2	927	1.5
26 June 2010	23,022	0	23,022	12	4,605	7.2
27 June 2010	6,623	0	6,623	3	1325	2.07
28 June 2010	0	0	0	0	0	0
29 June 2010	0	0	0	0	0	0
30 June 2010	0	0	0	0	0	0
01 July 2010	17,852	0	17,852	5	3570	6
02 July 2010	12,737	0	12,737	7	2547	3
03 July 2010	0	0	0	0	0	0
04 July 2010	3,000	0	3,000	1	600	1
05 July 2010	803	0	803	1	161	.25
06 July 2010	0	0	0	0	0	0
07 July 2010	1,000	0	1,000	1	200	0.3
08 July 2010	0	0	0	0	0	0
09 July 2010	0	0	0	0	0	0
10 July 2010	0	0	0	0	0	0
11 July 2010	0	0	0	0	0	0
12 July 2010	0	0	0	0	0	0
13 July 2010	999	0	999	1	200	0.3
TOTALS	**761,468**	**214,569**	**976,037**	**405**	**195,207**	**305.0**

NOTE: Spray map for today's operation will be available in tomorrow's report.

DAILY AERIAL DISPERSANT APPLICATION PLAN

DATE:	7/13/10	TIME:	0600 local	STAGING AIRPORTS:	Stennis Int'l / Houma	AIRPORT ID:	KHSA / KHUM

DISP. STAGING APT SPVSR (Name & Phone #): (Stennis) Gerry Nielsen (b) (6) / (Houma) Mark Cochrane (b) (6)

SPILL SITE INFORMATION:

SPILL LOCATION:	Latitude:	28 55 N	N	Longitude:	88 21 W	W	Size:
GEOGRAPHICAL REFERENCE:	112 nm SSE Stennis Airport						

SPILL SITE APPROACH INFORMATION:

ENTRY POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude: See OPS Chart	ft
EXIT POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude: See OPS Chart	ft
HOLDING AREA:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude: See OPS Chart	ft

SPILL SITE WX:	WIND: SW 10 - 19	CLG: UNL	VIS: 20 nm	SUNRISE: 0604	SUNSET: 1952
SEA STATE:	Swell: SW 5	Wind Waves: SW 1 5 - 3'		Combined Seas 6 1'	

(Attach Wilken's Weather Report for weather at the spill site and the staging airport)

DOSAGE (GPA): 5 **ADD'L INST:** See required setbacks and no fly area's on operational plan

COMMS

PRIMARY VHF COM: 126 40 MHz, W of 88-30	PRIMARY VHF COM: 135 65 MHz, E of 88-30	SEC VHF COM: 123 45 / EMERG COM: 121 5 MHz
PRIMARY VHF COM: Surface to Air 122 9 MHz / SECONDARY VHF COM: Surface to Air 123 45 MHz / Marine primary VHF 81A		
MARINE RADIO: Channel 16 then switch to Channel 9/ SATELLITE PHONE: Aircraft will contact through the Disp Staging Airport Supervisor		

AIRCRAFT INFORMATION:

Type:	Tail #:	Call Sign:	Airport ETA:	Purpose & Altitude:	PIC/Crew:	Passengers:
King Air Dynamic	N7198Y	98Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N80Y	80Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N39Q	39Q	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N7199D	99D	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N89N	89N	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N41J	41J	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N79W	79W	Houma	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N37H	37H	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
C-130 IAR	N117TG	7TG	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 Lynden	N403LC	3LC	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N9002K	02K	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N802BG	2BG	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N950HC	0HC	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
C-130 Lynden	401LC	1LC	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 OSR	EIJIV	JIV	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
BT-67 ASI	N932H	32H	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
DC-3 ASI	N64767	767	Houma Standby	Spray: 75'	PIC: TBD Co-pilot: TBD	
DC-3 ASI	N64766	766	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
Aztec ASI	N141183	183	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Turbo Cmdr ASI	N112EM	2EM	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Aircraft below are not directly part of the Dispersant Group / Cordination and assistance from the aircraft below is nessasary.						
King Air	N275	275	Houma Jet	Recon		
Helo PHI	759P		Houma	Recon		
U S Customs	P-3	Omaha 99		Communications		
Canada	Transport 950		Houma	Surveillance		

DATE: July 13, 2010											
SORTIE	TYPE A/C	TAIL #	PURPOSE	FUEL LOAD (#/Hrs:Min)	PAYLOAD GAL	PAYLOAD TYPE	TOTAL FLT TIME	DPT TIME EST/ACT	ENTRY EST/ACT	EXIT ETA EST/ACT	RETURN ETA EST/ACT
	BE90	39Q	Recon / Spotter	4	0			0600 / 0638			0945 / 0652
	BE90	89N	Recon / Spotter	4	0			0610 / 0644			0950 / 1054
	Turbo Cmdr	N112EM	Recon / Spotter	5	0			0610 / 0637			0910 / 0917
	Aztec	183	Recon / Spotter	4	0			0620 / 0614			0920 / 0857
	BE90	79W	Recon / Spotter	4	0			0630 / 0633			0930 / 0904
	BE90	80Y	Spotter	4	0			0600			1200
1	C -130	N117TG	Spray	4	0			0830			1030
	Turbo Cmdr	N690CG	Recon / Spotter	5	0			1205 / 1407			1540 / 1645
2	BT-67	N932H	Spray	4	999			1200 / 1409			1425 / 1637
3	DC-3	766	Spray	4	0			1230			1432
	BE90	89N	Spotter	4	0			0803			1206
4	C -130	403LC	Spray	4	0			0834			1035
	BE90	80Y	Spotter	4	0			1245			1545
5	C-130	401LC	Spray	4	0			1300			1455
	BE90	98Y	Spotter	4	0			1200			1600
6	C-130	JIV	Spray	4	0			1303			1457
	BE90	39Q	Spotter	4	0			1200			1600
7	AT- 802	82K	Spray	4	0			1245			1500
	BE90	98Y	SSM 19 Spotter	4	0			0000 / 0614			0000 / 0959
	BE90	80Y	Recon / Spotter	4	0			0000 / 0744			0000 / 1154
	BE90	99D	Recon / Spotter	4	0			0000 / 0920			0000 / 1257
	BE90	37H	Recon / Spotter	4	0			0000 / 1011			0000 / 1418
	BE90	98Y	Recon / Spotter	4	0			0000 / 1112			0000 / 1445
	BE90	80Y	Recon / Spotter	4	0			0000 / 1236			0000 / 1640
	BE90	89N	Recon / Spotter	4	0			0000 / 1355			0000 / 1719
	BE90	79W	Recon / Spotter	4	0			0000 / 1255			0000 / 1509

Combined SiteTotals	999	9500
	Stennis	0
	Houma	999

Sortie # 2 was the only spray mission today
Scientific Support Mission 19 with 98Y and the Vessel International Peace was completed today.
39Q returned early due to a mechanical concern

DAILY AERIAL DISPERSANT APPLICATION PLAN

DATE:	7/14/10	TIME:	0600 local	STAGING AIRPORTS:	Stennis Int'l / Houma	AIRPORT ID:	KHSA / KHUM

DISP. STAGING APT SPVSR (Name & Phone #): (Stennis) Gerry Nielsen (b) (6) / (Houma) Mark Cochrane (b) (6)

SPILL SITE INFORMATION:

SPILL LOCATION:	Latitude:	28 55 N	N	Longitude:	88 21 W	W	Size:
GEOGRAPHICAL REFERENCE:				112 nm SSE Stennis Airport			

SPILL SITE APPROACH INFORMATION:

ENTRY POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude: See OPS Chart	ft
EXIT POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude: See OPS Chart	ft
HOLDING AREA:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude: See OPS Chart	ft

SPILL SITE WX:	WIND: SW 7 - 17	CLG: UNL	VIS: 20 nm	SUNRISE: 0604	SUNSET: 1952		
SEA STATE:	Swell: SW 5	Wind Waves: SW 1 - 2'		Combined Seas 4 1'			

(Attach Wilken's Weather Report for weather at the spill site and the staging airport)

DOSAGE (GPA): 5 **ADD'L INST:** See required setbacks and no fly area's on operational plan

COMMS

PRIMARY VHF COM: 126 40 MHz, W of 88-30	PRIMARY VHF COM: 135 65 MHz, E of 88-30	SEC VHF COM: 123 45 / EMERG COM: 121 5 MHz
PRIMARY VHF COM: Surface to Air 122 9 MHz / SECONDARY VHF COM: Surface to Air 123 45 MHz / Marine primary VHF 81A		
MARINE RADIO: Channel 16 then switch to Channel 9/ SATELLITE PHONE: Aircraft will contact through the Disp Staging Airport Supervisor		

AIRCRAFT INFORMATION:

Type:	Tail #:	Call Sign:	Airport ETA:	Purpose & Altitude:	PIC/Crew:	Passengers:
King Air Dynamic	N7198Y	98Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N80Y	80Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N39Q	39Q	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N7199D	99D	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N89N	89N	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N41J	41J	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N79W	79W	Houma	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N37H	37H	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
C-130 IAR	N117TG	7TG	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 Lynden	N403LC	3LC	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N9002K	02K	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N802BG	2BG	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N950HC	0HC	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
C-130 Lynden	401LC	1LC	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 OSR	EJJIV	JIV	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
BT-67 ASI	N932H	32H	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
DC-3 ASI	N64767	767	Houma Standby	Spray: 75'	PIC: TBD Co-pilot: TBD	
DC-3 ASI	N64766	766	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
Aztec ASI	N141183	183	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Turbo Cmdr ASI	N690GG	0GG	Houma	Spotter	PIC: TBD Co-pilot: TBD	None

Aircraft below are not directly part of the Dispersant Group / Cordination and assistance from the aircraft below is nessasary.

King Air	N275	275	Houma Jet	Recon		
Helo PHI	759P		Houma	Recon		
U S Customs	P-3	Omaha 99		Communications		
Canada	Transport 950		Houma	Surveillance		

DATE: July 14, 2010											
SORTIE	TYPE A/C	TAIL #	PURPOSE	FUEL LOAD (#/Hrs:Min)	PAYLOAD GAL	PAYLOAD TYPE	TOTAL FLT TIME	DPT TIME EST/ACT	ENTRY EST/ACT	EXIT ETA EST/ACT	RETURN ETA EST/ACT
	BE90	37H	Recon / Spotter	4	0			0600			0945
	BE90	98Y	Recon / Spotter	4	0			0610			0950
	Turbo Cmdr	N112EM	Recon / Spotter	5	0			0610			0910
	Aztec	183	Recon / Spotter	4	0			0620			0920
	BE90	79W	Recon / Spotter	4	0			0630			0930
	BE90	80Y	Spotter	4	0			0800			1200
1	C-130	N1171L	Spray	4	3000			0830			1030
	Turbo Cmdr	N690GG	Recon / Spotter	5	0			1205			1540
2	BT-67	N932H	Spray	4	2000			1200			1425
3	DC-3	766	Spray	4	1000			1230			1432
	BE90	89N	Spotter	4	0			0803			1206
4	C-130	403LC	Spray	4	5000			0834			1035
	BE90	80Y	Spotter	4	0			1245			1545
5	C-130	401LC	Spray	4	5000			1300			1455
	BE90	98Y	Spotter	4	0			1200			1600
6	C-130	JIV	Spray	4	5000			1303			1457
	BE90	39Q	Spotter	4	0			1200			1600
7	AT - 802	02K	Spray	4	800			1245			1500

Combined SiteTotals		9500
	Stennis	0
	Houma	0

Aerial Dispersants Operations – Houma Status Report

July 14, 2010

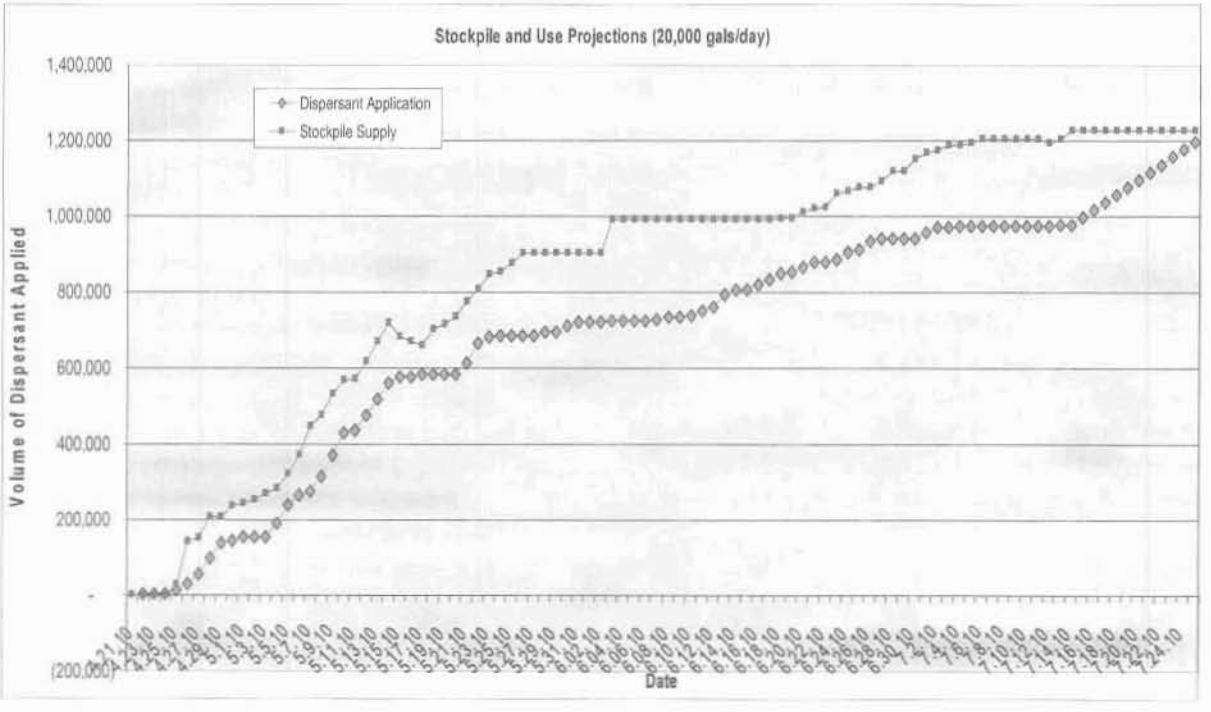
This report presents a snapshot of the aerial dispersant applications conducted on this date and summarizes the associated support activities. Aerial application of dispersants are being conducted under the direction of Unified Command and are targeting dispersible oil to minimize surface oil slicks impacting the environmentally sensitive shoreline ecosystem.

Dispersant Aerial Spray Summary:

1. FOSC approved Application Volume for July 14, 2010 (gallons):	10,000 @ 07:35 AM
2. Total Amount of Dispersant Applied on July 14, 2010 (gallons):	0
3. Total Sorties on July 14, 2010:	0
4. Total Amount of Dispersant Applied to date (gallons):	976,037
5. Total Sorties to date:	405
6. Total Area Covered by Dispersant Applications to date (mi^2):	305
7. Total Dispersant Stockpiles on the ground as of 7.14.2010 – 1200 PM (gallons):	227,299
8. Dispersant Stockpile Expected Arrival as of 7.14.10 – 1200 PM (gallons)*:	24,000
9. Estimated Total Dispersant as of 7.15.2010 - 1200 PM (gallons):	251,299
10. Projected Days Operational at maximum rate of 20,000 gal/day (days):	12

* Future estimates for the delivery of EC9500A are based on production schedules provided by Procurement on 7.13.10 via email and discussions with Nalco.

Dispersant Stockpile Supply and Use Projections



Asset Summary On Scene	
Spray Aircraft:	
C-130 – Stennis (2 Lynden, 1 IAR, 1 OSR)	4
DC-3 – Houma	2
BT-67 – Houma	1
King Air – 2 – Stennis (can be used for spotting)	2
AT-802 – Houma	3
TOTAL:	12
Spotter Aircraft:	
King Air – 5 – Stennis	5
King Air – 1 – Houma	1
Aztec – Houma	1
Turbo COMDR – Houma	1
TOTAL:	8
TOTAL AIRCRAFT:	20
PRIORITY Spray Assets Identified***	
Spray Aircraft:	LEAD TIME
C-130 – OSR-Singapore - (20,000 gal/day)	1 in 72+ hours
C-130 – IAR (15,000 gal/day)	1 – TBD
AT 802 (Agriculture Spray Planes) (5,000 gal/day)	3 in 6+ hours
***NOTE: These assets will not be activated until sufficient stockpile of dispersants are available for their use. Estimate that dispersant operations will need approximately 75,000 gallons per day of dispersant for these air craft spray systems.	
Additional Spray Assets Identified	
Neat Sweep	In area

Aerial Dispersant Activity Update for July 14, 2010:

- At 07:35 local time 14 July 2010, Capt Laferriere gave approval application of an initial 10,000 gallons of dispersants to targeted dispersible oil that may present itself during the morning reconnaissance flights.
- Fourteen overflights were conducted throughout the day. Dispersible oil slicks of various sizes and volumes were identified outside of the 30 nm exclusion zone in zones AN, AO, AY, and AZ, but were already being recovered by skimmer vessels. No dispersant was applied this day.

M/V International Peace Research Activity Update for July 14, 2010:

- Today the M/V IP collected additional water samples for toxicity testing.
- The vessel is coming into port for a scheduled crew change and will return to station (SE of the source) to continue their mission in the morning (7.14.10).

SMART Tier 1 Update for July 14, 2010:

- There were no SMART Tier 1 observations conducted as there were no dispersant applications conducted this day.

Aerial Dispersant Group Operations Plan for July 15th:
Dated 14 July, 2010

Tim Spoerl, Brad Barker, and Scotty Meador, please acknowledge receipt. Disseminate to all pilots. Op Areas are depicted on attached map .pdf; schedule on attached .xls.

Mission Targeting start of the day: 07-15-2010

The following zones are assigned for early morning surveillance and initial spray targets. Expect early authorization for 10,000 gallons. For Stennis base of 6,000 gallons and for Houma 4,000 gallons (This is not a given authorization).

Communicate dispersible oil as soon as possible in assigned zones. Spotters, please provide a photo if possible with your reports.

Stennis: Primary zones AN, AC. Secondary zones, AD, AO, AZ, R, S (RED indicators on map).
Houma ASI: Primary zones AM, AX. Secondary zones, AK, AW, AV, AY (BLUE indicators on map).
Houma AT-802: Primary zones AB, Z. Secondary zones Y, AL, AA, Q [Limited to within 40 NM from the shoreline] (GREEN indicators on map).

Continued next page →

Maintain 3 nm boundary separation if unable to coordinate air-to-air with other spotter or OMAHA 99.

Notes: Changes to previous orders are underlined.

1. **Required Equipment:** Functioning spray tracking units (GPS, Sat Lock) if not equipped, do not fly.
2. **As of 28 May 2010 FOSC approval is required each day for application of Corexit EC9500A dispersant in pre-approved areas.**
3. **Restrictions to aerial dispersant spraying:**
   a. No aerial dispersant spraying within the greatest of 3 nm offshore or depths less than 10 meters.
   b. No dispersant spraying within 5 nm of the spill source at surface: **28 45 12N -88 18 53 W as defined in the FAA NOTAM.**

FOR DOCUMENTATION PURPOSES (FUTURE REVIEW) WE WILL LIST THE FAA NOTAM **28 45 12N -88 18 53 W** AS THE OFFICIAL LOCATION.

   c. No aerial dispersant spraying 2nm of vessels, platforms, and 3nm from marine mammals.
   d. SMART and Scientific Support Missions may spray within 1nm of SMART/ SSM vessel; positive ID required.
   e. Target black and brown oil. This is the freshest/most dispersible oil. Dosage is 5 gallons per acre. ***Quality not Quantity***. Do not target Red/Reddish emulsified oil.
   f. Spotter aircraft remain on site to visually assess effects on dispersed area and document with photographs. Complete spotters debrief form and turn in to base operations on a daily bases.
   g. Report takeoff and landing times to assigned coordinators as they occur.

5. **Aircraft Communications:**
   a. **Primary air-to-air communication frequency in TFR West of 89° W is 126.4, East of 89° W is 135.65 AND 132.6 in the source area.**
   Secondary is 123.45 all zones.
   b. Contact P3 aircraft "Omaha 99" for flight advisories.
   c. Discreet IFF codes are permanently assigned to each aircraft must be used to enter TFR. This removes need to file DVFR flight plans.
   It is absolutely essential that each flight each day calls Tyndall to advise them prior to takeoff (b) (6)
   d. Advise SMART 1 prior to spray aircraft departure.
   e. Primary surface to air frequency is 122.9. Secondary is 123.45.

Continued next page →

Ancillary operations:

1. **SMART Team:** Will be working on defined and approved sites. Details to be developed with spotter findings.
2. **In Situ Burning:** The burn activities are within the circle is as depicted on the operational chart, however burn location is subject to continuous change and we will not be given a specific burn location.
3. **Skimmers:** Normal operations are to be conducted with 2nm separation for spray application. It has become apparent that the 15 nm circle around the source is ineffective in organizing the skimming and burn units. Any aerial dispersants will need to be made in areas where disposal oil is located and in locations that do not have burn or skimming operations underway.
4. **Stennis Tasking:** Scientific Support Mission: The M/V IP will require a recon/spotter Wednesday morning. Rendezvous point and time for Wednesday will be 0700 @ 28◦ 37' 33" N, 87◦ 59' 50". W. A spotter scientific support mission for tomorrow for the M/V Determination will be required, rendezvous @ 0700 at 28◦ 46.18' N, 88◦ 15.9' W. The M/V Determination is looking for a slick near that location. It is anticipated that one spotter aircraft from Stennis may be appropriate for both scientific support mission.

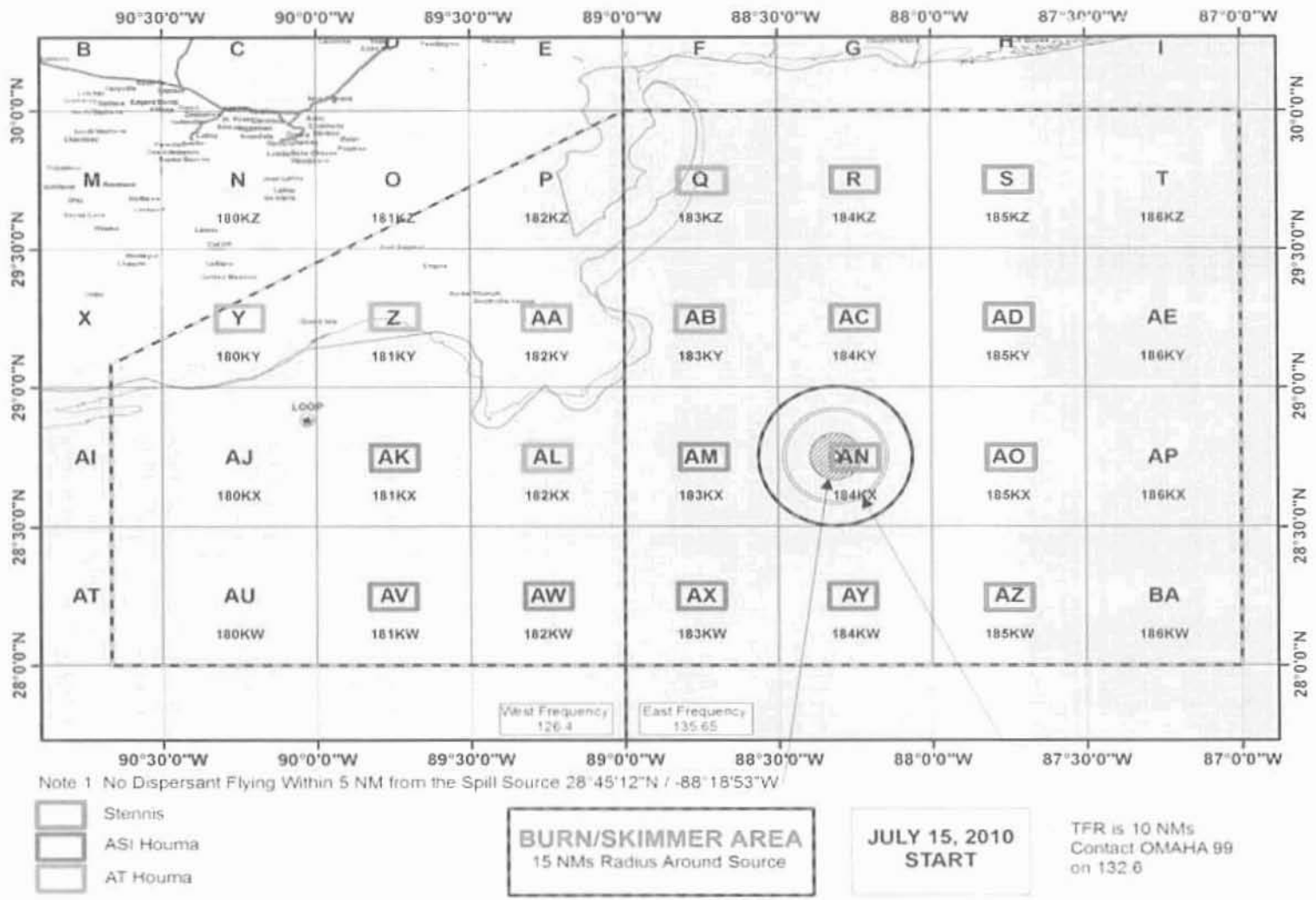
Dispersant Group conference call tomorrow @ 1530. Dial in (b) (6) participant code (b) (6) (Stennis use moderator number).

BLIMP_____S & BALLONS:

As earlier noted there are increasing balloon efforts in support of the spill. Here is the latest two we encountered.

FDC 0/1159 ZHU ..SPECIAL NOTICE.. GULF OF MEXICO. DEEPWATER HORIZON/MISSISSIPPI CANYON INCIDENT CLEANUP AND RECONSTITUTION OPERATIONS. EFFECTIVE IMMEDIATELY UNTIL FURTHER NOTICE. TETHERED BALLOON AND BURN OPERATIONS. PILOTS SHOULD USE EXTREME CAUTION WHEN OPERATING WITHIN A 15 NM RADIUS OF 284512N/0881853W DUE TO SIGNIFICANT OIL BURN OPERATIONS IN PROGRESS. BURN AREA MAY CAUSE THICK SMOKE TO BE PRODUCED AND HAS A POTENTIAL TO REDUCE FLIGHT VISIBILITY. WITHIN THIS AREA A 14 FT TETHERED BALLOON MAY BE OPERATING FROM THE SURFACE TO 1000 FT AGL. THE BALLOON WILL ONLY BE OPERATING WITHIN ACTIVE BURN PLUMES AND PILOTS ARE ADVISED TO AVOID ALL ACTIVE BURN PLUMES BY 2 NM. OMAHA WILL BE ADVISED OF BALLOON LOCATION AT ALL TIMES. QUESTIONS ABOUT BALLOON OPERATIONS SHOULD BE DIRECTED TO THE FAA REPRESENTATIVE AT THE TYNDALL DEEPWATER HORIZON INCIDENT AIR OPERATIONS CENTER AT 850-282-0928.

Aerial Dispersants Operational Areas July 15, 2010



Dispersant Spray Assets

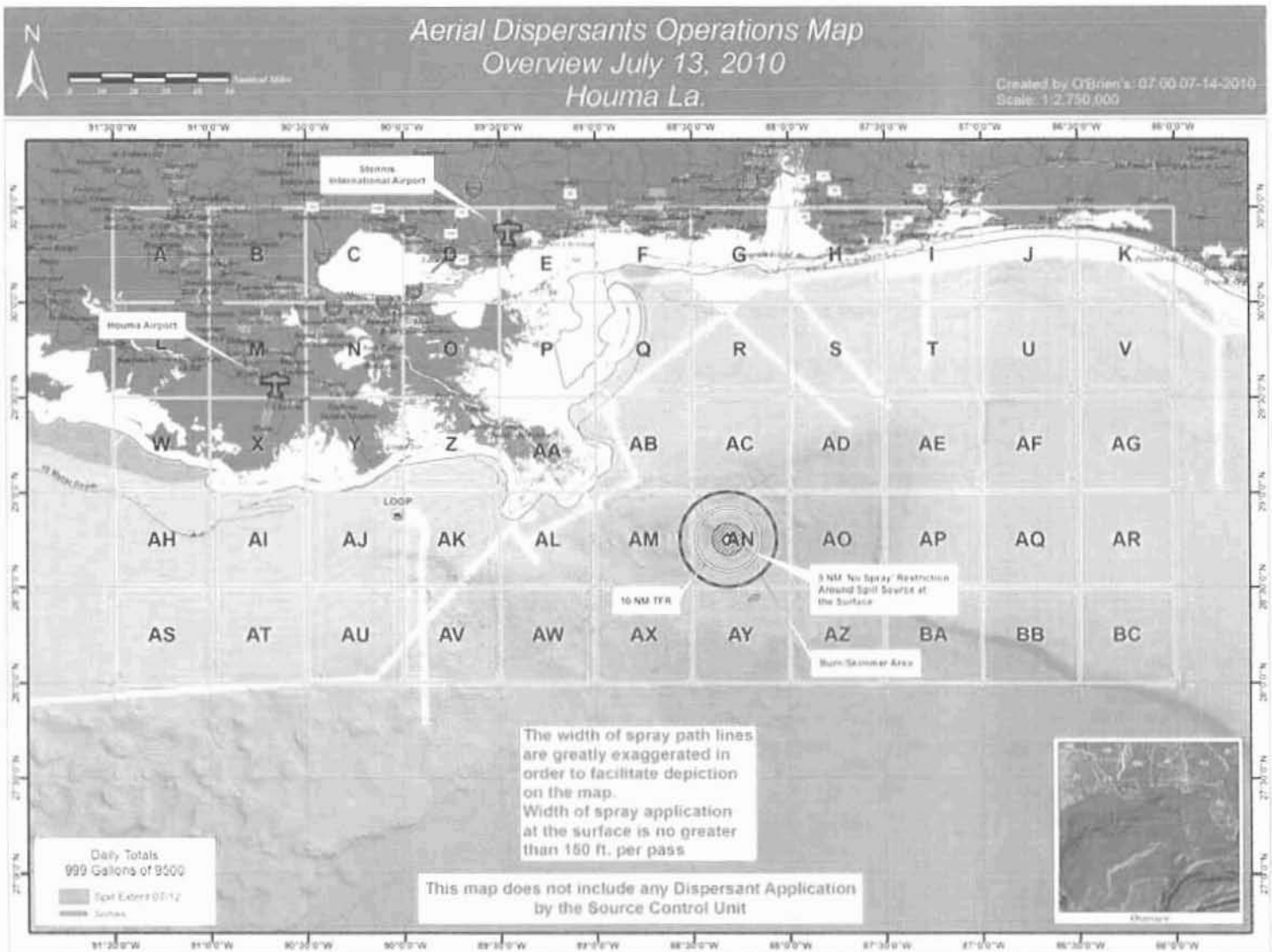
Aircraft Information						
Type	**Owner/ Operator**	**Tail #**	**Payload (gal)**	**Airport**	**Purpose & Altitude**	**Comments**
Spotters						
King Air	MSRC (Dynamic)	N39Q		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N89N		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N41J		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N37H		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N80Y		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N79W		Houma	Spotter – 1,000' to 1,500'	
Aztec (PA 23)	ASI	N141183		Houma	Backup Spotter	
Turbo COMDR	ASI	N690GG		Houma	Spotter	
Sprayers						
King Air	MSRC (Dynamic)	N7198Y	240	Stennis	Spray: 75'	Available for both Spray and Spotter duties
King Air	MSRC (Dynamic)	N7199D	240	Stennis	Spray: 75'	Available for both Spray and Spotter duties
C-130	IAR	N117TG	3,000	Stennis	Spray: 75'	
C-130	MSRC (Lynden)	N403LC	5,000	Stennis	Spray: 75'	ADDS Pack (CCA)
C-130	MSRC (Lynden)	N401LC	5,000	Stennis	Spray: 75'	ADDS Pack (Alyeska)
C-130	OSR	EIJIV	5,000	Stennis	Spray: 75'	ADDS Pack (OSR)
AT-802	Lane (NRC)	N9002K	800	Houma	Spray: 75'	2-Seater / Training
AT-802	Lane (NRC)	N802BG	800	Houma	Spray: 75'	
AT-802	Lane (NCR)	N950HC	800	Houma	Spray: 75'	
BT-67	ASI	N932H	1,800	Houma	Spray: 75'	
DC-3	ASI	N64766	1,000	Houma	Spray: 75'	
DC-3	ASI	N64767	1,000	Houma	Spray: 75'	Standby
Operational Spray Volume (1 load per plane) (gal)			24,680			
Total Operational Spray Maximum (gal) (4 sorties/ plane / day)			98,720			

Dispersant Application Totals

Dispersant Statistics Applied by Day						
Date	Dispersant Type (gallons)		Daily Totals	# Sorties	Acres Covered (5 gal/acre application rate)	Square Miles covered
	9500	9527				
21 April 2010	Initial Response Date					
22 April 2010	0	1,800	1,800	1	360	0.6
23 April 2010	0	0	0	0	0	0
24 April 2010	0	0	0	0	0	0
25 April 2010	0	11,604	11,604	9	2,321	3.7
26 April 2010	0	14,486	14,486	10	2,897	4.5
27 April 2010	11,191	15,887	27,078	11	5,416	8.5
28 April 2010	27,269	14,874	42,143	15	8,429	13.2
29 April 2010	36,913	4,000	40,913	13	8,183	12.8
30 April 2010	4,900	0	4,900	1	980	1.5
1 May 2010	3,550	8,103	11,653	4	2,331	3.6
2 May 2010	0	0	0	0	0	0
3 May 2010	0	0	0	0	0	0
4 May 2010	10,561	23,712	34,273	12	6,855	10.7
5 May 2010	30,905	18,670	49,575	18	9915	15.5
6 May 2010	13,032	15,738	28,770	11	5,754	9.0
7 May 2010	5,582	1,688	7,270	4	1,454	2.3
8 May 2010	17,813	23,877	41,690	17	8,338	13.0
9 May 2010	29,034	26,898	55,932	21	11,186	17.5
10 May 2010	29,240	26,980	56,220	22	11,244	17.6
11 May 2010	7,940	0	7,940	2	1,588	2.5
12 May 2010	39,710	0	39,710	12	7,942	12.4
13 May 2010	41,620	0	41,620	15	8,324	13.0
14 May 2010	44,031	0	44,031	14	8,806	13.8
15 May 2010	14,208	0	14,208	6	2,842	4.4
16 May 2010	0	0	0	0	0	0
17 May 2010	6,591	0	6,591	4	1,318	2.1
18 May 2010	209	0	209	1	42	0.1

Dispersant Statistics Applied by Day						
Date	Dispersant Type (gallons)		Daily Totals	# Sorties	Acres Covered (5 gal/acre application rate)	Square Miles covered
	9500	9527				
19 May 2010	0	0	0	0	0	0
20 May 2010	0	0	0	0	0	0
21 May 2010	25,233	4,659	29,892	14	5,978	9.3
22 May 2010	51,353	1,593	52,946	22	10,589	16.6
23 May 2010	18,104	0	18,104	11	3,621	5.7
24 May 2010	630	0	630	1	126	0.2
25 May 2010	200	0	200	1	40	0.1
26 May 2010	229	0	229	1	46	0.1
27 May 2010	200	0	200	1	40	0.1
28 May 2010	10,259	0	10,259	4	2,052	3.2
29 May 2010	0	0	0	0	0	0
30 May 2010	15,131	0	15,131	6	3,026	4.7
31 May 2010	11,676	0	11,676	7	2,335	3.7
1 June 2010	0	0	0	0	0	0
2 June 2010	0	0	0	0	0	0
3 June 2010	1,900	0	1,900	1	380	0.6
4 June 2010	0	0	0	0	0	0
5 June 2010	125	0	125	1	24	0
6 June 2010	0	0	0	0	0	0
7 June 2010	3,998	0	3,998	2	800	1.3
8 June 2010	5,505	0	5,505	3	1,101	1.7
9 June 2010	0	0	0	0	0	0
10 June 2010	4,506	0	4,506	2	901	1.4
11 June 2010	14,305	0	14,305	6	2,861	4.5
12 June 2010	6,996	0	6,996	2	1,399	2.2
13 June 2010	35,212	0	35,212	13	7,042	11.0
14 June 2010	10,703	0	10,703	7	2,141	3.3
15 June 2010	2,608	0	2,608	3	522	0.8
16 June 2010	13,380	0	13,380	7	2,676	4.2

Dispersant Statistics Applied by Day						
Date	Dispersant Type (gallons)		Daily Totals	# Sorties	Acres Covered (5 gal/acre application rate)	Square Miles covered
	9500	9527				
17 June 2010	12,123	0	12,123	6	2,425	3.8
18 June 2010	15,564	0	15,564	8	3,113	4.9
19 June 2010	2,604	0	2,604	2	521	0.8
20 June 2010	15,403	0	15,403	6	3,081	4.8
21 June 2010	10,355	0	10,355	4	2,071	3.2
22 June 2010	2,008	0	2,008	2	402	0.6
23 June 2010	5,099	0	5,099	3	1,020	1.6
24 June 2010	21,088	0	21,088	10	4,218	6.6
25 June 2010	4,633	0	4,633	2	927	1.5
26 June 2010	23,022	0	23,022	12	4,605	7.2
27 June 2010	6,623	0	6,623	3	1325	2.07
28 June 2010	0	0	0	0	0	0
29 June 2010	0	0	0	0	0	0
30 June 2010	0	0	0	0	0	0
01 July 2010	17,852	0	17,852	5	3570	6
02 July 2010	12,737	0	12,737	7	2547	3
03 July 2010	0	0	0	0	0	0
04 July 2010	3,000	0	3,000	1	600	1
05 July 2010	803	0	803	1	161	.25
06 July 2010	0	0	0	0	0	0
07 July 2010	1,000	0	1,000	1	200	0.3
08 July 2010	0	0	0	0	0	0
09 July 2010	0	0	0	0	0	0
10 July 2010	0	0	0	0	0	0
11 July 2010	0	0	0	0	0	0
12 July 2010	0	0	0	0	0	0
13 July 2010	999	0	999	1	200	0.3
14 July 2010	0	0	0	0	0	0
TOTALS	**761,468**	**214,569**	**976,037**	**405**	**195,207**	**305.0**


Aerial Dispersants Operations Map
Overview July 13, 2010
Houma La.
Created by OBrien's: 07:00 07-14-2010
Scale: 1:2,750,000
N
Houma Airport
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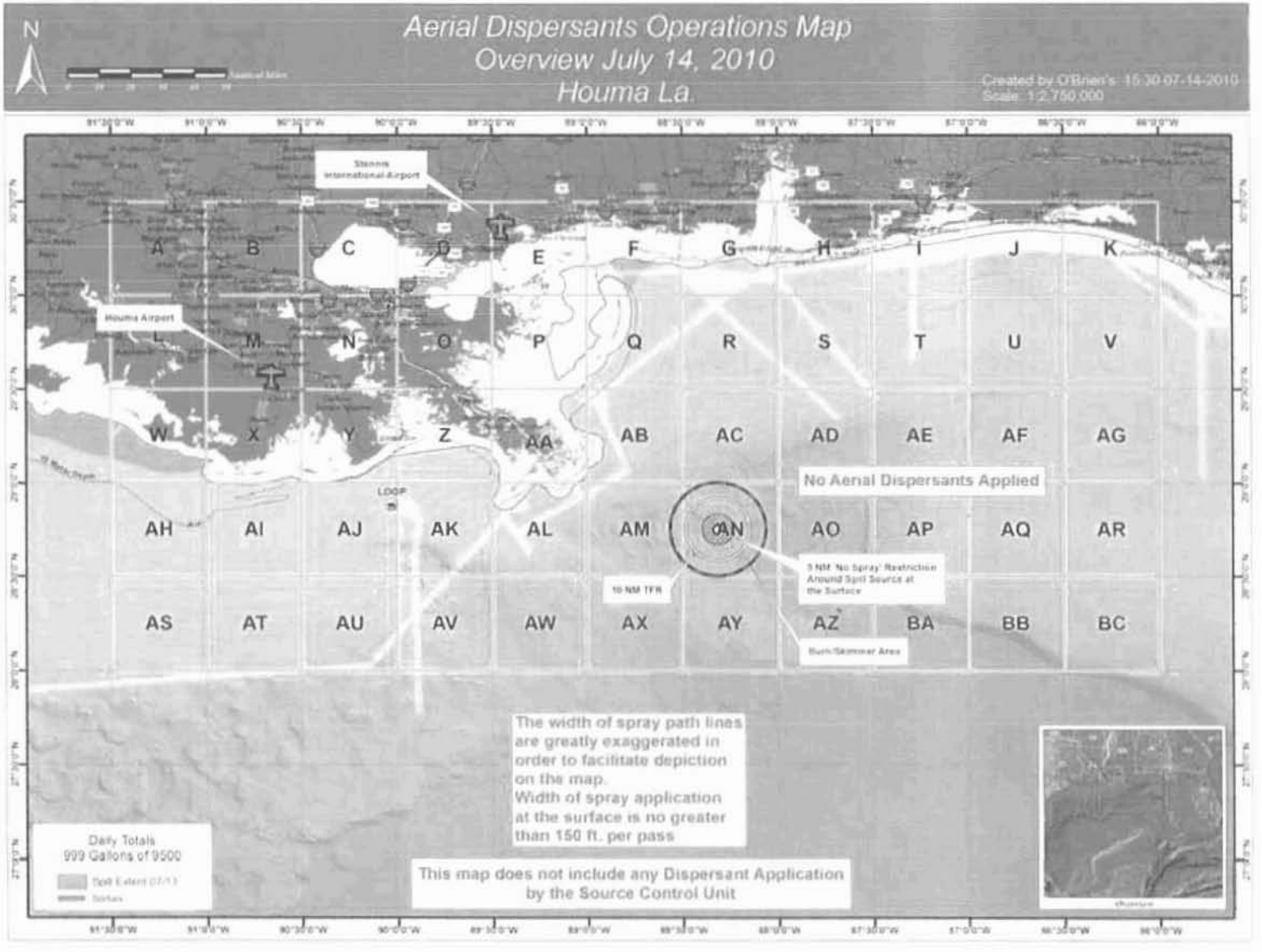
BC
10 NM TFR
5 NM 'No Spray' Restriction Around Spill Source at the Surface
Burn Skimmer Area
The width of spray path lines are greatly exaggerated in order to facilitate depiction on the map.
Width of spray application at the surface is no greater than 150 ft. per pass
This map does not include any Dispersant Application by the Source Control Unit
Daily Totals
999 Gallons of 9500


Aerial Dispersants Operations Map
Overview July 14, 2010
Houma La.
Created by OBrien's 15:30 07-14-2010
Scale 1:2,750,000
N
Stennis International Airport
Houma Airport
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AX
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AZ
BA
BB
BC
LOOP
No Aerial Dispersants Applied
5 NM 'No Spray' Restriction Around Spill Source at the Surface
10 NM TFR
Burn/Skimmer Area
The width of spray path lines are greatly exaggerated in order to facilitate depiction on the map.
Width of spray application at the surface is no greater than 150 ft. per pass
This map does not include any Dispersant Application by the Source Control Unit
Daily Totals
999 Gallons of 9500

DAILY AERIAL DISPERSANT APPLICATION PLAN

DATE:	7/14/10	TIME:	0600 local	STAGING AIRPORTS:	Stennis Int'l / Houma	AIRPORT ID:	KHSA / KHUM

DISP. STAGING APT SPVSR (Name & Phone #): (Stennis) Gerry Nielsen (b) (6) / (Houma) Mark Cochran (b) (6)

SPILL SITE INFORMATION:

SPILL LOCATION:	Latitude:	28 55 N	N	Longitude:	88 21 W	W	Size:
GEOGRAPHICAL REFERENCE:				112 nm SSE Stennis Airport			

SPILL SITE APPROACH INFORMATION:

ENTRY POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude:	See OPS Chart	ft
EXIT POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude:	See OPS Chart	ft
HOLDING AREA:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude:	See OPS Chart	ft

SPILL SITE WX:	WIND: SW 7 - 17	C'LG: UNL	VIS: 20 nm	SUNRISE: 0604	SUNSET: 1952		
SEA STATE:	Swell: SW 5	Wind Waves: SW 1 - 2'		Combined Seas 4 1'			

(Attach Wilken's Weather Report for weather at the spill site and the staging airport)

DOSAGE (GPA): 5 **ADD'L INST:** See required setbacks and no fly area's on operational plan

COMMS

PRIMARY VHF COM: 126 40 MHz, W of 88-30	PRIMARY VHF COM: 135 65 MHz, E of 88-30	SEC VHF COM: 123 45 / EMERG COM: 121 5 MHz
PRIMARY VHF COM: Surface to Air 122 9 MHz / SECONDARY VHF COM: Surface to Air 123 45 MHz / Marine primary VHF 81A		
MARINE RADIO: Channel 16 then switch to Channel 9/ SATELLITE PHONE: Aircraft will contact through the Disp Staging Airport Supervisor		

AIRCRAFT INFORMATION:

Type:	Tail #:	Call Sign:	Airport ETA:	Purpose & Altitude:	PIC/Crew:	Passengers:
King Air Dynamic	N719SY	98Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N80Y	80Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N39Q	39Q	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N7199D	99D	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N89N	89N	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N41J	41J	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N79W	79W	Houma	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N37H	37H	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
C-130 IAR	N117TG	7TG	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 Lynden	N403LC	3LC	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N9002K	02K	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N802BG	2BG	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N950HC	0HC	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
C-130 Lynden	401LC	1LC	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 OSR	EIJIV	JIV	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
BT-67 ASI	N932H	32H	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
DC-3 ASI	N64767	767	Houma Standby	Spray: 75'	PIC: TBD Co-pilot: TBD	
DC-3 ASI	N64766	766	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
Aztec ASI	N141183	183	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Turbo Cmdr ASI	N690GG	0GG	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Aircraft below are not directly part of the Dispersant Group / Cordination and assistance from the aircraft below is nessasary.						
King Air	N275	275	Houma Jet	Recon		
Helo PHI	759P		Houma	Recon		
US Customs	P-3	Omaha 99		Communications		
Canada	Transport 950		Houma	Surveillance		

DATE: July 14, 2010											
SORTIE	TYPE A/C	TAIL #	PURPOSE	FUEL LOAD (#/Hrs:Min)	PAYLOAD GAL	PAYLOAD TYPE	TOTAL FLT TIME	DPT TIME EST/ACT	ENTRY EST/ACT	EXIT ETA EST/ACT	RETURN ETA EST/ACT
	BE90	98Y	SSM 20/ Spotter	4	0			0610 / 0614			0910 / 0944
	Turbo Cmdr	690	Recon	5	0			0610 / 0622			0910 / 0849
	Aztec	183	Recon	4	0			0000 / 0633			0000 / 0948
	BE90	41J	Recon	4	0			0000 / 0627			0000 / 1031
	BE90	79W	Recon	4	0			0000 / 0635			0000 / 0903
	BE90	89N	Recon	4	0			0000 / 0647			0000 / 1050
	BE90	37H	Recon	4	0			0000 / 0903			0000 / 1304
	BE90	98Y	Recon	4	0			0000 / 1025			0000 / 1401
	BE90	80Y	Recon	4	0			0000 / 1133			0000 / 1544
	BE90	99D	Recon	4	0			0000 / 1214			0000 / 1548
	BE90	79W	Recon	4	0			0000 / 1246			0000 / 1509
	BE90	89N	Recon	4	0			0000 / 1403			0000 / 1742
	Aztec	183	Recon	4	0			0000 / 1436			0000 / 1729
	BE90	37H	Recon	4	0			0000 / 1452			0000 / 1748
Spray/Spotter Sorties											
	BE90	80Y	Spotter	4	0			0800			1200
1	C-130	N117TG	Spray	4	0			0830			1030
	Turbo Cmdr	N172EM	Recon / Spotter	5	0			1205			1540
2	BT-67	N932H	Spray	4	0			1200			1425
3	DC-3	766	Spray	4	0			1230			1432
	BE90	89N	Spotter	4	0			0803			1206
4	C-130	403LC	Spray	4	0			0834			1035
	BE90	80Y	Spotter	4	0			1245			1545
5	C-130	401LC	Spray	4	0			1300			1455
	BE90	98Y	Spotter	4	0			1200			1600
6	C-130	HY	Spray	4	0			1303			1457
	BE90	39Q	Spotter	4	0			1200			1600
7	AT - 802	02K	Spray	4	0			1245			1500
	No dispersant was applied today.										
	Flights in yellow were canceled, dispersible oil was discovered by spotter / recon aircraft, but several vessels were in the area of the oil slicks skimming.										
	Scientific Support Mission 20 with 98Y and the International Peace was completed today.										

Combined SiteTotals	0	9500
	Stennis	0
	Houma	0

DAILY AERIAL DISPERSANT APPLICATION PLAN

DATE: 7/15/2010	TIME: 0600 local	STAGING AIRPORTS Stennis Int'l / Houma	AIRPORT ID: KHSA / KHUM

DISP. STAGING APT SPVSR (Name & Phone #): (Stennis) Gerry Nielsen (b) (6) / (Houma) Mark Cochrane (b) (6)

SPILL SITE INFORMATION:

SPILL LOCATION	Latitude: 28 55 N	N	Longitude: 88 21 W	W	Size
GEOGRAPHICAL REFERENCE:	112 nm SSE Stennis Airport				

SPILL SITE APPROACH INFORMATION:

ENTRY POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude	See OPS Chart ft
EXIT POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude	See OPS Chart ft
HOLDING AREA:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude	See OPS Chart ft

SPILL SITE WX	WIND: NW 8 - 10'	CLG: 2,500	VIS: 17 nm	SUNRISE: 0605	SUNSET: 1952
SEA STATE:	Swell: CONF 0.5'	Wind Waves: NW 1.5'		Combined Seas 2.0'	

(Attach Wilken's Weather Report for weather at the spill site and the staging airport)

DOSAGE (GPA): 5 **ADD'L INST:** See required setbacks and no fly area's on operational plan

COMMS

PRIMARY VHF COM: 126.40 MHz, W of 88 / PRIMARY VHF COM: 135.65 MHz, E of 88-30 / EC: VHF COM: 123.45 / EMERG COM: 121.5 MHz
PRIMARY VHF COM: Surface to Air 122.9 MHz / SECONDARY VHF COM: Surface to Air 123.45 MHz / Marine primary VHF 81A
MARINE RADIO: Channel 16 then switch to Channel 9/ SATELLITE PHONE: Aircraft will contact through the Disp. Staging Airport Supervisor

AIRCRAFT INFORMATION:

Type:	Tail #:	Call Sign:	Airport ETA:	Purpose & Altitude:	PIC/Crew:	Passengers:
King Air Dynamic	N7198Y	98Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N80Y	80Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N39Q	39Q	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N7199D	99D	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N89N	89N	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N41J	41J	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N79W	79W	Houma	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N37H	37H	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
C-130 IAR	N117TG	7TG	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 Lynden	N403LC	3LC	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N9002K	02K	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N802BG	2BG	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N950HC	0HC	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 Lynden	401LC	1LC	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 OSR	EDJV	JIV	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
BT-67 ASI	N932H	32H	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
DC-3 ASI	N64767	767	Houma Standby	Spray: 75'	PIC: TBD Co-pilot: TBD	
DC-3 ASI	N64766	766	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
Aztec ASI	N141183	183	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Turbo Cmdr	N112EM	2EM	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Aircraft below are not directly part of the Dispersant Group / Cordination and assistance from the aircraft below is nessasary.						
King Air	N275	275	Houma Jet	Recon		
Helo PHI	759P		Houma	Recon		
U.S. Customs	P-3	Omaha 99		Communications		
Canada	Transport 950		Houma	Surveillance		

DATE: July 15, 2010											
SORTIE	TYPE A/C	TAIL #	PURPOSE	FUEL LOAD (#/Hrs:Min)	PAYLOAD GAL	PAYLOAD TYPE	TOTAL FLT TIME	DPT TIME EST/ACT	ENTRY EST/ACT	EXIT ETA EST/ACT	RETURN ETA EST/ACT
	BE90	37H	Recon / Spotter	4	0			0600			0945
	BE90	98Y	Recon / Spotter	4	0			0610			0950
	Turbo Cmdr	N112EM	Recon / Spotter	5	0			0610			0910
	Aztec	183	Recon / Spotter	4	0			0620			0920
	BE90	79W	Recon / Spotter	4	0			0630			0930
	BE90	80Y	Spotter	4	0			0800			1200
1	C-130	N117TG	Spray	4	3000			0830			1030
	Turbo Cmdr	N112EM	Recon / Spotter	5	0			1205			1540
2	BT-67	N932H	Spray	4	2000			1200			1425
3	DC-3	766	Spray	4	1000			1230			1432
	BE90	89N	Spotter	4	0			0803			1206
4	C-130	403LC	Spray	4	5000			0834			1035
	BE90	80Y	Spotter	4	0			1245			1545
5	C-130	401LC	Spray	4	5000			1300			1455
	BE90	98Y	Spotter	4	0			1200			1600
6	C-130	JIV	Spray	4	5000			1303			1457
	BE90	39Q	Spotter	4	0			1200			1600
7	AT-802	02K	Spray	4	800			1245			1500

Combined SiteTotals		9500
	Stennis	0
	Houma	0

Aerial Dispersants Operations – Houma Status Report

July 15, 2010

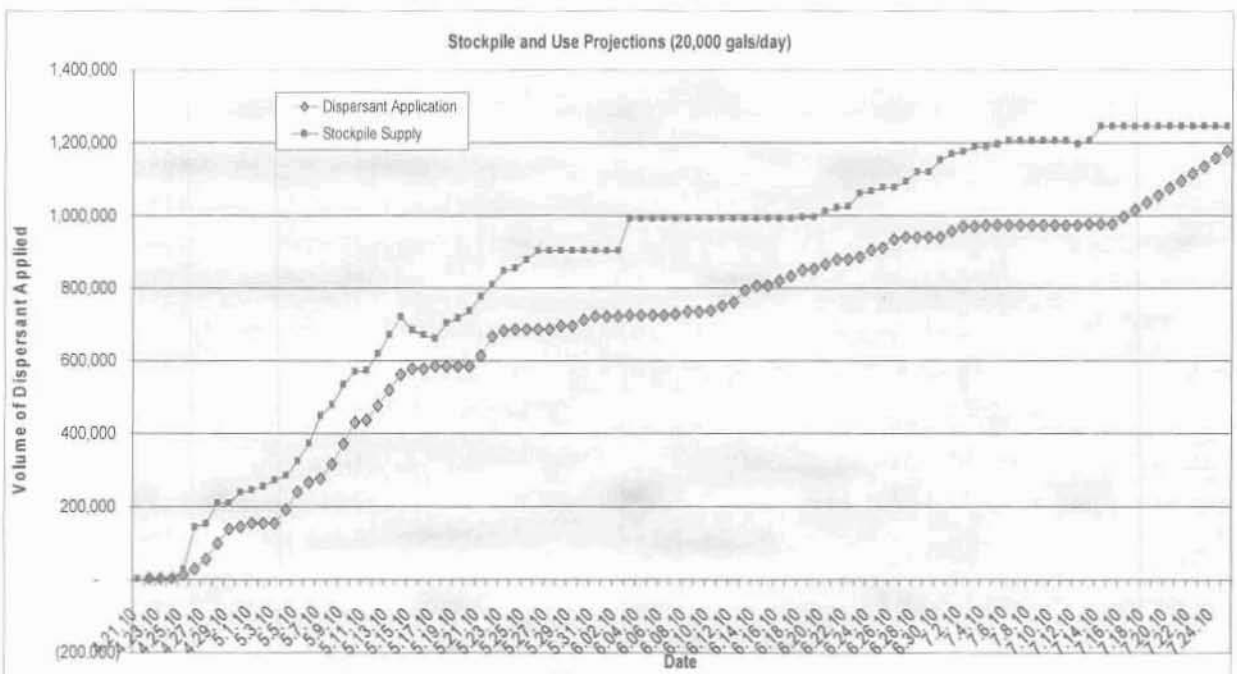
This report presents a snapshot of the aerial dispersant applications conducted on this date and summarizes the associated support activities. Aerial application of dispersants are being conducted under the direction of Unified Command and are targeting dispersible oil to minimize surface oil slicks impacting the environmentally sensitive shoreline ecosystem.

Dispersant Aerial Spray Summary:

1. FOSC approved Application Volume for July 15, 2010 (gallons):	No approval given
2. Total Amount of Dispersant Applied on July 15, 2010 (gallons):	0
3. Total Sorties on July 15, 2010:	0
4. Total Amount of Dispersant Applied to date (gallons):	976,037
5. Total Sorties to date:	405
6. Total Area Covered by Dispersant Applications to date (mi^2):	305
7. Total Dispersant Stockpiles on the ground as of 7.15.2010 – 1200 PM (gallons):	265,039
8. Dispersant Stockpile Expected Arrival as of 7.15.10 – 1200 PM (gallons)*:	0
9. Estimated Total Dispersant as of 7.16.2010 - 1200 PM (gallons):	265,039
10. Projected Days Operational at maximum rate of 20,000 gal/day (days):	13

* Future estimates for the delivery of EC9500A are based on production schedules provided by Procurement on 7.14.10 via email and discussions with Nalco.

Dispersant Stockpile Supply and Use Projections



Asset Summary On Scene	
Spray Aircraft:	
C-130 – Stennis (2 Lynden, 1 IAR, 1 OSR)	4
DC-3 – Houma	2
BT-67 – Houma	1
King Air – 2 – Stennis (can be used for spotting)	2
AT-802 – Houma	3
TOTAL:	12
Spotter Aircraft:	
King Air – 5 – Stennis	5
King Air – 1 – Houma	1
Aztec – Houma	1
Turbo COMDR – Houma	1
TOTAL:	8
TOTAL AIRCRAFT:	20
PRIORITY Spray Assets Identified***	
Spray Aircraft:	LEAD TIME
C-130 – OSR-Singapore - (20,000 gal/day)	1 in 72+ hours
C-130 – IAR (15,000 gal/day)	1 – TBD
AT 802 (Agriculture Spray Planes) (5,000 gal/day)	3 in 6+ hours
***NOTE: These assets will not be activated until sufficient stockpile of dispersants are available for their use. Estimate that dispersant operations will need approximately 75,000 gallons per day of dispersant for these air craft spray systems.	
Additional Spray Assets Identified	
Neat Sweep	In area

Aerial Dispersant Activity Update for July 15, 2010:

- No Dispersant authorization was given this day.
- The dispersant request for approval process was modified this day. Beginning July 15, 2010, the Aerial Dispersants Group – Houma is now required to:
  - Initiate spotter aircraft each morning to identify possible spray targets and report this information back to Houma team;
  - Houma team is to document each identified slick, including slick size, percentage of slick with dispersible oil, and volume of dispersant required to treat the identified slick;
  - Explain whether adverse winds, sea states, or wind directions dictate that the use of dispersants is the most viable means of response to reduce the risk of oil land fall or impacts to sensitive targets.
  - Explain reasons selected targets cannot be skimmed, addressed by other mechanical means, or in situ burned.
  - Explain whether the current weather and forecasted weather favorable to support both dispersant spray missions, spotter, and SMART flights.
  - Explain whether spotters able to identify oil slicks estimated to require a specific number of gallons of dispersants.
  - Provide a graphics or imagery/photos if possible.
  - State that spotters will, within 6 hours of the dispersant spray operations, identify high value targeted slicks and prepare a report specifying the location and dispersant volumes needed for each application.
  - Submit this request for each slick to the FOSC, USCG IC Legal Advisor, EPA Liaison, and the State Liaison for approval and concurrence.

  This approval process for aerial application of dispersants will require multiple reviews through EPA, USCG, LA State and NOAA management chains, all of which can cause approval delays due to unavailability of reviewers, computer message delays, cell phone coverage interruptions, etc. Obtaining approval for each targeted oil slick in a timely manner will be a challenge, as prior processes which commenced the evening before often resulted in late approvals.

- The Houma Unified Command has directed the Aerial Dispersants Group to demobilize three (3) C-130 spray planes (1 for OSR and 2 from Lynden) from the Stennis air base along with the ADDS packs used for spraying. The selected aircraft will decon their dispersant spray systems (Lynden will decon upon arrival at home airport), collect spare parts, and proceed with other demobilization activities prior to actually departing their individual air bases. Actual departure from Stennis may start this evening at the earliest and continue over the next several days. Additionally, one (1) DC-3 spray plane will be removed from its current standby status from the Houma air base.

M/V International Peace Research Activity Update for July 15, 2010:

- Today the M/V IP collected additional water samples for toxicity testing.

- The vessel will stay on station tonight and will meet a spotter aircraft in the morning (07:00) to continue their mission in the morning (7.14.10).

SMART Tier 1 Update for July 15, 2010:

- There were no SMART Tier 1 observations conducted as there were no dispersant applications conducted this day.

Aerial Dispersant Group Operations Plan for July 16th:
Dated 15 July, 2010

Tim Spoerl, Brad Barker, and Scotty Meador, please acknowledge receipt. Disseminate to all pilots. Op Areas are depicted on attached map .pdf; schedule on attached .xls.

Mission Targeting start of the day: 07-16-2010

The following zones are assigned for early morning surveillance and initial spray targets. Expect early authorization for 10,000 gallons. For Stennis base of 6,000 gallons and for Houma 4,000 gallons (This is not a given authorization).

Communicate dispersible oil as soon as possible in assigned zones. Spotters, please provide a photo if possible with your reports.

Stennis: Primary zones AN, AC. Secondary zones, AD, AO, AZ, R, S (RED indicators on map).
Houma ASI: Primary zones AM, AX. Secondary zones, AK, AW, AV, AY (BLUE indicators on map).
Houma AT-802: Primary zones AB, Z. Secondary zones Y, AL, AA, Q [Limited to within 40 NM from the shoreline] (GREEN indicators on map).

Maintain 3 nm boundary separation if unable to coordinate air-to-air with other spotter or OMAHA 99.

Notes: Changes to previous orders are underlined.

1. **Required Equipment:** Functioning spray tracking units (GPS, Sat Lock) if not equipped, do not fly.
2. **As of 28 May 2010 FOSC approval is required each day for application of Corexit EC9500A dispersant in pre-approved areas.**
3. **Restrictions to aerial dispersant spraying:**
   a. No aerial dispersant spraying within the greatest of 3 nm offshore or depths less than 10 meters.
   b. No dispersant spraying within 5 nm of the spill source at surface: **28 45 12N -88 18 53 W as defined in the FAA NOTAM.**

FOR DOCUMENTATION PURPOSES (FUTURE REVIEW) WE WILL LIST THE FAA NOTAM **28 45 12N -88 18 53 W** AS THE OFFICIAL LOCATION.

c. No aerial dispersant spraying 2nm of vessels, platforms, and 3nm from marine mammals.
d. SMART and Scientific Support Missions may spray within 1nm of SMART/ SSM vessel; positive ID required.
e. Target black and brown oil. This is the freshest/most dispersible oil. Dosage is 5 gallons per acre. ***Quality not Quantity***. Do no target Red/Reddish emulsified oil.
f. Spotter aircraft remain on site to visually assess effects on dispersed area and document with photographs. Complete spotters debrief form and turn in to base operations on a daily bases.
g. Report takeoff and landing times to assigned coordinators as they occur.

5. **Aircraft Communications:**
   a. **Primary air-to-air communication frequency in TFR West of 89° W is 126.4, East of 89° W is 135.65 AND 132.6 in the source area.**
   Secondary is 123.45 all zones.
   b. Contact P3 aircraft "Omaha 99" for flight advisories.
   c. Discreet IFF codes are permanently assigned to each aircraft must be used to enter TFR. This removes need to file DVFR flight plans.
   It is absolutely essential that each flight each day calls Tyndall to advise them prior to takeoff (b) (6)
   d. Advise SMART 1 prior to spray aircraft departure.
   e. Primary surface to air frequency is 122.9. Secondary is 123.45.

Ancillary operations:

1. **SMART Team:** Will be working on defined and approved sites. Details to be developed with spotter findings.
2. **In Situ Burning:** The burn activities are within the circle is as depicted on the operational chart, however the burn location is subject to continuous change and we will not be given a specific burn location.
3. **Skimmers:** Normal operations are to be conducted with 2nm separation for spray application.
4. **Stennis Tasking:** Scientific Support Mission: The M/V IP will require a recon/spotter Friday morning. Rendezvous point and time for Friday will be 0700 @ 28◦ 37' 33" N, 87◦ 59' 50". W. A spotter scientific support mission for tomorrow for the M/V Determination will be required, rendezvous @ 0700 at 28◦ 46.18' N, 88◦ 15.9' W. The M/V Determination will be in port tomorrow and will not require a spotter.

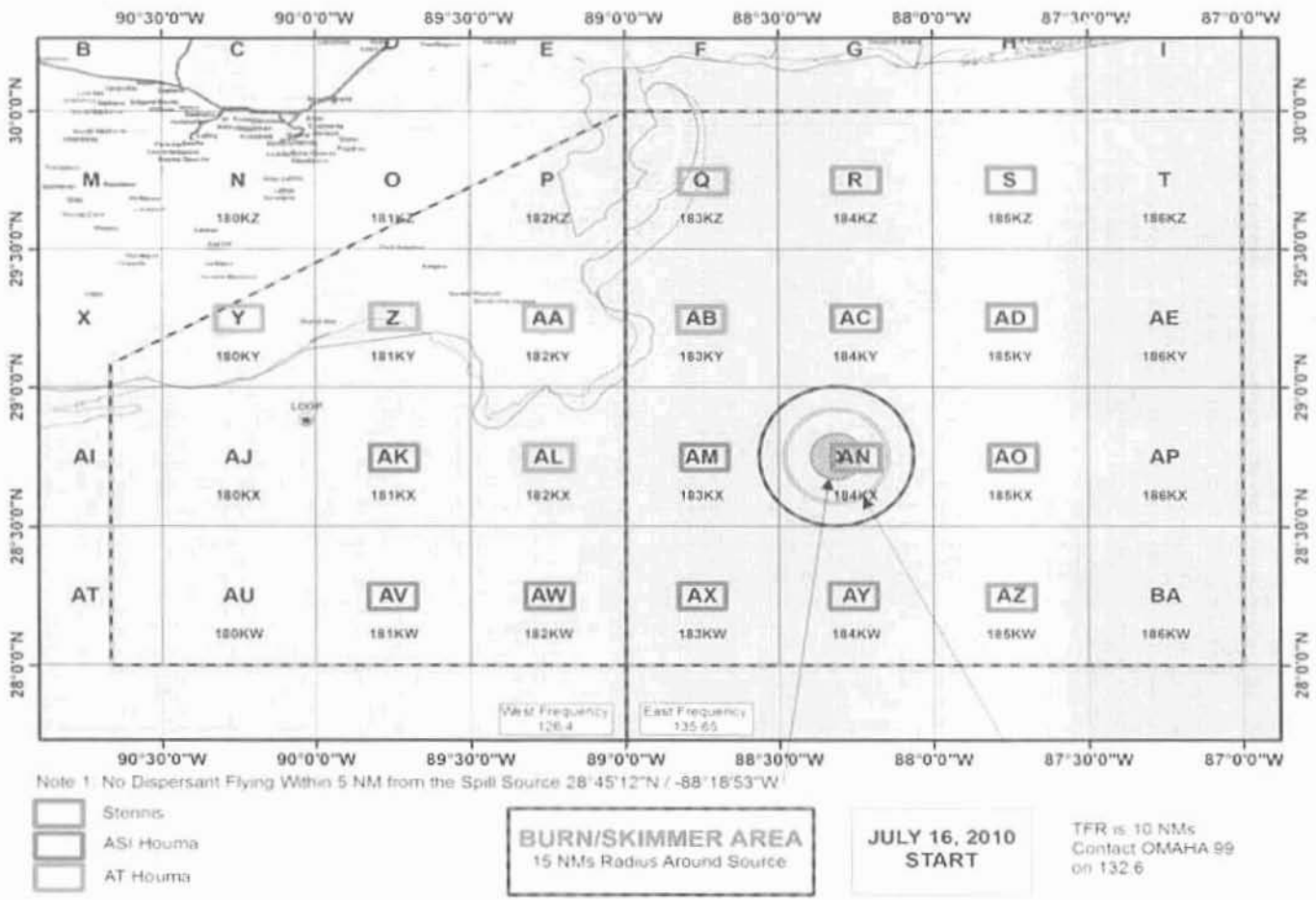
Dispersant Group conference call tomorrow @ 1530. Dial in (b) (6) participant code (b) (6) (Stennis use moderator number).

BLIMP____ S & BALLONS:

As earlier noted there are increasing balloon efforts in support of the spill. Here is the latest two we encountered.

FDC 0/1159 ZHU ..SPECIAL NOTICE.. GULF OF MEXICO. DEEPWATER HORIZON/MISSISSIPPI CANYON INCIDENT CLEANUP AND RECONSTITUTION OPERATIONS. EFFECTIVE IMMEDIATELY UNTIL FURTHER NOTICE. TETHERED BALLOON AND BURN OPERATIONS. PILOTS SHOULD USE EXTREME CAUTION WHEN OPERATING WITHIN A 15 NM RADIUS OF 284512N/0881853W DUE TO SIGNIFICANT OIL BURN OPERATIONS IN PROGRESS. BURN AREA MAY CAUSE THICK SMOKE TO BE PRODUCED AND HAS A POTENTIAL TO REDUCE FLIGHT VISIBILITY. WITHIN THIS AREA A 14 FT TETHERED BALLOON MAY BE OPERATING FROM THE SURFACE TO 1000 FT AGL. THE BALLOON WILL ONLY BE OPERATING WITHIN ACTIVE BURN PLUMES AND PILOTS ARE ADVISED TO AVOID ALL ACTIVE BURN PLUMES BY 2 NM. OMAHA WILL BE ADVISED OF BALLOON LOCATION AT ALL TIMES. QUESTIONS ABOUT BALLOON OPERATIONS SHOULD BE DIRECTED TO THE FAA REPRESENTATIVE AT THE TYNDALL DEEPWATER HORIZON INCIDENT AIR OPERATIONS CENTER AT 850-282-0928.

Aerial Dispersants Operational Areas July 16, 2010



Dispersant Spray Assets

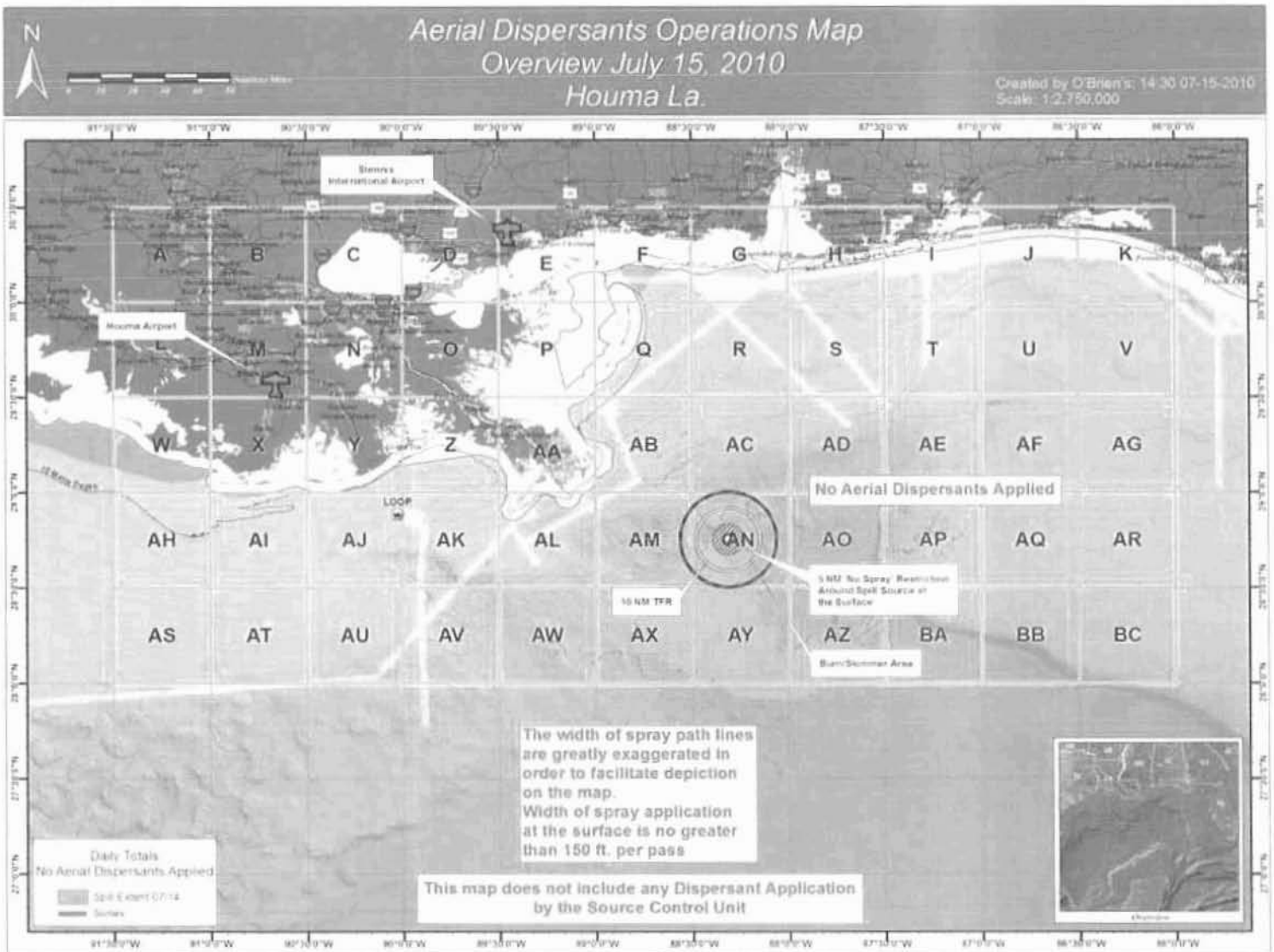
Aircraft Information						
Type	**Owner/ Operator**	**Tail #**	**Payload (gal)**	**Airport**	**Purpose & Altitude**	**Comments**
Spotters						
King Air	MSRC (Dynamic)	N39Q		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N89N		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N41J		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N37H		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N80Y		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N79W		Houma	Spotter – 1,000' to 1,500'	
Aztec (PA 23)	ASI	N141183		Houma	Backup Spotter	
Turbo COMDR	ASI	N690GG		Houma	Spotter	
Sprayers						
King Air	MSRC (Dynamic)	N7198Y	240	Stennis	Spray: 75'	Available for both Spray and Spotter duties
King Air	MSRC (Dynamic)	N7199D	240	Stennis	Spray: 75'	Available for both Spray and Spotter duties
C-130	IAR	N117TG	3,000	Stennis	Spray: 75'	
C-130	MSRC (Lynden)	N403LC	5,000	Stennis	Spray: 75'	***Begin Demob 7.16.10***
C-130	MSRC (Lynden)	N401LC	5,000	Stennis	Spray: 75'	***Begin Demob 7.16.10***
C-130	OSR	EIJIV	5,000	Stennis	Spray: 75'	***Begin Demob 7.16.10***
AT-802	Lane (NRC)	N9002K	800	Houma	Spray: 75'	2-Seater / Training
AT-802	Lane (NRC)	N802BG	800	Houma	Spray: 75'	
AT-802	Lane (NCR)	N950HC	800	Houma	Spray: 75'	
BT-67	ASI	N932H	1,800	Houma	Spray: 75'	
DC-3	ASI	N64766	1,000	Houma	Spray: 75'	
DC-3	ASI	N64767	1,000	Houma	Spray: 75'	***Begin Demob 7.16.10***
Operational Spray Volume (1 load per plane) (gal)			24,680			
Total Operational Spray Maximum (gal) (4 sorties/ plane / day)			98,720			

Dispersant Application Totals

Dispersant Statistics Applied by Day						
Date	Dispersant Type (gallons)		Daily Totals	# Sorties	Acres Covered (5 gal/acre application rate)	Square Miles covered
	9500	9527				
21 April 2010	Initial Response Date					
22 April 2010	0	1,800	1,800	1	360	0.6
23 April 2010	0	0	0	0	0	0
24 April 2010	0	0	0	0	0	0
25 April 2010	0	11,604	11,604	9	2,321	3.7
26 April 2010	0	14,486	14,486	10	2,897	4.5
27 April 2010	11,191	15,887	27,078	11	5,416	8.5
28 April 2010	27,269	14,874	42,143	15	8,429	13.2
29 April 2010	36,913	4,000	40,913	13	8,183	12.8
30 April 2010	4,900	0	4,900	1	980	1.5
1 May 2010	3,550	8,103	11,653	4	2,331	3.6
2 May 2010	0	0	0	0	0	0
3 May 2010	0	0	0	0	0	0
4 May 2010	10,561	23,712	34,273	12	6,855	10.7
5 May 2010	30,905	18,670	49,575	18	9915	15.5
6 May 2010	13,032	15,738	28,770	11	5,754	9.0
7 May 2010	5,582	1,688	7,270	4	1,454	2.3
8 May 2010	17,813	23,877	41,690	17	8,338	13.0
9 May 2010	29,034	26,898	55,932	21	11,186	17.5
10 May 2010	29,240	26,980	56,220	22	11,244	17.6
11 May 2010	7,940	0	7,940	2	1,588	2.5
12 May 2010	39,710	0	39,710	12	7,942	12.4
13 May 2010	41,620	0	41,620	15	8,324	13.0
14 May 2010	44,031	0	44,031	14	8,806	13.8
15 May 2010	14,208	0	14,208	6	2,842	4.4
16 May 2010	0	0	0	0	0	0
17 May 2010	6,591	0	6,591	4	1,318	2.1
18 May 2010	209	0	209	1	42	0.1

Dispersant Statistics Applied by Day						
Date	Dispersant Type (gallons)		Daily Totals	# Sorties	Acres Covered (5 gal/acre application rate)	Square Miles covered
	9500	9527				
19 May 2010	0	0	0	0	0	0
20 May 2010	0	0	0	0	0	0
21 May 2010	25,233	4,659	29,892	14	5,978	9.3
22 May 2010	51,353	1,593	52,946	22	10,589	16.6
23 May 2010	18,104	0	18,104	11	3,621	5.7
24 May 2010	630	0	630	1	126	0.2
25 May 2010	200	0	200	1	40	0.1
26 May 2010	229	0	229	1	46	0.1
27 May 2010	200	0	200	1	40	0.1
28 May 2010	10,259	0	10,259	4	2,052	3.2
29 May 2010	0	0	0	0	0	0
30 May 2010	15,131	0	15,131	6	3,026	4.7
31 May 2010	11,676	0	11,676	7	2,335	3.7
1 June 2010	0	0	0	0	0	0
2 June 2010	0	0	0	0	0	0
3 June 2010	1,900	0	1,900	1	380	0.6
4 June 2010	0	0	0	0	0	0
5 June 2010	125	0	125	1	24	0
6 June 2010	0	0	0	0	0	0
7 June 2010	3,998	0	3,998	2	800	1.3
8 June 2010	5,505	0	5,505	3	1,101	1.7
9 June 2010	0	0	0	0	0	0
10 June 2010	4,506	0	4,506	2	901	1.4
11 June 2010	14,305	0	14,305	6	2,861	4.5
12 June 2010	6,996	0	6,996	2	1,399	2.2
13 June 2010	35,212	0	35,212	13	7,042	11.0
14 June 2010	10,703	0	10,703	7	2,141	3.3
15 June 2010	2,608	0	2,608	3	522	0.8
16 June 2010	13,380	0	13,380	7	2,676	4.2

Dispersant Statistics Applied by Day						
Date	Dispersant Type (gallons)		Daily Totals	# Sorties	Acres Covered (5 gal/acre application rate)	Square Miles covered
	9500	9527				
17 June 2010	12,123	0	12,123	6	2,425	3.8
18 June 2010	15,564	0	15,564	8	3,113	4.9
19 June 2010	2,604	0	2,604	2	521	0.8
20 June 2010	15,403	0	15,403	6	3,081	4.8
21 June 2010	10,355	0	10,355	4	2,071	3.2
22 June 2010	2,008	0	2,008	2	402	0.6
23 June 2010	5,099	0	5,099	3	1,020	1.6
24 June 2010	21,088	0	21,088	10	4,218	6.6
25 June 2010	4,633	0	4,633	2	927	1.5
26 June 2010	23,022	0	23,022	12	4,605	7.2
27 June 2010	6,623	0	6,623	3	1325	2.07
28 June 2010	0	0	0	0	0	0
29 June 2010	0	0	0	0	0	0
30 June 2010	0	0	0	0	0	0
01 July 2010	17,852	0	17,852	5	3570	6
02 July 2010	12,737	0	12,737	7	2547	3
03 July 2010	0	0	0	0	0	0
04 July 2010	3,000	0	3,000	1	600	1
05 July 2010	803	0	803	1	161	.25
06 July 2010	0	0	0	0	0	0
07 July 2010	1,000	0	1,000	1	200	0.3
08 July 2010	0	0	0	0	0	0
09 July 2010	0	0	0	0	0	0
10 July 2010	0	0	0	0	0	0
11 July 2010	0	0	0	0	0	0
12 July 2010	0	0	0	0	0	0
13 July 2010	999	0	999	1	200	0.3
14 July 2010	0	0	0	0	0	0
15 July 2010	0	0	0	0	0	0
TOTALS	**761,468**	**214,569**	**976,037**	**405**	**195,207**	**305.0**


Aerial Dispersants Operations Map
Overview July 15, 2010
Houma La.
Created by O'Brien's: 14:30 07-15-2010
Scale: 1:2,750,000
N
Stennis International Airport
Houma Airport
A B C D E F G H I J K
L M N O P Q R S T U V
W X Y Z AA AB AC AD AE AF AG
AH AI AJ AK AL AM AN AO AP AQ AR
AS AT AU AV AW AX AY AZ BA BB BC
LOOP
No Aerial Dispersants Applied
10 NM TFR
5 NM No Spray Restriction Around Spill Source at the Surface
Burn/Skimmer Area
The width of spray path lines are greatly exaggerated in order to facilitate depiction on the map.
Width of spray application at the surface is no greater than 150 ft. per pass
This map does not include any Dispersant Application by the Source Control Unit
Daily Totals
No Aerial Dispersants Applied
Spill Extent 07/14
Surface

DAILY AERIAL DISPERSANT APPLICATION PLAN

DATE: 7/15/2010	TIME: 0600 local	STAGING AIRPORTS Stennis Int'l / Houma	AIRPORT ID: KHSA / KHUM

DISP. STAGING APT SPVSR (Name & Phone #): (Stennis) Gerry Nielsen [redacted] / (Houma) Mark Cochrane [redacted]

SPILL SITE INFORMATION:

SPILL LOCATION:	Latitude:	28 55 N	N	Longitude:	88 21 W	W	Size:
GEOGRAPHICAL REFERENCE:	112 nm SSE Stennis Airport						

SPILL SITE APPROACH INFORMATION:

ENTRY POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude: See OPS Chart	ft
EXIT POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude: See OPS Chart	ft
HOLDING AREA:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude: See OPS Chart	ft

SPILL SITE WX	WIND: NW 8 - 10'	CLG: 2,500	VIS: 17 nm	SUNRISE: 0605	SUNSET: 1952		
SEA STATE:	Swell: CONF 0 5'	Wind Waves: NW 1 5'		Combined Seas 2 0'			

(Attach Wilken's Weather Report for weather at the spill site and the staging airport)

DOSAGE (GPA): 5 **ADD'L INST:** See required setbacks and no fly area's on operational plan

COMMS

PRIMARY VHF COM: 126 40 MHz, W of 88	RIMARY VHF COM: 135 65 MHz, E of 88-30 EC VHF COM: 123 45 / EMERG COM: 121 5 MHz
PRIMARY VHF COM: Surface to Air 122 9 MHz / SECONDARY VHF COM: Surface to Air 123 45 MHz / Marine primary VHF 81A	
MARINE RADIO: Channel 16 then switch to Channel 9/ SATELLITE PHONE: Aircraft will contact through the Disp Staging Airport Supervisor	

AIRCRAFT INFORMATION:

Type:	Tail #:	Call Sign:	Airport ETA:	Purpose & Altitude:	PIC/Crew:	Passengers:
King Air Dynamic	N7198Y	98Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N80Y	80Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N39Q	39Q	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N7199D	99D	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N89N	89N	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N41J	41J	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N79W	79W	Houma	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N37H	37H	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
C-130 IAR	N117TG	7TG	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 Lynden	N403LC	3LC	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N9002K	02K	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N802BG	2BG	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N950HC	0HC	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
C-130 Lynden	401LC	1LC	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 OSR	EIJIV	JIV	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
BT-67 ASI	N932H	32H	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
DC-3 ASI	N64767	767	Houma Standby	Spray: 75'	PIC: TBD Co-pilot: TBD	
DC-3 ASI	N64766	766	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
Aztec ASI	N141183	183	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Turbo Cmdr	N112EM	2EM	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Aircraft below are not directly part of the Dispersant Group / Cordination and assistance from the aircraft below is nessasary.						
King Air	N275	275	Houma Jet	Recon		
Helo PHI	759P		Houma	Recon		
U S Customs	P-3	Omaha 99		Communications		
Canada	Transport 950		Houma	Surveillance		

DATE: July 15, 2010											
SORTIE	TYPE A/C	TAIL #	PURPOSE	FUEL LOAD (#/Hrs:Min)	PAYLOAD GAL	PAYLOAD TYPE	TOTAL FLT TIME	DPT TIME EST/ACT	ENTRY EST/ACT	EXIT ETA EST/ACT	RETURN ETA EST/ACT
	BE90	98Y	SSM 20/ Spotter	4	0			0610 / 0632			0910 / 1005
	Turbo Cmdr	690	Recon	5	0			0000 / 0621			0000 / 0845
	Aztec	183	Recon	4	0			0000 / 0623			0000 / 0909
	BE90	41J	Recon	4	0			0000 / 0625			0000 / 1022
	BE90	79W	Recon	4	0			0000 / 0649			0000 / 0848
	BE90	89N	Recon	4	0			0000 / 0642			0000 / 1036
	BE90	37H	Recon	4	0			0000 / 0903			0000 / 1257
	BE90	99D	Recon	4	0			0000 / 0911			0000 / 1237
	BE90	80Y	Recon	4	0			0000 / 1129			0000 / 1520
	BE90	89N	Recon	4	0			0000 / 1117			0000 / 1518
	Turbo Cmdr	690	Recon	5	0			0000 / 1346			0000 / 1632
	BE90	37H	Recon	4	0			0000 / 1355			0000 / 1731
	BE90	98Y	Recon	4	0			0000 / 1344			0000 / 1714
Spray/Spotter Sorties											
	BE90	80Y	Spotter	4	0			0800			1200
1	C-130	N117TG	Spray	4	0			0830			1030
	Turbo Cmdr	N121EM	Recon / Spotter	5	0			1205			1540
2	BT-67	N932H	Spray	4	0			1200			1425
3	DC-3	766	Spray	4	0			1330			1432
	BE90	89N	Spotter	4	0			0803			1206
4	C-130	403LC	Spray	4	0			0834			1035
	BE90	80Y	Spotter	4	0			1245			1545
5	C-130	401LC	Spray	4	0			1300			1455
	BE90	98Y	Spotter	4	0			1200			1600
6	C-130	HV	Spray	4	0			1303			1457
	BE90	39Q	Spotter	4	0			1200			1600
7	AT-802	07K	Spray	4	0			1245			1500
	No dispersant was applied today										
	Flights in yellow were canceled, no dispersable oil found										

Combined SiteTotals	9500
Stennis	0
Houma	0

DAILY AERIAL DISPERSANT APPLICATION PLAN

DATE: 7/16/2010	TIME: 0600 local	STAGING AIRPORTS Stennis Int'l / Houma	AIRPORT ID: KHSA / KHUM

DISP. STAGING APT SPVSR (Name & Phone #): (Stennis) John Giberson (b) (6) / (Houma) Mark Cochrane (b) (6)

SPILL SITE INFORMATION:

SPILL LOCATION:	Latitude: 28 55 N	N	Longitude: 88 21 W	W	Size:
GEOGRAPHICAL REFERENCE:	112 nm SSE Stennis Airport				

SPILL SITE APPROACH INFORMATION:

ENTRY POINT:	Latitude: See OPS Chart	N	Longitude: See OPS Chart	W	Altitude: See OPS Chart	ft
EXIT POINT:	Latitude: See OPS Chart	N	Longitude: See OPS Chart	W	Altitude: See OPS Chart	ft
HOLDING AREA:	Latitude: See OPS Chart	N	Longitude: See OPS Chart	W	Altitude: See OPS Chart	ft

SPILL SITE WX:	WIND: SSE 7 - 9	CLG: 1,500	VIS: 14 nm	SUNRISE: 0605	SUNSET: 1951
SEA STATE:	Swell: SE 1 0'	Wind Waves: SSE 1 5'		Combined Seas 2 0'	

(Attach Wilken's Weather Report for weather at the spill site and the staging airport)

DOSAGE (GPA): 5 **ADD'L INST:** See required setbacks and no fly area's on operational plan

COMMS	
	PRIMARY VHF COM: 126.40 MHz, W of 88 / PRIMARY VHF COM: 135.65 MHz, E of 88-30 / EC VHF COM: 123.45 / EMERG COM: 121.5 MHz
	PRIMARY VHF COM: Surface to Air 122 .9 MHz / SECONDARY VHF COM: Surface to Air 123.45 MHz / Marine primary VHF 81A
	MARINE RADIO: Channel 16 then switch to Channel 9/ SATELLITE PHONE: Aircraft will contact through the Disp Staging Airport Supervisor

AIRCRAFT INFORMATION:

Type:	Tail #:	Call Sign:	Airport ETA:	Purpose & Altitude:	PIC/Crew:	Passengers:
King Air Dynamic	N7198Y	98Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N80Y	80Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N39Q	39Q	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N7199D	99D	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N89N	89N	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N41J	41J	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N79W	79W	Houma	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N37H	37H	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
C-130 IAR	N117TG	7TG	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N9002K	02K	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N802BG	2BG	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N950HC	0HC	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
BT-67 ASI	N932H	32H	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
DC-3 ASI	N64766	766	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD Co-pilot: TBD	None
Aztec ASI	N141183	183	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Turbo Cmdr	N112EM	2EM	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Aircraft below are not directly part of the Dispersant Group / Cordination and assistance from the aircraft below is nessasary.						
King Air	N275	275	Houma Jet	Recon		
Helo PHI	759P		Houma	Recon		
U S Customs	P-3	Omaha 99		Communications		
Canada	Transport 950		Houma	Surveillance		

DATE: July 16, 2010											
SORTIE	TYPE A/C	TAIL #	PURPOSE	FUEL LOAD (#/Hrs:Min)	PAYLOAD GAL	PAYLOAD TYPE	TOTAL FLT TIME	DPT TIME EST/ACT	ENTRY EST/ACT	EXIT ETA EST/ACT	RETURN ETA EST/ACT
	BE90	37H	Recon / Spotter	4	0			0600			0945
	BE90	98Y	Recon / Spotter	4	0			0610			0950
	Turbo Cmdr	N112EM	Recon / Spotter	5	0			0610			0910
	Aztec	183	Recon / Spotter	4	0			0620			0920
	BE90	79W	Recon / Spotter	4	0			0630			0930
	BE90	80Y	Spotter	4	0			0800			1200
1	C-130	N117TG	Spray	4	3000			0830			1030
	Turbo Cmdr	N112EM	Recon / Spotter	5	0			1205			1540
2	BT-67	N932H	Spray	4	2000			1200			1425
3	DC-3	766	Spray	4	1000			1230			1432
	BE90	39Q	Spotter	4	0			1200			1600
4	AT-802	028K	Spray	4	800			1245			1500

Combined SiteTotals		9500
	Stennis	0
	Houma	0

Aerial Dispersants Operations – Houma Status Report

July 16, 2010

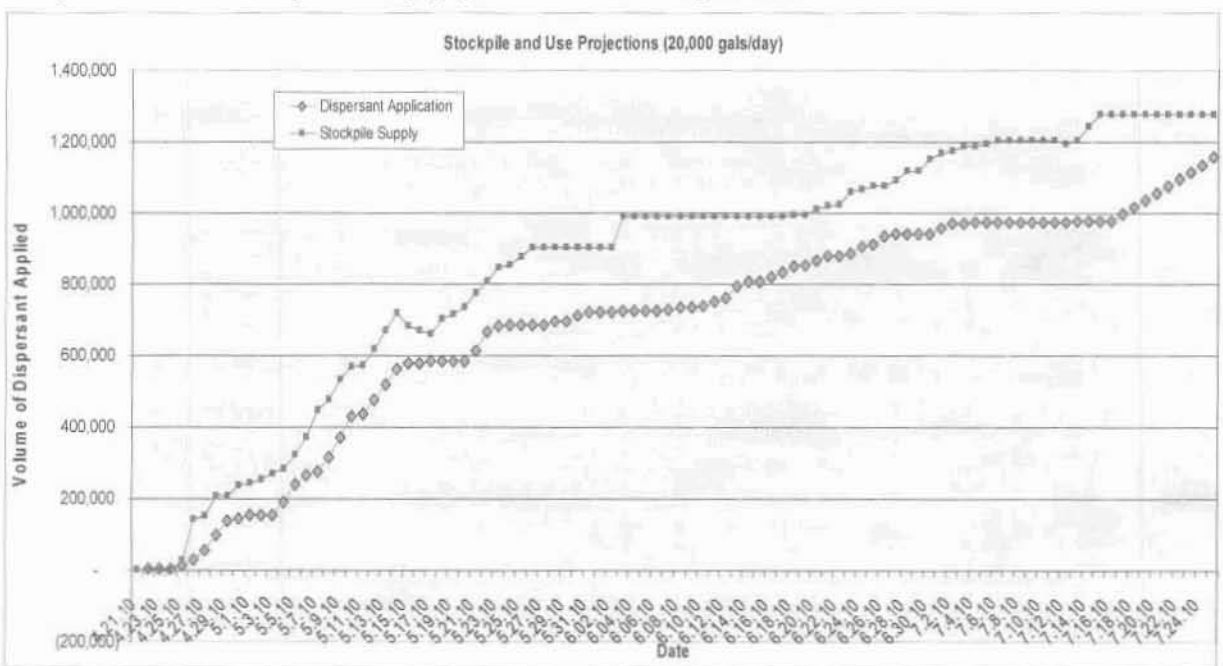
This report presents a snapshot of the aerial dispersant applications conducted on this date and summarizes the associated support activities. Aerial application of dispersants are being conducted under the direction of Unified Command and are targeting dispersible oil to minimize surface oil slicks impacting the environmentally sensitive shoreline ecosystem.

Dispersant Aerial Spray Summary:

1. FOSC approved Application Volume for July 16, 2010 (gallons):	No approval given
2. Total Amount of Dispersant Applied on July 16, 2010 (gallons):	0
3. Total Sorties on July 16, 2010:	0
4. Total Amount of Dispersant Applied to date (gallons):	976,037
5. Total Sorties to date:	405
6. Total Area Covered by Dispersant Applications to date (mi^2):	305
7. Total Dispersant Stockpiles on the ground as of 7.16.2010 – 1200 PM (gallons):	297,953
8. Dispersant Stockpile Expected Arrival as of 7.16.10 – 1200 PM (gallons)*:	0
9. Estimated Total Dispersant as of 7.17.2010 - 1200 PM (gallons):	297,953
10. Projected Days Operational at maximum rate of 20,000 gal/day (days):	14

* Future estimates for the delivery of EC9500A are based on production schedules provided by Procurement on 7.14.10 via email and discussions with Nalco.

Dispersant Stockpile Supply and Use Projections



Asset Summary On Scene	
Spray Aircraft:	
C-130 – Stennis (IAR)	1
DC-3 – Houma (ASI)	1
BT-67 – Houma (ASI)	1
King Air – 2 – Stennis (can be used for spotting)	2
AT-802 – Houma (Lane)	3
TOTAL:	8
Spotter Aircraft:	
King Air - Stennis (Dynamic)	5
King Air - Houma (Dynamic)	1
Aztec – Houma (ASI)	1
Turbo COMDR – Houma (ASI)	1
TOTAL:	8
TOTAL AIRCRAFT:	16

Aerial Dispersant Activity Update for July 16, 2010:

- No Dispersant authorization was given this day.
- The dispersant request for approval process was again modified - there is no longer an evening pre-approval request for the next morning. All requests will be based on sighting specifics. Beginning July 16, 2010, the Aerial Dispersants Group – Houma is now required to provide:
  - Visible chart demonstrating target slick outside offshore skimmer recovery and in-situ burn operations zone. Dimensions of spray box and percent of oil to be dispersed shall also be provided.
  - Visual justification and written explanation of why offshore skimmers and in-situ burn resources are unable to intercept and recover target prior to landfall. This justification may also include those slicks that have moved past skimmers and in-situ burn operations.
  - If skimming operations and/or in-situ burn operations are not being performed, provide written justification for reasons (i.e., outside weather parameters, resupply and refit).
  - Visual photographic imagery showing spotted target and area to be dispersed.
  - List of other environmental considerations such as vulnerabilities such as bird nesting, fledglings, mating, plant, rare species that provide tradeoff justifications.
  - List of economic extenuating circumstances, such as prevention of fishery closures and marine transportation system impacts.

Once this information is obtained, the Coast Guard Federal On-Scene Coordinator's Representative shall share this information and seek input from the NOAA Scientific Support Coordinator (SSC), the State On-Scene Coordinator (SOSC) and any other representatives he or she deems necessary. The Coast Guard Federal On-Scene Coordinator's Representative shall forward this information concurrently to the Environmental Protection Agency at Incident Command Post Houma.

Once the Coast Guard Federal On-Scene Coordinator's representative receives feedback from the NOAA SSC, State OSC and other representatives he/she will forward a recommendation to the Federal On-Scene Coordinator at the Unified Area Commander. Simultaneously, the EPA representative at ICP Houma shall also forward information to the UAC EPA representative for consideration. Today's example is attached.

- Dispersible oil was located today by ASI Houma. The request for approval document was developed and submitted at 15:42 (Attached). At approximately 1730 we were advised by Capt. Laferriere that a revision to the new approval procedure was that all requests for dispersant use **MUST** be submitted no later than 15:00 each day. This restriction limits the Aerial Dispersant Group to only those oil slicks discovered on morning recon flights as candidates for spray missions.

- One (1) DC-3 spray plane will be removed from its current standby status from the Houma air base.

- NOAA personnel toured the Houma airbase this day visiting the ASI facility and their spray and recon asset.

M/V International Peace Research Activity Update for July 16, 2010:

- Today the M/V IP was at the source trying to identify oil for sampling and was unsuccessful. No Samples were taken this day.
- The M/V IP is coming back into port for refueling and will return to station near the source for tomorrow's mission.
- The M/V IP has received verbal approval from RADM Zukunft to conduct specific testing to evaluate scientific background readings of the dispersant (EC9500A) on non-oiled water.

SMART Tier 1 Update for July 16, 2010:

- There were no SMART Tier 1 observations conducted as there were no dispersant applications conducted this day.

Aerial Dispersant Group Operations Plan for July 17th: Dated 16 July, 2010

Tim Spoerl, Brad Barker, and Scotty Meador, please acknowledge receipt. Disseminate to all pilots. Op Areas are depicted on attached map .pdf; schedule on attached .xls.

Mission Targeting start of the day: 07-17-2010

The following zones are assigned for early morning surveillance and initial spray targets. Communicate dispersible oil as soon as possible in assigned zones since each slick will require specific approvals and the approval process needs to be commenced as soon as feasible.

Spotters, please provide a photo if possible with your reports.

Stennis: Primary zones AN, AC. Secondary zones, AD, AO, AZ, R, S (RED indicators on map).
Houma ASI: Primary zones AM, AX. Secondary zones, AK, AW, AV, AY (BLUE indicators on map).
Houma AT-802: Primary zones AB, Z. Secondary zones Y, AL, AA, Q [Limited to within 40 NM from the shoreline] (GREEN indicators on map).

Maintain 3 nm boundary separation if unable to coordinate air-to-air with other spotter or OMAHA 99.

Notes: Changes to previous orders are underlined.

1. **Required Equipment:** Functioning spray tracking units (GPS, Sat Lock) if not equipped, do not fly.
2. **As of 28 May 2010 FOSC approval is required each day for application of Corexit EC9500A dispersant in pre-approved areas.**
3. **Restrictions to aerial dispersant spraying:**
    a. No aerial dispersant spraying within the greatest of 3 nm offshore or depths less than 10 meters.
    b. No dispersant spraying within 5 nm of the spill source at surface: **28 45 12N -88 18 53 W as defined in the FAA NOTAM.**

FOR DOCUMENTATION PURPOSES (FUTURE REVIEW) WE WILL LIST THE FAA NOTAM **28 45 12N -88 18 53 W** AS THE OFFICIAL LOCATION.

    c. No aerial dispersant spraying 2nm of vessels, platforms, and 3nm from marine mammals.
    d. SMART and Scientific Support Missions may spray within 1nm of SMART/ SSM vessel; positive ID required.
    e. Target black and brown oil. This is the freshest/most dispersible oil. Dosage is 5 gallons per acre. ***Quality not Quantity***. Do no target Red/Reddish emulsified oil.
    f. Spotter aircraft remain on site to visually assess effects on dispersed area and document with photographs. Complete spotters debrief form and turn in to base operations on a daily bases.
    g. Report takeoff and landing times to assigned coordinators as they occur.

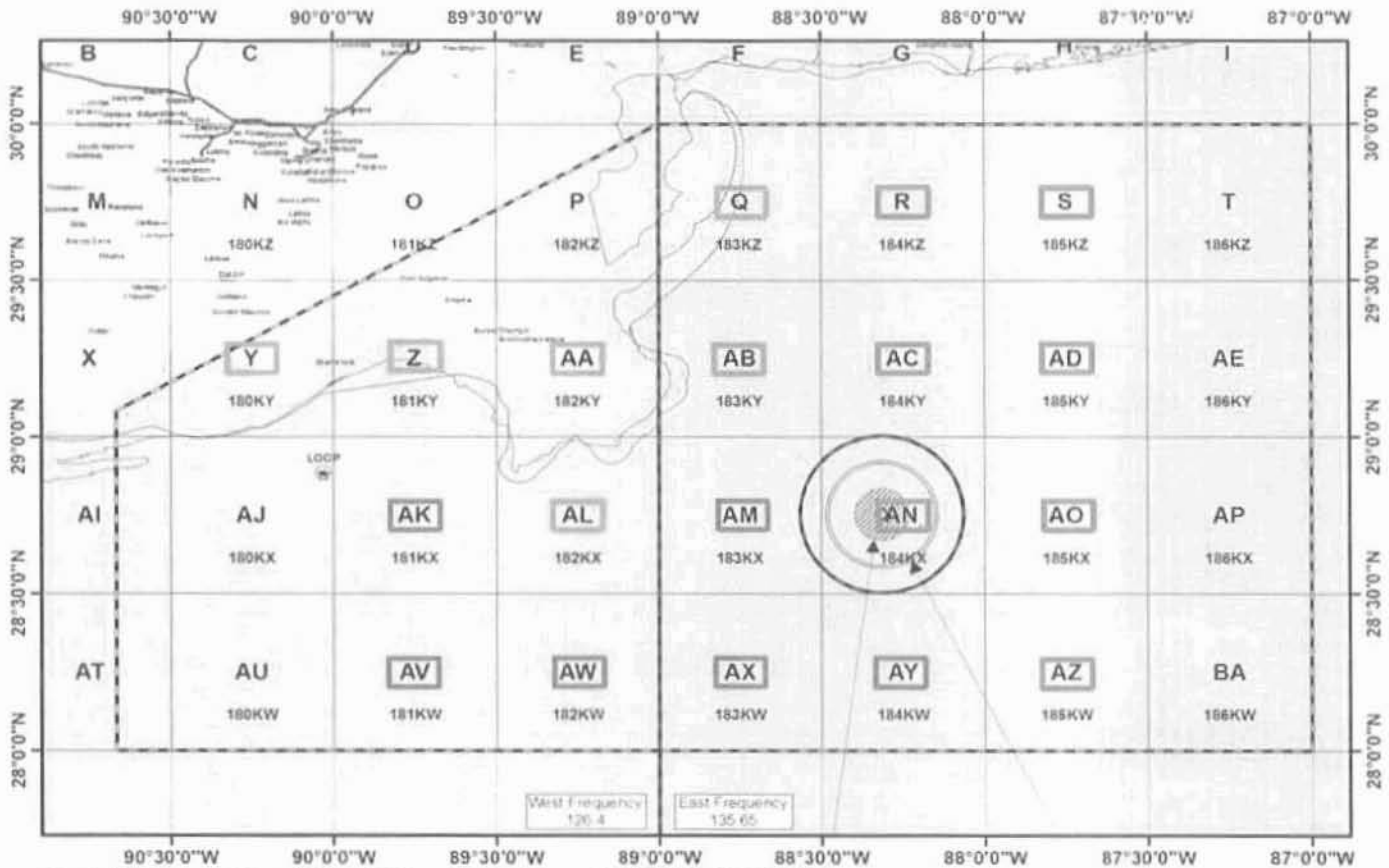
5. **Aircraft Communications:**
   a. **Primary air-to-air communication frequency in TFR West of 89° W is 126.4, East of 89° W is 135.65 AND 132.6 in the source area.**
   Secondary is 123.45 all zones.
   b. Contact P3 aircraft "Omaha 99" for flight advisories.
   c. Discreet IFF codes are permanently assigned to each aircraft must be used to enter TFR. This removes need to file DVFR flight plans.
   It is absolutely essential that each flight each day calls Tyndall to advise them prior to takeoff (b) (6)
   d. Advise SMART 1 prior to spray aircraft departure.
   e. Primary surface to air frequency is 122.9. Secondary is 123.45.

Ancillary operations:

1. **SMART Team:** Will be working on defined and approved sites. Details to be developed with spotter findings.
2. **In Situ Burning:** The burn activities are within the circle is as depicted on the operational chart, however the burn location is subject to continuous change and we will not be given a specific burn location.
3. **Skimmers:** Normal operations are to be conducted with 2nm separation for spray application.
4. **Stennis Tasking:** Scientific Support Mission: The M/V IP will not require a recon/spotter Saturday morning. A spotter scientific support mission for tomorrow for the M/V Determination is unknown at this time; **if a spotter is required, appropriate arrangements will be made tomorrow**.

Dispersant Group conference call tomorrow @ 1530. Dial in (b) (6) participant code (b) (6) (Stennis use moderator number).

Aerial Dispersants Operational Areas July 17, 2010



Note 1 No Dispersant Flying Within 5 NM from the Spill Source 28°45'12"N / -88°18'53"W

Stennis
ASI Houma
AT Houma

BURN/SKIMMER AREA
15 NMs Radius Around Source

JULY 17, 2010
START

TFR is 10 NMs
Contact OMAHA 99
on 132.6

Dispersant Spray Assets

Aircraft Information						
Type	**Owner/ Operator**	**Tail #**	**Payload (gal)**	**Airport**	**Purpose & Altitude**	**Comments**
Spotters						
King Air	MSRC (Dynamic)	N39Q		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N89N		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N41J		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N37H		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N80Y		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N79W		Houma	Spotter – 1,000' to 1,500'	
Aztec (PA 23)	ASI	N141183		Houma	Backup Spotter	
Turbo COMDR	ASI	N690GG		Houma	Spotter	
Sprayers						
King Air	MSRC (Dynamic)	N7198Y	240	Stennis	Spray: 75'	Available for both Spray and Spotter duties
King Air	MSRC (Dynamic)	N7199D	240	Stennis	Spray: 75'	Available for both Spray and Spotter duties
C-130	IAR	N117TG	3,000	Stennis	Spray: 75'	
AT-802	Lane (NRC)	N9002K	800	Houma	Spray: 75'	2-Seater / Training
AT-802	Lane (NRC)	N802BG	800	Houma	Spray: 75'	
AT-802	Lane (NCR)	N950HC	800	Houma	Spray: 75'	
BT-67	ASI	N932H	1,800	Houma	Spray: 75'	
DC-3	ASI	N64766	1,000	Houma	Spray: 75'	
Operational Spray Volume (1 load per plane) (gal)			8,680			
Total Operational Spray Maximum (gal) (4 sorties/ plane / day)			34,720			

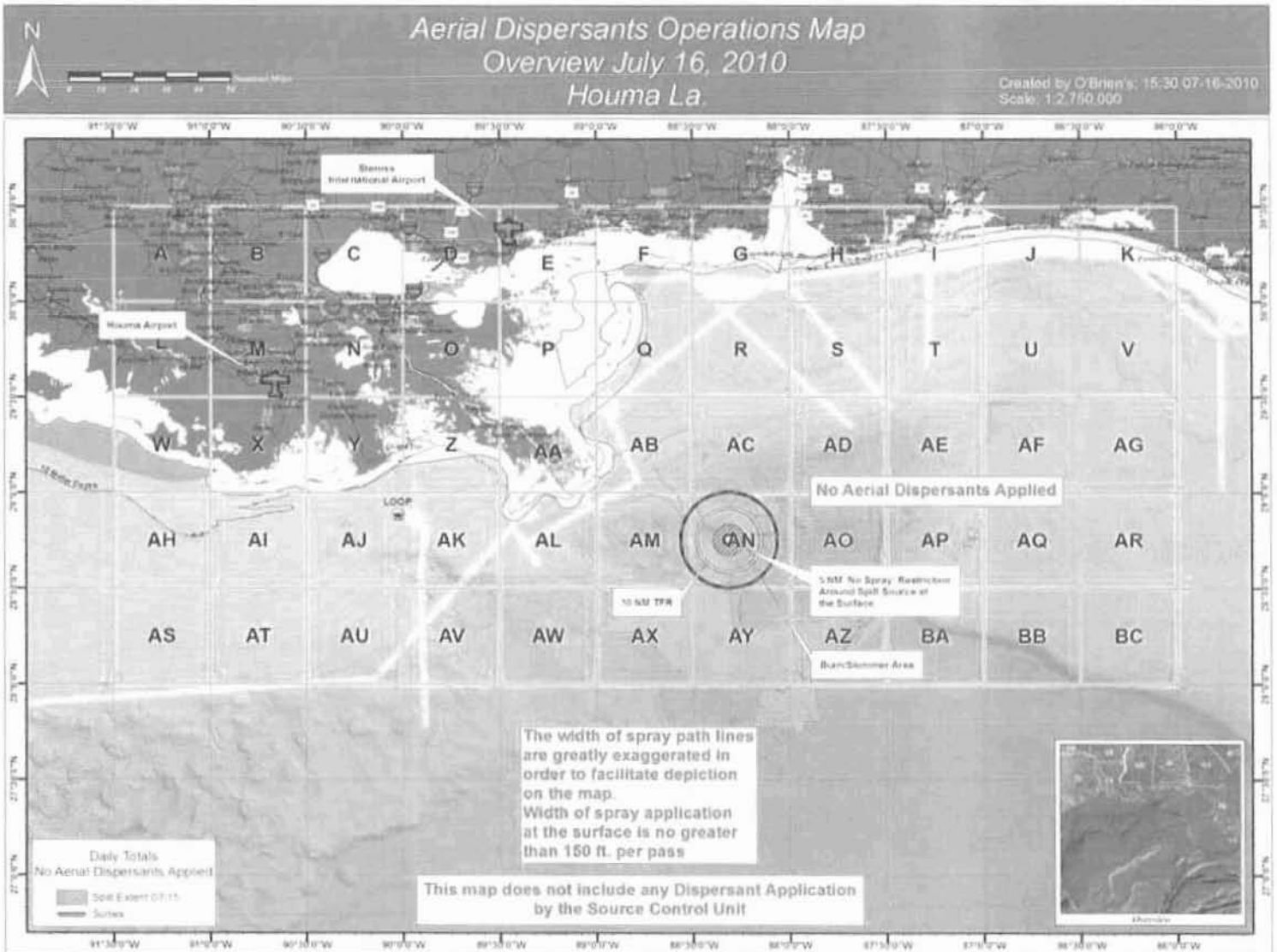
Dispersant Application Totals

Dispersant Statistics Applied by Day						
Date	Dispersant Type (gallons)		Daily Totals	# Sorties	Acres Covered (5 gal/acre application rate)	Square Miles covered
	9500	9527				
21 April 2010	Initial Response Date					
22 April 2010	0	1,800	1,800	1	360	0.6
23 April 2010	0	0	0	0	0	0
24 April 2010	0	0	0	0	0	0
25 April 2010	0	11,604	11,604	9	2,321	3.7
26 April 2010	0	14,486	14,486	10	2,897	4.5
27 April 2010	11,191	15,887	27,078	11	5,416	8.5
28 April 2010	27,269	14,874	42,143	15	8,429	13.2
29 April 2010	36,913	4,000	40,913	13	8,183	12.8
30 April 2010	4,900	0	4,900	1	980	1.5
1 May 2010	3,550	8,103	11,653	4	2,331	3.6
2 May 2010	0	0	0	0	0	0
3 May 2010	0	0	0	0	0	0
4 May 2010	10,561	23,712	34,273	12	6,855	10.7
5 May 2010	30,905	18,670	49,575	18	9915	15.5
6 May 2010	13,032	15,738	28,770	11	5,754	9.0
7 May 2010	5,582	1,688	7,270	4	1,454	2.3
8 May 2010	17,813	23,877	41,690	17	8,338	13.0
9 May 2010	29,034	26,898	55,932	21	11,186	17.5
10 May 2010	29,240	26,980	56,220	22	11,244	17.6
11 May 2010	7,940	0	7,940	2	1,588	2.5
12 May 2010	39,710	0	39,710	12	7,942	12.4
13 May 2010	41,620	0	41,620	15	8,324	13.0
14 May 2010	44,031	0	44,031	14	8,806	13.8
15 May 2010	14,208	0	14,208	6	2,842	4.4
16 May 2010	0	0	0	0	0	0
17 May 2010	6,591	0	6,591	4	1,318	2.1
18 May 2010	209	0	209	1	42	0.1

Dispersant Statistics Applied by Day						
Date	Dispersant Type (gallons)		Daily Totals	# Sorties	Acres Covered (5 gal/acre application rate)	Square Miles covered
	9500	9527				
19 May 2010	0	0	0	0	0	0
20 May 2010	0	0	0	0	0	0
21 May 2010	25,233	4,659	29,892	14	5,978	9.3
22 May 2010	51,353	1,593	52,946	22	10,589	16.6
23 May 2010	18,104	0	18,104	11	3,621	5.7
24 May 2010	630	0	630	1	126	0.2
25 May 2010	200	0	200	1	40	0.1
26 May 2010	229	0	229	1	46	0.1
27 May 2010	200	0	200	1	40	0.1
28 May 2010	10,259	0	10,259	4	2,052	3.2
29 May 2010	0	0	0	0	0	0
30 May 2010	15,131	0	15,131	6	3,026	4.7
31 May 2010	11,676	0	11,676	7	2,335	3.7
1 June 2010	0	0	0	0	0	0
2 June 2010	0	0	0	0	0	0
3 June 2010	1,900	0	1,900	1	380	0.6
4 June 2010	0	0	0	0	0	0
5 June 2010	125	0	125	1	24	0
6 June 2010	0	0	0	0	0	0
7 June 2010	3,998	0	3,998	2	800	1.3
8 June 2010	5,505	0	5,505	3	1,101	1.7
9 June 2010	0	0	0	0	0	0
10 June 2010	4,506	0	4,506	2	901	1.4
11 June 2010	14,305	0	14,305	6	2,861	4.5
12 June 2010	6,996	0	6,996	2	1,399	2.2
13 June 2010	35,212	0	35,212	13	7,042	11.0
14 June 2010	10,703	0	10,703	7	2,141	3.3
15 June 2010	2,608	0	2,608	3	522	0.8
16 June 2010	13,380	0	13,380	7	2,676	4.2

Dispersant Statistics Applied by Day						
Date	Dispersant Type (gallons)		Daily Totals	# Sorties	Acres Covered (5 gal/acre application rate)	Square Miles covered
	9500	9527				
17 June 2010	12,123	0	12,123	6	2,425	3.8
18 June 2010	15,564	0	15,564	8	3,113	4.9
19 June 2010	2,604	0	2,604	2	521	0.8
20 June 2010	15,403	0	15,403	6	3,081	4.8
21 June 2010	10,355	0	10,355	4	2,071	3.2
22 June 2010	2,008	0	2,008	2	402	0.6
23 June 2010	5,099	0	5,099	3	1,020	1.6
24 June 2010	21,088	0	21,088	10	4,218	6.6
25 June 2010	4,633	0	4,633	2	927	1.5
26 June 2010	23,022	0	23,022	12	4,605	7.2
27 June 2010	6,623	0	6,623	3	1325	2.07
28 June 2010	0	0	0	0	0	0
29 June 2010	0	0	0	0	0	0
30 June 2010	0	0	0	0	0	0
01 July 2010	17,852	0	17,852	5	3570	6
02 July 2010	12,737	0	12,737	7	2547	3
03 July 2010	0	0	0	0	0	0
04 July 2010	3,000	0	3,000	1	600	1
05 July 2010	803	0	803	1	161	.25
06 July 2010	0	0	0	0	0	0
07 July 2010	1,000	0	1,000	1	200	0.3
08 July 2010	0	0	0	0	0	0
09 July 2010	0	0	0	0	0	0
10 July 2010	0	0	0	0	0	0
11 July 2010	0	0	0	0	0	0
12 July 2010	0	0	0	0	0	0
13 July 2010	999	0	999	1	200	0.3
14 July 2010	0	0	0	0	0	0

Dispersant Statistics Applied by Day						
Date	Dispersant Type (gallons)		Daily Totals	# Sorties	Acres Covered (5 gal/acre application rate)	Square Miles covered
	9500	9527				
15 July 2010	0	0	0	0	0	0
16 July 2010	0	0	0	0	0	0
TOTALS	**761,468**	**214,569**	**976,037**	**405**	**195,207**	**305.0**


Aerial Dispersants Operations Map
Overview July 16, 2010
Houma La.
Created by O'Brien's: 15:30 07-16-2010
Scale: 1:2,750,000
N
Stennis International Airport
Houma Airport
LOOP
A B C D E F G H I J K
L M N O P Q R S T U V
W X Y Z AA AB AC AD AE AF AG
AH AI AJ AK AL AM AN AO AP AQ AR
AS AT AU AV AW AX AY AZ BA BB BC
No Aerial Dispersants Applied
10 NM TFR
5 NM No Spray Restriction Around Spill Source at the Surface
Burn/Skimmer Area
The width of spray path lines are greatly exaggerated in order to facilitate depiction on the map.
Width of spray application at the surface is no greater than 150 ft. per pass
This map does not include any Dispersant Application by the Source Control Unit
Daily Totals
No Aerial Dispersants Applied
Oil Extent
Sortes

DAILY AERIAL DISPERSANT APPLICATION PLAN

DATE: 7/16/2010	TIME: 0600 local	STAGING AIRPORTS Stennis Int'l / Houma	AIRPORT ID: KHSA / KHUM

DISP. STAGING APT SPVSR (Name & Phone #): (Stennis) John Giberson (b) (6) / (Houma) Mark Cochrane (b) (6)

SPILL SITE INFORMATION:

SPILL LOCATION:	Latitude:	28 55 N	N	Longitude:	88 21 W	W	Size:
GEOGRAPHICAL REFERENCE:	112 nm SSE Stennis Airport						

SPILL SITE APPROACH INFORMATION:

ENTRY POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude: See OPS Chart	ft
EXIT POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude: See OPS Chart	ft
HOLDING AREA:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude: See OPS Chart	ft

SPILL SITE WX:	WIND: SSE 7 - 9'	CLG: 1,500	VIS: 14 nm	SUNRISE: 0605	SUNSET: 1951
SEA STATE:	Swell: SE 1 0'	Wind Waves: SSE 1 5'		Combined Seas 2 0'	

(Attach Wilken's Weather Report for weather at the spill site and the staging airport)

DOSAGE (GPA): 5 **ADD'L INST:** See required setbacks and no fly area's on operational plan

COMMS	
	PRIMARY VHF COM: 126.40 MHz, W of 88 / PRIMARY VHF COM: 135.65 MHz, E of 88-30 / EC VHF COM: 123.45 / EMERG COM: 121.5 MHz
	PRIMARY VHF COM: Surface to Air 122 .9 MHz / SECONDARY VHF COM: Surface to Air 123.45 MHz / Marine primary VHF 81A
	MARINE RADIO: Channel 16 then switch to Channel 9 / SATELLITE PHONE: Aircraft will contact through the Disp. Staging Airport Supervisor

AIRCRAFT INFORMATION:

Type:	Tail #:	Call Sign:	Airport ETA:	Purpose & Altitude:	PIC/Crew:	Passengers:
King Air Dynamic	N7198Y	98Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N80Y	80Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N39Q	39Q	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N7199D	99D	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N89N	89N	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N41J	41J	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N79W	79W	Houma	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N37H	37H	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
C-130 IAR	N117TG	7TG	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N9002K	02K	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N802BG	2BG	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N950HC	0HC	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
BT-67 ASI	N932H	32H	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
DC-3 ASI	N64766	766	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD Co-pilot: TBD	None
Aztec ASI	N141183	183	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Turbo Cmdr	N112EM	2EM	Houma	Spotter	PIC: TBD Co-pilot: TBD	None

Aircraft below are not directly part of the Dispersant Group / Cordination and assistance from the aircraft below is nessasary.

King Air	N275	275	Houma Jet	Recon		
Helo PHI	759P		Houma	Recon		
U.S. Customs	P-3	Omaha 99		Communications		
Canada	Transport 950		Houma	Surveillance		

DATE: July 16, 2010											
SORTIE	TYPE A/C	TAIL #	PURPOSE	FUEL LOAD (#/Hrs:Min)	PAYLOAD GAL	PAYLOAD TYPE	TOTAL FLT TIME	DPT TIME EST/ACT	ENTRY EST/ACT	EXIT ETA EST/ACT	RETURN ETA EST/ACT
Recon Sorties											
	Turbo Cmdr	690	Recon	5	0			0000 / 0621			0000 / 0845
	Aztec	183	Recon	4	0			0000 / 0623			0000 / 0909
Spray/Spotter Sorties											
	BE90	80Y	Spotter	4	0			0800			1200
1	C-130	N117TG	Spray	4	0			0830			1030
	Turbo Cmdr	N125AJ	Recon / Spotter	5	0			1205			1540
2	BT-67	N932H	Spray	4	0			1200			1425
3	DC-3	766	Spray	4	0			1230			1432
	BE90	89N	Spotter	4	0			0803			1206
4	C-130	403LC	Spray	4	0			0834			1035
	BE90	80Y	Spotter	4	0			1245			1545
5	C-130	401LC	Spray	4	0			1300			1455
	BE90	98Y	Spotter	4	0			1200			1600
6	C-130	HV	Spray	4	0			1303			1457
	BE90	39Q	Spotter	4	0			1200			1600
7	AT-802	07K	Spray	4	0			1245			1500
	No dispersant was applied today										
	Flights in yellow were canceled, dispersable oil found -SW of source, approval not received										

Combined SiteTotals	0	9500
	Stennis	0
	Houma	0

DAILY AERIAL DISPERSANT APPLICATION PLAN

DATE: 6/17/2010	TIME: 0600 local	STAGING AIRPORTS Stennis Int'l / Houma	AIRPORT ID: KHSA / KHUM

DISP. STAGING APT SPVSR (Name & Phone #): (Stennis) Tim Spoerl (b) (6) / (Houma) Mark Cochrane (b) (6)

SPILL SITE INFORMATION:

SPILL LOCATION:	Latitude: 28.55 N N	Longitude: 88.21 W W	Size: 40 mi radius
GEOGRAPHICAL REFERENCE:	112 nm SSE Stennis Airport		

SPILL SITE APPROACH INFORMATION:

ENTRY POINT:	Latitude:	See OPS Chart N	Longitude:	See OPS Chart W	Altitude	See OPS Chart ft
EXIT POINT:	Latitude:	See OPS Chart N	Longitude:	See OPS Chart W	Altitude	See OPS Chart ft
HOLDING AREA:	Latitude:	See OPS Chart N	Longitude:	See OPS Chart W	Altitude	See OPS Chart ft

SPILL SITE WX:	WIND: S 8 - 10	CLG: 1500	VIS 14 miles	SUNRISE: 0606	SUNSET: 1951
SEA STATE:	Swell: SE 5'	Wind Waves: SSE 1.5'		Combined Seas: 2.0'	

(Attach Wilken's Weather Report for weather at the spill site and the staging airport)

DOSAGE (GPA): 5 **ADD'L INST:** See required setbacks and no fly area's on operational plan

COMMS

PRIMARY VHF COM: 126.40 MHz, West of 89 deg / PRIMARY VHF COM: 132.6 MHz, East of 89 deg / SEC. VHF COM: 123.45 / EMERG COM: 121.5 MHz
PRIMARY VHF COM: Surface to Air 122. 9 MHz / SECONDARY VHF COM: Surface to Air 123.45 MHz / Marine primary VHF 81A
MARINE RADIO: Channel 16 then switch to Channel 9/ SATELLITE PHONE: Aircraft will contact through the Disp. Staging Airport Supervisor.

AIRCRAFT INFORMATION:

Type:	Tail #:	Call Sign:	Airport ETA:	Purpose & Altitude:	PIC/Crew:	Passengers:
King Air Dynamic	N7198Y	98Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N80Y	80Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N39Q	39Q	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N7199D	99D	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N89N	89N	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N41J	41J	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N79W	79W	Houma	In Maintenance	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N37H	37H	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
C-130 IAR	N117TG	7TG	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N9002K	02K	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
BT-67 ASI	N932H	32H	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
DC-3 ASI	N64766	766	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
Aztec ASI	N141183	183	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Turbo CMDRA ASI	N690XT	0XT	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Aircraft below are not directly part of the Dispersant Group / Cordination and assistance from the aircraft below is nessasary.						
King Air	N275	275	Houma Jet	Recon		
Helo PHI	759P		Houma	Recon		
NOAA	NOAA 46			Surveillance		
U.S Customs	P-3	Omaha 99		Communications		
Canada	Transport 950		Houma	Surveillance		

DATE: June 17, 2010											
SORTIE	TYPE A/C	TAIL #	PURPOSE	FUEL LOAD (#/Hrs:Min)	PAYLOAD GAL	PAYLOAD TYPE	TOTAL FLT TIME	DPT TIME EST/ACT	ENTRY EST/ACT	EXIT ETA EST/ACT	RETURN ETA EST/ACT
	BE90	37H	Recon / Spotter	6	0			0600			0920
	Turbo Cmdr	N690XT	Spotter	5	0			0800			1200
1	BT-67	N932H	Spras	4	2000			0815			1130
	BE90	80Y	Spotter	6	0			0800			1545
2	C-130	N117TG	Spras	4	3000			0830			1455
	BE90	79W	Spotter	6	0			1200			1600
6	AT - 802	02K	Spras	4	800			1245			1500
	Aztec	183	Spotter	6	0			1208			1500
7	DC-3	766	Spray	4	1000			1230			1432
					6800						

Combined SiteTotals		9500	9527	Totals by Site
	Stennis	0	0	0
	Houma	0	0	0

July 16, 2010

To: Roger R. Laferriere, Captain, USCG
Federal On-Scene Coordinator Representative (FOSCR)

Subject: Dispersant Approval Request for July 16, 2010

RE: a) Memo from Rear Admiral Watson to Captain Laferriere Dated July 11, 2010
b) E-Mail dated July 15, 2010 from Captain Laferriere (USCG), to Ron Crossland

Gentlemen,

In compliance with the referenced memo titled, *Delegation of Aerial Dispersant Application Approval Authority to FOSCR, ICP Houma*, and referenced e-mail, I am requesting pre-approval for application of 1,260 gallons of Corexit 9500A for July 16, 2010 in order to apply to the observed oil slick(s). For compliance with the requirements stated within the aforementioned memo and e-mail, I provide the information in Attachment 1.

The Houma, Aerial Dispersant Group respectfully requests approval to apply 1,260 gallons of dispersant on the designated target(s) of dispersible oil on July 16, 2010.

Please be cognizant of the lateness of the day and the need for rapid approval in order to get a spray mission completed prior to darkness.

Sincerely,

John Joeckel
Deputy Aerial Dispersant Group Supervisor

Request approval to apply aerial dispersant to the target identified within this request.

Time of request: _____.

Concurrence will be finalized at UAC Level: Approved By _____.

CC: Admiral Allen
Admiral Nash
Admiral Korn
CAPT Roberge
CAPT Lodge
CAPT PJ Maguire
Cmdr (b) (6)
Richard Beyers

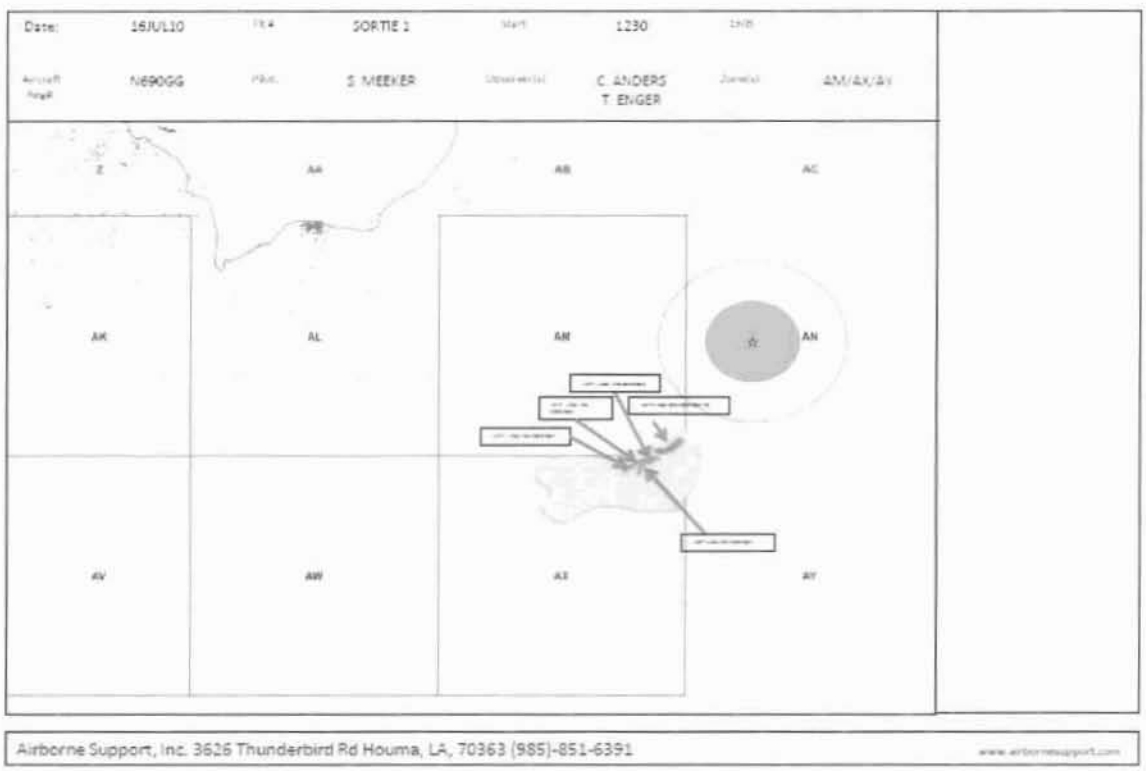
ATTACHMENT 1

Requirement-a. Operational Justification

a.1) Visible chart demonstrating target slick outside offshore skimmer recovery and in-situ burn operations zone. Dimensions of spray box and percent of oil to be dispersed shall also be provided.

Information provided in compliance with this requirement as follows;

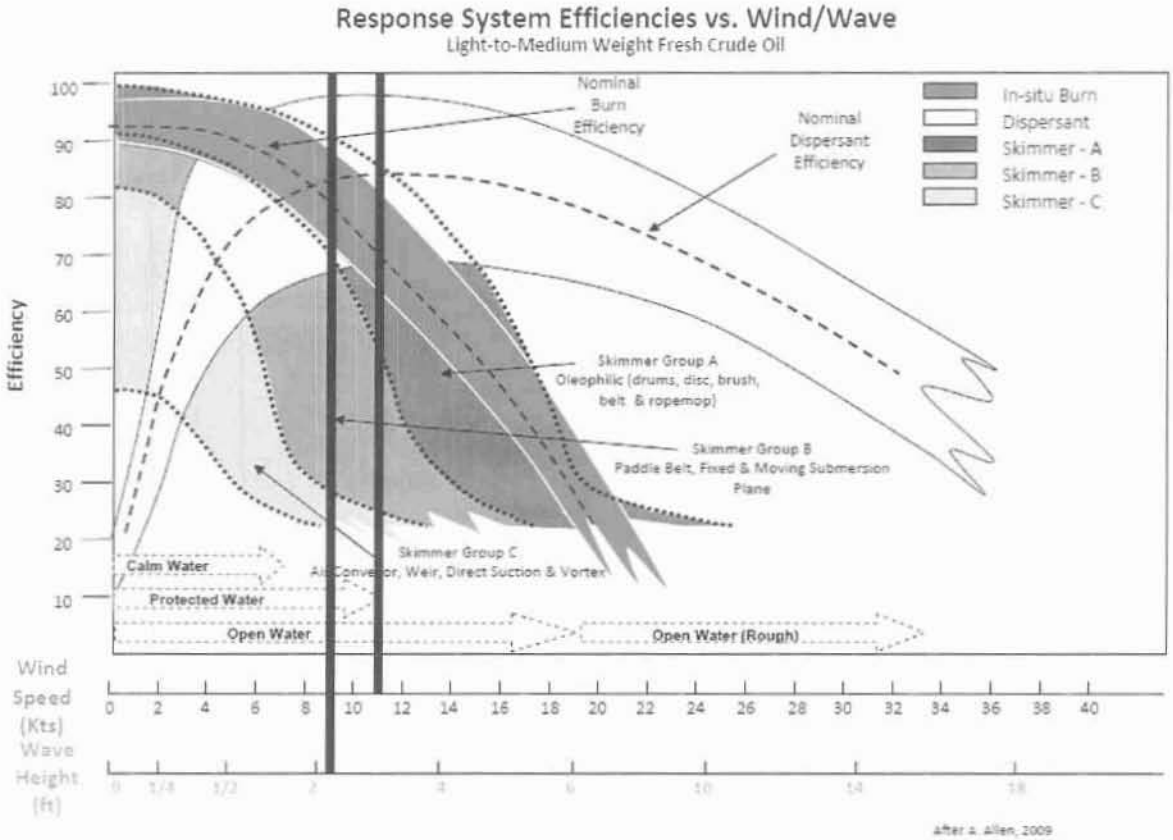
5 slicks located in the same general area and estimated total for those 5 slicks is 1,260 gallons



Requirements

a.2) Visual justification and written explanation of why offshore skimmers and in-situ burn resources are unable to intercept and recover target prior to landfall. This justification may also include those slicks that have moved past skimmers and in-situ burn operations.
a.3) If skimming operations and/or in-situ burn operations are not being performed, provide written justification for reasons (i.e., outside weather parameters, resupply and refit). Explain whether the current weather and forecasted weather are favorable to support dispersant spray missions, spotter, and SMART flights.

Information provided in compliance with these requirements as follows;



The current weather and sea state is conducive to skimming, in-situ burning and aerial dispersants, however, as the above graphic clearly illustrates the theoretical low effectiveness of skimmers operating in the open water source area and indicates the potential of **skimming capabilities alone being insufficient to remove oil from the environment, thus the need to supplement with alternate response technologies, e.g., aerial dispersants.**

Skimming Assets	Group I	Group II	Group III	TOTALS
Operational	11 28		10	49
Standby	0 1		0	1
Enroute	0 0		0	0
Maintenance	1	7	1	9

TOTALS	12 36		11	55

Available offshore skimming resources are shown in the previous table. It should be noted that **11% (9 vessels) of the fleet are not operational due to maintenance**. The operating fleet is largely composed of vessels utilizing Weir skimming units. Weir skimming units are inefficient in open water areas particularly with certain wind and sea states. The previous graphic shows that **approximately 85% of the skimming fleet is operating at 20% or less in effectiveness** with the remaining 15% of the fleet operating at approximately 80% effectiveness. This level of effectiveness will lead to certain dispersible quantities of oil escaping further away from the source due to the inability of skimmers and in-situ burning operations alone to contain the oil within a restricted geographic area.

Dispersants remain at nearly 100% effective in this weather and sea state with in-situ burning at around 75%.

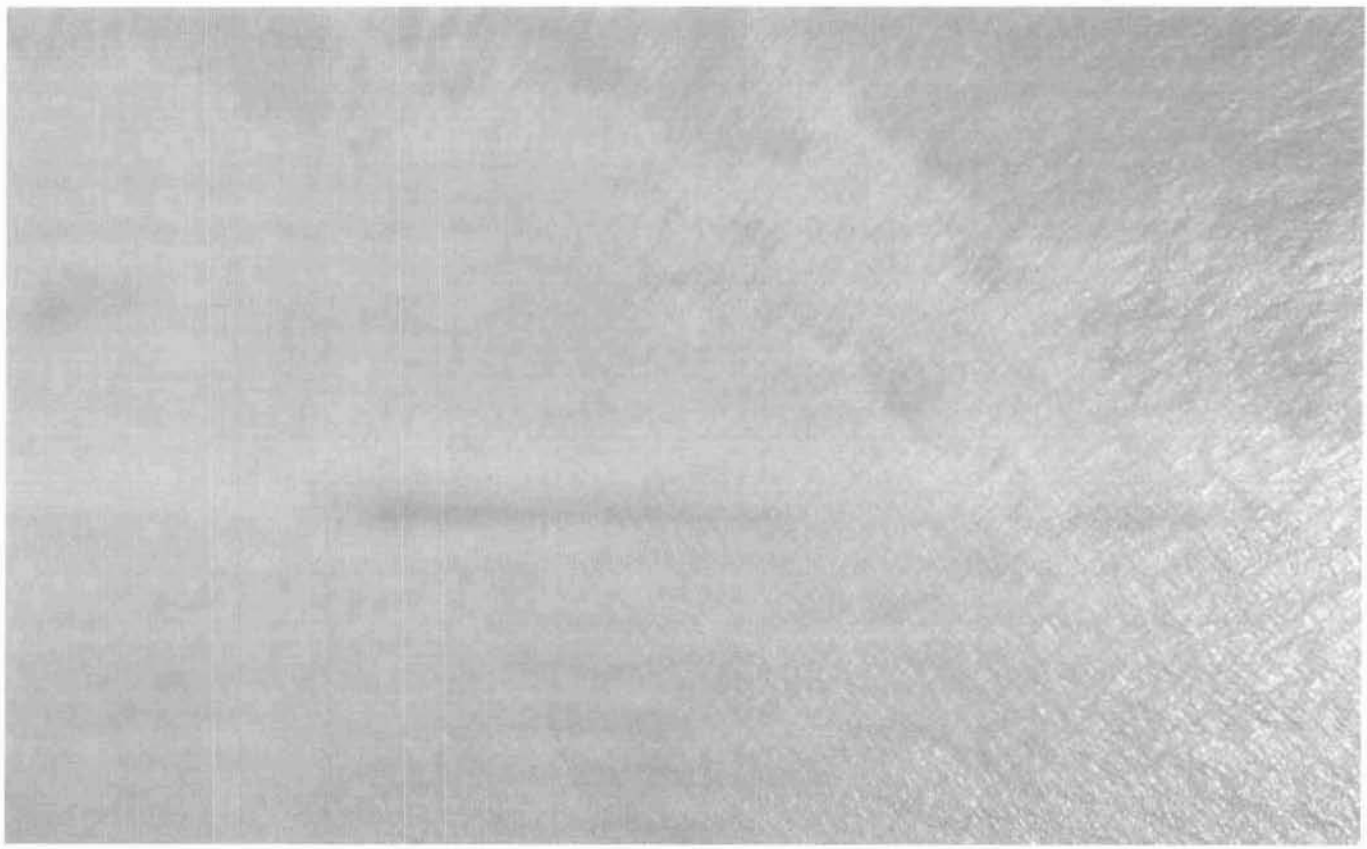
The forecast weather is suitable for aerial dispersant flight operations with 40% chance of precipitation, 1500 feet ceiling and 14nm visibility.

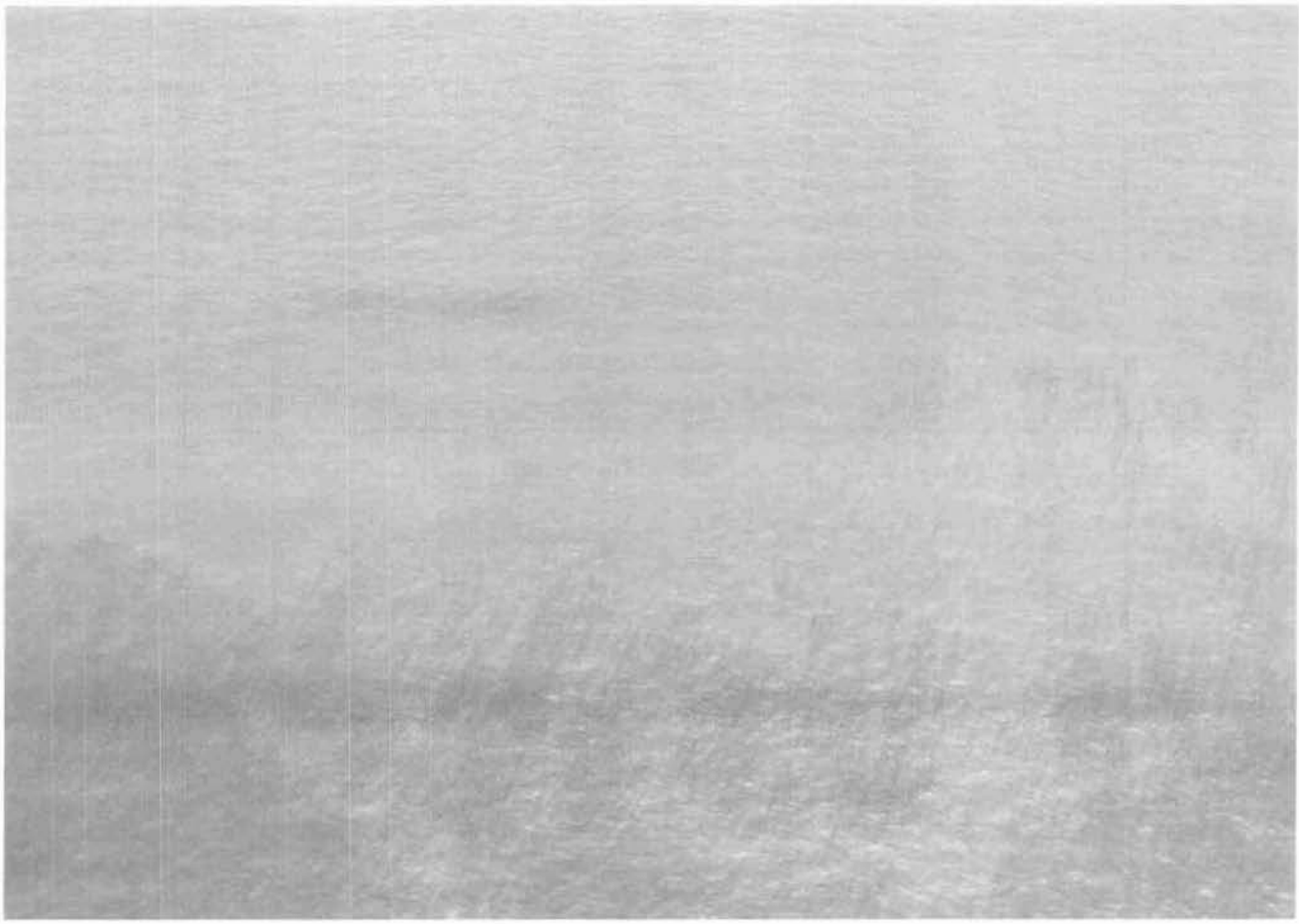
The observed oil slick is in Zone AX and is substantially outside the offshore skimmer recovery and in-situ burn operations zone, e.g., the 15 nm circle around the source.

Requirement

a.4) Visual photographic imagery showing spotted target and area to be dispersed.

Information provided in compliance with this requirement, e.g., photos of the observation.





Requirement

a.5) List of other environmental considerations such as vulnerabilities such as bird nesting, fledglings, mating, plant, rare species, that provide tradeoff justifications.
a.6) List of economic extenuating circumstances, such as prevention of fishery closures and marine transportation system impacts.

Information provided in compliance with this requirement.

Resources at Risk in the Offshore at the MC252

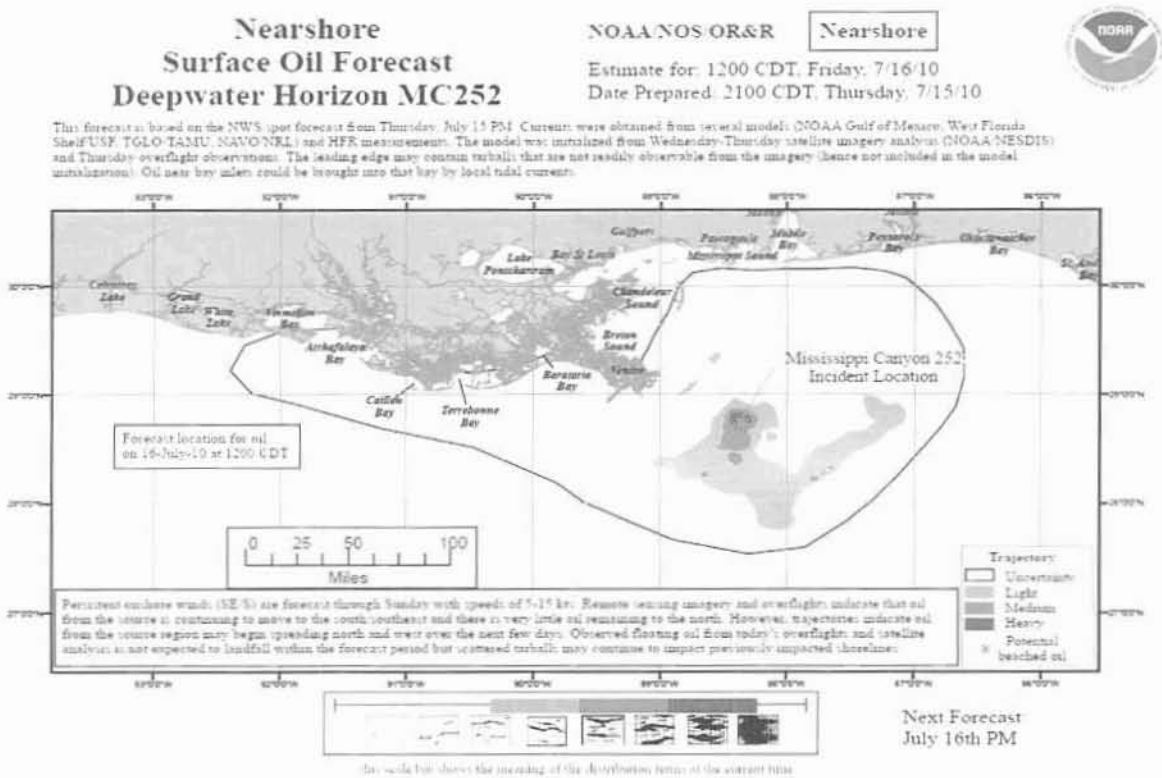
- Fish & Invertebrates – The fish in the area would primarily be pelagic open-water species such as tuna, jacks, and sailfish. There is an extensive recreational fishing for marlin and recreational and commercial fishing for yellowfin and bluefin tuna throughout the area. This area is also considered a nursery area for crevalle jack.
- Shellfish – This area is outside the normal range of spiny lobster, crabs and shrimp fisheries
- Birds – pelagic birds such as shearwaters and frigate birds may be in the area, but have likely removed themselves from the area. The birds may become oiled when foraging in the area. Direct oiling of birds reduced the buoyancy, water repellency, and insulation provided by the feathers and may result in death by drowning of hypothermia. Preening of oiled feathers may also result in ingestion of oil resulting in irritation, sickness and death.

- Mammals – whales (fin, and sperm, both federally and state endangered) and dolphins are commonly found throughout the area. Oil may irritate the skin, eyes, and nostrils of the cetaceans. Unless exposed to oil for prolonged periods, mortality is not expected.
- Reptiles – Loggerhead sea turtles (state/federally threatened) and Kemp's Ridley sea turtles (state /federally endangered) are found throughout the area in all life stages and water depths; other species are also known to be in the area (leatherback, green). The young of year of the various species are especially susceptible to oiling, often leading to mortality when exposed. In addition, weathered crude oil (in tarball form or trapped in Sargasso weed) is known to be consumed by the turtles who mistake it for a food source, typically resulting in toxic effects, intestinal blockages, and often resulting in death.

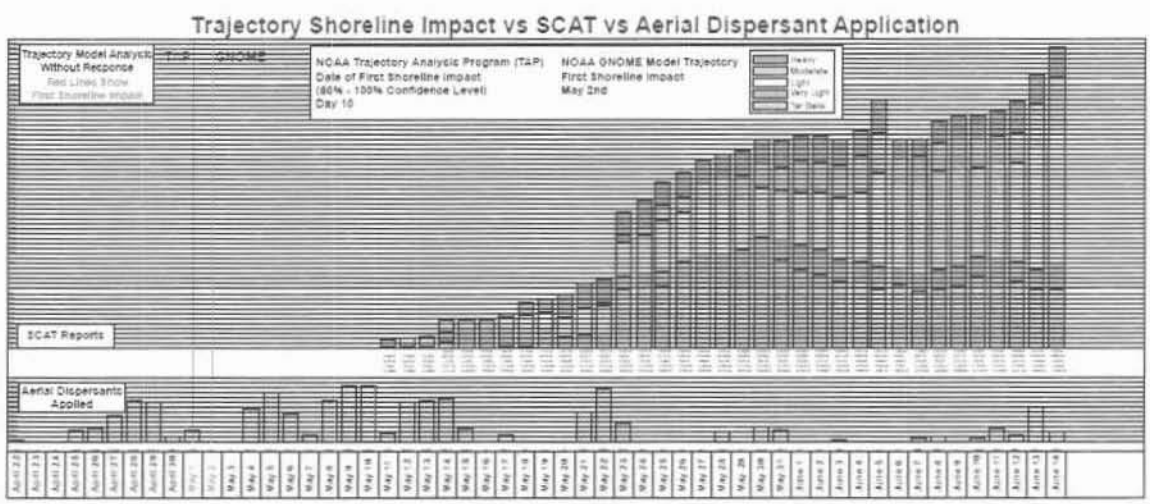
The ICS 232 – Resources at Risk should be consulted to completely define the shoreline and nearshore resources at risk (including wildlife, socioeconomic, and historic resources) and should be consulted to determine the potential extent of impacts from oil reaching these environments. Every effort should be taken to prevent this oil from reaching and impacting the extensive sensitive resources in these environments.

The longer oil remains on the surface without removal or dispersal, the negative impact of closures to the fishery will continue. Louisiana's $2.5-billion commercial fishing industry, provides much of the country's domestic shrimp and oysters. The threat to maritime commerce remains to the Louisiana Offshore Oil Platform (LOOP). LOOP handles 13 percent of the nation's foreign oil, about 1.2 million barrels a day, and connects by pipeline to 50 percent of the U.S. refining capability. The potential threat remains for marine commerce transiting the Mississippi River.

The NOAA Surface Oil Forecast shows extensive areas of heavy and medium oil that may adversely impact the shoreline, including sensitive resources (See the NOAA Near Shore Trajectory below). The NOAA Surface Oil Forecast for July 16th shows extensive areas of heavy and medium oil that are or may adversely impact the shoreline, including sensitive wetlands.



The data shown on the bar graph below indicates a correlation between shoreline impact and dispersant volume usage. Although this is raw data that requires future peer review and evaluation, it is shown here to illustrate that if oil escapes the source area and the skimming and in-situ burn operations around the source, and aerial dispersants are not utilized, in all likelihood, shoreline impact with subsequent negative impact to the aforementioned Resources at Risk, will occur.



Requirement: The weather and forecasted weather is favorable to support both reconnaissance flights and dispersant spray missions.

Information provided in compliance with this requirement: The forecast weather is excellent for flight operations with 40% chance of precipitation, 1500 feet ceiling and 14nm visibility.

a. **Requirements: Ensure entire process is documented and a report completed for all dispersant applications. Spotters aboard reconnaissance flights are able to identify oil slicks estimated to require a specific number of gallons of dispersants. State that spotters will, within 6 hours of the dispersant spray operations, identify high value targeted slicks and prepare a report specifying the location and dispersant volumes needed for each application.**

Information provided in compliance with this requirement: Spotters have been trained by the NOAA SSC Ed Levine to differentiate various conditions of oil, e.g., dispersible, emulsified, heavy metallic slicks, etc. Replacement spotter personnel, prior to being designated a spotter, make 4 training flights with experienced trained spotters. Many of the experienced spotters have been trained by the NOAA SSC. The spotters evaluate the oil and estimate percent coverage, length and width of the slick. The oil condition, size and coverage are provided to the Aerial Dispersant Group in the Houma ICP that reviews the evaluation and calculates the quantity of dispersants from the information provided by the spotter. An appropriately sized aircraft and payload are ordered for the mission. Spotter reports are typically filed and submitted immediately after the recon flight completes and is used in evaluation of spray missions.

The Aerial Dispersant Group, Houma ICP, coordinates closely with the USCG SMART 1 team on our spray missions and will advise the SMART Team Leader in advance of any spray missions being conducted so they can arrange observation flights. The USCG SMART 1 team posts mission observation reports and photos on the EPA website for review.

Aerial Dispersants Operations – Houma Status Report

July 17, 2010

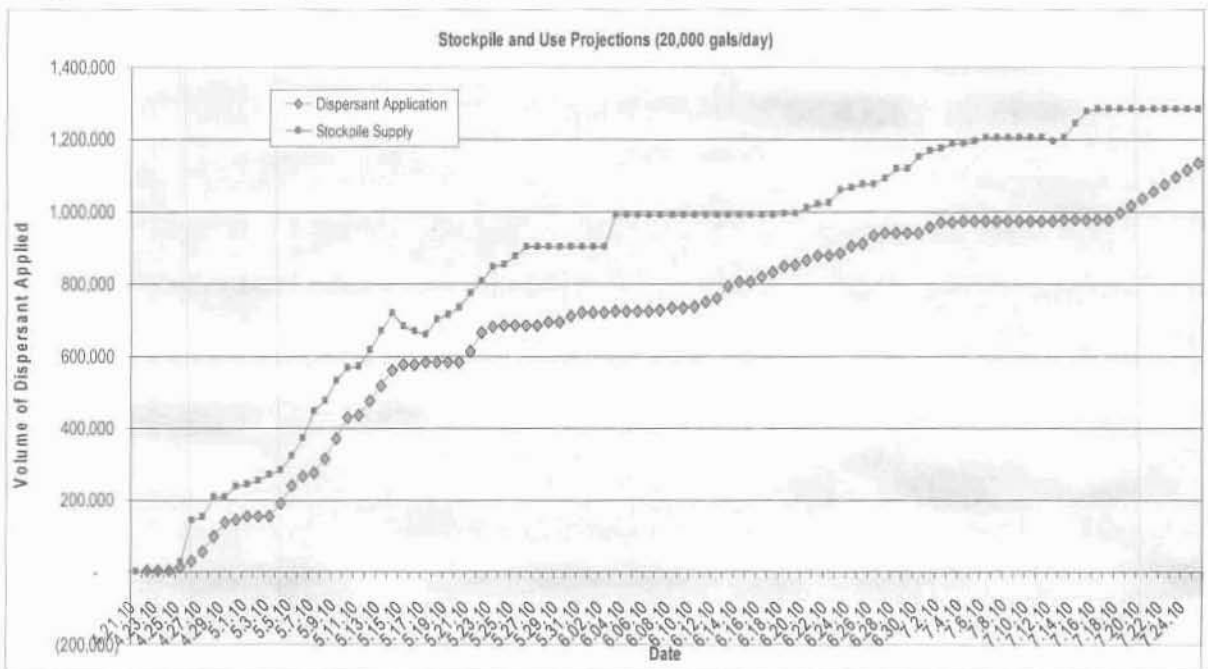
This report presents a snapshot of the aerial dispersant applications conducted on this date and summarizes the associated support activities. Aerial application of dispersants are being conducted under the direction of Unified Command and are targeting dispersible oil to minimize surface oil slicks impacting the environmentally sensitive shoreline ecosystem.

Dispersant Aerial Spray Summary:

1. FOSC approved Application Volume for July 17, 2010 (gallons):	None was requested
2. Total Amount of Dispersant Applied on July 17, 2010 (gallons):	0
3. Total Sorties on July 17, 2010:	0
4. Total Amount of Dispersant Applied to date (gallons):	976,037
5. Total Sorties to date:	405
6. Total Area Covered by Dispersant Applications to date (mi^2):	305
7. Total Dispersant Stockpiles on the ground as of 7.17.2010 – 1200 PM (gallons):	297,953
8. Dispersant Stockpile Expected Arrival as of 7.17.10 – 1200 PM (gallons)*:	5,722
9. Estimated Total Dispersant as of 7.18.2010 - 1200 PM (gallons):	303,675
10. Projected Days Operational at maximum rate of 20,000 gal/day (days):	15

* Future estimates for the delivery of EC9500A are based on production schedules provided by Procurement on 7.16.10 via email and discussions with Nalco.

Dispersant Stockpile Supply and Use Projections



Asset Summary On Scene	
Spray Aircraft:	
C-130 – Stennis (IAR)	1
DC-3 – Houma (ASI)	1
BT-67 – Houma (ASI)	1
King Air – 2 – Stennis (can be used for spotting)	2
AT-802 – Houma (Lane)	3
TOTAL:	8
Spotter Aircraft:	
King Air - Stennis (Dynamic)	5
King Air - Houma (Dynamic)	1
Aztec – Houma (ASI)	1
Turbo COMDR – Houma (ASI)	1
TOTAL:	8
TOTAL AIRCRAFT:	16

Aerial Dispersant Activity Update for July 17, 2010:

- No dispersible oil was located this day, therefore, no dispersant authorization was requested. The oil that is being reported by spotters is primarily emulsified with some smaller patches of dispersible oil that are not suitable size for aerial spraying. Dispersants group directed offshore skimming vessels to recover this oil.

M/V International Peace Research Activity Update for July 17, 2010:

- Today the M/V IP is collecting reference samples in an area between 5 – 30 miles from the coastline for comparison with samples previously collected during the response. The M/V IP will continue this activity as part of tomorrow's mission.

SMART Tier 1 Update for July 17, 2010:

- There were no SMART Tier 1 observations conducted as there were no dispersant applications conducted this day.

Aerial Dispersant Group Operations Plan for July 18th: Dated 17 July, 2010

Tim Spoerl, Brad Barker, and Scotty Meador, please acknowledge receipt. Disseminate to all pilots. Op Areas are depicted on attached map .pdf; schedule on attached .xls.

Mission Targeting start of the day: 07-18-2010

The following zones are assigned for early morning surveillance and initial spray targets. Communicate dispersible oil as soon as possible in assigned zones since each slick will require specific approvals and the approval process needs to be commenced as soon as feasible.

Spotters, please provide a photo if possible with your reports.

Stennis: Primary zones AN, AC. Secondary zones, AD, AO, AZ, R, S (RED indicators on map).
Houma ASI: Primary zones AM, AX. Secondary zones, AK, AW, AV, AY (BLUE indicators on map).
Houma AT-802: Primary zones AB, Z. Secondary zones Y, AL, AA, Q [Limited to within 40 NM from the shoreline] (GREEN indicators on map).

Maintain 3 nm boundary separation if unable to coordinate air-to-air with other spotter or OMAHA 99.

Notes: Changes to previous orders are underlined.

1. **Required Equipment:** Functioning spray tracking units (GPS, Sat Lock) if not equipped, do not fly.
2. **As of 28 May 2010 FOSC approval is required each day for application of Corexit EC9500A dispersant in pre-approved areas.**
3. **Restrictions to aerial dispersant spraying:**
   a. No aerial dispersant spraying within the greatest of 3 nm offshore or depths less than 10 meters.
   b. No dispersant spraying within 5 nm of the spill source at surface: **28 45 12N -88 18 53 W as defined in the FAA NOTAM.**

FOR DOCUMENTATION PURPOSES (FUTURE REVIEW) WE WILL LIST THE FAA NOTAM **28 45 12N -88 18 53 W** AS THE OFFICIAL LOCATION.

   c. No aerial dispersant spraying 2nm of vessels, platforms, and 3nm from marine mammals.
   d. SMART and Scientific Support Missions may spray within 1nm of SMART/ SSM vessel; positive ID required.
   e. Target black and brown oil. This is the freshest/most dispersible oil. Dosage is 5 gallons per acre. ***Quality not Quantity***. Do no target Red/Reddish emulsified oil.
   f. Spotter aircraft remain on site to visually assess effects on dispersed area and document with photographs. Complete spotters debrief form and turn in to base operations on a daily bases.
   g. Report takeoff and landing times to assigned coordinators as they occur.

5. **Aircraft Communications:**
   a. **Primary air-to-air communication frequency in TFR West of 89° W is 126.4, East of 89° W is 135.65 AND 132.6 in the source area.**
   Secondary is 123.45 all zones.
   b. Contact P3 aircraft "Omaha 99" for flight advisories.
   c. Discreet IFF codes are permanently assigned to each aircraft must be used to enter TFR. This removes need to file DVFR flight plans.
   It is absolutely essential that each flight each day calls Tyndall to advise them prior to takeoff (b) (6)
   d. Advise SMART 1 prior to spray aircraft departure.
   e. Primary surface to air frequency is 122.9. Secondary is 123.45.

Ancillary operations:

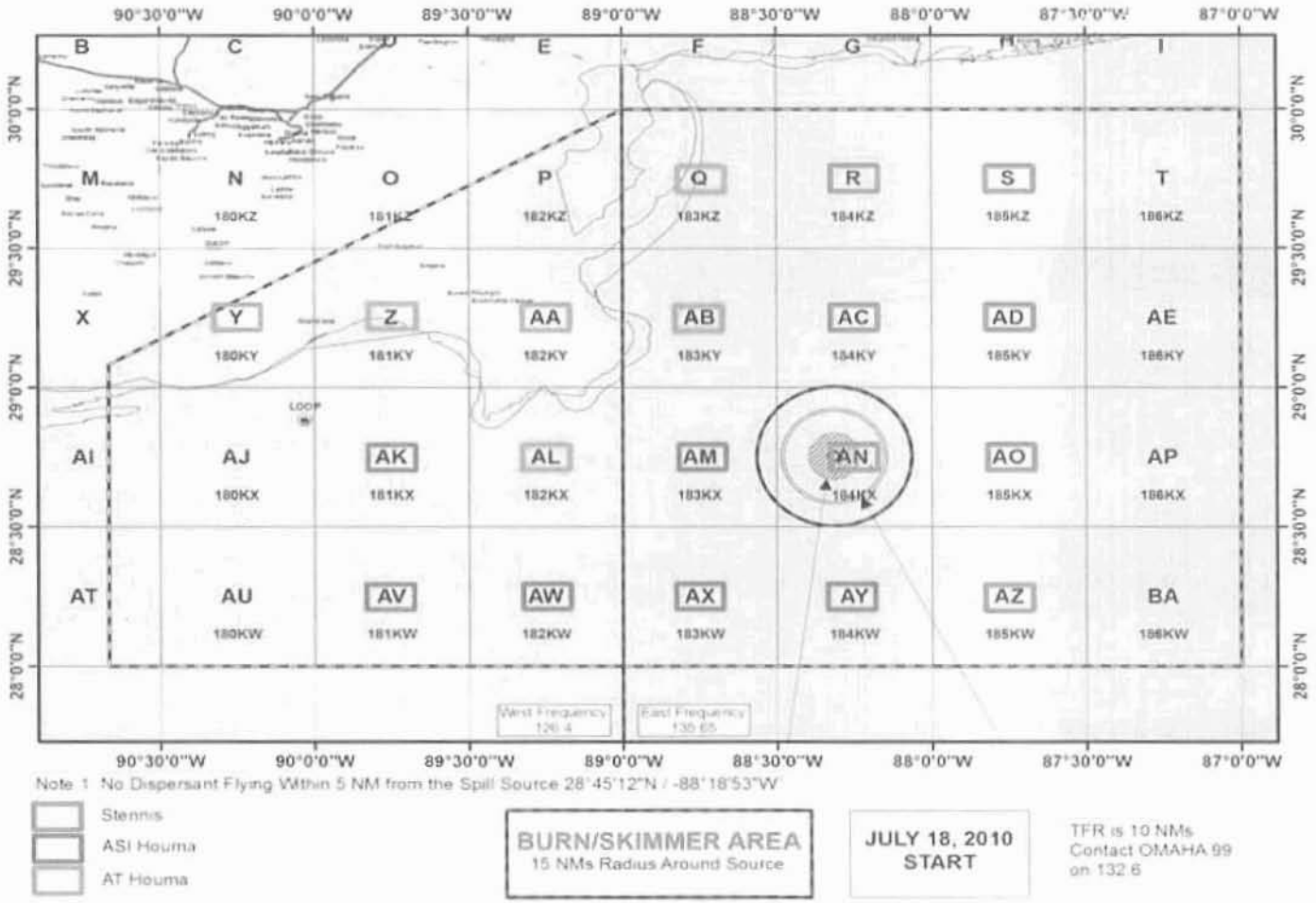
1. **SMART Team:** Will be working on defined and approved sites. Details to be developed with spotter findings.
2. **In Situ Burning:** The burn activities are within the circle is as depicted on the operational chart, however the burn location is subject to continuous change and we will not be given a specific burn location.
3. **Skimmers:** Normal operations are to be conducted with 2nm separation for spray application.
4. **Stennis Tasking:** Scientific Support Mission: The IP will not require a spotter scientific support mission for at least the next 3 days. The current location for the Determination is 28 51.14N / 88 26.17W. Estimated to be at the same location tomorrow at 0700. They will have buoys out and provide John Daigle with an update on that location, which should be very near current location. Would like to have an aircraft to find the closest oil to the buoy and relay that to the vessel.

Dispersant Group conference call tomorrow @ 1530. Dial in (b) (6) participant code (b) (6) (Stennis use moderator number).

The following NOTAM addresses the need to have remote tracking.

FDC 0/2185 ZHU ..SPECIAL NOTICE.. GULF OF MEXICO. DEEPWATER HORIZON/MISSISSIPPI CANYON INCIDENT CLEANUP AND RECONSTITUTION OPERATIONS. SATELLITE TRACKING EQUIPMENT SURVEY. EFFECTIVE IMMEDIATELY UNTIL 1007202300. THE INCIDENT COMMANDER HAS DIRECTED ALL OPERATORS WITH AIRCRAFT PARTICIPATING IN DEEPWATER HORIZON INCIDENT OPERATIONS TO CONTACT TYNDALL AIR OPERATIONS CENTER (AOC) AT THE NUMBER BELOW. OPERATORS SHALL ADVISE THE AOC IF THE AIRCRAFT BEING USED ARE CAPABLE OF REMOTE SATELLITE TRACKING THAT PROVIDES REALTIME OR NEAR REALTIME POSITION INFORMATION. OPERATORS WITH SUCH CAPABILITY SHOULD PROVIDE THE AOC WITH INFORMATION ABOUT THE SYSTEM THEY ARE USING, INCLUDING SERVICE PROVIDER AND EQUIPMENT TYPE. THIS REQUIREMENT APPLIES TO CIVILIAN, FEDERAL/STATE/LOCAL GOVERNMENT, AND DOD OPERATORS. THIS INFORMATION MUST BE PROVIDED TO THE AOC AT 850-282-0933 NO LATER THAN 1800 CST ON TUESDAY, JULY 20, 2010.

Aerial Dispersants Operational Areas July 18, 2010



Dispersant Spray Assets

Aircraft Information						
Type	**Owner/ Operator**	**Tail #**	**Payload (gal)**	**Airport**	**Purpose & Altitude**	**Comments**
Spotters						
King Air	MSRC (Dynamic)	N39Q		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N89N		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N41J		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N37H		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N80Y		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N79W		Houma	Spotter – 1,000' to 1,500'	
Aztec (PA 23)	ASI	N141183		Houma	Backup Spotter	
Turbo COMDR	ASI	N690GG		Houma	Spotter	
Sprayers						
King Air	MSRC (Dynamic)	N7198Y	240	Stennis	Spray: 75'	Available for both Spray and Spotter duties
King Air	MSRC (Dynamic)	N7199D	240	Stennis	Spray: 75'	Available for both Spray and Spotter duties
C-130	IAR	N117TG	3,000	Stennis	Spray: 75'	
AT-802	Lane (NRC)	N9002K	800	Houma	Spray: 75'	2-Seater / Training
AT-802	Lane (NRC)	N802BG	800	Houma	Spray: 75'	
AT-802	Lane (NCR)	N950HC	800	Houma	Spray: 75'	
BT-67	ASI	N932H	1,800	Houma	Spray: 75'	
DC-3	ASI	N64766	1,000	Houma	Spray: 75'	
Operational Spray Volume (1 load per plane) (gal)			8,680			
Total Operational Spray Maximum (gal) (4 sorties/ plane / day)			34,720			

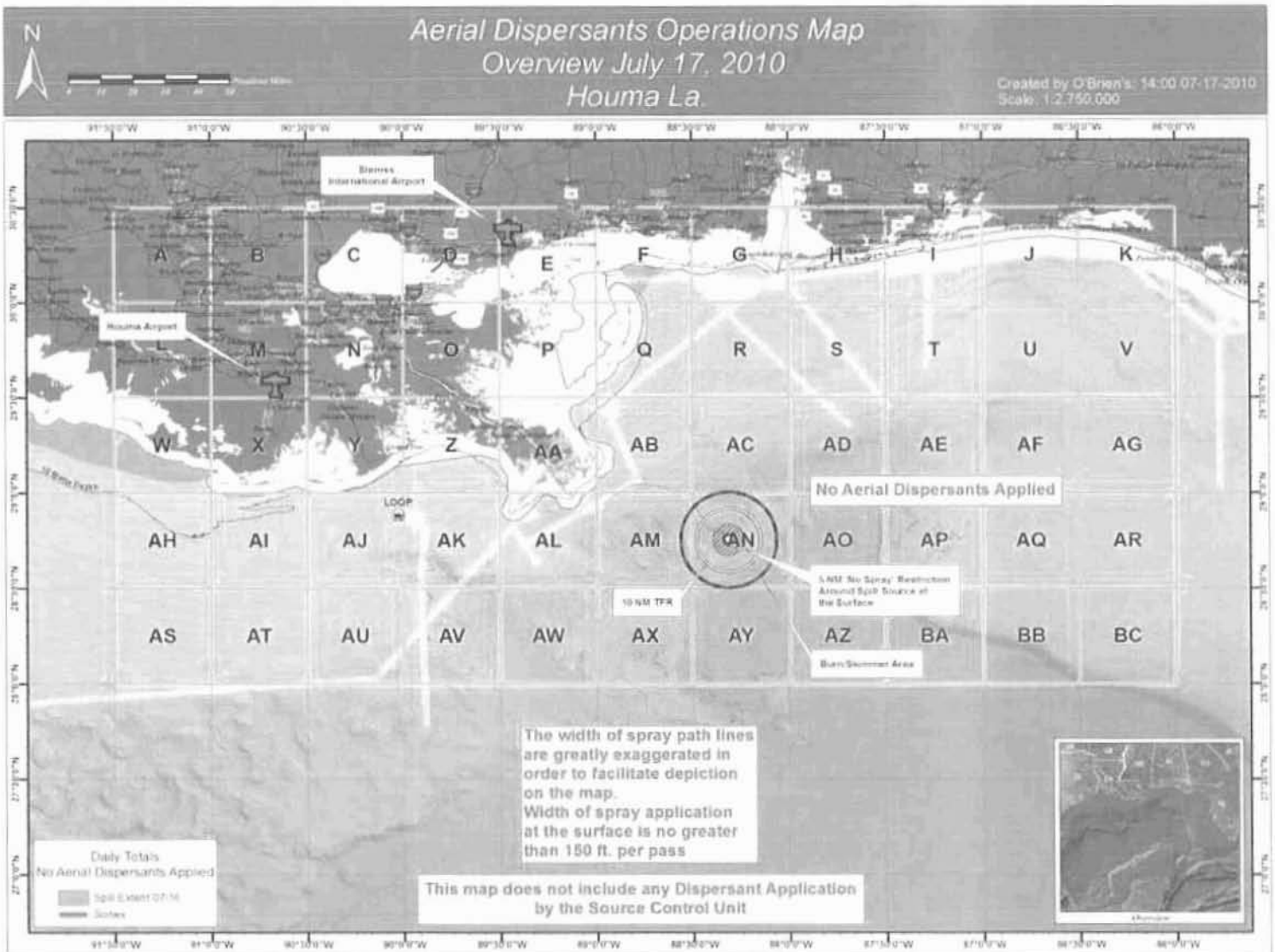
Dispersant Application Totals

Dispersant Statistics Applied by Day						
Date	Dispersant Type (gallons)		Daily Totals	# Sorties	Acres Covered (5 gal/acre application rate)	Square Miles covered
	9500	9527				
21 April 2010	Initial Response Date					
22 April 2010	0	1,800	1,800	1	360	0.6
23 April 2010	0	0	0	0	0	0
24 April 2010	0	0	0	0	0	0
25 April 2010	0	11,604	11,604	9	2,321	3.7
26 April 2010	0	14,486	14,486	10	2,897	4.5
27 April 2010	11,191	15,887	27,078	11	5,416	8.5
28 April 2010	27,269	14,874	42,143	15	8,429	13.2
29 April 2010	36,913	4,000	40,913	13	8,183	12.8
30 April 2010	4,900	0	4,900	1	980	1.5
1 May 2010	3,550	8,103	11,653	4	2,331	3.6
2 May 2010	0	0	0	0	0	0
3 May 2010	0	0	0	0	0	0
4 May 2010	10,561	23,712	34,273	12	6,855	10.7
5 May 2010	30,905	18,670	49,575	18	9915	15.5
6 May 2010	13,032	15,738	28,770	11	5,754	9.0
7 May 2010	5,582	1,688	7,270	4	1,454	2.3
8 May 2010	17,813	23,877	41,690	17	8,338	13.0
9 May 2010	29,034	26,898	55,932	21	11,186	17.5
10 May 2010	29,240	26,980	56,220	22	11,244	17.6
11 May 2010	7,940	0	7,940	2	1,588	2.5
12 May 2010	39,710	0	39,710	12	7,942	12.4
13 May 2010	41,620	0	41,620	15	8,324	13.0
14 May 2010	44,031	0	44,031	14	8,806	13.8
15 May 2010	14,208	0	14,208	6	2,842	4.4
16 May 2010	0	0	0	0	0	0
17 May 2010	6,591	0	6,591	4	1,318	2.1
18 May 2010	209	0	209	1	42	0.1

Dispersant Statistics Applied by Day						
Date	Dispersant Type (gallons)		Daily Totals	# Sorties	Acres Covered (5 gal/acre application rate)	Square Miles covered
	9500	9527				
19 May 2010	0	0	0	0	0	0
20 May 2010	0	0	0	0	0	0
21 May 2010	25,233	4,659	29,892	14	5,978	9.3
22 May 2010	51,353	1,593	52,946	22	10,589	16.6
23 May 2010	18,104	0	18,104	11	3,621	5.7
24 May 2010	630	0	630	1	126	0.2
25 May 2010	200	0	200	1	40	0.1
26 May 2010	229	0	229	1	46	0.1
27 May 2010	200	0	200	1	40	0.1
28 May 2010	10,259	0	10,259	4	2,052	3.2
29 May 2010	0	0	0	0	0	0
30 May 2010	15,131	0	15,131	6	3,026	4.7
31 May 2010	11,676	0	11,676	7	2,335	3.7
1 June 2010	0	0	0	0	0	0
2 June 2010	0	0	0	0	0	0
3 June 2010	1,900	0	1,900	1	380	0.6
4 June 2010	0	0	0	0	0	0
5 June 2010	125	0	125	1	24	0
6 June 2010	0	0	0	0	0	0
7 June 2010	3,998	0	3,998	2	800	1.3
8 June 2010	5,505	0	5,505	3	1,101	1.7
9 June 2010	0	0	0	0	0	0
10 June 2010	4,506	0	4,506	2	901	1.4
11 June 2010	14,305	0	14,305	6	2,861	4.5
12 June 2010	6,996	0	6,996	2	1,399	2.2
13 June 2010	35,212	0	35,212	13	7,042	11.0
14 June 2010	10,703	0	10,703	7	2,141	3.3
15 June 2010	2,608	0	2,608	3	522	0.8
16 June 2010	13,380	0	13,380	7	2,676	4.2

Dispersant Statistics Applied by Day						
Date	Dispersant Type (gallons)		Daily Totals	# Sorties	Acres Covered (5 gal/acre application rate)	Square Miles covered
	9500	9527				
17 June 2010	12,123	0	12,123	6	2,425	3.8
18 June 2010	15,564	0	15,564	8	3,113	4.9
19 June 2010	2,604	0	2,604	2	521	0.8
20 June 2010	15,403	0	15,403	6	3,081	4.8
21 June 2010	10,355	0	10,355	4	2,071	3.2
22 June 2010	2,008	0	2,008	2	402	0.6
23 June 2010	5,099	0	5,099	3	1,020	1.6
24 June 2010	21,088	0	21,088	10	4,218	6.6
25 June 2010	4,633	0	4,633	2	927	1.5
26 June 2010	23,022	0	23,022	12	4,605	7.2
27 June 2010	6,623	0	6,623	3	1325	2.07
28 June 2010	0	0	0	0	0	0
29 June 2010	0	0	0	0	0	0
30 June 2010	0	0	0	0	0	0
01 July 2010	17,852	0	17,852	5	3570	6
02 July 2010	12,737	0	12,737	7	2547	3
03 July 2010	0	0	0	0	0	0
04 July 2010	3,000	0	3,000	1	600	1
05 July 2010	803	0	803	1	161	.25
06 July 2010	0	0	0	0	0	0
07 July 2010	1,000	0	1,000	1	200	0.3
08 July 2010	0	0	0	0	0	0
09 July 2010	0	0	0	0	0	0
10 July 2010	0	0	0	0	0	0
11 July 2010	0	0	0	0	0	0
12 July 2010	0	0	0	0	0	0
13 July 2010	999	0	999	1	200	0.3
14 July 2010	0	0	0	0	0	0

Dispersant Statistics Applied by Day						
Date	Dispersant Type (gallons)		Daily Totals	# Sorties	Acres Covered (5 gal/acre application rate)	Square Miles covered
	9500	9527				
15 July 2010	0	0	0	0	0	0
16 July 2010	0	0	0	0	0	0
17 July 2010	0	0	0	0	0	0
TOTALS	**761,468**	**214,569**	**976,037**	**405**	**195,207**	**305.0**


Aerial Dispersants Operations Map
Overview July 17, 2010
Houma La.
Created by O'Brien's: 14:00 07-17-2010
Scale: 1:2,750,000
N
Houma Airport
A
B
C
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AJ
AK
AL
AM
AN
AO
AP
AQ
AR
AS
AT
AU
AV
AW
AX
AY
AZ
BA
BB
BC
LOOP
No Aerial Dispersants Applied
10 NM TFR
1 NM 'No Spray' Restriction Around Spill Source at the Surface
Burn/Skimmer Area
The width of spray path lines are greatly exaggerated in order to facilitate depiction on the map.
Width of spray application at the surface is no greater than 150 ft. per pass
This map does not include any Dispersant Application by the Source Control Unit
Daily Totals
No Aerial Dispersants Applied

DAILY AERIAL DISPERSANT APPLICATION PLAN

DATE: 6/17/2010	TIME: 0600 local	STAGING AIRPORTS Stennis Int'l / Houma	AIRPORT ID: KHSA / KHUM

DISP. STAGING APT SPVSR (Name & Phone #): (Stennis) Tim Spoerl (b) (6) / (Houma) Mark Cochrane (b) (6)

SPILL SITE INFORMATION:

SPILL LOCATION:	Latitude:	28.55 N	N	Longitude:	88.21 W	W	Size: 40 mi radius
GEOGRAPHICAL REFERENCE:	112 nm SSE Stennis Airport						

SPILL SITE APPROACH INFORMATION:

ENTRY POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude: See OPS Chart	ft
EXIT POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude: See OPS Chart	ft
HOLDING AREA:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude: See OPS Chart	ft

SPILL SITE WX:	WIND: S 8 - 10	CLG: 1500	VIS: 14 miles	SUNRISE: 0606	SUNSET: 1951		
SEA STATE:	Swell: SE 5'	Wind Waves: SSE 1.5'		Combined Seas: 2.0'			

(Attach Wilken's Weather Report for weather at the spill site and the staging airport)

DOSAGE (GPA): 5 **ADD'L INST:** See required setbacks and no fly area's on operational plan

COMMS	
	PRIMARY VHF COM: 126.40 MHz, West of MARY VHF COM: 132.6 MHz, East of 89 deg / EC VHF COM: 123.45 / EMERG COM: 121.5 MHz
	PRIMARY VHF COM: Surface to Air 122. 9 MHz / SECONDARY VHF COM: Surface to Air 123.45 MHz / Marine primary VHF 81A
	MARINE RADIO: Channel 16 then switch to Channel 9/ SATELLITE PHONE: Aircraft will contact through the Disp. Staging Airport Supervisor.

AIRCRAFT INFORMATION:

Type:	Tail #:	Call Sign:	Airport ETA:	Purpose & Altitude:	PIC/Crew:	Passengers:
King Air Dynamic	N7198Y	98Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N80Y	80Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N39Q	39Q	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N7199D	99D	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N89N	89N	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N41J	41J	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N79W	79W	Houma	In Maintenance	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N37H	37H	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
C-130 IAR	N117TG	7TG	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N9002K	02K	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
BT-67 ASI	N932H	32H	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
DC-3 ASI	N64766	766	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
Aztec ASI	N141183	183	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Turbo CMDRA ASI	N690XT	0XT	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Aircraft below are not directly part of the Dispersant Group / Cordination and assistance from the aircraft below is nessasary.						
King Air	N275	275	Houma Jet	Recon		
Helo PHI	759P		Houma	Recon		
NOAA	NOAA 46			Surveillance		
U.S Customs	P-3	Omaha 99		Communications		
Canada	Transport 950		Houma	Surveillance		

DATE: July 17, 2010											
SORTIE	TYPE A/C	TAIL #	PURPOSE	FUEL LOAD (#/Hrs:Min)	PAYLOAD GAL	PAYLOAD TYPE	TOTAL FLT TIME	DPT TIME EST/ACT	ENTRY EST/ACT	EXIT ETA EST/ACT	RETURN ETA EST/ACT
Recon Sorties											
	Aztec	183	Recon	4	0			0000 / 0610			0000 / 0924
	Turbo Cmdr	5DP	Recon	5	0			0000 / 0614			0000 / 0938
	BE90	39Q	Recon	5	0			0000 / 0625			0000 / 1022
	BE90	89N	Recon	5	0			0000 / 0631			0000 / 1030
	BE90	89F	Recon	5	0			0000 / 0743			0000 / 0951
	BE90	37H	Recon	5	0			0000 / 0840			0000 / 1215
	BE90	80Y	Recon	5	0			0000 / 0901			0000 / 1304
	BE90	39Q	Recon	5	0			0000 /1124			0000 / 1434
	BE90	99D	Recon	5	0			0000 /1130			0000 / 1500
	Turbo Cmdr	5DP	Recon	5	0			0000 / 1153			0000 / 1348
	BE90	98Y	Recon	5	0			0000 /1308			0000 / 1504
Spray/Spotter Sorties											
	BE90	80Y	Spotter	4	0			0800			1200
1	C-130	N117TG	Spray	4	0			0830			1030
	Turbo Cmdr	N112EM	Recon / Spotter	5	0			1205			1540
2	BT-67	N932H	Spray	4	0			1200			1425
3	DC-3	766	Spray	4	0			1230			1432
	BE90	89N	Spotter	4	0			0803			1206
4	C-130	403LC	Spray	4	0			0834			1035
	BE90	80Y	Spotter	4	0			1245			1545
5	C-130	401LC	Spray	4	0			1300			1455
	BE90	98Y	Spotter	4	0			1200			1600
6	C-130	JFY	Spray	4	0			1303			1457
	BE90	39Q	Spotter	4	0			1200			1600
7	AT - 802	02K	Spray	4	0			1245			1500
	No dispersant was applied today										
	Flights in yellow were canceled, no dispersible oil found										

Combined SiteTotals	0	9500
	Stennis	0
	Houma	0

DAILY AERIAL DISPERSANT APPLICATION PLAN

DATE: 6/18/2010	TIME: 0600 local	STAGING AIRPORTS Stennis Int'l / Houma	AIRPORT ID: KHSA / KHUM

DISP. STAGING APT SPVSR (Name & Phone #): (Stennis) Tim Spoerl (b) (6) / (Houma) Mark Cochrane (b) (6)

SPILL SITE INFORMATION:

SPILL LOCATION:	Latitude:	28.55 N	N	Longitude:	88.21 W	W	Size: 40 mi radius
GEOGRAPHICAL REFERENCE:	112 nm SSE Stennis Airport						

SPILL SITE APPROACH INFORMATION:

ENTRY POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude: See OPS Chart	ft
EXIT POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude: See OPS Chart	ft
HOLDING AREA:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude: See OPS Chart	ft

SPILL SITE WX:	WIND: S 8 - 10	CLG: 2500	VIS: 20miles	SUNRISE: 0606	SUNSET: 1951
SEA STATE:	Swell: SE 2.5'	Wind Waves: SSE 1.5'		Combined Seas: 4.0'	

(Attach Wilken's Weather Report for weather at the spill site and the staging airport)

DOSAGE (GPA): 5 **ADD'L INST:** See required setbacks and no fly area's on operational plan

COMMS

PRIMARY VHF COM: 126.40 MHz, West of	IMARY VHF COM: 132.6 MHz, East of 89 deg / EC VHF COM: 123.45 / EMERG COM: 121.5 MHz
PRIMARY VHF COM: Surface to Air 122. 9 MHz / SECONDARY VHF COM: Surface to Air 123.45 MHz / Marine primary VHF 81A	
MARINE RADIO: Channel 16 then switch to Channel 9/ SATELLITE PHONE: Aircraft will contact through the Disp. Staging Airport Supervisor	

AIRCRAFT INFORMATION:

Type:	Tail #:	Call Sign:	Airport ETA:	Purpose & Altitude:	PIC/Crew:	Passengers:
King Air Dynamic	N7198Y	98Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N80Y	80Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N39Q	39Q	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N7199D	99D	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N89N	89N	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N41J	41J	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N79W	79W	Houma	In Maintenance	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N37H	37H	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
C-130 IAR	N117TG	7TG	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N9002K	02K	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
BT-67 ASI	N932H	32H	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
DC-3 ASI	N64766	766	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
Aztec ASI	N141183	183	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Turbo CMDRA ASI	N690XT	0XT	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Aircraft below are not directly part of the Dispersant Group / Cordination and assistance from the aircraft below is nessasary.						
King Air	N275	275	Houma Jet	Recon		
Helo PHI	759P		Houma	Recon		
NOAA	NOAA 46			Surveillance		
U.S Customs	P-3	Omaha 99		Communications		
Canada	Transport 950		Houma	Surveillance		

DATE: June 18, 2010											
SORTIE	TYPE A/C	TAIL #	PURPOSE	FUEL LOAD (#/Hrs:Min)	PAYLOAD GAL	PAYLOAD TYPE	TOTAL FLT TIME	DPT TIME EST/ACT	ENTRY EST/ACT	EXIT ETA EST/ACT	RETURN ETA EST/ACT
	BE90	37H	Recon / Spotter	6	0			0600			0920
	Turbo Cmdr	N690XT	Spotter	5	0			0800			1200
1	BT-67	N932H	Spray	4	2000			0815			1130
	BE90	80Y	Spotter	6	0			0800			1545
2	C-130	N117TG	Spray	4	3000			0830			1455
	BE90	79W	Spotter	6	0			1200			1600
6	AT-802	02K	Spray	4	800			1245			1500
	Aztec	183	Spotter	6	0			1208			1500
7	DC-3	766	Spray	4	1000			1230			1432
					6800						

Combined SiteTotals		9500	9527	Totals by Site
	Stennis	0	0	0
	Houma	0	0	0

Aerial Dispersants Operations – Houma Status Report

July 18, 2010

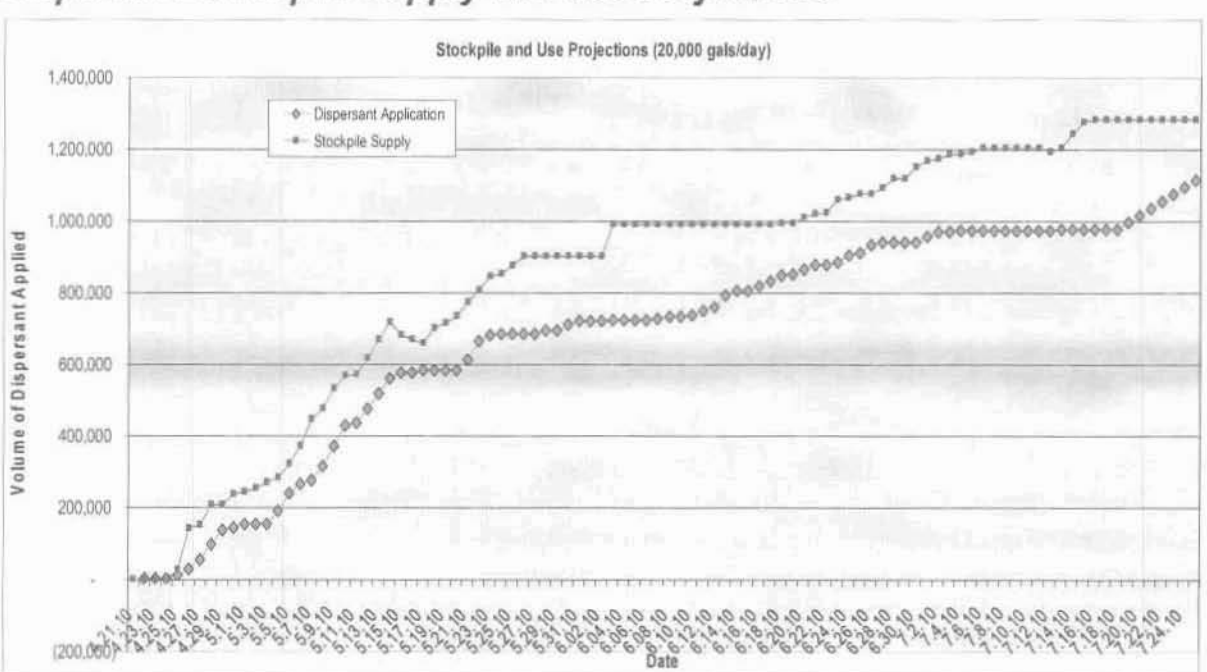
This report presents a snapshot of the aerial dispersant applications conducted on this date and summarizes the associated support activities. Aerial application of dispersants are being conducted under the direction of Unified Command and are targeting dispersible oil to minimize surface oil slicks impacting the environmentally sensitive shoreline ecosystem.

Dispersant Aerial Spray Summary:

1. FOSC approved Application Volume for July 18, 2010 (gallons):	No request made
2. Total Amount of Dispersant Applied on July 18, 2010 (gallons):	0
3. Total Sorties on July 18, 2010:	0
4. Total Amount of Dispersant Applied to date (gallons):	976,037
5. Total Sorties to date:	405
6. Total Area Covered by Dispersant Applications to date (mi^2):	305
7. Total Dispersant Stockpiles on the ground as of 7.18.2010 – 1200 PM (gallons):	297,953
8. Dispersant Stockpile Expected Arrival as of 7.18.10 – 1200 PM (gallons)*:	0
9. Estimated Total Dispersant as of 7.19.2010 - 1200 PM (gallons):	303,675
10. Projected Days Operational at maximum rate of 20,000 gal/day (days):	15

* Future estimates for the delivery of EC9500A are based on production schedules provided by Procurement on 7.16.10 via email and discussions with Nalco.

Dispersant Stockpile Supply and Use Projections



M/V International Peace Research Activity Update for July 18, 2010:

- Today the M/V IP is collecting reference samples and coming into port tonight for a crew change and will concurrently unload the spare Boat Spray system and will return offshore to be in place for the morning. The M/V IP will be working at coordinates 28 27.35N by 89 15.17W (Zone AY) to conduct additional testing involving two (2) 25 gallon spray runs of dispersants followed by Flourometry and LISST monitoring and collection of water samples for chemical analysis and toxicity testing, weather permitting.

Aerial Dispersant Group Operations Plan for July 19th: Dated 18 July, 2010

Tim Spoerl, Brad Barker, and Scotty Meador, please acknowledge receipt. Disseminate to all pilots. Op Areas are depicted on attached map .pdf; schedule on attached .xls.

Mission Targeting start of the day: 07-19-2010
One recon flight each from Stennis and Houma-Guidance will be provided regarding recon activities in the afternoon.

The following zones are assigned for early morning surveillance and initial spray targets. Communicate dispersible oil as soon as possible in assigned zones since each slick will require specific approvals and the approval process needs to be commenced as soon as feasible.

Spotters, please provide a photo if possible with your reports.

Stennis: Primary zones AB, AC. Secondary zones, AB, AD AO, AZ, Q, R, S (RED indicators on map).
Houma ASI: Primary zones AM, AX, AY. Secondary zones, AK, AL, AW, AV, Z (BLUE indicators on map).

Changed Zones highlighted in Yellow (map has not been changed).

Maintain 3 nm boundary separation if unable to coordinate air-to-air with other spotter or OMAHA 99.

Notes: Changes to previous orders are underlined.

1. **Required Equipment:** Functioning spray tracking units (GPS, Sat Lock) if not equipped, do not fly.
2. **As of 28 May 2010 FOSC approval is required each day for application of Corexit EC9500A dispersant in pre-approved areas.**
3. **Restrictions to aerial dispersant spraying:**
    a. No aerial dispersant spraying within the greatest of 3 nm offshore or depths less than 10 meters.
    b. No dispersant spraying within 5 nm of the spill source at surface: **28 45 12N -88 18 53 W as defined in the FAA NOTAM.**

Asset Summary On Scene	
Spray Aircraft:	
~~C-130 – Stennis (IAR)~~	demobilizing
DC-3 – Houma (ASI)	1
BT-67 – Houma (ASI)	1
King Air – 2 – Stennis (can be used for spotting)	2
~~AT-802 – Houma (Lane)~~	demobilizing
TOTAL:	4
Spotter Aircraft:	
~~King Air – Stennis (Dynamic)~~	demobilizing
~~King Air – Houma (Dynamic)~~	demobilizing
Aztec – Houma (ASI)	1
Turbo COMDR – Houma (ASI)	1
TOTAL:	2
TOTAL AIRCRAFT:	6

Aerial Dispersant Activity Update for July 18, 2010:

- No dispersible oil was located this day, therefore, no dispersant authorization was requested. The oil that is being reported by spotters is primarily emulsified with some smaller patches of dispersible oil that are not suitable size for aerial spraying. Dispersants group directed offshore skimming vessels to recover this oil.
- Aerial Dispersants group in coordination with Air Operations and Offshore Operations Section have recommended the demobilization of all but six airplanes in the dispersant operations assets – Demobilization recommendations include the following assets and their support personnel/equipment (refer to table on page 6 of this report):
  - Stennis air base – five (5) Dynamic Beechcraft King Air spotter aircraft
  - Stennis air base – one (1) IAR Hercules C-130A spray aircraft
  - Houma air base – three (3) Ag Tractors AT-802 spray aircraft
  - Houma air base – one (1) Dynamic Beechraft King Air spotter aircraft

  This demobilization will leave the response with two (2) King Air spray aircraft at Stennis air base and one (1) BT-67 and one (1) DC-3 spray aircraft and two (2) spotter aircraft (Aztec and Aero Commander).

SMART Tier 1 Update for July 18, 2010:

- There were no SMART Tier 1 observations conducted as there were no dispersant applications conducted this day.

FOR DOCUMENTATION PURPOSES (FUTURE REVIEW) WE WILL LIST THE FAA NOTAM **28 45 12N -88 18 53 W** AS THE OFFICIAL LOCATION.

c. No aerial dispersant spraying 2nm of vessels, platforms, and 3nm from marine mammals.
d. SMART and Scientific Support Missions may spray within 1nm of SMART/ SSM vessel; positive ID required.
e. Target black and brown oil. This is the freshest/most dispersible oil. Dosage is 5 gallons per acre. ***Quality not Quantity***. Do no target Red/Reddish emulsified oil.
f. Spotter aircraft remain on site to visually assess effects on dispersed area and document with photographs. Complete spotters debrief form and turn in to base operations on a daily bases.
g. Report takeoff and landing times to assigned coordinators as they occur.

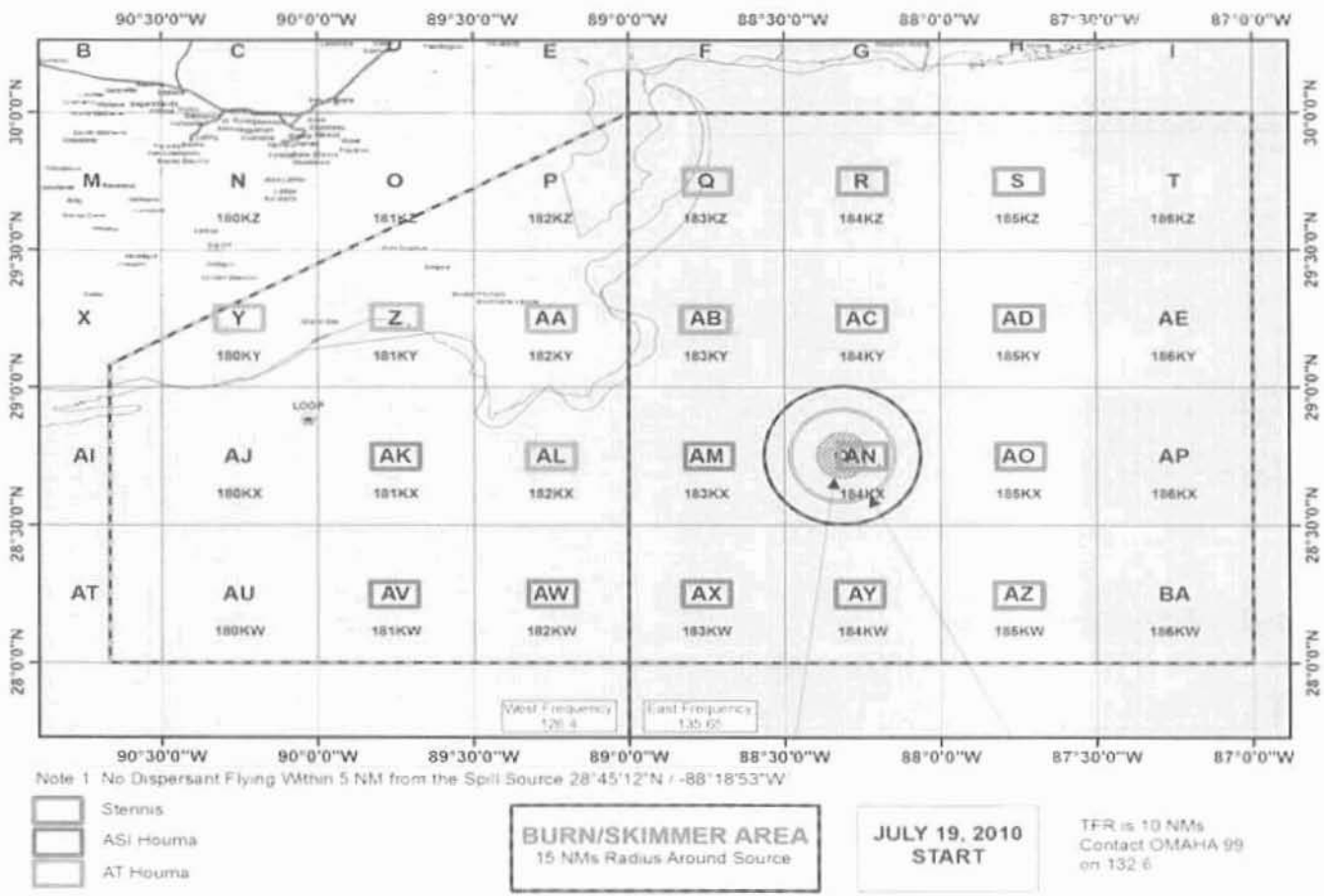
5. **Aircraft Communications:**
   a. **Primary air-to-air communication frequency in TFR West of 89° W is 126.4, East of 89° W is 135.65 AND 132.6 in the source area.**
   Secondary is 123.45 all zones.
   b. Contact P3 aircraft "Omaha 99" for flight advisories.
   c. Discreet IFF codes are permanently assigned to each aircraft must be used to enter TFR. This removes need to file DVFR flight plans.
   It is absolutely essential that each flight each day calls Tyndall to advise them prior to takeoff (b) (6)
   d. Advise SMART 1 prior to spray aircraft departure.
   e. Primary surface to air frequency is 122.9. Secondary is 123.45.

Ancillary operations:

1. **SMART Team:** Will be working on defined and approved sites. Details to be developed with spotter findings.
2. **In Situ Burning:** The burn activities are unknown.
3. **Skimmers:** Normal operations are to be conducted with 2nm separation for spray application.
4. **Stennis Tasking:** Scientific Support Mission: The IP will not require a spotter flight. . The M/V Determination needs are unknown at this time.

Dispersant Group conference call tomorrow @ 1530. Dial in (b) (6) participant code (b) (6) (Stennis use moderator number). (Tentative)

Aerial Dispersants Operational Areas July 19, 2010



Note 1 No Dispersant Flying Within 5 NM from the Spill Source 28°45'12"N / -88°18'53"W

Stennis
ASI Houma
AT Houma

BURN/SKIMMER AREA
15 NMs Radius Around Source

JULY 19, 2010
START

TFR is 10 NMs
Contact OMAHA 99
on 132.6

Dispersant Spray Assets

Aircraft Information						
Type	**Owner/ Operator**	**Tail #**	**Payload (gal)**	**Airport**	**Purpose & Altitude**	**Comments**
Spotters						
King Air	MSRC (Dynamic)	N39Q		Stennis	Spotter – 1,000' to 1,500'	Demobilizing
King Air	MSRC (Dynamic)	N89N		Stennis	Spotter – 1,000' to 1,500'	Demobilizing
King Air	MSRC (Dynamic)	N41J		Stennis	Spotter – 1,000' to 1,500'	Demobilizing
King Air	MSRC (Dynamic)	N37H		Stennis	Spotter – 1,000' to 1,500'	Demobilizing
King Air	MSRC (Dynamic)	N80Y		Stennis	Spotter – 1,000' to 1,500'	Demobilizing
King Air	MSRC (Dynamic)	N79W		Houma	Spotter – 1,000' to 1,500'	Demobilizing
Aztec (PA 23)	ASI	N141183		Houma	Backup Spotter	
Turbo COMDR	ASI	N690GG		Houma	Spotter	
Sprayers						
King Air	MSRC (Dynamic)	N7198Y	240	Stennis	Spray: 75'	Available for both Spray and Spotter duties
King Air	MSRC (Dynamic)	N7199D	240	Stennis	Spray: 75'	Available for both Spray and Spotter duties
C-130	IAR	N117TG	~~3,000~~	Stennis	Spray: 75'	Demobilizing
AT-802	Lane (NRC)	N9002K	~~800~~	Houma	Spray: 75'	Demobilizing
AT-802	Lane (NRC)	N802BG	~~800~~	Houma	Spray: 75'	Demobilizing
AT-802	Lane (NCR)	N950HC	~~800~~	Houma	Spray: 75'	Demobilizing
BT-67	ASI	N932H	1,800	Houma	Spray: 75'	
DC-3	ASI	N64766	1,000	Houma	Spray: 75'	
Operational Spray Volume (1 load per plane) (gal)			3,280			
Total Operational Spray Maximum (gal) (4 sorties/ plane / day)			13,120			

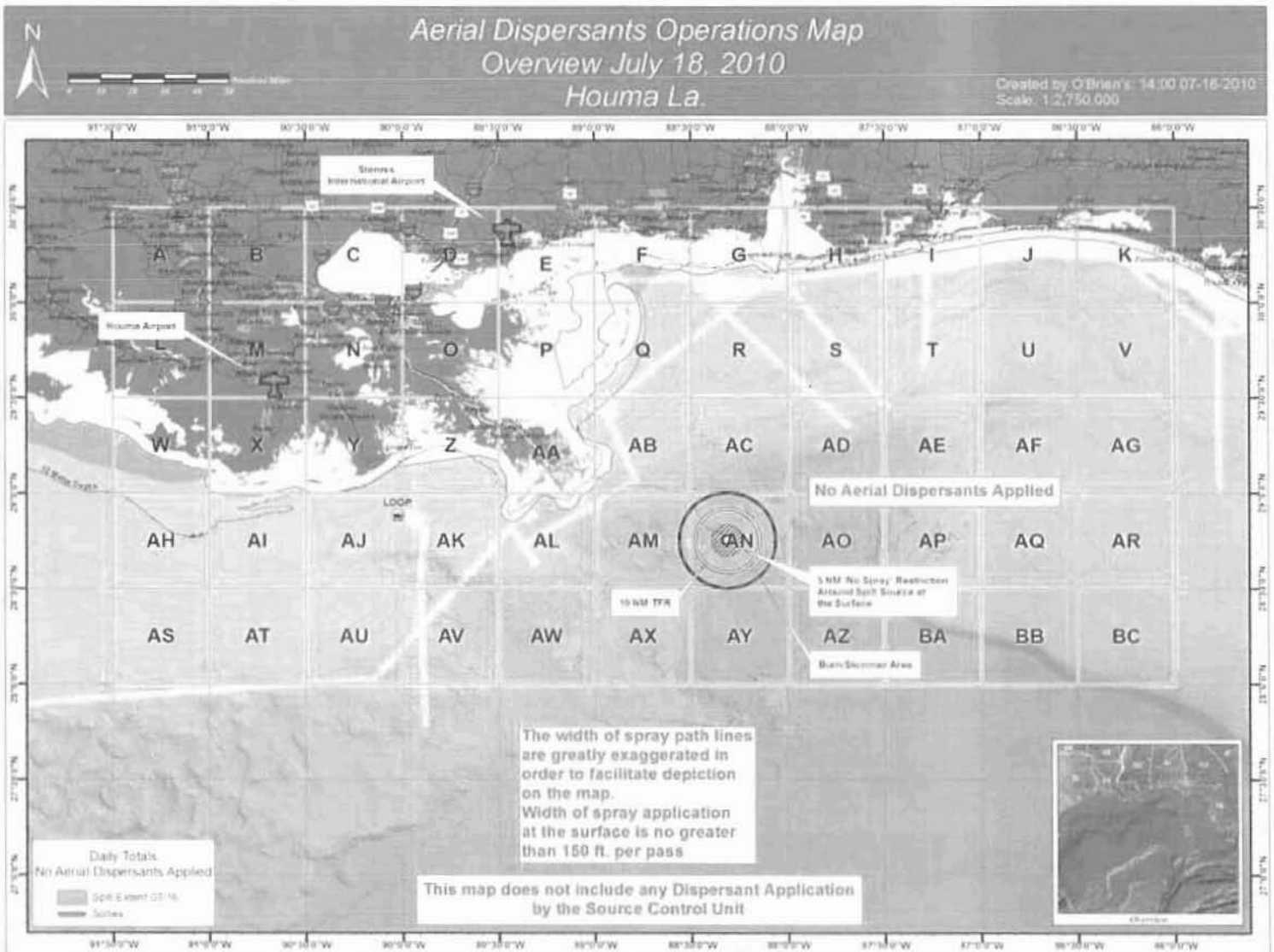
Dispersant Application Totals

Dispersant Statistics Applied by Day						
Date	Dispersant Type (gallons)		Daily Totals	# Sorties	Acres Covered (5 gal/acre application rate)	Square Miles covered
	9500	9527				
21 April 2010	Initial Response Date					
22 April 2010	0	1,800	1,800	1	360	0.6
23 April 2010	0	0	0	0	0	0
24 April 2010	0	0	0	0	0	0
25 April 2010	0	11,604	11,604	9	2,321	3.7
26 April 2010	0	14,486	14,486	10	2,897	4.5
27 April 2010	11,191	15,887	27,078	11	5,416	8.5
28 April 2010	27,269	14,874	42,143	15	8,429	13.2
29 April 2010	36,913	4,000	40,913	13	8,183	12.8
30 April 2010	4,900	0	4,900	1	980	1.5
1 May 2010	3,550	8,103	11,653	4	2,331	3.6
2 May 2010	0	0	0	0	0	0
3 May 2010	0	0	0	0	0	0
4 May 2010	10,561	23,712	34,273	12	6,855	10.7
5 May 2010	30,905	18,670	49,575	18	9915	15.5
6 May 2010	13,032	15,738	28,770	11	5,754	9.0
7 May 2010	5,582	1,688	7,270	4	1,454	2.3
8 May 2010	17,813	23,877	41,690	17	8,338	13.0
9 May 2010	29,034	26,898	55,932	21	11,186	17.5
10 May 2010	29,240	26,980	56,220	22	11,244	17.6
11 May 2010	7,940	0	7,940	2	1,588	2.5
12 May 2010	39,710	0	39,710	12	7,942	12.4
13 May 2010	41,620	0	41,620	15	8,324	13.0
14 May 2010	44,031	0	44,031	14	8,806	13.8
15 May 2010	14,208	0	14,208	6	2,842	4.4
16 May 2010	0	0	0	0	0	0
17 May 2010	6,591	0	6,591	4	1,318	2.1
18 May 2010	209	0	209	1	42	0.1

Dispersant Statistics Applied by Day						
Date	Dispersant Type (gallons)		Daily Totals	# Sorties	Acres Covered (5 gal/acre application rate)	Square Miles covered
	9500	9527				
19 May 2010	0	0	0	0	0	0
20 May 2010	0	0	0	0	0	0
21 May 2010	25,233	4,659	29,892	14	5,978	9.3
22 May 2010	51,353	1,593	52,946	22	10,589	16.6
23 May 2010	18,104	0	18,104	11	3,621	5.7
24 May 2010	630	0	630	1	126	0.2
25 May 2010	200	0	200	1	40	0.1
26 May 2010	229	0	229	1	46	0.1
27 May 2010	200	0	200	1	40	0.1
28 May 2010	10,259	0	10,259	4	2,052	3.2
29 May 2010	0	0	0	0	0	0
30 May 2010	15,131	0	15,131	6	3,026	4.7
31 May 2010	11,676	0	11,676	7	2,335	3.7
1 June 2010	0	0	0	0	0	0
2 June 2010	0	0	0	0	0	0
3 June 2010	1,900	0	1,900	1	380	0.6
4 June 2010	0	0	0	0	0	0
5 June 2010	125	0	125	1	24	0
6 June 2010	0	0	0	0	0	0
7 June 2010	3,998	0	3,998	2	800	1.3
8 June 2010	5,505	0	5,505	3	1,101	1.7
9 June 2010	0	0	0	0	0	0
10 June 2010	4,506	0	4,506	2	901	1.4
11 June 2010	14,305	0	14,305	6	2,861	4.5
12 June 2010	6,996	0	6,996	2	1,399	2.2
13 June 2010	35,212	0	35,212	13	7,042	11.0
14 June 2010	10,703	0	10,703	7	2,141	3.3
15 June 2010	2,608	0	2,608	3	522	0.8
16 June 2010	13,380	0	13,380	7	2,676	4.2

Dispersant Statistics Applied by Day						
Date	Dispersant Type (gallons)		Daily Totals	# Sorties	Acres Covered (5 gal/acre application rate)	Square Miles covered
	9500	9527				
17 June 2010	12,123	0	12,123	6	2,425	3.8
18 June 2010	15,564	0	15,564	8	3,113	4.9
19 June 2010	2,604	0	2,604	2	521	0.8
20 June 2010	15,403	0	15,403	6	3,081	4.8
21 June 2010	10,355	0	10,355	4	2,071	3.2
22 June 2010	2,008	0	2,008	2	402	0.6
23 June 2010	5,099	0	5,099	3	1,020	1.6
24 June 2010	21,088	0	21,088	10	4,218	6.6
25 June 2010	4,633	0	4,633	2	927	1.5
26 June 2010	23,022	0	23,022	12	4,605	7.2
27 June 2010	6,623	0	6,623	3	1325	2.07
28 June 2010	0	0	0	0	0	0
29 June 2010	0	0	0	0	0	0
30 June 2010	0	0	0	0	0	0
01 July 2010	17,852	0	17,852	5	3570	6
02 July 2010	12,737	0	12,737	7	2547	3
03 July 2010	0	0	0	0	0	0
04 July 2010	3,000	0	3,000	1	600	1
05 July 2010	803	0	803	1	161	.25
06 July 2010	0	0	0	0	0	0
07 July 2010	1,000	0	1,000	1	200	0.3
08 July 2010	0	0	0	0	0	0
09 July 2010	0	0	0	0	0	0
10 July 2010	0	0	0	0	0	0
11 July 2010	0	0	0	0	0	0
12 July 2010	0	0	0	0	0	0
13 July 2010	999	0	999	1	200	0.3
14 July 2010	0	0	0	0	0	0

Dispersant Statistics Applied by Day						
Date	Dispersant Type (gallons)		Daily Totals	# Sorties	Acres Covered (5 gal/acre application rate)	Square Miles covered
	9500	9527				
15 July 2010	0	0	0	0	0	0
16 July 2010	0	0	0	0	0	0
17 July 2010	0	0	0	0	0	0
18 July 2010	0	0	0	0	0	0
TOTALS	**761,468**	**214,569**	**976,037**	**405**	**195,207**	**305.0**


Aerial Dispersants Operations Map
Overview July 18, 2010
Houma La.
Created by O'Brien's: 14:00 07-16-2010
Scale: 1:2,750,000
Stennis International Airport
Houma Airport
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R
S
T
U
V
W
X
Y
Z
AA
AB
AC
AD
AE
AF
AG
LOOP
No Aerial Dispersants Applied
AH
AI
AJ
AK
AL
AM
AN
AO
AP
AQ
AR
5 NM No Spray Restriction Around Spill Source at the Surface
10 NM TFR
AS
AT
AU
AV
AW
AX
AY
AZ
BA
BB
BC
Burn/Skimmer Area
The width of spray path lines are greatly exaggerated in order to facilitate depiction on the map.
Width of spray application at the surface is no greater than 150 ft. per pass
This map does not include any Dispersant Application by the Source Control Unit
Daily Totals
No Aerial Dispersants Applied
Spill Extent 07-16
Sorties

DAILY AERIAL DISPERSANT APPLICATION PLAN

DATE: 6/18/2010	TIME: 0600 local	STAGING AIRPORTS Stennis Int'l / Houma	AIRPORT ID: KHSA / KHUM

DISP. STAGING APT SPVSR (Name & Phone #): (Stennis) Tim Spoerl (b) (6) / (Houma) Mark Cochrane (b) (6)

SPILL SITE INFORMATION:

SPILL LOCATION	Latitude: 28.55 N	N	Longitude: 88.21 W	W	Size: 40 mi radius
GEOGRAPHICAL REFERENCE:	112 nm SSE Stennis Airport				

SPILL SITE APPROACH INFORMATION:

ENTRY POINT:	Latitude: See OPS Chart	N	Longitude: See OPS Chart	W	Altitude: See OPS Chart	ft
EXIT POINT:	Latitude: See OPS Chart	N	Longitude: See OPS Chart	W	Altitude: See OPS Chart	ft
HOLDING AREA:	Latitude: See OPS Chart	N	Longitude: See OPS Chart	W	Altitude: See OPS Chart	ft

SPILL SITE WX:	WIND: S 8 - 10	CLG: 2500	VIS: 20miles	SUNRISE: 0606	SUNSET: 1951
SEA STATE:	Swell: SE 2.5'	Wind Waves: SSE 1.5'		Combined Seas: 4.0'	

(Attach Wilken's Weather Report for weather at the spill site and the staging airport)

DOSAGE (GPA): 5 **ADD'L INST:** See required setbacks and no fly area's on operational plan

COMMS

PRIMARY VHF COM: 126.40 MHz. West of MARY VHF COM: 132.6 MHz. East of 89 deg / EC VHF COM: 123.45 / EMERG COM: 121.5 MHz
PRIMARY VHF COM: Surface to Air 122. 9 MHz / SECONDARY VHF COM: Surface to Air 123.45 MHz / Marine primary VHF 81A
MARINE RADIO: Channel 16 then switch to Channel 9/ SATELLITE PHONE: Aircraft will contact through the Disp. Staging Airport Supervisor

AIRCRAFT INFORMATION:

Type:	Tail #:	Call Sign:	Airport ETA:	Purpose & Altitude:	PIC/Crew:	Passengers:
King Air Dynamic	N7198Y	98Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N80Y	80Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N39Q	39Q	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N7199D	99D	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N89N	89N	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N41J	41J	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N79W	79W	Houma	In Maintenance	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N37H	37H	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
C-130 IAR	N117TG	7TG	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N9002K	02K	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
BT-67 ASI	N932H	32H	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
DC-3 ASI	N64766	766	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
Aztec ASI	N141183	183	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Turbo CMDRA ASI	N690XT	0XT	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Aircraft below are not directly part of the Dispersant Group / Cordination and assistance from the aircraft below is nessasary.						
King Air	N275	275	Houma Jet	Recon		
Helo PHI	759P		Houma	Recon		
NOAA	NOAA 46			Surveillance		
U.S. Customs	P-3	Omaha 99		Communications		
Canada	Transport 950		Houma	Surveillance		

DATE: July 18, 2010											
SORTIE	TYPE A/C	TAIL #	PURPOSE	FUEL LOAD (#/Hrs:Min)	PAYLOAD GAL	PAYLOAD TYPE	TOTAL FLT TIME	DPT TIME EST/ACT	ENTRY EST/ACT	EXIT ETA EST/ACT	RETURN ETA EST/ACT
Recon Sorties											
	BE90	98Y	Recon	5	0			0000 / 0612			0000 / 0942
	Aztec	183	Recon	4	0			0000 / 0621			0000 / 0911
	BE90	99D	Recon	5	0			0000 /0625			0000 / 1014
	BE90	80Y	Recon	5	0			0000 / 0636			0000 / 1030
	BE90	89N	Recon	5	0			0000 / 0642			0000 / 1039
	Turbo Cmdr	690	Recon	5	0			0000 / 0655			0000 / 1025
	BE90	37H	Recon	5	0			0000 / 0831			0000 / 1215
	BE90	39Q	Recon	5	0			0000 / 0909			0000 / 1152
	Turbo Cmdr	690	Recon	5	0			0000 / 1436			0000 / 1708
	BE90	37H	Recon	5	0			0000 / 1351			0000 / 1547
Spray/Spotter Sorties											
	BE90	80Y	Spotter	4	0			0800			1200
1	C-130	N117TG	Spray	4	0			0830			1030
	Turbo Cmdr	N112EM	Recon / Spotter	5	0			1205			1540
2	BT-67	N932H	Spray	4	0			1200			1425
3	DC-3	766	Spray	4	0			1230			1432
	BE90	39Q	Spotter	4	0			1200			1600
7	AT - 802	02K	Spray	4	0			1245			1500
	No dispersant was applied today										
	Flights in yellow were canceled, no dispersable oil found										

Combined SiteTotals	0	9500
	Stennis	0
	Houma	0

DAILY AERIAL DISPERSANT APPLICATION PLAN

DATE: 6/19/2010	TIME: 0600 local	STAGING AIRPORTS Stennis Int'l / Houma	AIRPORT ID: KHSA / KHUM

DISP. STAGING APT SPVSR (Name & Phone #): (Stennis) Tim Spoerl (b) (6) / (Houma) Mark Cochrane (b) (6)

SPILL SITE INFORMATION:

SPILL LOCATION:	Latitude:	28.55 N	N	Longitude:	88.21 W	W	Size: 40 mi radius
GEOGRAPHICAL REFERENCE:	112 nm SSE Stennis Airport						

SPILL SITE APPROACH INFORMATION:

ENTRY POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude	See OPS Chart ft.
EXIT POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude	See OPS Chart ft.
HOLDING AREA:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude	See OPS Chart ft.

SPILL SITE WX:	WIND: ESE 10-13	CLG: 4000	VIS	20miles	SUNRISE: 0607	SUNSET: 1950	
SEA STATE:	Swell: SE 1.0'	Wind Waves: ESE 2.0'			Combined Seas: 3.0'		

(Attach Wilken's Weather Report for weather at the spill site and the staging airport)

DOSAGE (GPA): 5 **ADD'L INST:** See required setbacks and no fly area's on operational plan

COMMS			
	PRIMARY VHF COM: 126.40 MHz, West o	IMARY VHF COM: 132.6 MHz, East of 89 deg	EC. VHF COM: 123.45 / EMERG COM: 121.5 MHz
	PRIMARY VHF COM: Surface to Air 122 .9 MHz / SECONDARY VHF COM: Surface to Air 123.45 MHz / Marine primary VHF 81A		
	MARINE RADIO: Channel 16 then switch to Channel 9/ SATELLITE PHONE: Aircraft will contact through the Disp. Staging Airport Supervisor.		

AIRCRAFT INFORMATION:

Type:	Tail #:	Call Sign:	Airport ETA:	Purpose & Altitude:	PIC/Crew:	Passengers:
King Air Dynamic	N7198Y	98Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N99D	99D	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
BT-67 ASI	N932H	32H	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
DC-3 ASI	N64766	766	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
Aztec ASI	N141183	183	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Turbo CMDRA ASI	N690XT	0XT	Houma	Spotter	PIC: TBD Co-pilot: TBD	None

DATE: June 19, 2010											
SORTIE	TYPE A/C	TAIL #	PURPOSE	FUEL LOAD (#/Hrs:Min)	PAYLOAD GAL	PAYLOAD TYPE	TOTAL FLT TIME	DPT TIME EST/ACT	ENTRY EST/ACT	EXIT ETA EST/ACT	RETURN ETA EST/ACT
	BE90	98V	Recon / Spotter	6	0			0600			0920
	Turbo Cmdr	N690XT	Spotter	5	0			0800			1200
1	BT-67	N932H	Spray	4	2800			0815			1130
	BE90	79W	Spotter	6	0			1200			1600
6	AT - 802	02K	Spray	4	800			1245			1500
	Aztec	183	Spotter	6	0			1208			1500
7	DC-3	766	Spray	4	1000			1230			1432
					3800						
			Combined SiteTotals				9500	9527	Totals by Site		
						Stennis	0	0	0		
						Houma	0	0	0		

Aerial Dispersants Operations – Houma Status Report

July 7, 2010

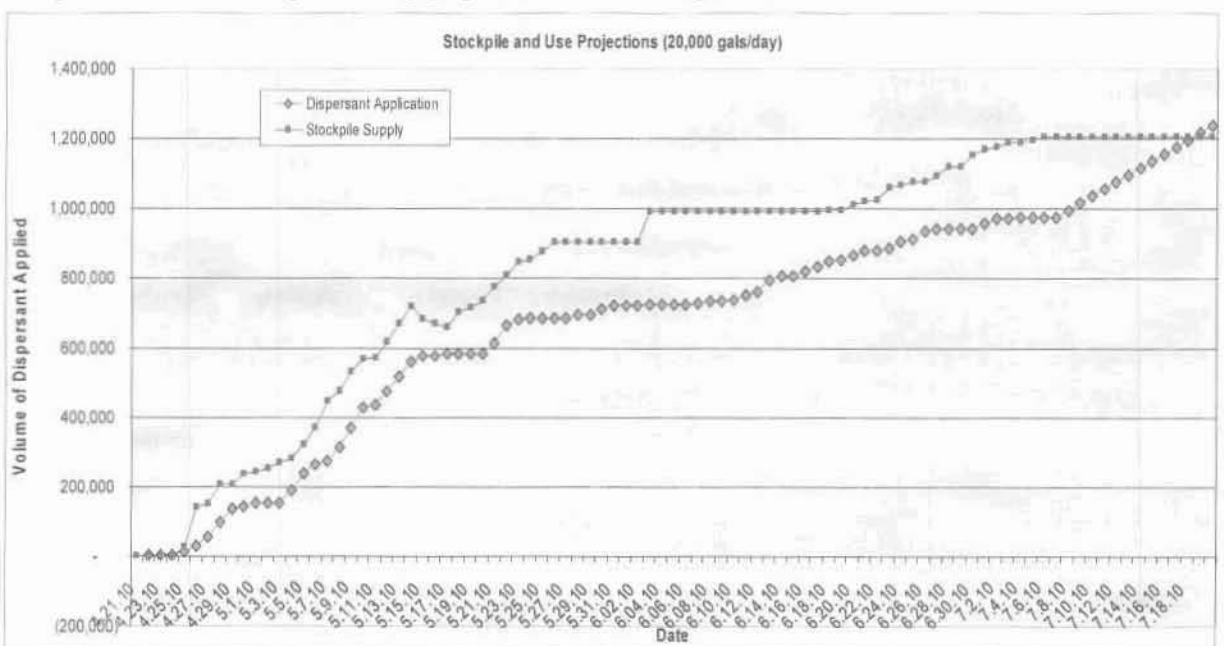
This report presents a snapshot of the aerial dispersant applications conducted on this date and summarizes the associated support activities. Aerial application of dispersants are being conducted under the direction of Unified Command and are targeted on dispersible oil to minimize surface oil slicks impacting the environmentally sensitive shoreline ecosystem.

Dispersant Aerial Spray Summary:

1. FOSC approved Application Volume for July 07, 2010 (gallons):	10,000
2. Total Amount of Dispersant Applied on July 07, 2010 (gallons):	1,000
3. Total Sorties on July 07, 2010:	1
4. Total Amount of Dispersant Applied to date (gallons):	975,038
5. Total Sorties to date:	404
6. Total Area Covered by Dispersant Applications to date (mi^2):	305
7. Total Dispersant Stockpiles on the ground as of 7.07.2010 – 1200 PM (gallons):	217,859
8. Dispersant Stockpile Expected Arrival as of 7.07.10 – 1200 PM (gallons)*:	0
9. Estimated Total Dispersant as of 7.07.2010 - 1200 PM (gallons):	216,859
10. Projected Days Operational at maximum rate of 20,000 gal/day (days):	11

* Future estimates for the delivery of EC9500A are based on production schedules provided by Nalco on 6.24.10.

Dispersant Stockpile Supply and Use Projections



Asset Summary On Scene	
Spray Aircraft:	
C-130 – Stennis (2 Lynden, 1 IAR, 1 OSR)	4
DC-3 – Houma	2
BT-67 – Houma	1
King Air – 2 – Stennis (can be used for spotting)	2
AT-802 – Houma	3
TOTAL:	12
Spotter Aircraft:	
King Air – 5 – Stennis	5
King Air – 1 – Houma	1
Aztec – Houma	1
Turbo COMDR – Houma	1
TOTAL:	8
TOTAL AIRCRAFT:	20
PRIORITY Spray Assets Identified*	
Spray Aircraft:	LEAD TIME
C-130 – OSR-Singapore - (20,000 gal/day)	1 – 72 hours
C-130 – IAR (15,000 gal/day)	1 – TBD
AT 802 (Agriculture Spray Planes) (5,000 gal/day)	12
***NOTE**: These assets will not be activated until sufficient stockpile of dispersants are available for their use. Estimate that dispersant operations will need approximately 75,000 gallons per day of dispersant for these air craft spray systems.	
Additional Spray Assets Identified	
Neat Sweep	In area

Aerial Dispersant Activity Update for July 7, 2010:

- At 06:30 local time 7 July 2010, RADM Watson gave approval last evening to apply an initial 10,000 g of dispersants to targeted dispersible oil. No additional spray authorization was given beyond the initial 10,000 gallons.

- One dispersible oil slick was observed by Houma recon aircraft. The slick was estimated to be approximately 2.5 miles long, 1/4 mile wide with 50% coverage. Calculations showed that approximately 1,000 gallons of dispersant would be necessary for this application. No additional spray applications were completed today.

- On 7/5/10, Stennis Airbase had one OSHA Recordable incident. A contractor was exposed to Poison Ivy which caused an allergic reaction. The reaction was treated by his primary care physician and a prescription was written.

M/V International Peace Research Activity Update for July 7, 2010:

- The M/V IP was in port today (7.7.10). Due to the weather conditions and sea state, they were unable to collect any samples associated with a slick (pre-or post-dispersant).
- The M/V IP will do an equipment update tomorrow (7.8.10) and resupply and is expected to leave port tomorrow evening to be on scene for the following morning to continue the sampling mission. No samples are expected to be collected on 7.8.10.

SMART Tier 1 Update for July 7, 2010:

- Today Team 2 observed a spray mission with Houma. The data will be uploaded to the EPA OSC Deepwater SMART website before 0600 tomorrow morning.

Aerial Dispersant Group Operations Plan for July 7th:
Dated 7 July, 2010

Tim Spoerl, Brad Barker, and Scotty Meador, please acknowledge receipt.

Disseminate to all pilots. Op Areas are depicted on attached map .pdf; schedule on attached .xls

Mission Targeting start of the day: 07-08-2010

The following zones are assigned for early morning surveillance and initial spray targets. Expect early authorization for 10,000 gallons NEW LEVEL. For Stennis base of 6,000 gallons and for Houma 4,000 gallons (This is not a given authorization).

Communicate dispersible oil as soon as possible in assigned zones.
Spotters, please provide a photo if possible with your reports.

Stennis: Primary zones AN, AC. Secondary zones, AD AO, AY, R, S (RED indicators on map).
Houma ASI: Primary zones AM, AX. Secondary zones, AK, AW, AV (BLUE indicators on map).
Houma AT802: Primary zones AB, Z. Secondary zones Y, AL, AA, Q [Limited to within 40 NM from the shoreline] (GREEN indicators on map).

Maintain 3 nm boundary separation if unable to coordinate air-to-air with other spotter or OMAHA 99.

Notes: Changes to previous orders are underlined.

1. **Required Equipment:** Functioning spray tracking units (GPS, Sat Lock) if not equipped, do not fly.
2. **As of 28 May 2010 FOSC approval is required each day for application of Corexit EC9500 dispersant in pre-approved areas.**
3. **Restrictions to aerial dispersant spraying:**
   a. No aerial dispersant spraying within the greatest of 3 nm offshore or depths less than 10 meters.
   b. No dispersant spraying within 5 nm of the spill source at surface: **28 45 12N - 88 18 53 W as defined in the FAA NOTAM.**

John Giberson has brought the following to my attention: *In the NOTAM it says the source coordinates are 284512 and 881853. I'm fairly certain this is Degrees, Minutes and Seconds. Since we have agreed to keep everything as Degrees Decimal Minutes we (Stennis Base) have been converting it to 28 45.2 and 88 18.88. The zone chart yesterday had these coordinates, but today it had 28 45.12 and 88 18.53. I think we need to go back to the way it was yesterday.* Depending on what format you use please adjust accordingly. FOR DOCUMENTATION PURPOSES (FUTURE REVIEW) WE WILL LIST THE FAA NOTAM **28 45 12N -88 18 53 W** AS THE OFFICIAL LOCATION.

Continued next page >

c. No aerial dispersant spraying 2nm of vessels, platforms, and 3nm from marine mammals.
d. SMART and Scientific Support Missions (SSM) may spray within 1nm of SMART/ SSM vessel; positive ID required.
e. Target black and brown oil. This is the freshest/most dispersible oil. Dosage is 5 gallons per acre. ***Quality not Quantity***. Do not target Red/Reddish emulsified oil.
f. Spotter aircraft remain on site to visually assess effects on dispersed area and document with photographs. Complete spotters debrief form and turn in to base operations on a daily bases.
g. Report takeoff and landing times to assigned coordinators as they occur.

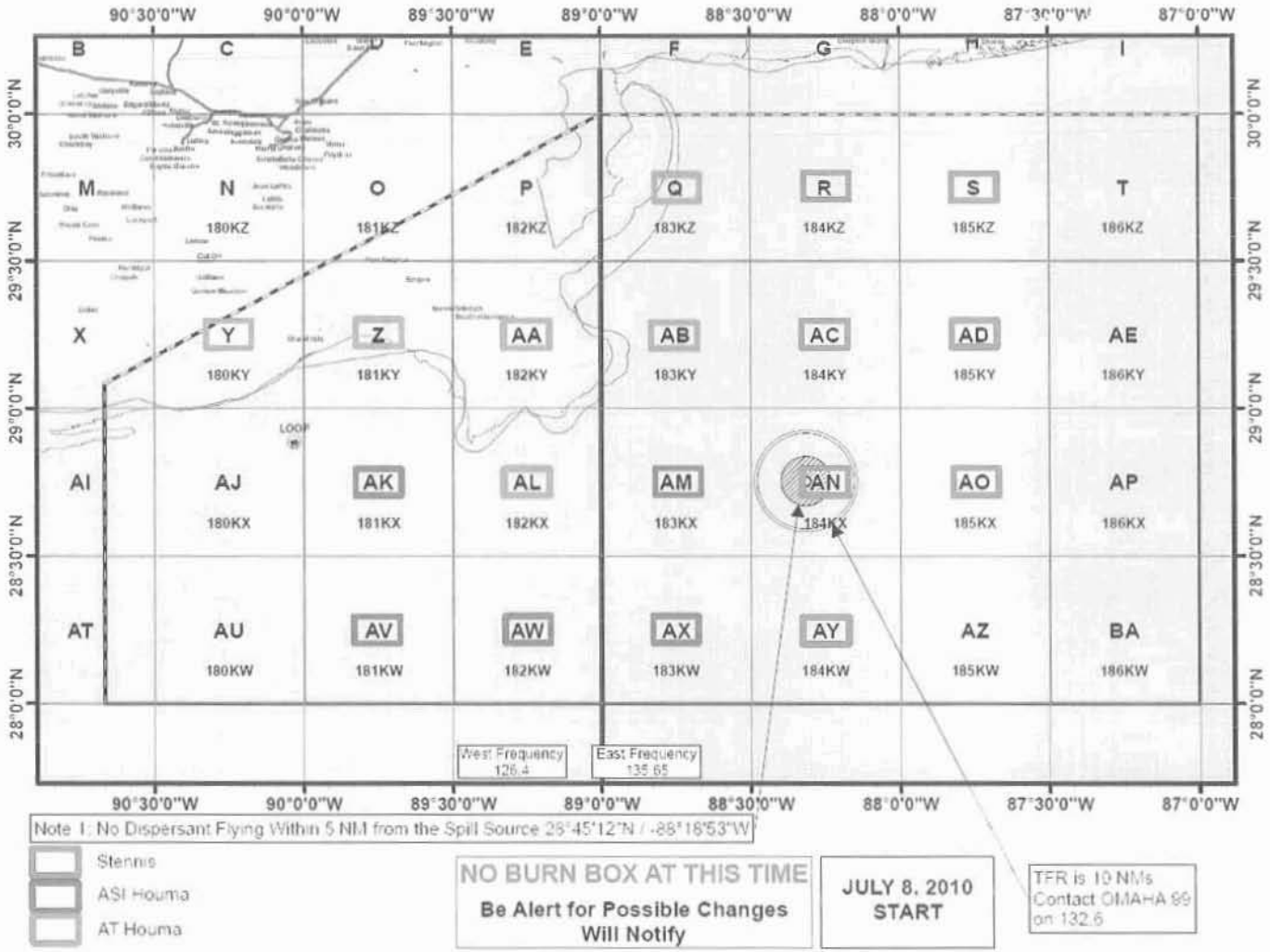
4. **Aircraft Communications:**
   a. **Primary air-to-air communication frequency in TFR West of 89° W is 126.4, East of 89° W is 135.65 AND 132.6 in the source area.**
      - Secondary is 123.45 all zones.
   b. Contact P3 aircraft "Omaha 99" for flight advisories.
   c. Discreet IFF codes are permanently assigned to each aircraft must be used to enter TFR. This removes need to file DVFR flight plans.
      It is absolutely essential that each flight each day calls Tyndall to advise them prior to takeoff (b) (6) .
   d. Advise SMART 1 prior to spray aircraft departure.
   e. Primary surface to air frequency is 122.9. Secondary is 123.45.

NOTE: Restrictions around the source area, the 5 miles has been extended to 10 miles...however, you can still work there by contacting Omaha 99 on 132.6 (see attached below).

Ancillary operations:

1. **No In Situ Burning.** Their boats are departing this evening in search of suitable oil. We will provide information at least one hour prior to the burn.
2. **Skimmers** will be departing port for the source area. Areas of operation are to be defined and will be communicated as decisions are made.
3. **"A Whale"** is still operating NW of the source, moving at ±1 knot.
4. **Stennis Tasking:** Scientific Support Mission: It is not anticipated at this time that the IP will be operating on July 8th. If the IP sails a recon/spotter request will be made to Stennis and Stennis would have ample time to make the appropriate recon/spotter resource arrangements.
5. **Dispersant Group conference call will be held 1530 Dial in (b) (6) participant code (b) (6) (Stennis use moderator number).**

Aerial Dispersants Operational Areas July 08, 2010



Dispersant Spray Assets

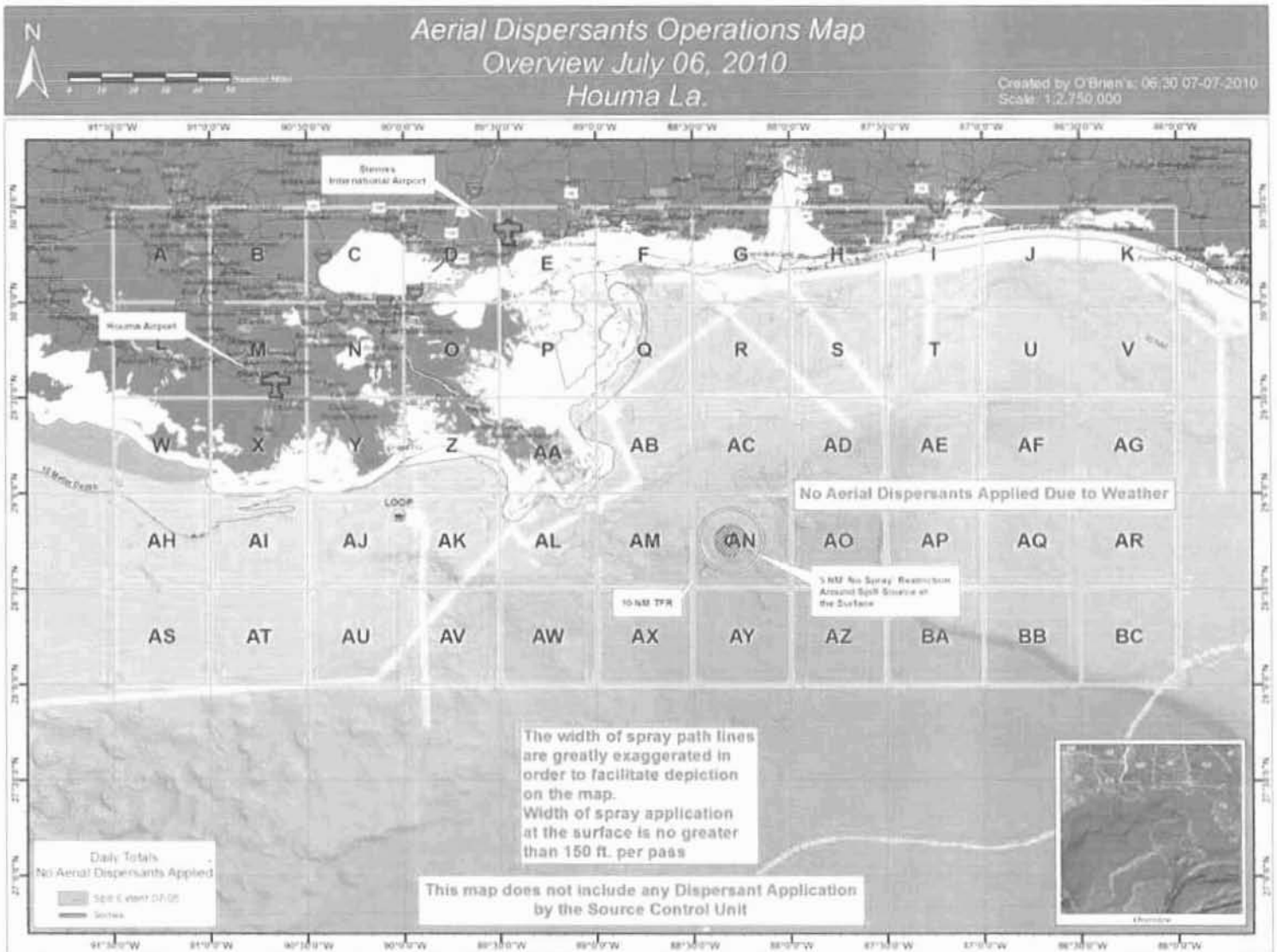
Aircraft Information						
Type	**Owner/ Operator**	**Tail #**	**Payload (gal)**	**Airport**	**Purpose & Altitude**	**Comments**
Spotters						
King Air	MSRC (Dynamic)	N39Q		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N89N		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N41J		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N37H		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N80Y		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N79W		Houma	Spotter – 1,000' to 1,500'	
Aztec (PA 23)	ASI N141183			Houma	Backup Spotter	
Turbo COMDR	ASI N112EM			Houma	Spotter	
Sprayers						
King Air	MSRC (Dynamic)	N7198Y	240	Stennis	Spray: 75'	Available for both Spray and Spotter duties
King Air	MSRC (Dynamic)	N7199D	240	Stennis	Spray: 75'	Available for both Spray and Spotter duties
C-130	IAR N117TG		3,000	Stennis	Spray: 75'	
C-130	MSRC (Lynden)	N403LC	5,000	Stennis	Spray: 75'	ADDS Pack (CCA)
C-130	MSRC (Lynden)	N401LC	5,000	Stennis	Spray: 75'	ADDS Pack (Alyeska)
C-130	OSR	EIJIV	5,000	Stennis	Spray: 75'	ADDS Pack (OSR)
AT-802	Lane (NRC)	N9002K	800	Houma	Spray: 75'	2-Seater / Training
AT-802	Lane (NRC)	N802BG	800	Houma	Spray: 75'	
AT-802	Lane (NCR)	N950HC	800	Houma	Spray: 75'	
BT-67	ASI	N932H	1,800	Houma	Spray: 75'	
DC-3	ASI	N64766	1,000	Houma	Spray: 75'	
DC-3	ASI	N64767	1,000	Houma	Spray: 75'	Standby
Operational Spray Volume (1 load per plane) (gal)			24,680			
Total Operational Spray Maximum (gal) (4 sorties/ plane / day)			98,720			

Dispersant Application Totals

Dispersant Statistics Applied by Day						
Date	Dispersant Type (gallons)		Daily Totals	# Sorties	Acres Covered (5 gal/acre application rate)	Square Miles covered
	9500	9527				
21 April 2010	Initial Response Date					
22 April 2010	0	1,800	1,800	1	360	0.6
23 April 2010	0	0	0	0	0	0
24 April 2010	0	0	0	0	0	0
25 April 2010	0	11,604	11,604	9	2,321	3.7
26 April 2010	0	14,486	14,486	10	2,897	4.5
27 April 2010	11,191	15,887	27,078	5	5,416	8.5
28 April 2010	27,269	14,874	42,143	15	8,429	13.2
29 April 2010	36,913	4,000	40,913	13	8,183	12.8
30 April 2010	4,900	0	4,900	1	980	1.5
1 May 2010	3,550	8,103	11,653	4	2,331	3.6
2 May 2010	0	0	0	0	0	0
3 May 2010	0	0	0	0	0	0
4 May 2010	10,561	23,712	34,273	12	6,855	10.7
5 May 2010	30,905	18,670	49,575	18	9915	15.5
6 May 2010	13,032	15,738	28,770	11	5,754	9.0
7 May 2010	5,582	1,688	7,270	4	1,454	2.3
8 May 2010	17,813	23,877	41,690	17	8,338	13.0
9 May 2010	29,034	26,898	55,932	21	11,186	17.5
10 May 2010	29,240	26,980	56,220	22	11,244	17.6
11 May 2010	7,940	0	7,940	2	1,588	2.5
12 May 2010	39,710	0	39,710	12	7,942	12.4
13 May 2010	41,620	0	41,620	15	8,324	13.0
14 May 2010	44,031	0	44,031	14	8,806	13.8
15 May 2010	14,208	0	14,208	6	2,842	4.4
16 May 2010	0	0	0	0	0	0
17 May 2010	6,591	0	6,591	4	1,318	2.1
18 May 2010	209	0	209	1	42	0.1

Dispersant Statistics Applied by Day						
Date	Dispersant Type (gallons)		Daily Totals	# Sorties	Acres Covered (5 gal/acre application rate)	Square Miles covered
	9500	9527				
19 May 2010	0	0	0	0	0	0
20 May 2010	0	0	0	0	0	0
21 May 2010	25,233	4,659	29,892	14	5,978	9.3
22 May 2010	51,353	1,593	52,946	22	10,589	16.6
23 May 2010	18,104	0	18,104	11	3,621	5.7
24 May 2010	630	0	630	1	126	0.2
25 May 2010	200	0	200	1	40	0.1
26 May 2010	229	0	229	1	46	0.1
27 May 2010	200	0	200	1	40	0.1
28 May 2010	10,259	0	10,259	4	2,052	3.2
29 May 2010	0	0	0	0	0	0
30 May 2010	15,131	0	15,131	6	3,026	4.7
31 May 2010	11,676	0	11,676	7	2,335	3.7
1 June 2010	0	0	0	0	0	0
2 June 2010	0	0	0	0	0	0
3 June 2010	1,900	0	1,900	1	380	0.6
4 June 2010	0	0	0	0	0	0
5 June 2010	125	0	125	1	24	0
6 June 2010	0	0	0	0	0	0
7 June 2010	3,998	0	3,998	2	800	1.3
8 June 2010	5,505	0	5,505	3	1,101	1.7
9 June 2010	0	0	0	0	0	0
10 June 2010	4,506	0	4,506	2	901	1.4
11 June 2010	14,305	0	14,305	6	2,861	4.5
12 June 2010	6,996	0	6,996	2	1,399	2.2
13 June 2010	35,212	0	35,212	13	7,042	11.0
14 June 2010	10,703	0	10,703	7	2,141	3.3
15 June 2010	2,608	0	2,608	3	522	0.8
16 June 2010	13,380	0	13,380	7	2,676	4.2

Dispersant Statistics Applied by Day						
Date	Dispersant Type (gallons)		Daily Totals	# Sorties	Acres Covered (5 gal/acre application rate)	Square Miles covered
	9500	9527				
17 June 2010	12,123	0	12,123	6	2,425	3.8
18 June 2010	15,564	0	15,564	8	3,113	4.9
19 June 2010	2,604	0	2,604	2	521	0.8
20 June 2010	15,403	0	15,403	6	3,081	4.8
21 June 2010	10,355	0	10,355	4	2,071	3.2
22 June 2010	2,008	0	2,008	2	402	0.6
23 June 2010	5,099	0	5,099	3	1,020	1.6
24 June 2010	21,088	0	21,088	10	4,218	6.6
25 June 2010	4,633	0	4,633	2	927	1.5
26 June 2010	23,022	0	23,022	12	4,605	7.2
27 June 2010	6,623	0	6,623	3	1325	2.07
28 June 2010	0	0	0	0	0	0
29 June 2010	0	0	0	0	0	0
30 June 2010	0	0	0	0	0	0
01 July 2010	17,852	0	17,852	5	3570	6
02 July 2010	12,737	0	12,737	7	2547	3
03 July 2010	0	0	0	0	0	0
04 July 2010	3,000	0	3,000	1	600	1
05 July 2010	803	0	803	1	161	.25
06 July 2010	0	0	0	0	0	0
07 July 2010	1,000	0	1,000	1	200	0.3
TOTALS	**760,469**	**214,569**	**975,038**	**404**	**195,008**	**304.7**


Aerial Dispersants Operations Map
Overview July 06, 2010
Houma La.
Created by O'Brien's: 06:30 07-07-2010
Scale: 1:2,750,000
N
Houma Airport
A B C D E F G H I J K
L M N O P Q R S T U V
W X Y Z AA AB AC AD AE AF AG
AH AI AJ AK AL AM AN AO AP AQ AR
AS AT AU AV AW AX AY AZ BA BB BC
No Aerial Dispersants Applied Due to Weather
10-NM TFR
The width of spray path lines are greatly exaggerated in order to facilitate depiction on the map.
Width of spray application at the surface is no greater than 150 ft. per pass
This map does not include any Dispersant Application by the Source Control Unit
Daily Totals
No Aerial Dispersants Applied

DAILY AERIAL DISPERSANT APPLICATION PLAN

DATE:	7/7/10	TIME:	0600 local	STAGING AIRPORTS:	Stennis Int'l / Houma	AIRPORT ID:	KHSA / KHUM
DISP. STAGING APT SPVSR (Name & Phone #):				(Stennis) Gerry Nielsen (b) (6)		/ (Houma) Mark Cochrane (b) (6)	

SPILL SITE INFORMATION:

SPILL LOCATION:	Latitude:	28 55 N	N	Longitude:	88 21 W	W	Size:
GEOGRAPHICAL REFERENCE:				112 nm SSE Stennis Airport			

SPILL SITE APPROACH INFORMATION:

ENTRY POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude:	See OPS Chart	ft
EXIT POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude:	See OPS Chart	ft
HOLDING AREA:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude:	See OPS Chart	ft

SPILL SITE WX:	WIND:	SE 19 - 37	CLG:	1000 - 2000'	VIS:	5 miles	SUNRISE:	0601	SUNSET:	1954
SEA STATE:	Swell: SE - 6 - 8'		Wind Waves: SE 6 - 6 5'			Combined Seas 10'				

(Attach Wilken's Weather Report for weather at the spill site and the staging airport)

DOSAGE (GPA):	5	ADD'L INST:	See required setbacks and no fly area's on operational plan

COMMS	PRIMARY VHF COM: 126 40 MHz, W of 88-30	PRIMARY VHF COM: 135 65 MHz, E of 88-30	SEC VHF COM: 123 45 / EMERG COM: 121 5 MHz
	PRIMARY VHF COM: Surface to Air 122 9 MHz / SECONDARY VHF COM: Surface to Air 123 45 MHz / Marine primary VHF 81A		
	MARINE RADIO: Channel 16 then switch to Channel 9/ SATELLITE PHONE: Aircraft will contact through the Disp Staging Airport Supervisor		

AIRCRAFT INFORMATION:

Type:	Tail #:	Call Sign:	Airport ETA:	Purpose & Altitude:	PIC/Crew:	Passengers:
King Air Dynamic	N7198Y	98Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N80Y	80Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N39Q	39Q	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N7199D	99D	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N89N	89N	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N41J	41J	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N79W	79W	Houma	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N37H	37H	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
C-130 IAR	N117TG	7TG	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 Lynden	N403LC	3LC	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N9002K	02K	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N802BG	2BG	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N950HC	0HC	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
C-130 Lynden	401LC	1LC	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 OSR	EIJIV	JIV	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
BT-67 ASI	N932H	32H	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
DC-3 ASI	N64767	767	Houma Standby	Spray: 75'	PIC: TBD Co-pilot: TBD	
DC-3 ASI	N64766	766	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
Aztec ASI	N141183	183	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Turbo Cmdr ASI	N112EM	2EM	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Aircraft below are not directly part of the Dispersant Group / Cordination and assistance from the aircraft below is nessasary.						
King Air	N275	275	Houma Jet	Recon		
Helo PHI	759P		Houma	Recon		
U S Customs	P-3	Omaha 99		Communications		
Canada	Transport 950		Houma	Surveillance		

DATE: July 7, 2010											
SORTIE	TYPE A/C	TAIL #	PURPOSE	FUEL LOAD (#/Hrs:Min)	PAYLOAD GAL	PAYLOAD TYPE	TOTAL FLT TIME	DPT TIME EST/ACT	ENTRY EST/ACT	EXIT ETA EST/ACT	RETURN ETA EST/ACT
	BE90	37H	Recon / Spotter	4	0			0600 / 0639			0945 / 1030
	BE90	89N	Recon / Spotter	4	0			0610 / 0642			0950 / 1110
	Turbo Cmdr	N112EM	Recon / Spotter	5	0			0610 / 0626			0910 / 0840
	Aztec	183	Recon / Spotter	4	0			0620 / 0623			0920 / 0837
	BE90	79W	Recon / Spotter	4	0			0630 / 0658			0930 / 0858
	BE90	80Y	Spotter	4	0			0800			1200
1	C-130	401LC	Spray	4	0			0830			1030
	Turbo Cmdr	5EE	Spotter / S-2	5	0			1205 / 1402			1540 / 1627
2	B1-67	N932H	Spray	4	1000			1200 / 1409			1425 / 1600
3	DC-9	709	Spray	4	0			1230			1452
	BE90	89N	Spotter	4	0			0803			1206
4	C-130	403LC	Spray	4	0			0834			1035
	BE90	80Y	Spotter	4	0			1240			1545
5	C-130	401LC	Spray	4	0			1300			1455
	BE90	98Y	Spotter	4	0			1200			1600
6	C-130	JIV	Spray	4	0			1305			1457
	BE90	39Q	Spotter	4	0			1200			1600
	AT-802	02K	Spray	4	0			1245			1500
	BE90	99D	Recon / Spotter	4	0			0000 / 0915			0000 / 1149
	BE90	39Q	Recon / Spotter	4	0			0000 / 0919			0000 / 1318
	BE90	98Y	Recon / Spotter	4	0			0000 / 1058			0000 / 1440
	BE90	37H	Recon / Spotter	4	0			0000 / 1139			0000 / 1540
	BE90	89N	Recon / Spotter	4	0			0000 / 1348			0000 / 1655
	BE90	80Y	Recon / Spotter	4	0			0000 / 1418			0000 / 1723
					1000						

Combined SiteTotals	1000	9500
	Stennis	0
	Houma	1000

The flights in yellow were canceled. The only dispersible oil report today was sprayed by sortie number two.

DAILY AERIAL DISPERSANT APPLICATION PLAN

DATE: 7/8/10	TIME: 0600 local	STAGING AIRPORTS: Stennis Int'l / Houma	AIRPORT ID: KHSA / KHUM

DISP. STAGING APT SPVSR (Name & Phone #): (Stennis) Gerry Nielsen (b) (6) / (Houma) Mark Cochrane (b) (6)

SPILL SITE INFORMATION:

SPILL LOCATION:	Latitude:	28 55 N	N	Longitude:	88 21 W	W	Size:
GEOGRAPHICAL REFERENCE:	112 nm SSE Stennis Airport						

SPILL SITE APPROACH INFORMATION:

ENTRY POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude: See OPS Chart	ft
EXIT POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude: See OPS Chart	ft
HOLDING AREA:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude: See OPS Chart	ft

SPILL SITE WX:	WIND: ESE 11 - 14	CLG: UNL	VIS: 12 nm	SUNRISE: 0601	SUNSET: 1953		
SEA STATE:	Swell: SSE - 4 5' - 9 4'	Wind Waves: ESE 3'		Combined Seas 9 4'			

(Attach Wilken's Weather Report for weather at the spill site and the staging airport)

DOSAGE (GPA): 5 **ADD'L INST:** See required setbacks and no fly area's on operational plan

COMMS

PRIMARY VHF COM: 126 40 MHz, W of 88-30 | PRIMARY VHF COM: 135 65 MHz, E of 88-30 | SEC VHF COM: 123 45 / EMERG COM: 121 5 MHz

PRIMARY VHF COM: Surface to Air 122 9 MHz / SECONDARY VHF COM: Surface to Air 123 45 MHz / Marine primary VHF 81A

MARINE RADIO: Channel 16 then switch to Channel 9/ SATELLITE PHONE: Aircraft will contact through the Disp Staging Airport Supervisor

AIRCRAFT INFORMATION:

Type:	Tail #:	Call Sign:	Airport ETA:	Purpose & Altitude:	PIC/Crew:	Passengers:
King Air Dynamic	N7198Y	98Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N80Y	80Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N39Q	39Q	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N7199D	99D	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N89N	89N	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N41J	41J	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N79W	79W	Houma	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N37H	37H	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
C-130 IAR	N117TG	7TG	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 Lynden	N403LC	3LC	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N9002K	02K	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N802BG	2BG	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N950HC	0HC	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
C-130 Lynden	401LC	1LC	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 OSR	EIJIV	JIV	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
BT-67 ASI	N932H	32H	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
DC-3 ASI	N64767	767	Houma Standby	Spray: 75'	PIC: TBD Co-pilot: TBD	
DC-3 ASI	N64766	766	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
Aztec ASI	N141183	183	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Turbo Cmdr ASI	N112EM	2EM	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Aircraft below are not directly part of the Dispersant Group / Cordination and assistance from the aircraft below is nessasary.						
King Air	N275	275	Houma Jet	Recon		
Helo PHI	759P		Houma	Recon		
U S Customs	P-3	Omaha 99		Communications		
Canada	Transport 950		Houma	Surveillance		

DATE: July 8, 2010											
SORTIE	TYPE A/C	TAIL #	PURPOSE	FUEL LOAD (#/Hrs:Min)	PAYLOAD GAL	PAYLOAD TYPE	TOTAL FLT TIME	DPT TIME EST/ACT	ENTRY EST/ACT	EXIT ETA EST/ACT	RETURN ETA EST/ACT
	BE90	371I	Recon / Spotter	4	0			0600			0945
	BE90	98Y	Recon / Spotter	4	0			0610			0950
	Turbo Cmdr	N112EM	Recon / Spotter	5	0			0610			0910
	Aztec	183	Recon / Spotter	4	0			0620			0920
	BE90	79W	Recon / Spotter	4	0			0630			0930
	BE90	80Y	Spotter	4	0			0800			1200
1	C -130	N117TG	Spray	4	3000			0830			1030
	Turbo Cmdr	N112EM	Recon / Spotter	5	0			1205			1540
2	B1-67	N932H	Spray	4	2000			1200			1425
3	DC-3	766	Spray	4	1000			1230			1432
	BE90	89N	Spotter	4	0			0803			1206
4	C -130	403LC	Spray	4	5000			0834			1035
	BE90	80Y	Spotter	4	0			1245			1545
5	C-130	401LC	Spray	4	5000			1300			1455
	BE90	98Y	Spotter	4	0			1200			1600
6	C-130	JIV	Spray	4	5000			1303			1457
	BE90	39Q	Spotter	4	0			1200			1600
7	AT - 802	02K	Spray	4	800			1245			1500

Combined SiteTotals		9500
	Stennis	0
	Houma	0

Aerial Dispersants Operations – Houma Status Report

July 8, 2010

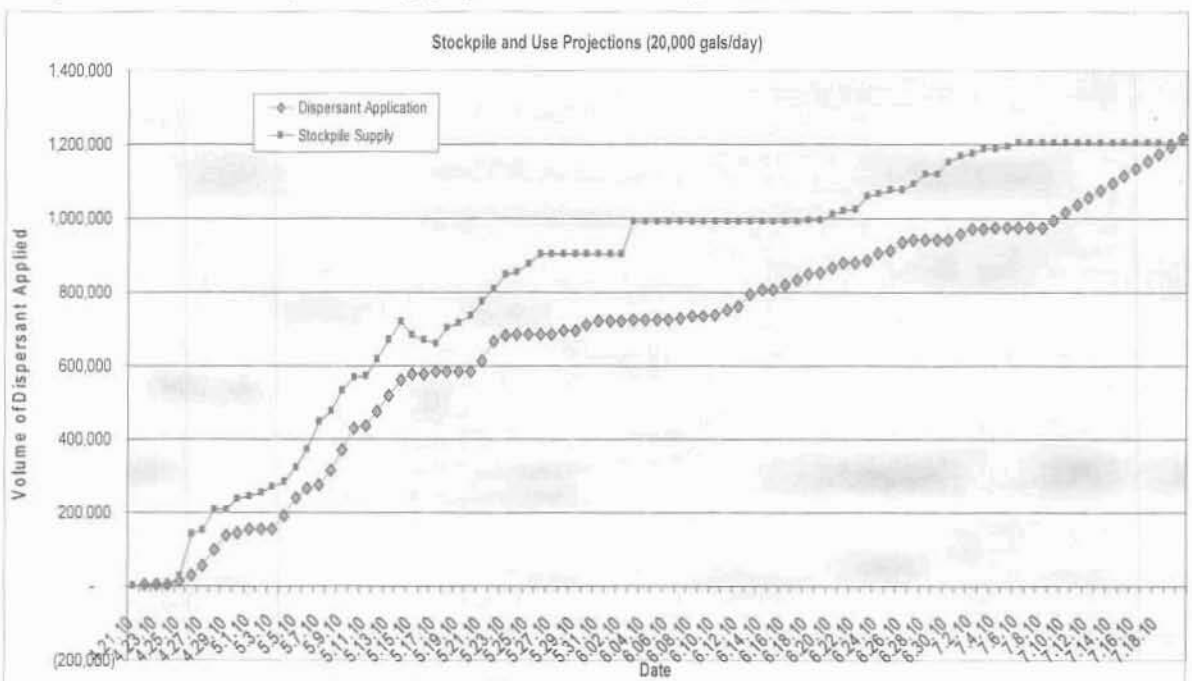
This report presents a snapshot of the aerial dispersant applications conducted on this date and summarizes the associated support activities. Aerial application of dispersants are being conducted under the direction of Unified Command and are targeting dispersible oil to minimize surface oil slicks impacting the environmentally sensitive shoreline ecosystem.

Dispersant Aerial Spray Summary:

1. FOSC approved Application Volume for July 08, 2010 (gallons):	10,000 @ 07:10 AM
2. Total Amount of Dispersant Applied on July 08, 2010 (gallons):	0
3. Total Sorties on July 08, 2010:	0
4. Total Amount of Dispersant Applied to date (gallons):	975,038
5. Total Sorties to date:	404
6. Total Area Covered by Dispersant Applications to date (mi^2):	305
7. Total Dispersant Stockpiles on the ground as of 7.08.2010 – 1200 PM (gallons):	216,859
8. Dispersant Stockpile Expected Arrival as of 7.08.10 – 1200 PM (gallons)*:	0
9. Estimated Total Dispersant as of 7.09.2010 - 1200 PM (gallons):	216,859
10. Projected Days Operational at maximum rate of 20,000 gal/day (days):	11

* Future estimates for the delivery of EC9500A are based on production schedules provided by Procurement on 7.8.10 via email and discussions with Nalco.

Dispersant Stockpile Supply and Use Projections



Asset Summary On Scene	
Spray Aircraft:	
C-130 – Stennis (2 Lynden, 1 IAR, 1 OSR)	4
DC-3 – Houma	2
BT-67 – Houma	1
King Air – 2 – Stennis (can be used for spotting)	2
AT-802 – Houma	3
TOTAL:	12
Spotter Aircraft:	
King Air – 5 – Stennis	5
King Air – 1 – Houma	1
Aztec – Houma	1
Turbo COMDR – Houma	1
TOTAL:	8
TOTAL AIRCRAFT:	20
PRIORITY Spray Assets Identified***	
Spray Aircraft:	LEAD TIME
C-130 – OSR-Singapore - (20,000 gal/day)	1 – 72 hours
C-130 – IAR (15,000 gal/day)	1 – TBD
AT 802 (Agriculture Spray Planes) (5,000 gal/day)	12
***NOTE: These assets will not be activated until sufficient stockpile of dispersants are available for their use. Estimate that dispersant operations will need approximately 75,000 gallons per day of dispersant for these air craft spray systems.	
Additional Spray Assets Identified	
Neat Sweep	In area

Aerial Dispersant Activity Update for July 8, 2010:

- At 07:10 local time 8 July 2010, RADM Watson gave approval to apply an initial 10,000 g of dispersants to targeted dispersible oil. No additional spray authorization was given beyond the initial 10,000 gallons.
- Morning spotters reported only emulsified oil and sheen throughout their flight areas; no dispersible oil. Additional spotter overflights were conducted throughout the day. At 1545, a large dispersible slick (5nm by 1.5nm with 40-60% coverage) was identified; however, this slick was in the area where the offshore skimming vessel assets that were not skimming but were congregating for beginning tomorrow's operations. Requests to the M/V SEACOR LEE were made to have the vessel traffic divert to another area to allow spraying. It was determined that the timeframe required to move the boats would preclude getting spray operations underway before 1730 cutoff window for spray planes. No spray applications were conducted.
- Other dispersible oil was discovered this day, but it was determined by dispersant spotters that skimming operations would be better suited to recovering this oil, so the coordinates for these slicks were given to the offshore skimming operations for recovery.

M/V International Peace Research Activity Update for July 8, 2010:

- The M/V IP had an equipment update and resupply and will leave port tonight to be on scene for the tomorrow morning to test equipment and continue the sampling mission. No samples will be collected on 7.8.10.

SMART Tier 1 Update for July 8, 2010:

- There were no SMART Tier 1 observations as there were no dispersant applications conducted this day.

Aerial Dispersant Group Operations Plan for July 7th:
Dated 8 July, 2010

Think safe, fly safe...tomorrow will be a rush to get back into operations. ALL dispersant operations (aerial, burning and skimming) are or will be converging on the source area to resume operations.

NOTE: The daily operations map...the "burn box" (originally planned for 20 nms) and the "skimmers box" are planning on the same area.

This rush brings inherent dangers...we've lost some of the routine flow of operations and will need a day or two to reestablish that flow. Therefore, double check everything especially your communications with everyone around you.

There will be a daily 1500 meeting between the three operations (aerial, skimming and burning) to coordinate the next day's operations and to insure the highest level of safety for all, as each use spotters and thus increasing the potential for conflict.

Again...tomorrow will be a day that we need to increase our vigilance and *"FLY SAFE"*

Mission Targeting start of the day: 07-09-2010

The following zones are assigned for early morning surveillance and initial spray targets. Expect early authorization for 10,000 gallons NEW LEVEL. For Stennis base of 6,000 gallons and for Houma 4,000 gallons (This is not a given authorization).

Communicate dispersible oil as soon as possible in assigned zones. Spotters, please provide a photo if possible with your reports.

Stennis: Primary zones AN, AC. Secondary zones, AD AO, AY, R, S (RED indicators on map).
Houma ASI: Primary zones AM, AX. Secondary zones, AK, AW, AV (BLUE indicators on map).
Houma AT-802: Primary zones AB, Z. Secondary zones Y, AL, AA, Q [Limited to within 40 NM from the shoreline] (GREEN indicators on map).

Maintain 3 nm boundary separation if unable to coordinate air-to-air with other spotter or OMAHA 99.

Notes: Changes to previous orders are underlined.

1. **Required Equipment:** Functioning spray tracking units (GPS, Sat Lock) if not equipped, do not fly.
2. **As of 28 May 2010 FOSC approval is required each day for application of Corexit EC9500A dispersant in pre-approved areas.**
3. **Restrictions to aerial dispersant spraying:**
   a. No aerial dispersant spraying within the greatest of 3 nm offshore or depths less than 10 meters.
   b. No dispersant spraying within 5 nm of the spill source at surface: **28 45 12N - 88 18 53 W as defined in the FAA NOTAM.**

FOR DOCUMENTATION PURPOSES (FUTURE REVIEW) WE WILL LIST THE FAA NOTAM **28 45 12N -88 18 53 W** AS THE OFFICIAL LOCATION.

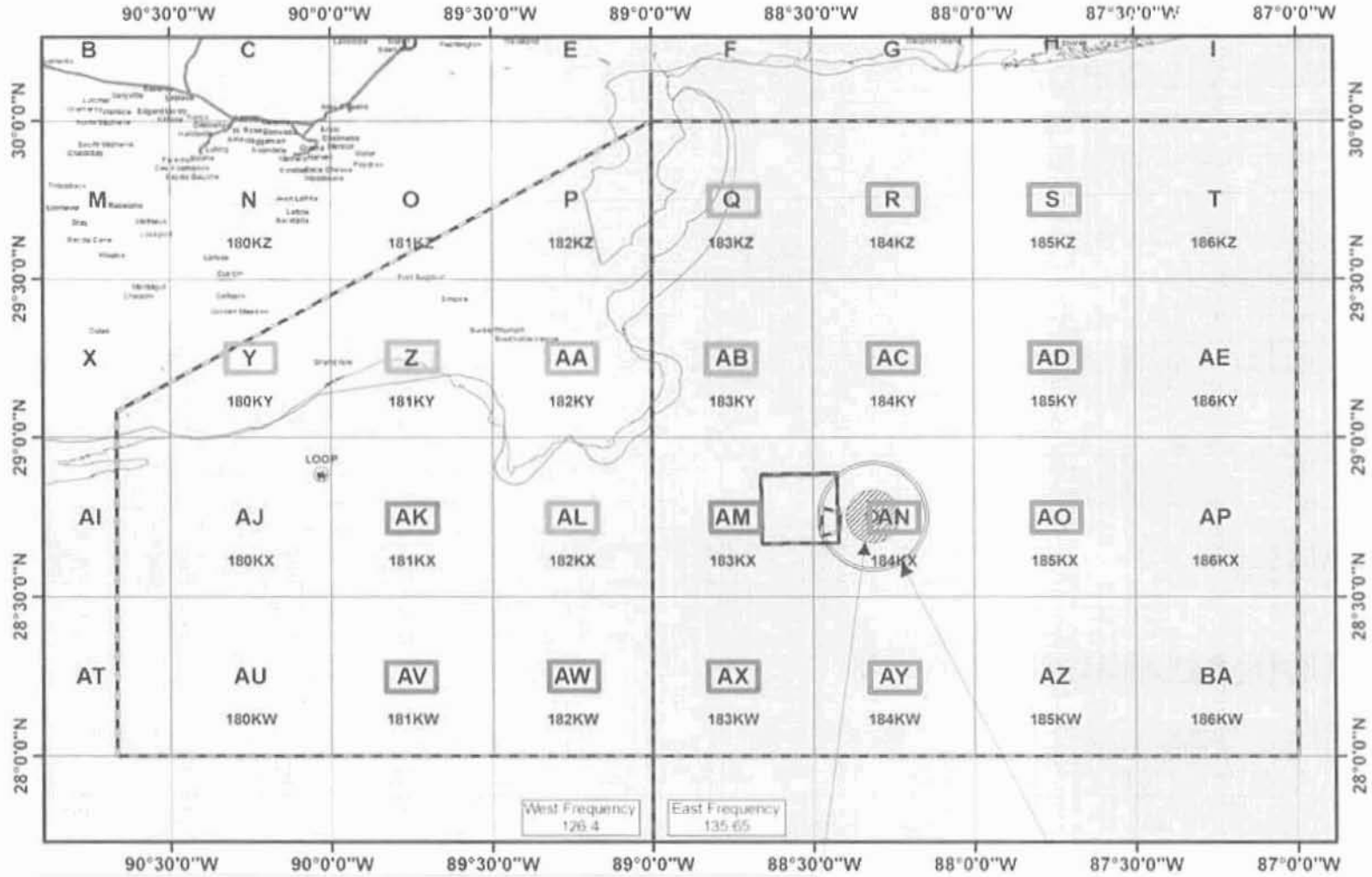
   c. No aerial dispersant spraying 2nm of vessels, platforms, and 3nm from marine mammals.
   d. SMART and Scientific Support Missions may spray within 1nm of SMART/ SSM vessel; positive ID required.
   e. Target black and brown oil. This is the freshest/most dispersible oil. Dosage is 5 gallons per acre. ***Quality not Quantity***. Do not target Red/Reddish emulsified oil.
   f. Spotter aircraft remain on site to visually assess effects on dispersed area and document with photographs. Complete spotters debrief form and turn in to base operations on a daily bases.
   g. Report takeoff and landing times to assigned coordinators as they occur.

Continued next page >

5. **Aircraft Communications:**
   a. **Primary air-to-air communication frequency in TFR West of 89° W is 126.4, East of 89° W is 135.65 AND 132.6 in the source area.**
      - Secondary is 123.45 all zones.
   b. Contact P3 aircraft "Omaha 99" for flight advisories.
   c. Discreet IFF codes are permanently assigned to each aircraft must be used to enter TFR. This removes need to file DVFR flight plans.
      It is absolutely essential that each flight each day calls Tyndall to advise them prior to takeoff (b) (6)
   d. Advise SMART 1 prior to spray aircraft departure.
   e. Primary surface to air frequency is 122.9. Secondary is 123.45.

Dispersant Group conference call will be held 1530 Dial in (b) (6) participant code (b) (6) (Stennis use moderator number).

Aerial Dispersants Operational Areas July 09, 2010



Note 1: No Dispersant Flying Within 5 NM from the Spill Source 28°45'12"N / -88°18'53"W

Stennis

ASI Houma

AT Houma

SKIMMER OPERATIONS

-88 39.666W
28 53.009N

-88 39.467W
28 40.05N

BURN BOX

-88 25.577W
28 53.25N

-88 25.339W
28 40.201N

JULY 9, 2010
START

TFR is 10 NMs
Contact OMAHA 99
on 132 6

Dispersant Spray Assets

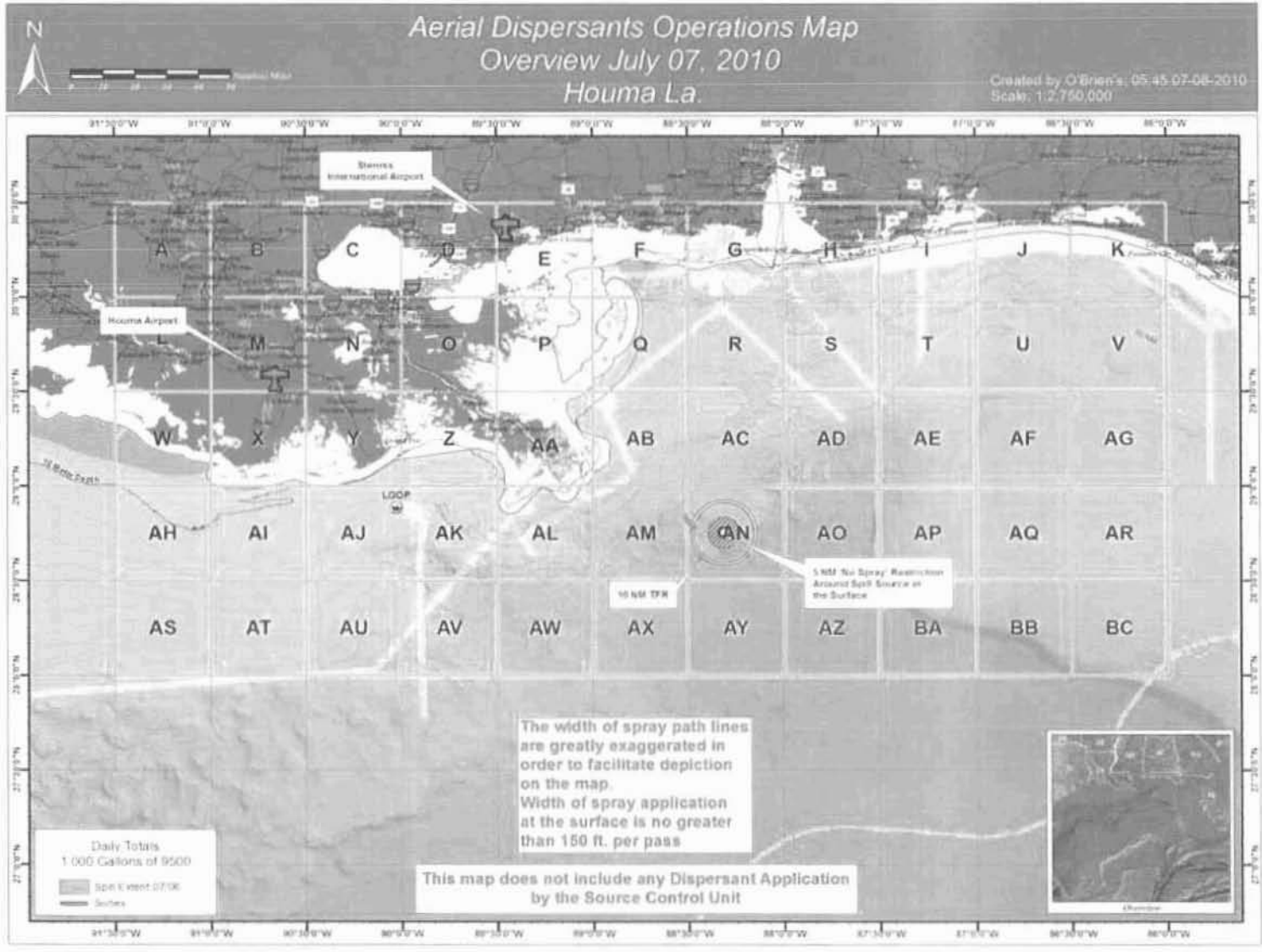
Aircraft Information						
Type	**Owner/ Operator**	**Tail #**	**Payload (gal)**	**Airport**	**Purpose & Altitude**	**Comments**
Spotters						
King Air	MSRC (Dynamic)	N39Q		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N89N		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N41J		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N37H		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N80Y		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N79W		Houma	Spotter – 1,000' to 1,500'	
Aztec (PA 23)	ASI N141183			Houma	Backup Spotter	
Turbo COMDR	ASI N112EM			Houma	Spotter	
Sprayers						
King Air	MSRC (Dynamic)	N7198Y	240	Stennis	Spray: 75'	Available for both Spray and Spotter duties
King Air	MSRC (Dynamic)	N7199D	240	Stennis	Spray: 75'	Available for both Spray and Spotter duties
C-130	IAR N117TG		3,000	Stennis	Spray: 75'	
C-130	MSRC (Lynden)	N403LC	5,000	Stennis	Spray: 75'	ADDS Pack (CCA)
C-130	MSRC (Lynden)	N401LC	5,000	Stennis	Spray: 75'	ADDS Pack (Alyeska)
C-130	OSR	EIJIV	5,000	Stennis	Spray: 75'	ADDS Pack (OSR)
AT-802	Lane (NRC)	N9002K	800	Houma	Spray: 75'	2-Seater / Training
AT-802	Lane (NRC)	N802BG	800	Houma	Spray: 75'	
AT-802	Lane (NCR)	N950HC	800	Houma	Spray: 75'	
BT-67	ASI	N932H	1,800	Houma	Spray: 75'	
DC-3	ASI	N64766	1,000	Houma	Spray: 75'	
DC-3	ASI	N64767	1,000	Houma	Spray: 75'	Standby
Operational Spray Volume (1 load per plane) (gal)			24,680			
Total Operational Spray Maximum (gal) (4 sorties/ plane / day)			98,720			

Dispersant Application Totals

Dispersant Statistics Applied by Day						
Date	Dispersant Type (gallons)		Daily Totals	# Sorties	Acres Covered (5 gal/acre application rate)	Square Miles covered
	9500	9527				
21 April 2010	Initial Response Date					
22 April 2010	0	1,800	1,800	1	360	0.6
23 April 2010	0	0	0	0	0	0
24 April 2010	0	0	0	0	0	0
25 April 2010	0	11,604	11,604	9	2,321	3.7
26 April 2010	0	14,486	14,486	10	2,897	4.5
27 April 2010	11,191	15,887	27,078	11	5,416	8.5
28 April 2010	27,269	14,874	42,143	15	8,429	13.2
29 April 2010	36,913	4,000	40,913	13	8,183	12.8
30 April 2010	4,900	0	4,900	1	980	1.5
1 May 2010	3,550	8,103	11,653	4	2,331	3.6
2 May 2010	0	0	0	0	0	0
3 May 2010	0	0	0	0	0	0
4 May 2010	10,561	23,712	34,273	12	6,855	10.7
5 May 2010	30,905	18,670	49,575	18	9915	15.5
6 May 2010	13,032	15,738	28,770	11	5,754	9.0
7 May 2010	5,582	1,688	7,270	4	1,454	2.3
8 May 2010	17,813	23,877	41,690	17	8,338	13.0
9 May 2010	29,034	26,898	55,932	21	11,186	17.5
10 May 2010	29,240	26,980	56,220	22	11,244	17.6
11 May 2010	7,940	0	7,940	2	1,588	2.5
12 May 2010	39,710	0	39,710	12	7,942	12.4
13 May 2010	41,620	0	41,620	15	8,324	13.0
14 May 2010	44,031	0	44,031	14	8,806	13.8
15 May 2010	14,208	0	14,208	6	2,842	4.4
16 May 2010	0	0	0	0	0	0
17 May 2010	6,591	0	6,591	4	1,318	2.1
18 May 2010	209	0	209	1	42	0.1

Dispersant Statistics Applied by Day						
Date	Dispersant Type (gallons)		Daily Totals	# Sorties	Acres Covered (5 gal/acre application rate)	Square Miles covered
	9500	9527				
19 May 2010	0	0	0	0	0	0
20 May 2010	0	0	0	0	0	0
21 May 2010	25,233	4,659	29,892	14	5,978	9.3
22 May 2010	51,353	1,593	52,946	22	10,589	16.6
23 May 2010	18,104	0	18,104	11	3,621	5.7
24 May 2010	630	0	630	1	126	0.2
25 May 2010	200	0	200	1	40	0.1
26 May 2010	229	0	229	1	46	0.1
27 May 2010	200	0	200	1	40	0.1
28 May 2010	10,259	0	10,259	4	2,052	3.2
29 May 2010	0	0	0	0	0	0
30 May 2010	15,131	0	15,131	6	3,026	4.7
31 May 2010	11,676	0	11,676	7	2,335	3.7
1 June 2010	0	0	0	0	0	0
2 June 2010	0	0	0	0	0	0
3 June 2010	1,900	0	1,900	1	380	0.6
4 June 2010	0	0	0	0	0	0
5 June 2010	125	0	125	1	24	0
6 June 2010	0	0	0	0	0	0
7 June 2010	3,998	0	3,998	2	800	1.3
8 June 2010	5,505	0	5,505	3	1,101	1.7
9 June 2010	0	0	0	0	0	0
10 June 2010	4,506	0	4,506	2	901	1.4
11 June 2010	14,305	0	14,305	6	2,861	4.5
12 June 2010	6,996	0	6,996	2	1,399	2.2
13 June 2010	35,212	0	35,212	13	7,042	11.0
14 June 2010	10,703	0	10,703	7	2,141	3.3
15 June 2010	2,608	0	2,608	3	522	0.8
16 June 2010	13,380	0	13,380	7	2,676	4.2

Dispersant Statistics Applied by Day						
Date	Dispersant Type (gallons)		Daily Totals	# Sorties	Acres Covered (5 gal/acre application rate)	Square Miles covered
	9500	9527				
17 June 2010	12,123	0	12,123	6	2,425	3.8
18 June 2010	15,564	0	15,564	8	3,113	4.9
19 June 2010	2,604	0	2,604	2	521	0.8
20 June 2010	15,403	0	15,403	6	3,081	4.8
21 June 2010	10,355	0	10,355	4	2,071	3.2
22 June 2010	2,008	0	2,008	2	402	0.6
23 June 2010	5,099	0	5,099	3	1,020	1.6
24 June 2010	21,088	0	21,088	10	4,218	6.6
25 June 2010	4,633	0	4,633	2	927	1.5
26 June 2010	23,022	0	23,022	12	4,605	7.2
27 June 2010	6,623	0	6,623	3	1325	2.07
28 June 2010	0	0	0	0	0	0
29 June 2010	0	0	0	0	0	0
30 June 2010	0	0	0	0	0	0
01 July 2010	17,852	0	17,852	5	3570	6
02 July 2010	12,737	0	12,737	7	2547	3
03 July 2010	0	0	0	0	0	0
04 July 2010	3,000	0	3,000	1	600	1
05 July 2010	803	0	803	1	161	.25
06 July 2010	0	0	0	0	0	0
07 July 2010	1,000	0	1,000	1	200	0.3
08 July 2010	0	0	0	0	0	0
TOTALS	**760,469**	**214,569**	**975,038**	**404**	**195,008**	**304.7**


Aerial Dispersants Operations Map
Overview July 07, 2010
Houma La.
Created by O'Brien's: 05:45 07-08-2010
Scale: 1:2,750,000
N
Houma Airport
LOOP
A
B
C
D
E
F
G
H
I
J
K
L
M
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O
P
Q
R
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U
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AJ
AK
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AO
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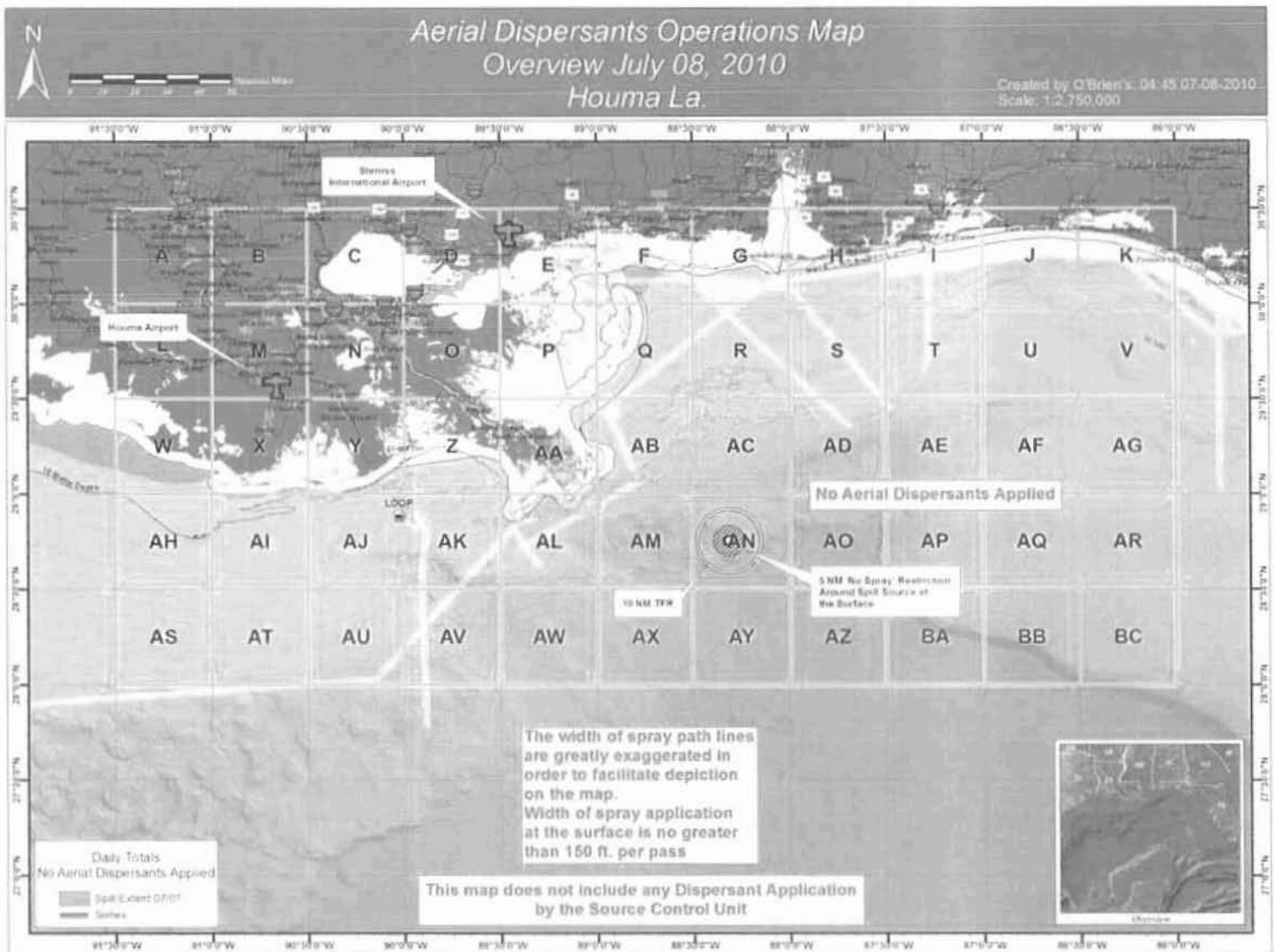
AV
AW
AX
AY
AZ
BA
BB
BC
The width of spray path lines are greatly exaggerated in order to facilitate depiction on the map.
Width of spray application at the surface is no greater than 150 ft. per pass
This map does not include any Dispersant Application by the Source Control Unit
Daily Totals
1,000 Gallons of 9500


Aerial Dispersants Operations Map
Overview July 08, 2010
Houma La.
Created by O'Brien's: 04:45 07-08-2010
Scale: 1:2,750,000
N
Stennis International Airport
Houma Airport
A
B
C
D
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F
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H
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J
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AI
AJ
AK
AL
AM
AN
AO
AP
AQ
AR
AS
AT
AU
AV
AW
AX
AY
AZ
BA
BB
BC
LOOP
No Aerial Dispersants Applied
10 NM TFR
5 NM 'No Spray' Restriction Around Spill Source at the Surface
The width of spray path lines are greatly exaggerated in order to facilitate depiction on the map.
Width of spray application at the surface is no greater than 150 ft. per pass
This map does not include any Dispersant Application by the Source Control Unit
Daily Totals
No Aerial Dispersants Applied
Spill Extent 07/07
Spillers

DAILY AERIAL DISPERSANT APPLICATION PLAN

DATE:	7/8/10	TIME:	0600 local	STAGING AIRPORTS:	Stennis Int'l / Houma	AIRPORT ID:	KHSA / KHUM

DISP. STAGING APT SPVSR (Name & Phone #): (Stennis) Gerry Nielsen (b) (6) / (Houma) Mark Cochrane (b) (6)

SPILL SITE INFORMATION:

SPILL LOCATION:	Latitude:	28 55 N	N	Longitude:	88 21 W	W	Size:
GEOGRAPHICAL REFERENCE:	112 nm SSE Stennis Airport						

SPILL SITE APPROACH INFORMATION:

ENTRY POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude:	See OPS Chart	ft
EXIT POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude:	See OPS Chart	ft
HOLDING AREA:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude:	See OPS Chart	ft

SPILL SITE WX:	WIND: ESE 11 - 14	CLG: UNL	VIS: 12 nm	SUNRISE: 0601	SUNSET: 1953		
SEA STATE:	Swell: SSE - 4 5' - 9 4'	Wind Waves: ESE 3'		Combined Seas 9 4'			

(Attach Wilken's Weather Report for weather at the spill site and the staging airport)

DOSAGE (GPA): 5 **ADD'L INST:** See required setbacks and no fly area's on operational plan

COMMS

PRIMARY VHF COM: 126 40 MHz. W of 88-30	PRIMARY VHF COM: 135 65 MHz. E of 88-30	SEC VHF COM: 123 45 / EMERG COM: 121 5 MHz
PRIMARY VHF COM: Surface to Air 122 9 MHz / SECONDARY VHF COM: Surface to Air 123 45 MHz / Marine primary VHF 81A		
MARINE RADIO: Channel 16 then switch to Channel 9/ SATELLITE PHONE: Aircraft will contact through the Disp Staging Airport Supervisor		

AIRCRAFT INFORMATION:

Type:	Tail #:	Call Sign:	Airport ETA:	Purpose & Altitude:	PIC/Crew:	Passengers:
King Air Dynamic	N7198Y	98Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N80Y	80Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N39Q	39Q	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N7199D	99D	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N89N	89N	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N41J	41J	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N79W	79W	Houma	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N37H	37H	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
C-130 IAR	N117TG	7TG	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 Lynden	N403LC	3LC	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N9002K	02K	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N802BG	2BG	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N950HC	0HC	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
C-130 Lynden	401LC	1LC	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 OSR	EIJIV	JIV	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
BT-67 ASI	N932H	32H	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
DC-3 ASI	N64767	767	Houma Standby	Spray: 75'	PIC: TBD Co-pilot: TBD	
DC-3 ASI	N64766	766	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
Aztec ASI	N141183	183	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Turbo Cmdr ASI	N112EM	2EM	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Aircraft below are not directly part of the Dispersant Group / Cordination and assistance from the aircraft below is nessasary.						
King Air	N275	275	Houma Jet	Recon		
Helo PHI	759P		Houma	Recon		
U S Customs	P-3	Omaha 99		Communications		
Canada	Transport 950		Houma	Surveillance		

DATE: July 8, 2010												
SORTIE	TYPE A/C	TAIL #	PURPOSE	FUEL LOAD (#/Hrs:Min)	PAYLOAD GAL	PAYLOAD TYPE	TOTAL FLT TIME	DPT TIME EST/ACT	ENTRY EST/ACT	EXIT ETA EST/ACT	RETURN ETA EST/ACT
	BE90	79W	Recon / Spotter	4	0			0000 / 0628			0000 / 0841
	Aztec	183	Recon / Spotter	4	0			0000/0631			0000//0959
	Turbo Cmdr	N112EM	Recon / Spotter	5	0			0610 /0633			0910 / 0910
	BE90	89N	Recon / Spotter	4	0			0000 / 0647			0000 /1049
	BE90	37H	Recon / Spotter	4	0			0000 / 0715			0000 / 1110
	BE90	80Y	Recon / Spotter	4	0			0000 / 0921			0000 /1239
	BE90	39Q	Recon / Spotter	4	0			0000 / 0945			0000 / 1111
	BE90	98Y	Recon / Spotter	4	0			0000 / 1142			0000 / 1515
	BE90	37H	Recon / Spotter	4	0			0000 / 1209			0000 / 1616
	BE90	79W	Recon / Spotter	4	0			0000 / 1254			0000 / 1428
	BE90	80Y	Recon / Spotter	4	0			0000 /1343			0000 / 1715
	BE90	39Q	Recon / Spotter	4	0			0000 / 1441			0000 / 1718
	BE90	80Y	Spotter	4	0			0800			1200
1	C -130	N117TG	Spray	4	0			0830			1030
	Turbo Cmdr	N112EM	Recon / Spotter	5	0			1205			1540
2	BT-67	N932H	Spray	4	0			1200			1425
3	DC-3	766	Spray	4	0			1230			1432
	BE90	89N	Spotter	4	0			0803			1206
4	C -130	403LC	Spray	4	0			0834			1035
	BE90	80Y	Spotter	4	0			1245			1545
5	C-130	401LC	Spray	4	0			1300			1455
	BE90	98Y	Spotter	4	0			1200			1600
6	C-130	JD	Spray	4	0			1303			1457
	BE90	39Q	Spotter	4	0			1200			1600
7	AT - 802	02K	Spray	4	0			1245			1500
	Unable to find dispersable oil, all spray flights cancelled.										

Combined SiteTotals	0	9500
	Stennis	0
	Houma	0

DAILY AERIAL DISPERSANT APPLICATION PLAN

DATE:	7/9/2010	TIME:	0600 local	STAGING AIRPORTS	Stennis Int'l / Houma	AIRPORT ID:	KHSA / KHUM

DISP. STAGING APT SPVSR (Name & Phone #): (Stennis) Gerry Nielsen (b) (6) / (Houma) Mark Cochrane (b) (6)

SPILL SITE INFORMATION:

SPILL LOCATION:	Latitude:	28 55 N	N	Longitude:	88 21 W	W	Size:
GEOGRAPHICAL REFERENCE:	112 nm SSE Stennis Airport						

SPILL SITE APPROACH INFORMATION:

ENTRY POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude	See OPS Chart ft
EXIT POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude	See OPS Chart ft
HOLDING AREA:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude	See OPS Chart ft

SPILL SITE WX:	WIND: ESE 5 - 7	CLG: UNL	VIS 15 nm	SUNRISE: 0602	SUNSET: 1953
SEA STATE:	Swell: SSE - 2 0'	Wind Waves: ESE 2'		Combined Seas 3 0'	

(Attach Wilken's Weather Report for weather at the spill site and the staging airport)

DOSAGE (GPA): 5 **ADD'L INST:** See required setbacks and no fly area's on operational plan

COMMS	
	PRIMARY VHF COM: 126 40 MHz, W of 8 / PRIMARY VHF COM: 135 65 MHz, E of 88-30 / SEC VHF COM: 123 45 / EMERG COM: 121 5 MHz
	PRIMARY VHF COM: Surface to Air 122 9 MHz / SECONDARY VHF COM: Surface to Air 123 45 MHz / Marine primary VHF 81A
	MARINE RADIO: Channel 16 then switch to Channel 9/ SATELLITE PHONE: Aircraft will contact through the Disp Staging Airport Supervisor

AIRCRAFT INFORMATION:

Type:	Tail #:	Call Sign:	Airport ETA:	Purpose & Altitude:	PIC/Crew:	Passengers:
King Air Dynamic	N7198Y	98Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N80Y	80Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N39Q	39Q	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N7199D	99D	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N89N	89N	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N41J	41J	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N79W	79W	Houma	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N37H	37H	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
C-130 IAR	N117TG	7TG	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 Lynden	N403LC	3LC	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N9002K	02K	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N802BG	2BG	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N950HC	0HC	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
C-130 Lynden	401LC	1LC	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 OSR	EIJIV	JIV	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
BT-67 ASI	N932H	32H	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
DC-3 ASI	N64767	767	Houma Standby	Spray: 75'	PIC: TBD Co-pilot: TBD	
DC-3 ASI	N64766	766	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
Aztec ASI	N141183	183	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Turbo Cmdr ASI	N112EM	2EM	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Aircraft below are not directly part of the Dispersant Group / Cordination and assistance from the aircraft below is nessasary.						
King Air	N275	275	Houma Jet	Recon		
Helo PHI	759P		Houma	Recon		
U S Customs	P-3	Omaha 99		Communications		
Canada	Transport 950		Houma	Surveillance		

DATE: July 9, 2010											
SORTIE	TYPE A/C	TAIL #	PURPOSE	FUEL LOAD (#/Hrs:Min)	PAYLOAD GAL	PAYLOAD TYPE	TOTAL FLT TIME	DPT TIME EST/ACT	ENTRY EST/ACT	EXIT ETA EST/ACT	RETURN ETA EST/ACT
	BE90	37H	Recon / Spotter	4	0			0600			0945
	BE90	98Y	Recon / Spotter	4	0			0610			0950
	Turbo Cmdr	N112EM	Recon / Spotter	5	0			0610			0910
	Aztec	183	Recon / Spotter	4	0			0620			0920
	BE90	79W	Recon / Spotter	4	0			0630			0930
	BE90	80Y	Spotter	4	0			0800			1200
1	C-130	N117TG	Spray	4	3000			0830			1030
	Turbo Cmdr	N112EM	Recon / Spotter	5	0			1205			1540
2	BT-67	N932H	Spray	4	2000			1200			1425
3	DC-3	766	Spray	4	1000			1230			1432
	BE90	89N	Spotter	4	0			0803			1206
4	C-130	403LC	Spray	4	5000			0834			1035
	BE90	80Y	Spotter	4	0			1245			1545
5	C-130	401LC	Spray	4	5000			1300			1455
	BE90	98Y	Spotter	4	0			1200			1600
6	C-130	JIV	Spray	4	5000			1303			1457
	BE90	39Q	Spotter	4	0			1200			1600
7	AT-802	02K	Spray	4	800			1245			1500

Combined SiteTotals		9500
	Stennis	0
	Houma	0

Aerial Dispersants Operations – Houma Status Report

July 9, 2010

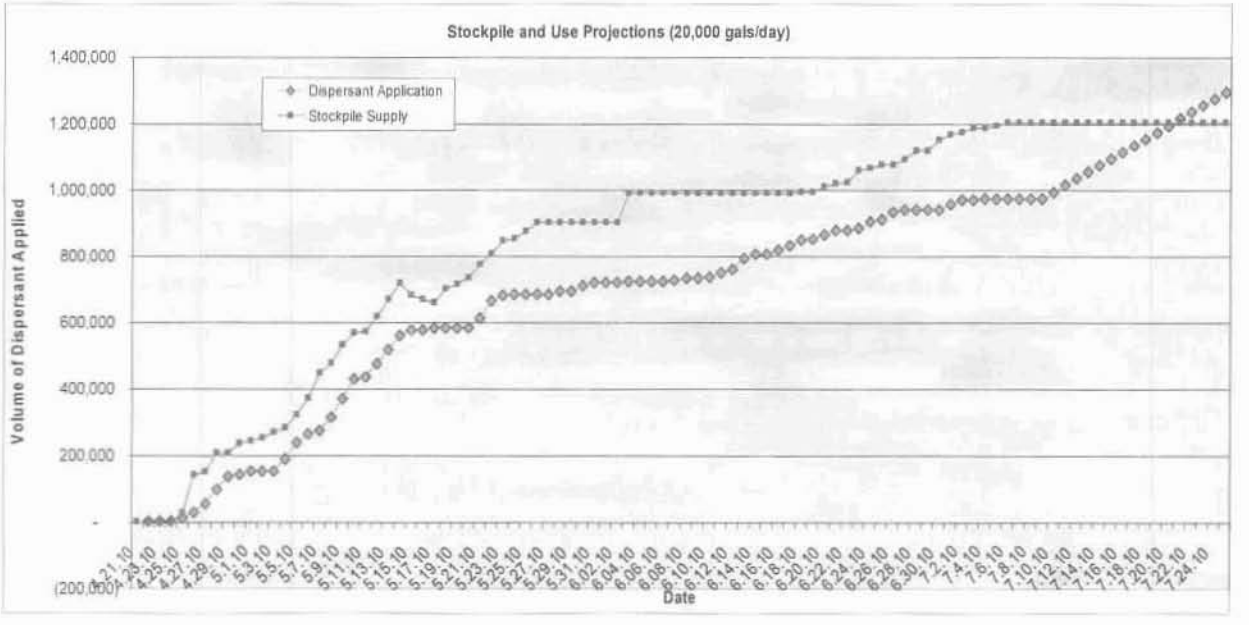
This report presents a snapshot of the aerial dispersant applications conducted on this date and summarizes the associated support activities. Aerial application of dispersants are being conducted under the direction of Unified Command and are targeting dispersible oil to minimize surface oil slicks impacting the environmentally sensitive shoreline ecosystem.

Dispersant Aerial Spray Summary:

1. FOSC approved Application Volume for July 09, 2010 (gallons):	10,000 @ 08:50 AM
2. Total Amount of Dispersant Applied on July 09, 2010 (gallons):	0
3. Total Sorties on July 09, 2010:	0
4. Total Amount of Dispersant Applied to date (gallons):	975,038
5. Total Sorties to date:	404
6. Total Area Covered by Dispersant Applications to date (mi^2):	305
7. Total Dispersant Stockpiles on the ground as of 7.09.2010 – 1200 PM (gallons):	216,859
8. Dispersant Stockpile Expected Arrival as of 7.09.10 – 1200 PM (gallons)*:	0
9. Estimated Total Dispersant as of 7.10.2010 - 1200 PM (gallons):	216,859
10. Projected Days Operational at maximum rate of 20,000 gal/day (days):	11

* Future estimates for the delivery of EC9500A are based on production schedules provided by Procurement on 7.8.10 via email and discussions with Nalco.

Dispersant Stockpile Supply and Use Projections



Asset Summary On Scene	
Spray Aircraft:	
C-130 – Stennis (2 Lynden, 1 IAR, 1 OSR)	4
DC-3 – Houma	2
BT-67 – Houma	1
King Air – 2 – Stennis (can be used for spotting)	2
AT-802 – Houma	3
TOTAL:	12
Spotter Aircraft:	
King Air – 5 – Stennis	5
King Air – 1 – Houma	1
Aztec – Houma	1
Turbo COMDR – Houma	1
TOTAL:	8
TOTAL AIRCRAFT:	20
PRIORITY Spray Assets Identified***	
Spray Aircraft:	LEAD TIME
C-130 – OSR-Singapore - (20,000 gal/day)	1 in 72+ hours
C-130 – IAR (15,000 gal/day)	1 – TBD
AT 802 (Agriculture Spray Planes) (5,000 gal/day)	3 in 6+ hours
***NOTE: These assets will not be activated until sufficient stockpile of dispersants are available for their use. Estimate that dispersant operations will need approximately 75,000 gallons per day of dispersant for these air craft spray systems.	
Additional Spray Assets Identified	
Neat Sweep	In area

Aerial Dispersant Activity Update for July 9, 2010:

- At 08:50 local time 9 July 2010, RADM Watson gave approval to apply an initial 10,000 g of dispersants to targeted dispersible oil.

- Thirteen overflights were conducted throughout the day. Dispersible oil slicks were identified in zone AN and were already being recovered by skimmers and burned by the ISB vessels. Emulsified oil was also sighted in the northeast AN zone, but was deemed non-dispersible and also had skimmers commencing operations.

- We have been asked about the procedures for conducting our spray missions. Rather than provide a lengthy copy of the operations plan, we have prepared a flow chart of the operations. This flow chart is separate from the "Dispersant Approval Process" flow chart and represents what actions are taken by the staging bases and the spray and spotter aircraft. These actions are constant and are not affected by the approval process, with the one important exception that spraying cannot take place until FOSC approval is obtained. The Dispersant Application Flow Chart is attached.

- With the new cap replacement operations to commence this evening it is expected that there will be a period when the oil release will be uncontained resulting in more oil reaching the surface. During this period the Dispersant Group will be ready to assist in treating any oil that escapes from the skimming and ISB assets stationed near the source site with the currently available dispersant stockpiles.

- We developed a database of all spray missions, specifically targeting all missions that were conducted within 10 - 20 nm from shorelines at the request of BP Corporate. In summary:
    - 56 sorties (13.86% of 404 spray sorties total) were complete or partial applications within 20nm from shore (a sortie is defined as a spray aircraft taking off with a payload, flying offshore, and returning to base after applying dispersant).
    - The gallons sprayed within 10 or 20 nm were estimated from the amount of the spray passes in these areas, i.e., only the portion of the sortie within 10 to 20 nm is included; the spray pass gallons sprayed outside the 10 to 20 nm zones are not included..
    - 2.07% of total spray volume (975,058 gallons) was within 10 nm from shore.
    - 7.79% of total spray volume (975,058 gallons) was within 10 to 20nm from shore.

  A copy of this graphic is attached.

M/V International Peace Research Activity Update for July 9, 2010:

- The M/V IP left port last night and was on scene for this morning's mission to test equipment in preparation for continuing the sampling mission on July 10, 2010. No samples will be collected on 7.9.10.

SMART Tier 1 Update for July 9, 2010:

- There were no SMART Tier 1 observations as there were no dispersant applications conducted this day.

Aerial Dispersant Group Operations Plan for July 7th:
Dated 9 July, 2010

Tim Spoerl, Brad Barker, and Scotty Meador, please acknowledge receipt. Disseminate to all pilots. Op Areas are depicted on attached map .pdf; schedule on attached .xls

Mission Targeting start of the day: 07-10-2010

The following zones are assigned for early morning surveillance and initial spray targets. Expect early authorization for 10,000 gallons. For Stennis base of 6,000 gallons and for Houma 4,000 gallons (This is not a given authorization).

Communicate dispersible oil as soon as possible in assigned zones. Spotters, please provide a photo if possible with your reports.

Stennis: Primary zones AN, AC. Secondary zones, AD, AO, AY, R, S (RED indicators on map).
Houma ASI: Primary zones AM, AX. Secondary zones, AK, AW, AV (BLUE indicators on map).
Houma AT-802: Primary zones AB, Z. Secondary zones Y, AL, AA, Q [Limited to within 40 NM from the shoreline] (GREEN indicators on map).

Maintain 3 nm boundary separation if unable to coordinate air-to-air with other spotter or OMAHA 99.

Notes: Changes to previous orders are underlined.

1. **Required Equipment:** Functioning spray tracking units (GPS, Sat Lock) if not equipped, do not fly.
2. **As of 28 May 2010 FOSC approval is required each day for application of Corexit EC9500A dispersant in pre-approved areas.**
3. **Restrictions to aerial dispersant spraying:**
   a. No aerial dispersant spraying within the greatest of 3 nm offshore or depths less than 10 meters.
   b. No dispersant spraying within 5 nm of the spill source at surface: **28 45 12N - 88 18 53 W as defined in the FAA NOTAM.**

FOR DOCUMENTATION PURPOSES (FUTURE REVIEW) WE WILL LIST THE FAA NOTAM **28 45 12N -88 18 53 W** AS THE OFFICIAL LOCATION.

c. No aerial dispersant spraying 2nm of vessels, platforms, and 3nm from marine mammals.
d. SMART and Scientific Support Missions may spray within 1nm of SMART/ SSM vessel; positive ID required.
e. Target black and brown oil. This is the freshest/most dispersible oil. Dosage is 5 gallons per acre. ***Quality not Quantity***. Do not target Red/Reddish emulsified oil.
f. Spotter aircraft remain on site to visually assess effects on dispersed area and document with photographs. Complete spotters debrief form and turn in to base operations on a daily bases.
g. Report takeoff and landing times to assigned coordinators as they occur.

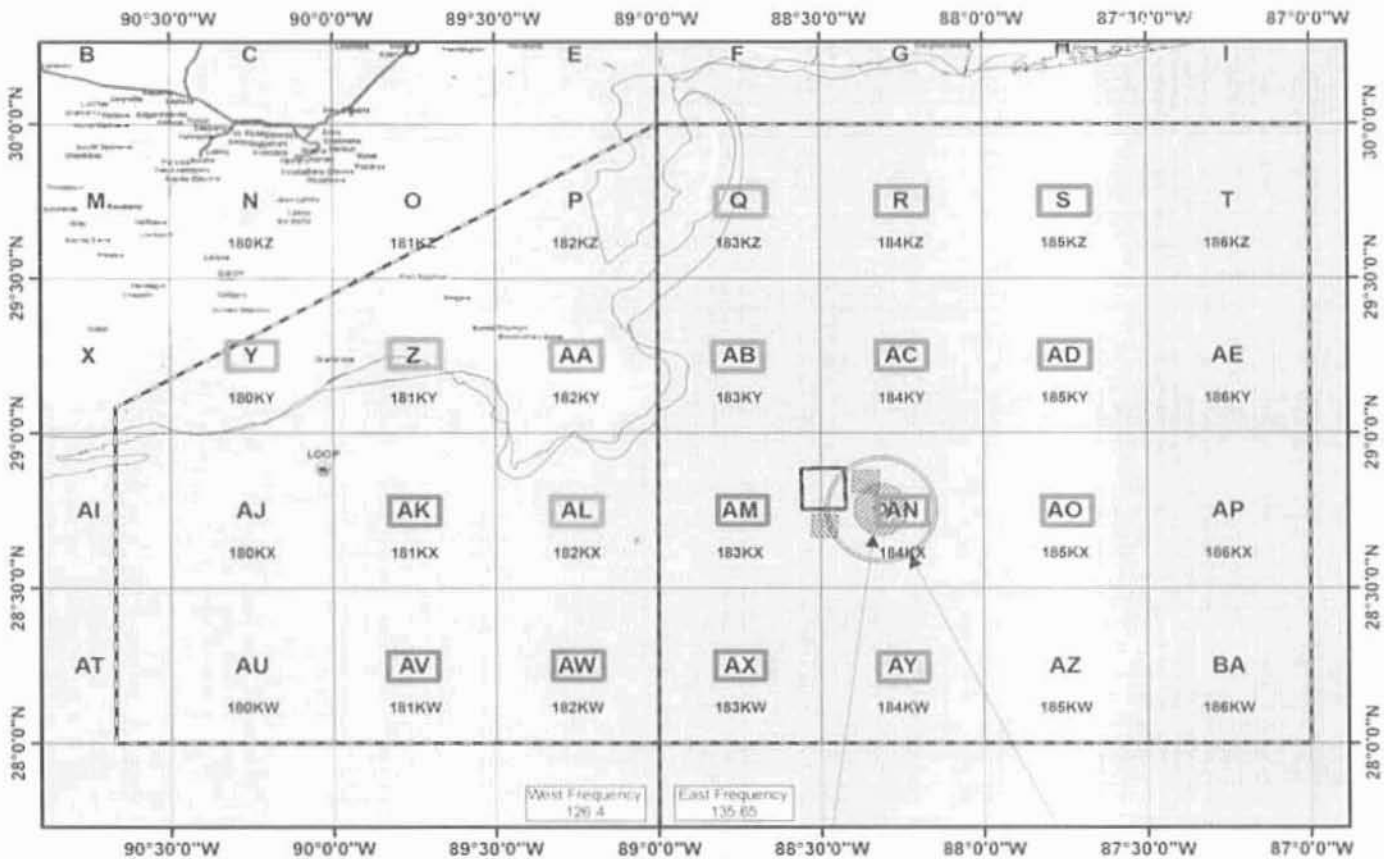
5. **Aircraft Communications:**
   a. **Primary air-to-air communication frequency in TFR West of 89° W is 126.4, East of 89° W is 135.65 AND 132.6 in the source area.**
   - Secondary is 123.45 all zones.
   b. Contact P3 aircraft "Omaha 99" for flight advisories.
   c. Discreet IFF codes are permanently assigned to each aircraft must be used to enter TFR. This removes need to file DVFR flight plans.
   It is absolutely essential that each flight each day calls Tyndall to advise them prior to takeoff (b) (6)
   d. Advise SMART 1 prior to spray aircraft departure.
   e. Primary surface to air frequency is 122.9. Secondary is 123.45.

Ancillary operations:

1. **SMART Team:** Will be working on defined and approved sites. Details to be developed with spotter findings.
2. **In Situ Burning:** The burn box is as depicted on the operational chart, however, note, the burn box location is subject to change. We will coordinate with the burn boys in the morning and advise if any location adjustment has been made.
3. **Skimmers:** Normal operations are to be conducted with 2nm separation for spray application.
4 **"A Whale"** is still operating position varies but usually WNW-NW of the source. Allow 2nm separation.
5. **Stennis Tasking:** Scientific Support Mission: The IP will require a recon/spotter in the morning. Tentative rendezvous location will be the SW corner of AC. Tentatively, the research vessel M/V Determination is due to sail this evening and may need a spotter plane tomorrow. Hopefully, the same plane can spot for the IP & Determination.

No Dispersant Group conference call today. If on is held tomorrow, it will be held @ 1530 Dial in (b) (6) participant code (b) (6). (Stennis use moderator number).

Aerial Dispersants Operational Areas July 10, 2010



Note 1 No Dispersant Flying Within 5 NM from the Spill Source 28°45'12"N / -88°18'53"W

Stennis
ASI Houma
AT Houma

-88 33.71W 28 53.15N	BURN BOX	-88 25.57W 28 53.25N
-88 33.60W 28 45.30N		-88 25.43W 28 45.33N

JULY 10, 2010
START

TFR is 10 NMs
Contact OMAHA 99
on 132.6

Dispersant Spray Assets

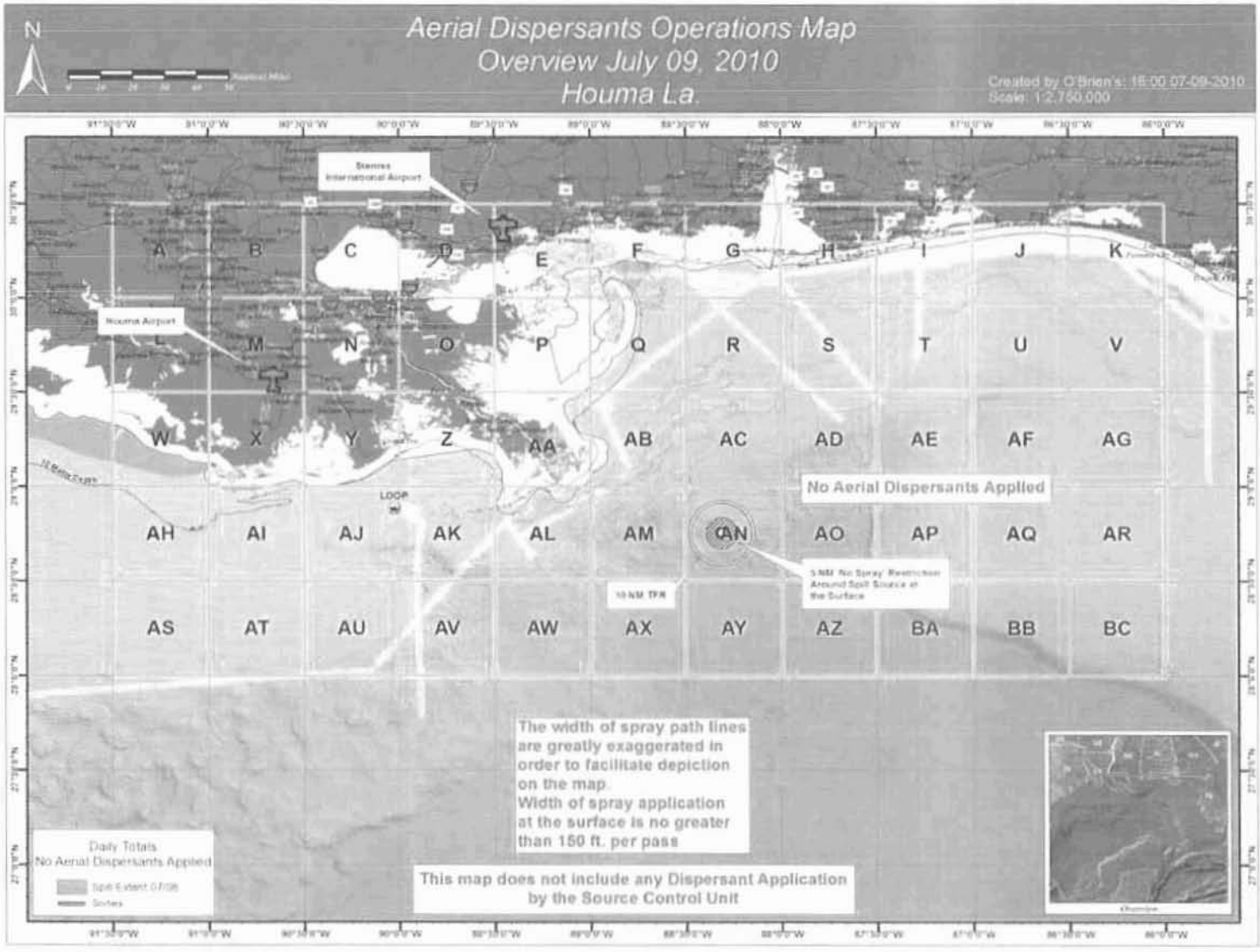
Aircraft Information						
Type	**Owner/ Operator**	**Tail #**	**Payload (gal)**	**Airport**	**Purpose & Altitude**	**Comments**
Spotters						
King Air	MSRC (Dynamic)	N39Q		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N89N		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N41J		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N37H		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N80Y		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N79W		Houma	Spotter – 1,000' to 1,500'	
Aztec (PA 23)	ASI N141183			Houma	Backup Spotter	
Turbo COMDR	ASI N112EM			Houma	Spotter	
Sprayers						
King Air	MSRC (Dynamic)	N7198Y	240	Stennis	Spray: 75'	Available for both Spray and Spotter duties
King Air	MSRC (Dynamic)	N7199D	240	Stennis	Spray: 75'	Available for both Spray and Spotter duties
C-130	IAR N117TG		3,000	Stennis	Spray: 75'	
C-130	MSRC (Lynden)	N403LC	5,000	Stennis	Spray: 75'	ADDS Pack (CCA)
C-130	MSRC (Lynden)	N401LC	5,000	Stennis	Spray: 75'	ADDS Pack (Alyeska)
C-130	OSR	EIJIV	5,000	Stennis	Spray: 75'	ADDS Pack (OSR)
AT-802	Lane (NRC)	N9002K	800	Houma	Spray: 75'	2-Seater / Training
AT-802	Lane (NRC)	N802BG 800		Houma	Spray: 75'	
AT-802	Lane (NCR)	N950HC 800		Houma	Spray: 75'	
BT-67	ASI	N932H	1,800	Houma	Spray: 75'	
DC-3	ASI	N64766	1,000	Houma	Spray: 75'	
DC-3	ASI	N64767	1,000	Houma	Spray: 75'	Standby
Operational Spray Volume (1 load per plane) (gal)			24,680			
Total Operational Spray Maximum (gal) (4 sorties/ plane / day)			98,720			

Dispersant Application Totals

Dispersant Statistics Applied by Day						
Date	Dispersant Type (gallons)		Daily Totals	# Sorties	Acres Covered (5 gal/acre application rate)	Square Miles covered
	9500	9527				
21 April 2010	Initial Response Date					
22 April 2010	0	1,800	1,800	1	360	0.6
23 April 2010	0	0	0	0	0	0
24 April 2010	0	0	0	0	0	0
25 April 2010	0	11,604	11,604	9	2,321	3.7
26 April 2010	0	14,486	14,486	10	2,897	4.5
27 April 2010	11,191	15,887	27,078	11	5,416	8.5
28 April 2010	27,269	14,874	42,143	15	8,429	13.2
29 April 2010	36,913	4,000	40,913	13	8,183	12.8
30 April 2010	4,900	0	4,900	1	980	1.5
1 May 2010	3,550	8,103	11,653	4	2,331	3.6
2 May 2010	0	0	0	0	0	0
3 May 2010	0	0	0	0	0	0
4 May 2010	10,561	23,712	34,273	12	6,855	10.7
5 May 2010	30,905	18,670	49,575	18	9915	15.5
6 May 2010	13,032	15,738	28,770	11	5,754	9.0
7 May 2010	5,582	1,688	7,270	4	1,454	2.3
8 May 2010	17,813	23,877	41,690	17	8,338	13.0
9 May 2010	29,034	26,898	55,932	21	11,186	17.5
10 May 2010	29,240	26,980	56,220	22	11,244	17.6
11 May 2010	7,940	0	7,940	2	1,588	2.5
12 May 2010	39,710	0	39,710	12	7,942	12.4
13 May 2010	41,620	0	41,620	15	8,324	13.0
14 May 2010	44,031	0	44,031	14	8,806	13.8
15 May 2010	14,208	0	14,208	6	2,842	4.4
16 May 2010	0	0	0	0	0	0
17 May 2010	6,591	0	6,591	4	1,318	2.1
18 May 2010	209	0	209	1	42	0.1

Dispersant Statistics Applied by Day						
Date	Dispersant Type (gallons)		Daily Totals	# Sorties	Acres Covered (5 gal/acre application rate)	Square Miles covered
	9500	9527				
19 May 2010	0	0	0	0	0	0
20 May 2010	0	0	0	0	0	0
21 May 2010	25,233	4,659	29,892	14	5,978	9.3
22 May 2010	51,353	1,593	52,946	22	10,589	16.6
23 May 2010	18,104	0	18,104	11	3,621	5.7
24 May 2010	630	0	630	1	126	0.2
25 May 2010	200	0	200	1	40	0.1
26 May 2010	229	0	229	1	46	0.1
27 May 2010	200	0	200	1	40	0.1
28 May 2010	10,259	0	10,259	4	2,052	3.2
29 May 2010	0	0	0	0	0	0
30 May 2010	15,131	0	15,131	6	3,026	4.7
31 May 2010	11,676	0	11,676	7	2,335	3.7
1 June 2010	0	0	0	0	0	0
2 June 2010	0	0	0	0	0	0
3 June 2010	1,900	0	1,900	1	380	0.6
4 June 2010	0	0	0	0	0	0
5 June 2010	125	0	125	1	24	0
6 June 2010	0	0	0	0	0	0
7 June 2010	3,998	0	3,998	2	800	1.3
8 June 2010	5,505	0	5,505	3	1,101	1.7
9 June 2010	0	0	0	0	0	0
10 June 2010	4,506	0	4,506	2	901	1.4
11 June 2010	14,305	0	14,305	6	2,861	4.5
12 June 2010	6,996	0	6,996	2	1,399	2.2
13 June 2010	35,212	0	35,212	13	7,042	11.0
14 June 2010	10,703	0	10,703	7	2,141	3.3
15 June 2010	2,608	0	2,608	3	522	0.8
16 June 2010	13,380	0	13,380	7	2,676	4.2

Dispersant Statistics Applied by Day						
Date	Dispersant Type (gallons)		Daily Totals	# Sorties	Acres Covered (5 gal/acre application rate)	Square Miles covered
	9500	9527				
17 June 2010	12,123	0	12,123	6	2,425	3.8
18 June 2010	15,564	0	15,564	8	3,113	4.9
19 June 2010	2,604	0	2,604	2	521	0.8
20 June 2010	15,403	0	15,403	6	3,081	4.8
21 June 2010	10,355	0	10,355	4	2,071	3.2
22 June 2010	2,008	0	2,008	2	402	0.6
23 June 2010	5,099	0	5,099	3	1,020	1.6
24 June 2010	21,088	0	21,088	10	4,218	6.6
25 June 2010	4,633	0	4,633	2	927	1.5
26 June 2010	23,022	0	23,022	12	4,605	7.2
27 June 2010	6,623	0	6,623	3	1325	2.07
28 June 2010	0	0	0	0	0	0
29 June 2010	0	0	0	0	0	0
30 June 2010	0	0	0	0	0	0
01 July 2010	17,852	0	17,852	5	3570	6
02 July 2010	12,737	0	12,737	7	2547	3
03 July 2010	0	0	0	0	0	0
04 July 2010	3,000	0	3,000	1	600	1
05 July 2010	803	0	803	1	161	.25
06 July 2010	0	0	0	0	0	0
07 July 2010	1,000	0	1,000	1	200	0.3
08 July 2010	0	0	0	0	0	0
09 July 2010	0	0	0	0	0	0
TOTALS	**760,469**	**214,569**	**975,038**	**404**	**195,008**	**304.7**


Aerial Dispersants Operations Map
Overview July 09, 2010
Houma La.
Created by O'Brien's: 18:00 07-09-2010
Scale: 1:2,750,000
N
Stennis International Airport
Houma Airport
A B C D E F G H I J K
L M N O P Q R S T U V
W X Y Z AA AB AC AD AE AF AG
AH AI AJ AK AL AM AN AO AP AQ AR
AS AT AU AV AW AX AY AZ BA BB BC
LOOP
No Aerial Dispersants Applied
5 NM 'No Spray' Restriction Around Spill Source at the Surface
10 NM TFR
The width of spray path lines are greatly exaggerated in order to facilitate depiction on the map.
Width of spray application at the surface is no greater than 150 ft. per pass
This map does not include any Dispersant Application by the Source Control Unit
Daily Totals
No Aerial Dispersants Applied
Spill Extent 07/08
Sorbex

DAILY AERIAL DISPERSANT APPLICATION PLAN

DATE: 7/9/2010	TIME: 0600 local	STAGING AIRPORTS Stennis Int'l / Houma	AIRPORT ID: KHSA / KHUM

DISP. STAGING APT SPVSR (Name & Phone #): (Stennis) Gerry Nielsen (b) (6) / (Houma) Mark Cochrane (b) (6)

SPILL SITE INFORMATION:

SPILL LOCATION:	Latitude:	28 55 N		Longitude:	88 21 W	N	Size:
GEOGRAPHICAL REFERENCE:			112 nm SSE Stennis Airport				

SPILL SITE APPROACH INFORMATION:

ENTRY POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude: See OPS Chart	ft
EXIT POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude: See OPS Chart	ft
HOLDING AREA:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude: See OPS Chart	ft

SPILL SITE WX:	WIND:	ESE 5 - 7	CLG: UNL	VIS: 15 nm	SUNRISE: 0602	SUNSET: 1953	
SEA STATE:	Swell: SSE - 2 0'		Wind Waves: ESE 2'		Combined Seas 3 0'		

(Attach Wilken's Weather Report for weather at the spill site and the staging airport)

DOSAGE (GPA): 5 **ADD'L INST:** See required setbacks and no fly area's on operational plan

COMMS

PRIMARY VHF COM: 126 40 MHz, W of 88	PRIMARY VHF COM: 135 65 MHz, E of 88-30	SEC VHF COM: 123 45 / EMERG COM: 121 5 MHz
PRIMARY VHF COM: Surface to Air 122 9 MHz / SECONDARY VHF COM: Surface to Air 123 45 MHz / Marine primary VHF 81A		
MARINE RADIO: Channel 16 then switch to Channel 9/ SATELLITE PHONE: Aircraft will contact through the Disp Staging Airport Supervisor		

AIRCRAFT INFORMATION:

Type:	Tail #:	Call Sign:	Airport ETA:	Purpose & Altitude:	PIC/Crew:	Passengers:
King Air Dynamic	N7198Y	98Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N80Y	80Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N39Q	39Q	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N7199D	99D	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N89N	89N	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N41J	41J	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N79W	79W	Houma	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N37H	37H	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
C-130 IAR	N117TG	7TG	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 Lynden	N403LC	3LC	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N9002K	02K	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N802BG	2BG	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N950HC	0HC	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
C-130 Lynden	401LC	1LC	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 OSR	EUIV	JIV	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
BT-67 ASI	N932H	32H	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
DC-3 ASI	N64767	767	Houma Standby	Spray: 75'	PIC: TBD Co-pilot: TBD	
DC-3 ASI	N64766	766	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
Aztec ASI	N141183	183	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Turbo Cmdr ASI	N112EM	2EM	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Aircraft below are not directly part of the Dispersant Group / Cordination and assistance from the aircraft below is nessasary.						
King Air	N275	275	Houma Jet	Recon		
Helo PIII	759P		Houma	Recon		
US Customs	P-3	Omaha 99		Communications		
Canada	Transport 950		Houma	Surveillance		

DATE: July 9, 2010											
SORTIE	TYPE A/C	TAIL #	PURPOSE	FUEL LOAD (#/Hrs:Min)	PAYLOAD GAL	PAYLOAD TYPE	TOTAL FLT TIME	DPT TIME EST/ACT	ENTRY EST/ACT	EXIT ETA EST/ACT	RETURN ETA EST/ACT
Recon Sorties											
	BE90	79W	Recon	4	0			0000 / 0622			0000 / 0839
	BE90	99D	Recon	4	0			0000 / 0626			0000 / 0950
	Turbo Cmdr	2EM	Recon	5	0			0610 / 0640			0910 / 0908
	BE90	89N	Recon	4	0			0000 / 0641			0000 / 1051
	Aztec	183	Recon	4	0			0000 / 0648			0000 / 1016
	BE90	89N	Recon	4	0			0000 / 0647			0000 / 1049
	BE90	37H	Recon	4	0			0000 / 0814			0000 / 1228
	BE90	39Q	Recon	4	0			0000 / 0908			0000 / 1315
	BE90	99D	Recon	4	0			0000 / 1047			0000 / 1408
	BE90	80V	Recon	4	0			0000 / 1103			0000 / 1506
	BE90	89N	Recon	4	0			0000 / 1143			0000 / 1530
	BE90	37H	Recon	4	0			0000 / 1326			0000 / 1706
	Aztec	183	Recon	4	0			0000 / 1340			0000 / 1630
	BE90	39Q	Recon	4	0			0000 / 1411			0000 / 1715
Training Sorties											
	C-130	JIV	Training 4		0	No Spray		1135			1335
	C-130	401LC	Training 4		0	No Spray		1204			1350
	Training sorties to train new crews, no dispersants or water sprayed.										
Spray/Spotter Sorties											
	BE90	80V	Spotter	4	0			0800			1200
1	C-130	N117TG	Spray	4	0			0830			1030
	Turbo Cmdr	N172EM	Recon / Spotter	5	0			1205			1540
2	BT-67	N932H	Spray	4	0			1200			1425
3	DC-3	766	Spray	4	0			1230			1432
	BE90	89N	Spotter	4	0			0803			1206
4	C-130	403LC	Spray	4	0			0834			1035
	BE90	80V	Spotter	4	0			1245			1545
5	C-130	401LC	Spray	4	0			1300			1455
	BE90	98Y	Spotter	4	0			1200			1600
6	C-130	JIV	Spray	4	0			1303			1457
	BE90	39Q	Spotter	4	0			1200			1600
7	AT-802	02K	Spray	4	0			1245			1500
	Unable to find dispersable oil, all spray flights cancelled.										

Combined SiteTotals	0	9500
	Stennis	0
	Houma	0

DAILY AERIAL DISPERSANT APPLICATION PLAN

DATE: 7/10/2010	TIME: 0600 local	STAGING AIRPORTS Stennis Int'l / Houma	AIRPORT ID: KHSA / KHUM

DISP. STAGING APT SPVSR (Name & Phone #): (Stennis) Gerry Nielsen (b) (6) / (Houma) Mark Cochrane (b) (6)

SPILL SITE INFORMATION:

SPILL LOCATION:	Latitude: 28.55 N	Longitude: 88.21 W N	Size:
GEOGRAPHICAL REFERENCE:	112 nm SSE Stennis Airport		

SPILL SITE APPROACH INFORMATION:

ENTRY POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude: See OPS Chart	ft.
EXIT POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude: See OPS Chart	ft.
HOLDING AREA:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude: See OPS Chart	ft.

SPILL SITE WX:	WIND: WSW 8 - 10'	CLG: 5,000	VIS: 15 nm	SUNRISE: 0602	SUNSET: 1953
SEA STATE:	Swell: SSE - 1.0'	Wind Waves: WSW 1.5'		Combined Seas 2.0'	

(Attach Wilken's Weather Report for weather at the spill site and the staging airport)

DOSAGE (GPA): 5 **ADD'L INST:** See required setbacks and no fly area's on operational plan

COMMS	
	PRIMARY VHF COM: 126.40 MHz, W of 88 / PRIMARY VHF COM: 135.65 MHz, E of 88-30 / FC VHF COM: 123.45 / EMERG COM: 121.5 MHz
	PRIMARY VHF COM: Surface to Air 122. 9 MHz / SECONDARY VHF COM: Surface to Air 123.45 MHz / Marine primary VHF 81A
	MARINE RADIO: Channel 16 then switch to Channel 9/ SATELLITE PHONE: Aircraft will contact through the Disp. Staging Airport Supervisor

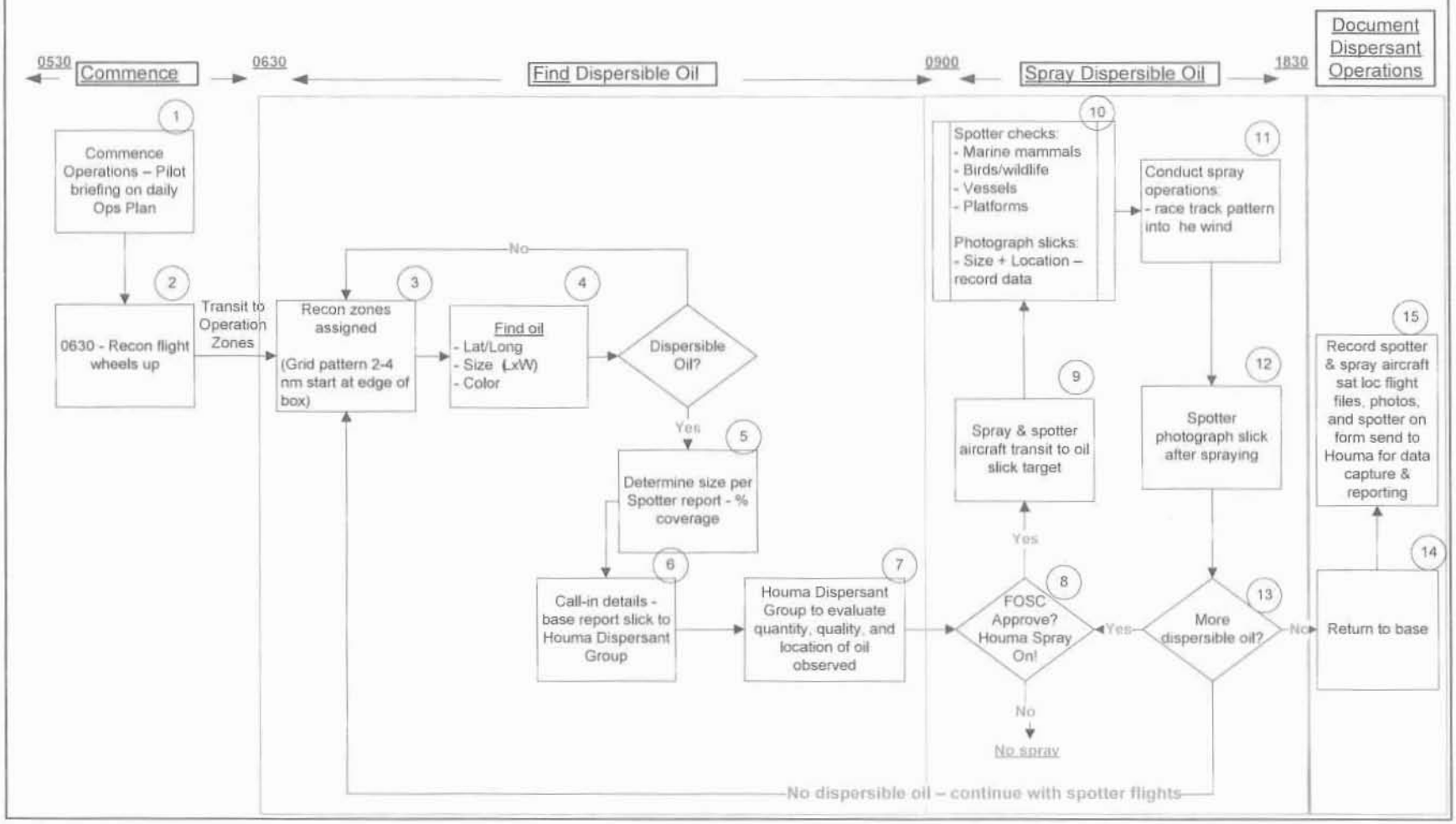
AIRCRAFT INFORMATION:

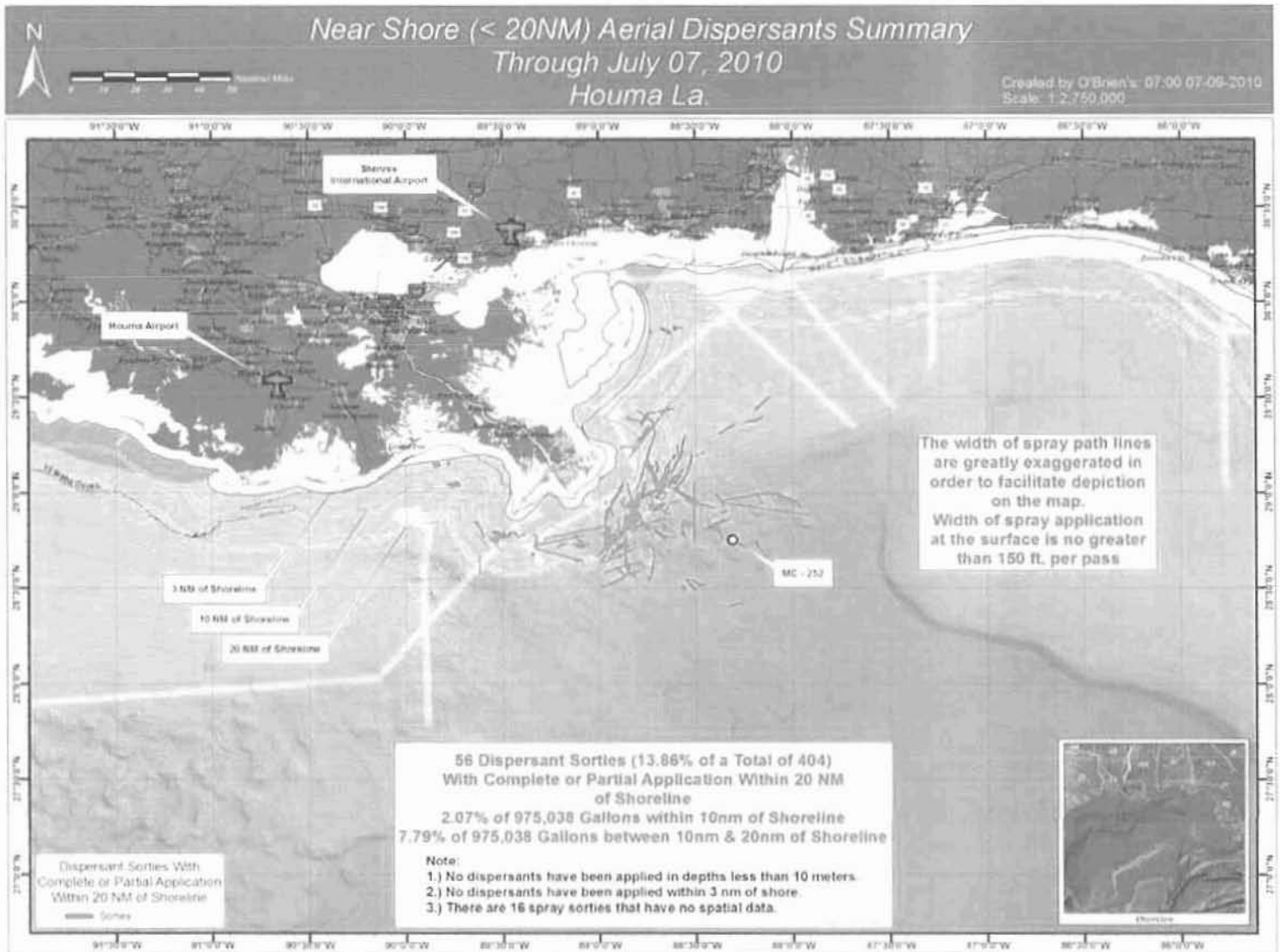
Type:	Tail #:	Call Sign:	Airport ETA:	Purpose & Altitude:	PIC/Crew:	Passengers:
King Air Dynamic	N7198Y	98Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N80Y	80Y	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N39Q	39Q	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N7199D	99D	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N89N	89N	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N41J	41J	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N79W	79W	Houma	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N37H	37H	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
C-130 IAR	N117TG	7TG	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 Lynden	N403LC	3LC	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N9002K	02K	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N802BG	2BG	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
AT 802	N950HC	0HC	Houma	Spray 75'	PIC: TBD Co-pilot: TBD	None
C-130 Lynden	401LC	1LC	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 OSR	EIJIV	JIV	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
BT-67 ASI	N932H	32H	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
DC-3 ASI	N64767	767	Houma Standby	Spray: 75'	PIC: TBD Co-pilot: TBD	
DC-3 ASI	N64766	766	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
Aztec ASI	N141183	183	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Turbo Cmdr ASI	N112EM	2EM	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Aircraft below are not directly part of the Dispersant Group / Cordination and assistance from the aircraft below is nessasary.						
King Air	N275	275	Houma Jet	Recon		
Helo PHI	759P		Houma	Recon		
U.S. Customs	P-3	Omaha 99		Communications		
Canada	Transport 950		Houma	Surveillance		

DATE: July 10, 2010											
SORTIE	TYPE A/C	TAIL #	PURPOSE	FUEL LOAD (#/Hrs:Min)	PAYLOAD GAL	PAYLOAD TYPE	TOTAL FLT TIME	DPT TIME EST/ACT	ENTRY EST/ACT	EXIT ETA EST/ACT	RETURN ETA EST/ACT
	BE90	37H	Recon / Spotter	4	0			0600			0945
	BE90	98Y	Recon / Spotter	4	0			0610			0950
	Turbo Cmdr	N112EM	Recon / Spotter	5	0			0610			0910
	Aztec	183	Recon / Spotter	4	0			0620			0920
	BE90	79W	Recon / Spotter	4	0			0630			0930
	BE90	80Y	Spotter	4	0			0800			1200
1	C -130	N117TG	Spray	4	3000			0830			1030
	Turbo Cmdr	N112EM	Recon / Spotter	5	0			1205			1540
2	BT-67	N932H	Spray	4	2000			1200			1425
3	DC-3	766	Spray	4	1000			1230			1432
	BE90	89N	Spotter	4	0			0803			1206
4	C -130	403LC	Spray	4	5000			0834			1035
	BE90	80Y	Spotter	4	0			1245			1545
5	C-130	401LC	Spray	4	5000			1300			1455
	BE90	98Y	Spotter	4	0			1200			1600
6	C-130	JIV	Spray	4	5000			1303			1457
	BE90	39Q	Spotter	4	0			1200			1600
7	AT - 802	02K	Spray	4	800			1245			1500

Combined SiteTotals		9500
	Stennis	0
	Houma	0

Dispersant Spray Operations Flow Chart




Near Shore (< 20NM) Aerial Dispersants Summary
Through July 07, 2010
Houma La.
Created by O'Brien's: 07:00 07-09-2010
Scale: 1:2,750,000
N
Stennis International Airport
Houma Airport
MC - 252
3 NM of Shoreline
10 NM of Shoreline
20 NM of Shoreline
The width of spray path lines are greatly exaggerated in order to facilitate depiction on the map.
Width of spray application at the surface is no greater than 150 ft. per pass
56 Dispersant Sorties (13.86% of a Total of 404)
With Complete or Partial Application Within 20 NM of Shoreline
2.07% of 975,038 Gallons within 10nm of Shoreline
7.79% of 975,038 Gallons between 10nm & 20nm of Shoreline
Note:
1.) No dispersants have been applied in depths less than 10 meters.
2.) No dispersants have been applied within 3 nm of shore.
3.) There are 16 spray sorties that have no spatial data.
Dispersant Sorties With Complete or Partial Application Within 20 NM of Shoreline
Sorties

Aerial Dispersants Operations - Houma Status Report

May 12, 2010

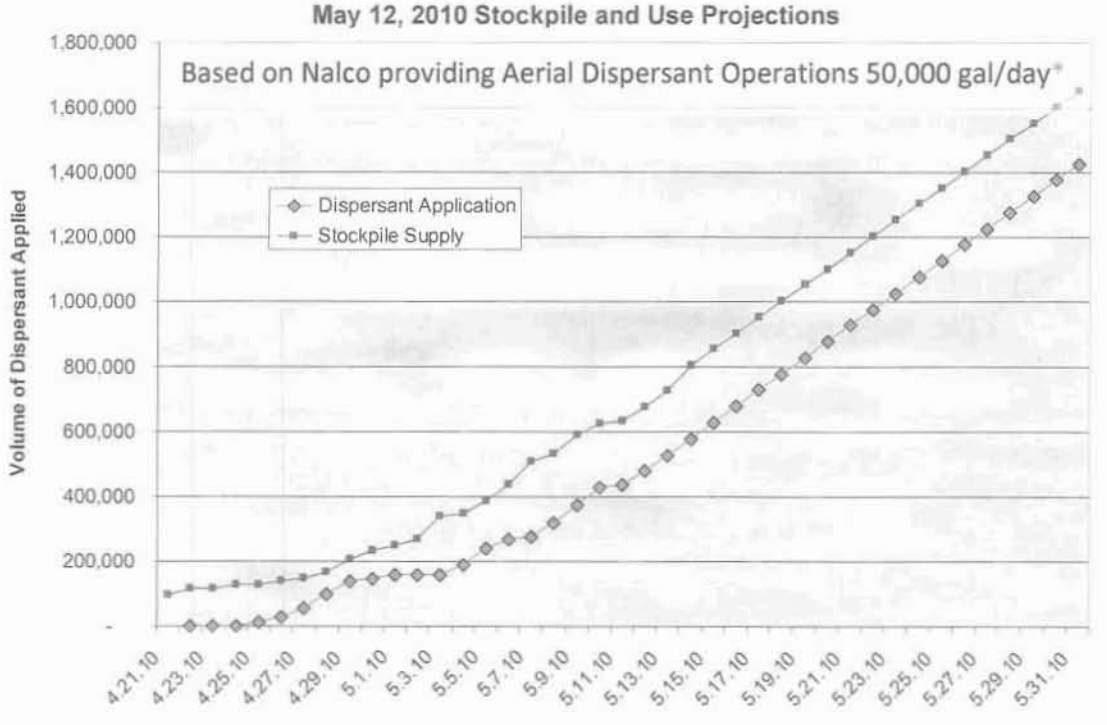
Note: This information is the reporting for aerial dispersant spraying

Dispersant Aerial Spray Summary:

1. Total Amount of Dispersant Applied on May 12, 2010 (gallons):	39,710
2. Total Sorties on May 12, 2010465:	12
3. Total Amount of Dispersant Applied to date (gallons):	475,957
4. Total Sorties to date:	177
5. Total Area Covered by Dispersant Applications to date (mi^2):	148.7
6. Total Dispersant Stockpiles on the ground as of 5.12.2010 – 1200 PM (gallons):	195,465*
7. Dispersant Stockpile Expected Arrival as of 5.13.10 – 1200 PM (gallons):	22,000
8. Estimated Total Dispersant as of 5.13.2010 - 1200 PM (gallons):	217,465*
9. Projected Days Operational at maximum rate of 50,000 gal/day (days):	unlimited

* This volume is still being reconciled and verified with procurement, staging, receiving and finance.

Dispersant Stockpile Supply and Use Projections



*Includes stock pile arrivals from Hawaii.

Asset Summary On Scene	
Spray Aircraft:	
C-130 – Stennis (1 IAR, 1 Lynden, 3 USAF)	5
DC-3 - Houma	2
BT-67 - Houma	1
King Air – 2 – Stennis (can be used for spotting)	2
AT-802 – Stennis	1
TOTAL:	11
Spotter Aircraft:	
King Air – 5 – Stennis	5
Aztec - Houma	1
Aero COMDR - Houma	1
TOTAL:	7
TOTAL AIRCRAFT:	18
PRIORITY Spray Assets Identified*	
Spray Aircraft:	LEAD TIME
C-130 – OSR-UK (20,000 gal/day) + 8-person support team with 2 flight crews	1 – 28 hours
C-130 – OSR-Singapore - (20,000 gal/day)	1 – 72 hours
C-130 – Lynden (Alaska) - (20,000 gal/day)	1 – 5+days
C-130 – IAR (15,000 gal/day)	1 – TBD
AT 802 (Agriculture Spray Planes) (5,000 gal/day)	1
*NOTE: These assets will not be activated until sufficient stockpile of dispersants are available for their use. Estimate that dispersant operations will need approximately 75,000 gallons per day of dispersant for these air craft spray systems.	
Additional Spray Assets Identified	
Neat Sweep	In area

Activity Update:

In response to the Operations Review conducted on 11 May 2010 the following actions were taken:

1. Dispersant spraying was revised to target black and brown dispersible oil near the source and not to spray the pinkish/reddish emulsions near shore.
2. ASI has arranged to have flow rate and droplet size calibration tests for the BT-67 and DC-3 conducted this week. ASI continues to provide spotter aircraft to support dispersant operations.
3. An Oil Dispersant Spotter Debrief Form was prepared to capture information on the results of spraying and the spotters will stay on scene after spraying to photograph the treated oil.
4. Arrangements will be made for the NOAA SSC to provide observer oil identification training to spotters.
5. Briefed Houma Dispersant Group and Stennis and Houma bases concerning the Operations Review and the changes being made.
6. Coordinated with USCG SMART members to share photographs of treated oil and dispersant operations, and fluorometry data.
    - Developed Boat Dispersant Spray procedures to use neat spraying systems. A copy of the procedures is attached.
    - Provided dispersant spray trajectories and flight plans for aerial spraying operations to address potential near shore human exposure issues. Records showed dispersant spraying was considerably distant from reported exposure and considered not responsible.
7. Dispersant Science Group worked on the following:
    - Providing scientific justification for continued dispersant use.
    - Developed final draft sampling plan for water chemistry needs.
    - Outfitted the International Peace for boat application of dispersant, SMART evaluation, and chemical and biological sampling.
    - Prepared organization charts for Aerial Dispersant Group. See Attached.

Objectives

Objectives for May 12th were to focus spraying on thick oil areas outside of 5 nm radius around spill source. Additionally, boat spray testing of alternate dispersants will continue near the source area.

Requirements

Aircraft spotters should be on site in their zone at 0800 and spray aircraft may pre-stage to the site at 0830. Spray operations to commence approximately 0900.

DISPERSANT APPLICATION GUIDANCE FOR 12 MAY

Maintain **3 nm** boundary separation if unable to coordinate air-to-air with other spotter or OMAHA 99.

Spotters should recon area inbound and outbound for subsequent targets. Report new targets to Dispersant Group via base manager.

Notes: Changes to previous orders are underlined.

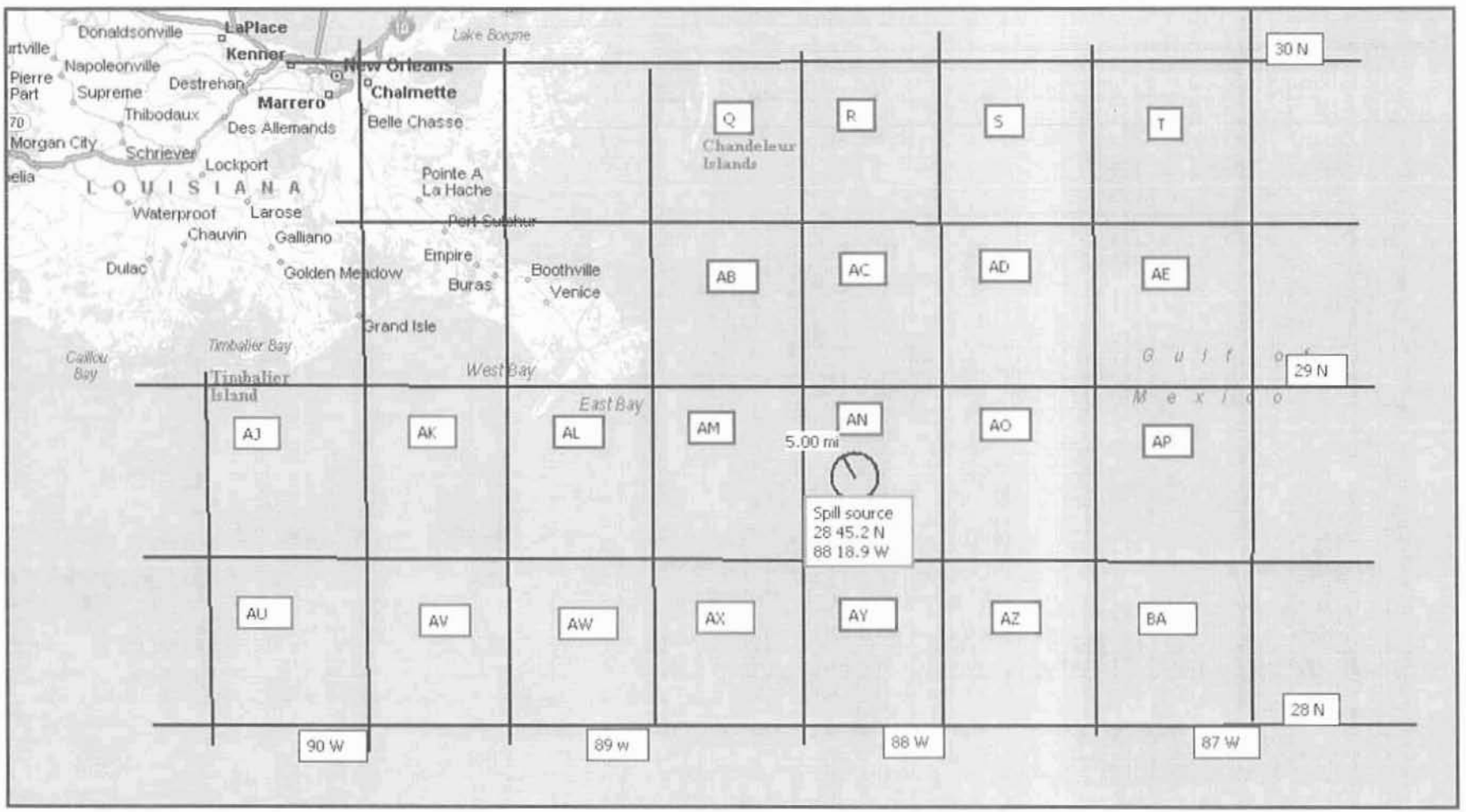
1. FOSC approval has been granted since 22 April for application of dispersants in pre-approved areas.
2. No dispersant spraying within the greater of **3 nm** offshore or depths less than **10 meters**.
3. No dispersant flying within **5 nm** of the spill source at surface:
   28 45.2 N 88 18.9 W
4. Remain **2 nm** from boats, platforms, and marine mammals.
5. Target black and brown oil as this is the freshest and most dispersible oil. Rate is 5 gallons per acre. Quality versus Quantity. Do not target Red/Pink emulsified oil.
6. Spotter aircraft remain on site up to 30 minutes to visually assess effects on dispersed area and document with photographs.
7. Report takeoff and landing times to assigned coordinators as they occur to the best of your abilities. Report areas sprayed Latitude/Longitude, time stated spraying, number of passes, and gallons applied.
8. Primary air to air communication frequency is now 126.4. Secondary is 123.45. Primary surface to air frequency is 122.9. Secondary is 123.45.
   a. Contact P3 aircraft "Omaha 99" for flight advisories.
   b. Also SMART vessels, Surveillance "Transport 950", "Seacor Lee" command vessel, and other Spotters.
9. Use discreet IFF codes as provided on separate correspondence. This removes need to file DVFR flight plans.
10. Houma ASI tasking: Provide spotter for boat spray alternate dispersant testing. M/V "Armstrong" to depart South Pass at 0800 and remain 3 to 30 nm from shore to conduct vessel spray operations. Coordination on 122.9 primary, Marine Channel 81a Secondary.
11. Stennis tasking Smart Mission 04 Warrior. M/V "Warrior" will arrive at intersection of zone AN and AY at 28 30 N 88 30 W to conduct SMART dispersant effectiveness tests in vicinity. Stennis Base send spotter (with marine radio) to arrive at 1130 to coordinate. Coordination on 122.9 primary; Marine Channel 81a Secondary.

Primary emphasis is always on Safety: **Aviate, Navigate, Communicate**!

AFF Automatic Flight Following:

- Air Force North - https://www.aff.gov/afn/afnorth.kmz
- Civilian - https://www.aff.gov/cgi-bin/aff.dll

Aerial Dispersant Operations Divisions:



Dispersant Spray Assets

Aircraft Information –May 11, 2010						
Type	**Owner/ Operator**	**Tail #**	**Payload (gal)**	**Airport / Status**	**Purpose & Altitude**	**Comments**
Spotters						
King Air	MSRC (Dynamic)	N39Q		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N98N		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N41J		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N79W		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N37H		Stennis	Spotter – 1,000' to 1,500'	
Aztec (PA 23)	ASI	N141183		Houma	Backup Spotter	
Aero COMDR	ASI	N38WA		Houma	Spotter	
Recon						
King Air	ASI	N275		Houma	Recon	
Helo	ASI	759P		Houma	Recon	
Sprayers						
King Air	MSRC (Dynamic)	N7198Y	240	Stennis	Spray: 75'	Available for both Spray and Spotter duties
King Air	MSRC (Dynamic)	N71999D	240	Stennis	Spray: 75'	Available for both Spray and Spotter duties
C-130	IAR	N117TG	3,000	Stennis	Spray: 75'	
C-130	MSRC (Lynden)	N403LC	5,000	Stennis	Spray: 75'	Plus 5 other crew members
C-130	Air Force	105	1,675	Stennis	Spray: 75'	
C-130	Air Force	106	1,675	Stennis	Spray: 75'	Cargo ops with spray capability
C-130	Air Force	107	1,750	Stennis	Spray: 75'	
AT-802		N9002K	800	Stennis	Spray: 50'	
BT-67	ASI	N932H	1,800	Houma	Spray: 75'	
DC-3	ASI	N64766	1,000	Houma	Spray: 75'	
DC-3	ASI	N64767	1,000	Houma – Standby	Spray: 75'	

Dispersant Application Totals

Dispersant Statistics Applied by Day						
Date	Dispersant Type (gallons)		Daily Totals	# Sorties	Acres Covered (5 gal/acre application rate)	Square Miles covered
	9500	9527				
21 April 2010	Initial Response Date					
22 April 2010	0	1,800	1,800	1	360	0.56
23 April 2010	0	0	0	0	0	0
24 April 2010	0	0	0	0	0	0
25 April 2010	0	11,604	11,604	9	2,320.8	3.7
26 April 2010	0	14,486	14,486	10	2,897.2	4.5
27 April 2010	11,191	15,887	27,078	5	5,415.6	8.5
28 April 2010	27,269	14,874	42,143	15	8,428.6	13.2
29 April 2010	36,913	4,000	40,913	13	8,182.6	12.8
30 April 2010	4,900	0	4,900	1	980.0	1.5
1 May 2010	3,550	8,103	11,653	4	2,330.6	3.6
2 May 2010	0	0	0	0	0	0
3 May 2010	0	0	0	0	0	0
4 May 2010	10,561	23,712	34,273	12	6,854.6	10.7
5 May 2010	30,905	18,670	49,575	18	9915	15.5
6 May 2010	13,032	15,738	28,770	11	5,754	9.0
7 May 2010	5,582	1,688	7,270	4	1,454	2.3
8 May 2010	17,813	23,877	41,690	17	8,338	13.0
9 May 2010	29,034	26,898	55,932	21	11,186.4	17.5
10 May 2010	29,240	26,980	56,220	22	11,244	17.6
11 May 2010	7,940	0	7,940	2	1,588	2.5
12 May 2010	39,710	0	39,710	12	7,942	12.4
TOTALS	**267,640**	**208,317**	**475,957**	**177**	**95,191**	**148.86**

DAILY AERIAL DISPERSANT APPLICATION PLAN

DATE: 5/12/2010	TIME: 0530 local	STAGING AIRPORTS: Stennis Int'l / Houma	AIRPORT ID: KHSA / KHUM

DISP. STAGING APT SPVSR (Name & Phone #): (Stennis)Tim Spoerl (b) (6) / (Houma) Mark Cochrane (b) (6)

SPILL SITE INFORMATION:

SPILL LOCATION:	Latitude: 28.55 N	Longitude: 87.21 W N	Size: 40 mi radius
GEOGRAPHICAL REFERENCE:	112 nm SSE Stennis Airport		

SPILL SITE APPROACH INFORMATION:

ENTRY POINT:	Latitude:	See OPS Chart N	Longitude:	See OPS Chart W	Altitude	See OPS Chart	ft.
EXIT POINT:	Latitude:	See OPS Chart N	Longitude:	See OPS Chart W	Altitude	See OPS Chart	ft.
HOLDING AREA:	Latitude:	See OPS Chart N	Longitude:	See OPS Chart W	Altitude	See OPS Chart	ft.

SPILL SITE WX:	WIND: SSE 11-27	CLG: UNL	VIS: 10 nm	SUNRISE: 0605	SUNSET: 1937

(Attach Wilken's Weather Report for weather at the spill site and the staging airport)

DOSAGE (GPA): 5 **ADD'L INST:** See required setbacks and no fly area's on operational plan

COMMS

PRIMARY VHF COM: 126.40 MHz	SECONDARY VHF COM: 123.45 MHz	EMERGENCY VHF COM: 121.5 MHz
PRIMARY VHF COM: Surface to Air 127.85 MHz / SECONDARY VHF COM: Surface to Air 123.45 MHz		
MARINE RADIO: Channel 16 then switch to Channel 9/ SATELLITE PHONE: Aircraft will contact through the Disp. Staging Airport Supervisor.		

AIRCRAFT INFORMATION:

Type:	Tail #:	Call Sign:	Airport ETA:	Purpose & Altitude:	PIC/Crew:	Passengers:
King Air Dynamic	N7198Y	98Y	Stennis	Spotter: 1000'-1500'	PIC: Vince Kane Kevin Smith	None
King Air Dynamic	N39Q	39Q	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot:	None
King Air Dynamic	N7199D	99D	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N98N	98N	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N41J	41J	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N79W	79W	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N37H	37H	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
C-130 IAR	N117TG	7TG	Stennis	Spray: 75'	PIC: Dave Kunz Co-pilot: TBD	None
C-130 Lynden	N403LC	3LC	Stennis	Spray: 75'	PIC: Capt Redman Co-pilot:	plus 5 other crew members
AT 802	N9002K	02K	Stennis	Spray 90'	PIC: TBD Co-pilot: TBD	None
C-130 USAFR	105	105	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 USAFR	106	106	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 USAFR	107	107	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
BT-67 ASI	N932H	32H	Houma	Spray: 75'	Co-pilot: TBD	None
DC-3 ASI	N64767	767	Houma Standby	Spray: 75'	PIC: TBD	None
DC-3 ASI	N64766	766	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
Aztec ASI	N141183	183	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Aero CMDRA ASI	N547GA	7GA	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Aircraft below are not directly part of the Dispersant Group / Cordination and assistance from the aircraft below is nessasary.						
King Air	N275	N275	Houma Jet	Recon		
Helo PHI	759P		Houma	Recon		
NOAA		NOAA 46		Surveillance		
U.S. Customs	P-3	Omaha 99		Communications		
Canada	Transport 950		Houma	Surveillance		

DAILY ACTIVITY SCHEDULE FOR __~~12~~ May_2010__ (Date)		Dispersant Group Staging Airport Supervisor (DGSAS):
TIME	ACTIVITY	
	Report to Airfield	All aircraft
	Pilot and Support Team Daily Operational Briefing (mandatory)	0600 local
	Commence Flight Operations	0630 local
	Terminate Flight Operations	2000 local
	Pilot and Support Team Daily Debriefing on Operations	2030 local

DAILY OPERATIONAL BRIEFING AGENDA:

Safety Issues:	SAR flights beware of and check in onsite
Weather:	See Wilkins Wx and airport weather service
Communications Air and Ground:	Sat Comm and standard freq
Application Dosage and Pattern to be used:	5.0 gpa racetrack
Approach Information:	TBD
Oil Spill Location and Description:	TBD
Operational Procedures and Changes:	None at this time
Flight Schedule:	See schedule page 2

FUELING/FBO:

Contact Name: Tim Spoerl Stennis Airport acting as FBO — Business Hours Services: 0500 - 2000

Contact Phone: (b) (6) — After Hours Services:

DESIGNATED DISPERSANT LOADING AREA:

Location: ramp off the end of the runway

Contractor Name: Steve Henne MSRC in charge

Contractor Phone: (b) (6)

REPORTING REQUIREMENTS AND PROCEDURES*:

SatLoc Files:

Photographs and Videos:

Observation Logs:

* MSRC aircraft are responsible to ensure SatLoc files, photographs, videos and observation logs are provided to the Dispersant Group Staging Airport Supervisor (DGSAS) after every sortie or at the end of the operational period. Other aircraft operators are responsible to maintain and submit logs after each sortie or daily which state the amount of dispersant applied, number of passes, dosage rates, altitude and speeds dispersant was applied and the time for starting and stopping dispersant application for each pass.

TSA/AIRPORT SECURITY REQUIREMENTS: Hangar door to be kept locked, no entry without MSRC person escort

DATE: May 12, 2010

Payload #	TYPE A/C	TAIL #	PURPOSE	FUEL LOAD (#/Hrs:Min)	PAYLOAD GAL & TYPE	TOTAL FLT TIME	DPT TIME EST/ACT	ENTRY ETA EST/ACT	EXIT ETA EST/ACT	RETURN ETA EST/ACT
	BE90	79W	Spotter	6	0	2:50	0530/0811	0615	0810	0850/1143
1	C-130	N117TG	Spray	4	2885/9500	2:10	0620/0845	0640	0810	0830/1031
2	C-130	N4031C	Spray	4	5002/9500	2:10	0625/0857	0645	0815	0835/1117
	Aztec	14183	Spotter	Spotter for vessel disp. Spray			0740	0815	0905	0950
3	BT-67	N923H	Spray	4	2000	2:15	0750	0830	0925	0955
4	DC-3	N84700	Spray	4	1000	2:50	0754	0824	0945	0945
	BE90	98V	Spotter	4	0	2:50	845			1219
5	C-130	105	Spray	4	1887/9500	2:30	0830/0925	0900	0930	1001/1138
	BE90	79W	Spotter	4	0	2:50	0820	0902	1017	1142
6	C-130	107	Spray	4	4750	2:20	0845	0915	0945	1015
	BE90	37H	Spotter	6	0	2:35	1033			1447
	BE90	39Q	Spotter	6	0	2:35	0955/1043	0925	1205	1240/1418
7	C-130	N117TG	Spray	4	3063/9500	2:30	1000/1123	1030	1200	1230/1327
8	C-130	N4031C	Spray	4	5000/9500	2:30	1005/1206	1035	1205	1235/1352
	Aero Cmdr	N547GA	Spotter	5	0	2:10	1125	1205	1250	1335
9	BT-67	N923H	Spray	4	2000	2:05	1100	1205	1220	1305
10	DC-3	N84700	Spray	4	1000	2:50	1105	1135	1250	1350
	BE90	39Q	Spotter	4	0	2:50	1150/1043	1220	1345	1430/1418
11	C-130	105	Spray	4	1938/9500	2:30	1215/1218	1245	1320	1400/1435
	BE90	79W	Spotter	4	0	2:50	1140	1222	1345	1410
12	C-130	107	Spray	4	1750	2:20	1215	1245	1320	1350
	BE90	79W	Spotter	6	0	2:40	1355/1305	1425	1505	1540/1702
13	C-130	N117TG	Spray	4	3058/9500	2:30	1400/1308	1430	1505	1540/1550
14	C-130	N4031C	Spray	4	5002/9500	2:30	1400/1447	1430	1505	1535/1620
	Aero Cmdr	N547GA	Spotter	5	0	2:30	1510	1605	1645	1720
15	BT-67	N923H	Spray	4	2000	2:35	1500	1605	1635	1735
16	DC-3	N84700	Spray	4	1000	2:30	1505	1605	1640	1740
	BE90	37H	Spotter	6	0	1:55	1655/1533	1725	1810	1845/1900
17	C-130	N117TG	Spray	4	3012/9500	2:30	1700/1650	1730	1805	1835/1825
18	C-130	N4031C	Spray	4	5002/9500	2:40	1700/1712	1735	1810	1840/1842
	BE90	39Q	Spotter	4	0	2:50	1745/1539	1830	1907	2000/1856
19	C-130	105	Spray	4	1961/9500	2:30	1805/1540	1835	1905	1945/1715
	BE90	79W	Spotter	4	0	2:50	1850	1930	1905	2020
20	C-130	107	Spray	4	1750	2:30	1905	1935	1905	1937
	BE90	39Q	Spotter	4	0	2:50	1539			1856
21	C-130	106	Spray	4	1980/9500	2:30	1645			1800

Combined SiteTotals	39,710	9500	9527
Stennis	39,710	0	39,710
Houma	0	0	0

Flights in yellow were canceled.

DAILY AERIAL DISPERSANT APPLICATION PLAN

DATE: 5/13/2010	TIME: 0530 local	STAGING AIRPORTS: Stennis Int'l / Houma	AIRPORT ID: KHSA / KHUM

DISP. STAGING APT SPVSR (Name & Phone #): (Stennis)Tim Spoerl (b) (6) / (Houma) Mark Cochrane (b) (6)

SPILL SITE INFORMATION:

SPILL LOCATION:	Latitude:	28 55 N	Longitude:	87.21 W	N	Size:	40 mi radius
GEOGRAPHICAL REFERENCE:	112 nm SSE Stennis Airport						

SPILL SITE APPROACH INFORMATION:

ENTRY POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude:	See OPS Chart ft
EXIT POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude:	See OPS Chart ft
HOLDING AREA:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude:	See OPS Chart ft

SPILL SITE WX:	WIND: SE 10-26	CLG: UNL	VIS: 10 nm	SUNRISE: 0605	SUNSET: 1937

(Attach Wilken's Weather Report for weather at the spill site and the staging airport)

DOSAGE (GPA): 5	ADD'L INST: See required setbacks and no fly area's on operational plan

COMMS	
	PRIMARY VHF COM: 126.40 MHz / SECONDARY VHF COM: 123.45 MHz / EMERGENCY VHF COM: 121.5 MHz
	PRIMARY VHF COM: Surface to Air 122. 9 MHz / SECONDARY VHF COM: Surface to Air 123.45 MHz
	MARINE RADIO: Channel 16 then switch to Channel 9/ SATELLITE PHONE: Aircraft will contact through the Disp. Staging Airport Supervisor

AIRCRAFT INFORMATION:

Type:	Tail #:	Call Sign:	Airport ETA:	Purpose & Altitude:	PIC/Crew:	Passengers:
King Air Dynamic	N7198Y	98Y	Stennis	Spotter: 1000'-1500'	PIC: Vince Kane Kevin Smith	None
King Air Dynamic	N39Q	39Q	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot:	None
King Air Dynamic	N7199D	99D	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N98N	98N	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N41J	41J	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N79W	79W	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N37H	37H	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
C-130 IAR	N117TG	7TG	Stennis	Spray: 75'	PIC: Dave Kunz Co-pilot: TBD	None
C-130 Lynden	N403LC	3LC	Stennis	Spray: 75'	PIC: Capt Redman Co-pilot:	plus 5 other crew members
AT 802	N9002K	02K	Stennis	Spray 50'	PIC: TBD Co-pilot: TBD	None
C-130 USAFR	105	105	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 USAFR	106	106	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 USAFR	107	107	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
BT-67 ASI	N932H	32H	Houma	Spray: 75'	Co-pilot: TBD	None
DC-3 ASI	N64767	767	Houma Standby	Spray: 75'	PIC: TBD	None
DC-3 ASI	N64766	766	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
Aztec ASI	N141183	183	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Aero CMDRA ASI	N547GA	7GA	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Aircraft below are not directly part of the Dispersant Group / Cordination and assistance from the aircraft below is nessasary.						
King Air	N275	N275	Houma Jet	Recon		
Helo PHI	759P		Houma	Recon		
NOAA		NOAA 46		Surveillance		
U.S. Customs	P-3	Omaha 99		Communications		
Canada	Transport 950		Houma	Surveillance		

DAILY ACTIVITY SCHEDULE FOR __13 May_2010__ (Date)		Dispersant Group Staging Airport Supervisor (DGSAS):
TIME	ACTIVITY	
	Report to Airfield	All aircraft
	Pilot and Support Team Daily Operational Briefing (mandatory)	0600 local
	Commence Flight Operations	0630 local
	Terminate Flight Operations	2000 local
	Pilot and Support Team Daily Debriefing on Operations	2030 local

DAILY OPERATIONAL BRIEFING AGENDA:

Safety Issues:	SAR flights beware of and check in onsite
Weather:	See Wilkins Wx and airport weather service
Communications Air and Ground:	Sat Comm and standard freq
Application Dosage and Pattern to be used:	5.0 gpa racetrack
Approach Information:	TBD
Oil Spill Location and Description:	TBD
Operational Procedures and Changes:	None at this time
Flight Schedule:	See schedule page 2

FUELING/FBO:

Contact Name: Tim Spoerl Stennis Airport acting as FBO — Business Hours Services: 0500 - 2000

Contact Phone: (b) (6) — After Hours Services:

DESIGNATED DISPERSANT LOADING AREA:

Location: ramp off the end of the runway

Contractor Name: Steve Henne MSRC in charge

Contractor Phone: (b) (6)

REPORTING REQUIREMENTS AND PROCEDURES*:

SatLoc Files:

Photographs and Videos:

Observation Logs:

* MSRC aircraft are responsible to ensure SatLoc files, photographs, videos and observation logs are provided to the Dispersant Group Staging Airport Supervisor (DGSAS) after every sortie or at the end of the operational period. Other aircraft operators are responsible to maintain and submit logs after each sortie or daily which state the amount of dispersant applied, number of passes, dosage rates, altitude and speeds dispersant was applied and the time for starting and stopping dispersant application for each pass.

TSA/AIRPORT SECURITY REQUIREMENTS: Hangar door to be kept locked, no entry without MSRC person escort

					DATE: May 13, 2010					
Payload #	TYPE A/C	TAIL #	PURPOSE	FUEL LOAD (#/Hrs:Min)	PAYLOAD GAL & TYPE	TOTAL FLT TIME	DPT TIME EST/ACT	ENTRY ETA EST/ACT	EXIT ETA EST/ACT	RETURN ETA EST/ACT
	BE90	79W	Spotter	6	0	2:50	0530	0615	0810	0850
1	C-130	N117TG	Spray	4	3000	2:10	0620	0640	0810	0830
2	C-130	N403LC	Spray	4	5000	2:10	0625	0645	0815	0835
	Aero Cmdr	N547GA	Spotter	5	0	2:10	0740	0815	0905	0950
3	BT-67	N932H	Spray	4	2000	2:15	0720	0820	0835	0935
4	DC-3	N64766	Spray	4	1000	2:30	0724	0824	0845	0945
	BE90	4LJ	Spotter	4	0	2:50	0815	0900	1015	1135
5	C-130	105	Spray	4	1900	2:30	0830	0900	0930	1001
	BE90	98N	Spotter	4	0	2:50	0820	0902	1017	1145
6	C-130	107	Spray	4	1900	2:30	0845	0915	0945	1015
	BE90	39Q	Spotter	6	0	2:35	0955	0925	1205	1240
7	C-130	N117TG	Spray	4	3000	2:30	1000	1030	1200	1230
8	C-130	N403LC	Spray	4	5000	2:30	1005	1035	1205	1235
	Aero Cmdr	N547GA	Spotter	5	0	2:10	1125	1205	1250	1335
9	BT-67	N932H	Spray	4	2000	2:05	1100	1205	1220	1305
10	DC-3	N64766	Spray	4	1000	2:30	1105	1110	1230	1330
	BE90	N7199D	Spotter	4	0	2:50	1150	1220	1345	1430
11	C-130	105	Spray	4	1900	2:30	1215	1245	1320	1400
	BE90	79W	Spotter	4	0	2:50	1140	1222	1345	1410
12	C-130	107	Spray	4	1900	2:30	1218	1247	1325	1355
	BE90	N7198V	Spotter	6	0	2:40	1355	1425	1505	1540
13	C-130	N117TG	Spray	4	3000	2:30	1400	1430	1505	1540
14	C-130	N403LC	Spray	4	5000	2:30	1400	1430	1505	1535
	Aero Cmdr	N547GA	Spotter	5	0	2:20	1510	1605	1645	1730
15	BT-67	N932H	Spray	4	2000	2:25	1500	1605	1625	1725
16	DC-3	N64766	Spray	4	1000	2:30	1505	1605	1640	1740
	BE90	39Q	Spotter	6	0	1:55	1655	1725	1810	1845
17	C-130	N117TG	Spray	4	3000	2:30	1700	1730	1805	1835
18	C-130	N403LC	Spray	4	5000	2:40	1700	1735	1810	1840
	BE90	98N	Spotter	4	0	2:50	1745	1830	1907	2000
19	C-130	105	Spray	4	1900	2:30	1805	1835	1905	1945
	BE90	79W	Spotter	4	0	2:50	1750	1830	1907	2030
20	C-130	107	Spray	4	1900	2:30	1807	1835	1907	1937

Combined SiteTotals		9500	9527	Totals by Site
	Stennis			
	Houma			

Aerial Dispersant Ops
Spotter Debrief Form

Date		Pilot/Copilot	
Spotter Aircraft #		Take off	Land
Zone (s)			
Weather on scene			

Spray Aircraft #		Spray commence time	
Payload # fm schedule		Spray end time	
		Zone	
# of spray runs		Gen'l location (circle)	NW NE / Center / SW SE
Photos?	Y/N		

Spotter Evaluation

Spray Aircraft #		Spray commence time	
Payload # fm schedule		Spray end time	
		Zone	NW NE / SE SW / Center
# of spray runs		Gen'l location	
Photos?	Y/N		

Spotter Evaluation

Signature

Aerial Dispersant Ops
Spotter Debrief Form

Date		Pilot/Copilot	
Spotter Aircraft #		Take off	Land
Zone (s)			
Weather on scene			

Spray Aircraft #		Spray commence time	
Payload # fm schedule		Spray end time	
		Zone	
# of spray runs		Gen'l location (circle)	NW NE / Center / SW SE
Photos?	Y/N		

Spotter Evaluation

Spray Aircraft #		Spray commence time	
Payload # fm schedule		Spray end time	
		Zone	NW NE / SE SW / Center
# of spray runs		Gen'l location	
Photos?	Y/N		

Spotter Evaluation

Signature

Vessel Mounted Spray Ops Technical Sheet

Objective

The ability to apply neat chemical dispersants to smaller, isolated patches of oil closer to shore, has been identified as part of the tactical action plan. The high degree of manoeuvrability offered by small vessels in comparison to large scale aerial application systems facilitates accurate targeting of slicks and better control of application rates. However these benefits have to be balanced with slower transit times and lower dispersant payloads. The spray systems at the disposal of the Operations Division Dispersants Group are designed to be fitted to vessels of opportunity and this document will attempt to identify the key parameters when selecting vessels for conducting boat spray operations.

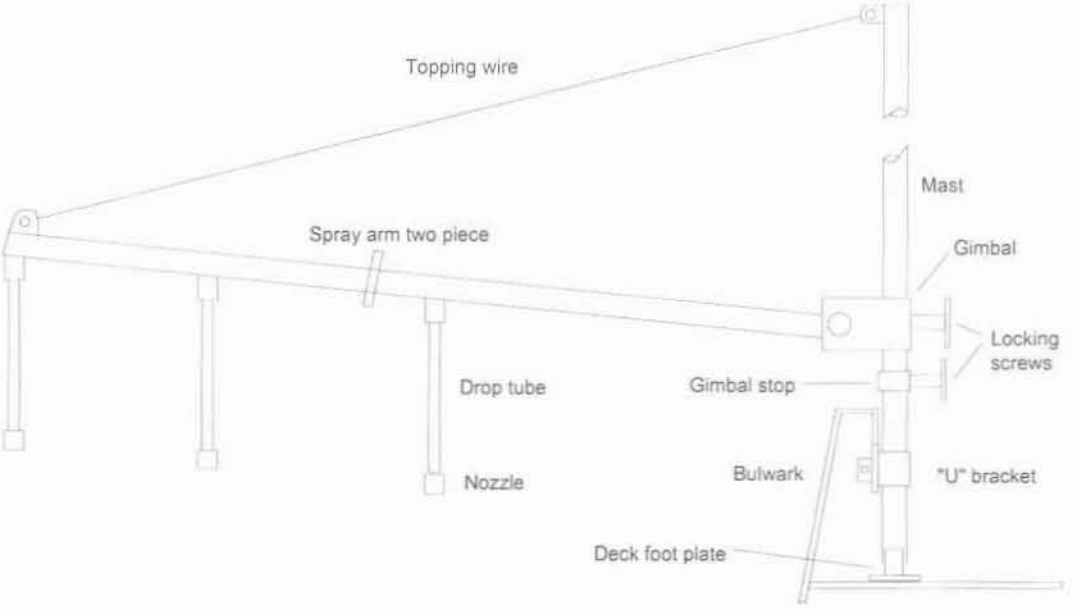
Outline

Due to the large coverage area of the MC 252 spill, the ability to be able to operate over a long range from the staging base would be beneficial. In addition the function to be able to operate in more confined waters or no-fly zones, such as areas of high oil platform density, will be advantageous. For this purpose the ideal vessel specifications below have been broken in to these two separate operating zones;

Offshore	**Near shore** (1/2 mile pending approval)
• Large, clear working deck (minimum 60ft x 20ft)to store sufficient dispersant stock for prolonged operational periods	• Adequate working space to safely store a minimum of 2 tote tanks, spray pump & booms (approx 20ft x 12ft)
• Potential to fix spray booms at the forecastle (bow)	• Spray booms to be bow mounted.
• Minimal bow freeboard (max 10ft) in order to minimise the effect of wind drift. The use of drop tubes can help to minimise this effect.	• Reduced draught for shallow water transits.
• If possible sleeping quarters onboard will support prolonged operations without the need to return to port.	• Adequate shelter / welfare facilities on board for all day operations
	

Once suitable vessels have been identified and requested, installation of the spray system should be supervised by a trained operative to ensure correct positioning and fitting. Prior to any untrained crews leaving port a detailed safety brief, in accordance with BP's dispersant safety document, & basic training in the operation of the system should be given. Copies of all relevant MSDS shall be made available to crews. On a daily basis objectives should be set.

Spray Boom Fixing Schematic



For best spraying results it is best to mount the spray arms as near to the bow as possible, this allows for better mixing of the dispersant through the bow wave. Drop height from nozzle end to sea surface should between three - nine (3-9) feet, this will maximise the effectiveness of the dispersant. For freeboards in excess of nine feet the use of drop tubes is recommended.

Pre- Spray Summary

- Vessels to be audited for suitability, including potential for correct spray boom positioning.
- Training to be given to vessel crews by qualified staff prior to leaving port.
- MSDS and correct levels of PPE to be made available to spray crews (splash goggles, chemical resistant gloves, polycoated Tyvek suit, non skid rubber boots).

Spray Operations

- Records of quantities of dispersant sprayed, position and visual evaluation to be kept.
- Once fitted spray systems to be calibration tested with water to confirm nozzle flow rate.
- Desired dosage rate and corresponding vessel speed, as prescribed in operating manual to be strictly observed. Particular attention to be paid to avoiding excessive bow wave and deflecting oil away from the spray.

- Boat spray operations to be co-ordinated with SMART team monitoring activities. Communication with aerial spotter aircraft to be conducted on air band radios channel 122.9.
- Future requirements for forward planning purposes to be kept and communicated to ICP
- Logistics chain and transfer systems for replenishing dispersant to be in place.

Aerial Dispersant's Group Organization – Houma CP
May12, 2010

Position	Agency
Aerial Dispersants Group Supervisor (1)	Obrien's → C. A Huber, Inc.
• Charlie Huber (John Joeckel relief)	
Dispersant Group Deputy Supervisor (2)	
• Ken Schacht (Jeff Jappe relief MSRC)	MSRC/ C. A Huber, Inc.
• Mike Gass (Dave Garner relief CCA)	Clean Caribbean Cooperative
Air Operations and Charting Documentation (7)	
○ Ken Schacht (Jeff Jappe relief) – Stennis Aviation Liaison	MSRC
○ Mike Gass (Dave Garner relief) – Houma Aviation Liaison	Clean Caribbean Cooperative
○ Maj. Mark Breidenbaugh USAF Aviation Liaison	USAF
○ Lt. Col Dan Sarachene USAF Aviation Liaison	USAF
○ Ed Rosenberg - AT-802	C. A Huber, Inc. →Vervision, Inc
Boat Spray and Boat Sampling Coordinator	
○ Marcus Russell	OSR, Ltd
Plotting / Tracking the Spray	
▪ John LaCaze	Obrien's
Aviation Consultant and Air Operations (1)	
○ Rich Landrum (Vern Albert relief)	C. A Huber, Inc. →AirWing, Inc.
Report Preparation and Analysis (1)	C. A Huber, Inc.→SEA Consulting Inc
○ Debbie Scholz (Don Costanzo relief)	
Stockpile Operations and Logistics (2)	
○ John Daigle	MSRC
○ Ed Rosenberg	C. A. Huber, Inc. →Vervision
Stockpile Evaluation / Testing / Dispersant Impact (7)	
○ Randy Belore	Swift → SL Ross
○ Marie BenKinney	Exponent
○ John Brown	Exponent
○ Tom Coolbaugh	ExxonMobil
○ Alexis Steen	ExxonMobil
○ Ken Trudel	Swift → SL Ross
○ Ann Hayward Walker	C. A Huber, Inc. →SEA Consulting

REMOTE BASES

Position	Agency
Stennis Air Base – Kiln, MS (102 personnel)	
• Don Toenshoff – Base Manager (2) Brenda Wedge (admin)	MSRC
○ Tim Spoerl – Base Coordinator (13 MSRC personnel onsite)	MSRC
○ Linda Whitman (12)	Clean Caribbean Cooperative
○ Erik Demicco (Skip Przelomski relief)	Clean Caribbean Cooperative
○ Jason Heyn – GIS MapSTAR SME (1)	MSRC→Heynsight
○ Billy Grantham (8 IAR personnel onsite)	MSRC → IAR
○ Skip Przelomski	Clean Caribbean Cooperative
○ T.K. Rosolina (26 Dynamic Personnel onsite)	MSRC → Dynamic Aviation
○ Major Tancer USAF (40 USAFR onsite)	USAF
Houma Air Base – Houma, LA (25 personnel)	
• Howard Barker – Base Manager	ASI, Inc.
○ Brad Barker – Base Coordinator	ASI, Inc
○ Mark Cochrane – Staging Manager	OBrien's
• Scotty Meador – AT -802 Base Manager	NRC - Lane Aviation
AT-802 Crew (2)	NRC – Lane Aviation

James A. Watson
Rear Admiral, USCG
Federal On-Scene Coordinator

July 1, 2010

Dear Admiral Watson:

In compliance with the May 26, 2010, Dispersant Monitoring and Assessment Directive - Addendum 3 (the "Directive"), BP Exploration & Production Inc. ("BP") has eliminated the surface application of dispersants, except in cases where an exemption is requested and justified, and approved by the Federal On-Scene Coordinator.

Houma Unified Command had two (2) spotter visual reports on 1 July from aircraft out of Stennis Base and these spotters were able to identify oil slicks that were estimated to require over 20,000 gallons of dispersant. Because of weather conditions, Houma Base was able to launch only one reconnaissance flight which returned to base shortly due to deteriorating weather.

Weather will again be an issue tomorrow, but significantly improved from the past few days. The Friday forecast calls for flying conditions that will have showers, winds of 6-12 knots from the SE-ESE, maximum significant wave height 4 feet, ceilings of 17,000 feet or less, visibility of 6 nm with a 20%-30% chance of rain.

The NOAA Surface Oil Forecast for July 2nd shows extensive areas of heavy and medium oil (Attachment 2) that are or may adversely impact the shoreline, including sensitive wetlands.

Houma Unified Command anticipates that due to the weather, if oil slicks are identified, the most viable means of response will be the use of dispersants to reduce the risk of oil land fall especially with the continuation of southerly and easterly winds.

Prior to spray operations tomorrow morning, the spotter aircraft will identify the high value targeted slicks and we will prepare a report of the location and dispersant volumes needed for application as soon as practicable tomorrow. It is anticipated that the thunderstorm pattern that has existed in the previous couple of days will moderate, although the continued presence of rain showers may continue to make it difficult to execute reconnaissance or dispersant spray missions.

Pursuant to a request this date from Unified Command, the following information is provided.

- Estimated size of identified dispersible oil slick targets proposed in designated zones: Today there were limited air surveillance operations and the only two reconnaissance flights observed dispersible oil slicks in Zone AC as shown in See Table 1.

- Explicit justification for why these targets can't be skimmed or addressed by other mechanical means: The weather is moderating and the forecast wind wave heights for tomorrow averaging 2 feet, with significant wave height averaging 4 feet and maximum wave height averaging 6.8 feet.

Source Skimming Assets:	All vessels in port
Non-Source Skimming Assets:	All vessels in port
ISB Assets:	All vessels in port

- Consequently, source and non-source skimming vessels as well as ISB will not be in action tomorrow.
- Today, all offshore recovery assets (skimmers, etc.) are ***in port or at anchor due to inclement weather*** and ISB operations did not take place.
- It is planned to conduct Tier 1 helicopter SMART over flights to observe dispersant operations tomorrow should they be conducted.
- M/V *International Peace* is currently in port waiting on better seas and weather. It is not anticipated that she will get underway and on station until later in the day Friday at the earliest, weather permitting.
- QA/QC SMART Team 2 June 27th report (Attachment 4).
- No burn box is shown at this time, since the ISB fleet will be in port tomorrow.
- Forecast sea state through Sunday showing skimming and ISB limitations is provided as Attachment 5.
- ***ALL RESPONSE OPERATIONS MAY BE CANCELED DUE TO WEATHER TOMORROW***

It should be noted, that due to the adverse weather, there has been no skimming, ISB or dispersant activities for the past three (3) days. Skimming and ISB operations are not scheduled for tomorrow. With the anticipation of the weather moderating over the next couple of days, it is anticipated that significant quantities of dispersible oil will be observed and there will be flying weather conducive for air operations.

Accordingly, in accordance with the Directive, the Houma Unified Command respectfully requests an exemption to apply EC9500A on dispersible oil slicks based on the morning reconnaissance flights. As aerial dispersant presents the primary mechanism for spill response, we have mobilized the reconnaissance and deployment resources and request an initial ~~15,000~~ 20,000 gallons for early opportunistic targets. This will be coupled with further reconnaissance and target identification. If further targets are identified, a subsequent request will be issued later in the day.

Sincerely,

Houma Unified Command

Exemption approved subject to the above:

(b) (6)

Date: 7-2-10

James A. Watson
Rear Admiral, USCG
Federal On-Scene Coordinator

Attachment 1

Dispersant Zone Map for 2 July 2010 with Oil Targets from Spotter Operations on 1 July

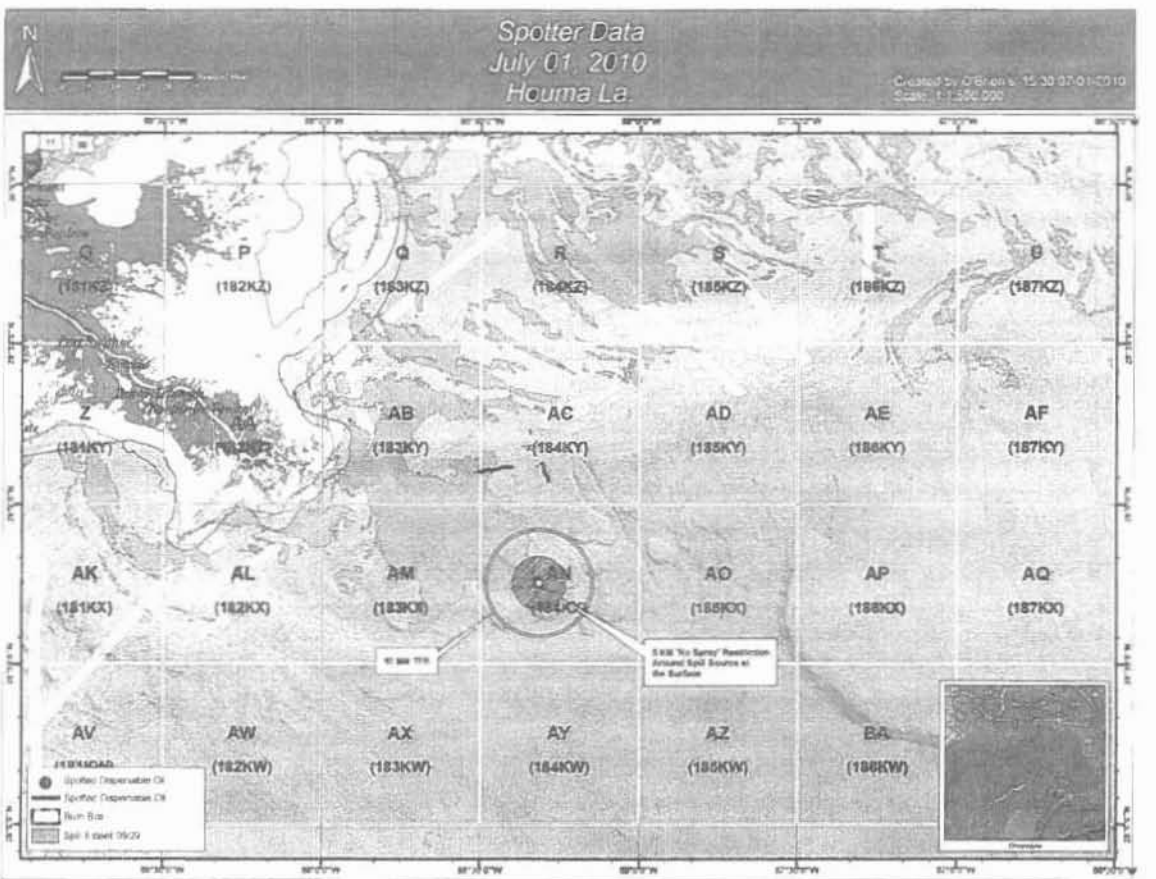


TABLE 1 Dispersible Oil Report July 1, 2010

Zone	# of slicks reported	Area in acres	Estimated percentage dispersible oil	Dispersant Needed (1/20 DOR)
AC	2	4,224	95%	20,064
Dispersant Approved: 20,000 gallons - Sprayed Today The requested amount for 7/2/10 will be based on tomorrow mornings reconnaissance with an initial request for 15,000 g as it is expected with 4 days of no response operations there will be considerable surface oil.				17,852

Note: Table 1 shows our intentions based upon our observations the day before these actions take place. Size and location of slicks will change. Activities within slick areas e.g., skimming operations, in-situ burning, etc., or weather conditions may require revisions to the actual operational plan implemented.

Attachment 2

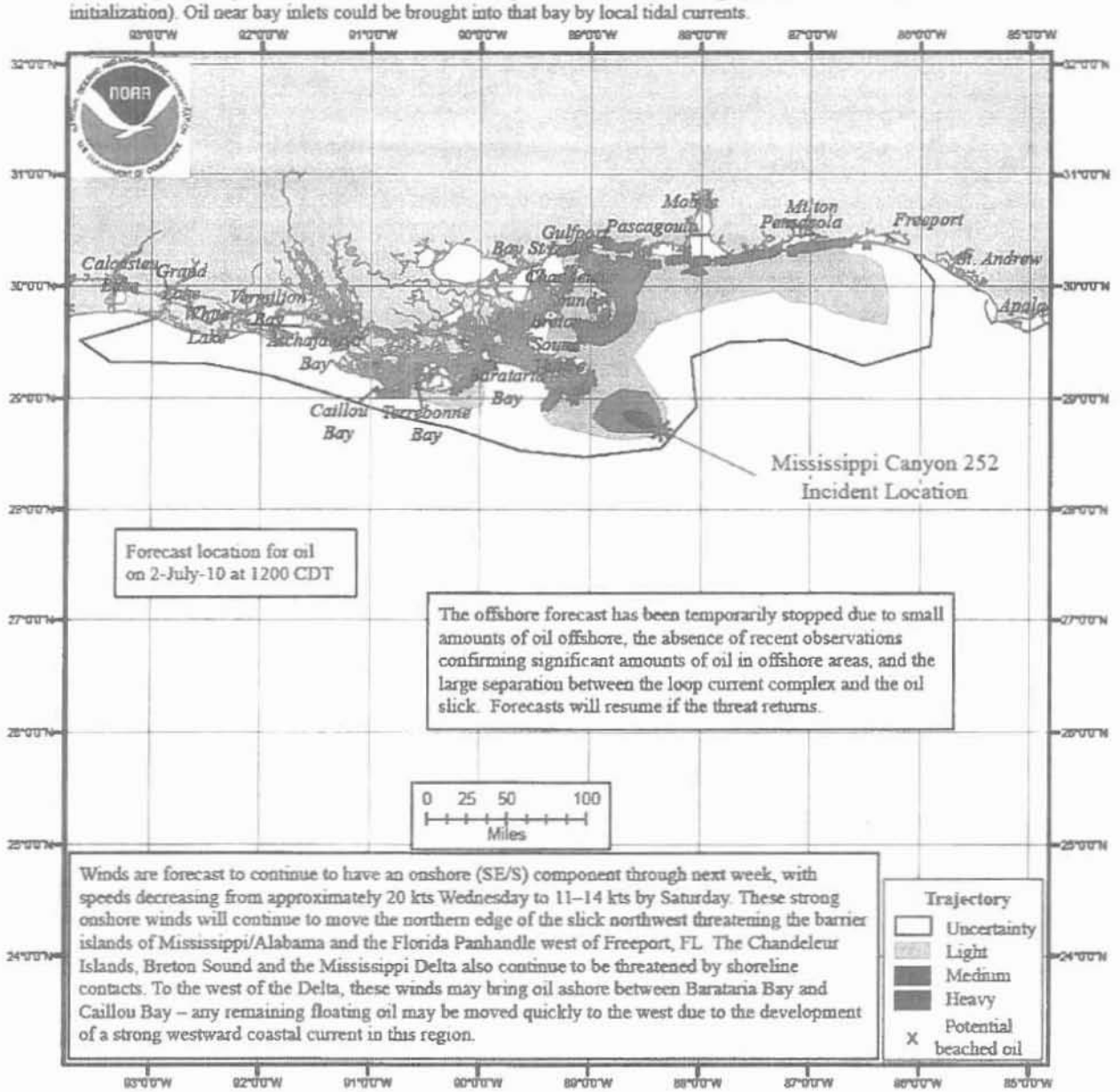
Nearshore Surface Oil Forecast Deepwater Horizon MC252

NOAA/NOS/OR&R

Nearshore

Estimate for: 1200 CDT, Friday, 7/02/10
Date Prepared: 2100 CDT, Wednesday, 6/30/10

This forecast is based on the NWS spot forecast from Wednesday, June 30 PM. Currents were obtained from several models (NOAA Gulf of Mexico, West Florida Shelf/USF, TGLO/TAMU, NAVO/NRL) and HFR measurements. The model was initialized from Tuesday-Wednesday satellite imagery analysis (NOAA/NESDIS) and Wednesday overflight observations. The leading edge may contain tarballs that are not readily observable from the imagery (hence not included in the model initialization). Oil near bay inlets could be brought into that bay by local tidal currents.



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

Next Forecast:
July 1st PM

Attachment 3

Vessel Status Board

All Vessels Are Currently In Port Due To Inclement Weather And The Anticipation Is That Skimming Capacity Will Remain In Port Tomorrow

Attachment 4

QA / QC Report for 6/27/10

Deepwater Horizon Incident – Houma Incident Command Center

SMART Tier 1 Data Quality Assessment and Review

SMART Tier 1 data consists of observations summarized in an Activity Log (Unit Log ICS 214-CG) and pre- and post-application photographs and associated photo log of dispersant spray operations. This form documents the results of a preliminary quality assessment review of these documents.

Smart Air Team #: 2 Date: 6/27/2010

Operational Period: 20100627 0700 to 20100627 1506

Data Review (Check documents that were reviewed)

☑ Unit Log – ICS 214-CG

☑ Photographs (How many reviewed? 9)

☑ Photo Log

☐ Dispersant Observation Reporting Form 30 – not included in package

Assessment (Check appropriate box(s))

☑ Concur with SMART observer findings (reasonableness of findings)

☐ Issues of note from data review. Briefly describe.

dispersion along edges of the oil patch, with 'café-au-lait' color change

☑ Dispersant is effective based on review of Activity Log, photographs, and photo log.

☐ Results inconclusive with respect to dispersant effectiveness.

☐ Other. Briefly describe.

noticeable changes to oil patch

Reviewed by Dispersant Assessment Group Member (Print name, sign, and date)

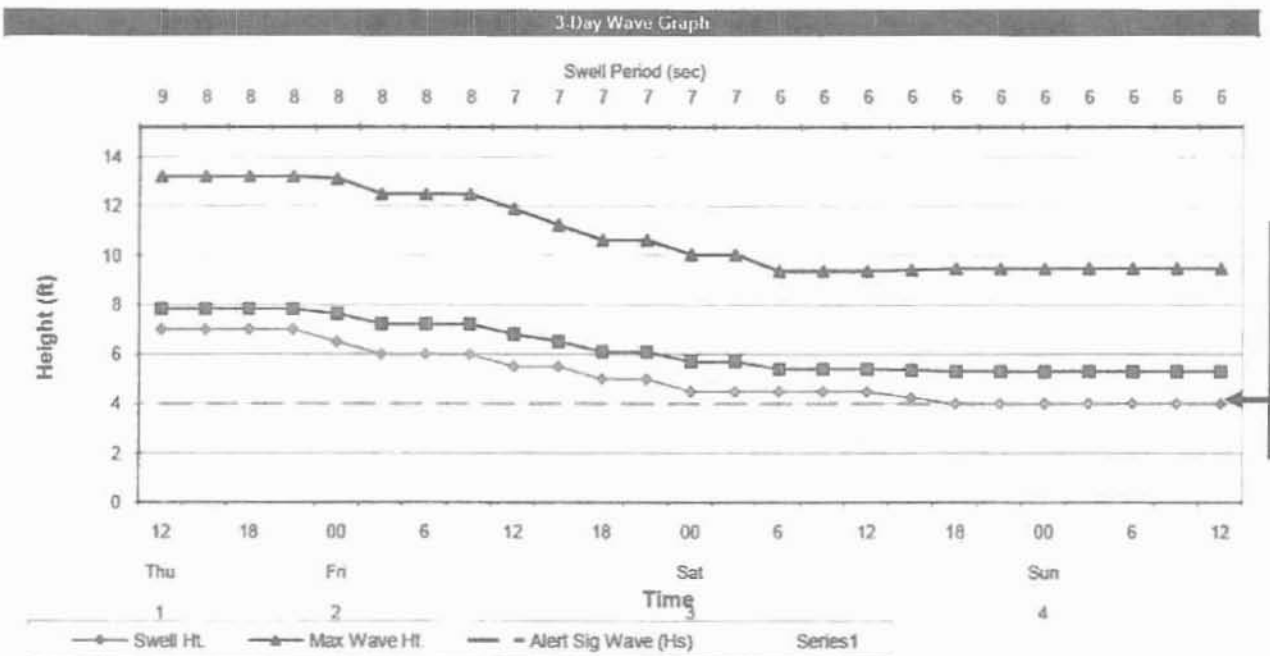
Name: Matt Benkiney Signature: (b) (6) Date: 6/30/10

Reviewed by NOAA SSC (Print name, sign, and date)

Name: JAY ROBSTEIN Signature: (b) (6) Date: 6/30/10

Template Updated 20100619

Attachment 5



Skimming 4 feet to start operational pullback. ISB stop operations at 2 feet

bp

Douglas J. Suttles
Chief Operating Officer

BP Exploration & Production Inc.
501 WestLake Park Boulevard
Houston, TX 77079
(b) (6)

July 11, 2010

Rear Admiral James A. Watson
Federal On-Scene Coordinator
United States Coast Guard

Exemption to Dispersant Monitoring and Assessment Directive – Addendum 3

Dear Admiral Watson,

BP respectfully requests an exemption to the Directive's maximum daily application of subsea dispersant for Sunday, July 11, 2010. Consistent with the Capping Stack Installation Plan sent to Admiral Allen on July 9, 2010, we are currently injecting 12 gallons per minute of subsea dispersant into the exiting oil stream. This is to ensure safe working conditions for the +1400 people on vessels working near the source. While we will continue to adjust the dispersant injection rate based upon winds, observed VOCs and oil capture volume, if we maintain 12 gpm, we will exceed 15,000 gallons for July 11.

An increase in subsea dispersant use is consistent with the Guidance on Subsea Dispersant Application you signed on June 23, which states, "For the purpose of VOC control, increases in the application rate of subsurface dispersants will be limited to conditions where winds are weak (< 10 knots) or VOC readings indicate potential health concerns. While this authority is granted to the OSC in the National Contingency Plan, all attempts will be made to maintain the 15,000 gallon per day subsurface cap outlined in Addendum 3 of the Dispersant Monitoring and Assessment Directive." The increase in subsea dispersant is also consistent with the Source Control Subsea Dispersant Forward Plan signed by Doug Suttles on July 6 and awaiting your signature. Assuming a flow rate of 53,000 bbls/day, a capture rate of 8,000 bbls/day, and a dispersant to oil ratio of 75 as stipulated by the USCG and EPA, the target daily dispersant volume would be 25,200 gallons or 17.5 gallons/minute.

The amount of subsea dispersant needed for VOC control has many controlling factors, including oil containment volume, wind conditions, and ocean currents. As you are aware, the amount of oil being captured decreased by ~18,000 barrels yesterday when the previous cap was removed. While we continue to bring the Helix Producer on line as quickly as is safely and operationally prudent, until it is operational, the amount of oil coming to the surface is greater than it has been recently. Additionally, winds are less than 10 knots today and the NOAA forecast is for winds to continue to be light. Finally, while ocean currents are currently bringing the oil to the surface to the southeast of the central operational area, if this current shifts or dissipates, the oil could revert to coming up directly under the main operational area, increasing the risk of VOCs.

Consistent with all of the above, we are requesting an exemption from the 15,000 gallon limit for July 11, 2010. Unless we see an increase in VOCs, we intend to hold our subsea dispersant rate at approximately 12 gpm, which would result in a total volume for today of less than 20,000 gallons. Further, the Helix Producer should begin capturing oil today, and thus we expect we will only need a one day exemption to proactively prevent dangerous VOC conditions during this time of crucial operations near the source.

Sincerely,

(b) (6) RTF

Douglas J. Suttles

Approval granted subject to the above:

(b) (6)

Date: 7-11-10

Rear Admiral James A. Watson
Federal On-Scene Coordinator
United States Coast Guard

James A. Watson
Rear Admiral, USCG
Federal On-Scene Coordinator

July 2, 2010

Dear Admiral Watson:

In compliance with the May 26, 2010, Dispersant Monitoring and Assessment Directive - Addendum 3 (the "Directive"), BP Exploration & Production Inc. ("BP") has eliminated the surface application of dispersants, except in cases where an exemption is requested and justified, and approved by the Federal On-Scene Coordinator.

Houma Unified Command had 6 spotter visual reports on 2 July from aircraft out of both Stennis and Houma Bases. These spotters were able to identify oil slicks that were estimated to require 65,000 gallons of dispersant. Today aerial dispersant operations applied the 10,000 gallons that was initially approved and another 10,000 gallons that was approved approved by FOSC. Actual applied yesterday was 12,737 gals.

Weather will be a significant issue tomorrow. The Saturday forecast calls for flying conditions that may preclude aerial spraying with rain and thundershowers, winds of 20-28 knots from the N-NE-ENE, significant wave height over 7.5 feet, ceilings of 500 feet or less, visibility of 2 nm with a 80% chance of rain.

The NOAA Surface Oil Forecast for July 3rd shows extensive areas of heavy and medium oil (Attachment 2) that are or may adversely impact the shoreline, including sensitive wetlands.

Houma Unified Command anticipates that due to the weather, if oil slicks are identified, the most viable means of response will be the use of dispersants to reduce the risk of oil land fall, since tomorrow will be the 5th straight day of no skimming or ISB activities taking place.

Prior to spray operations tomorrow morning, the spotter aircraft will identify the high value targeted slicks and we will prepare a report of the location and dispersant volumes needed for application as soon as practicable tomorrow. It is anticipated that the forecasted weather pattern consisting of low ceilings and rain/thunderstorms will make it difficult to execute reconnaissance or dispersant spray missions.

Pursuant to a request this date from Unified Command, the following information is provided.

- Estimated size of identified dispersible oil slick targets proposed in designated zones: Today there were several air reconnaissance flights observing dispersible oil slicks in Zone AC & AM as shown Table 1.

- Explicit justification for why these targets can't be skimmed or addressed by other mechanical means: The weather is forecast to exceed the capability to skim and conduct ISB operations.

Source Skimming Assets:	All vessels in port
Non-Source Skimming Assets:	All vessels in port
ISB Assets:	All vessels in port
A Whale	Operating offshore for testing of system

- Consequently, source and non-source skimming vessels as well as ISB will not be in action tomorrow.
- Today, all offshore recovery assets (skimmers, etc.) are ***in port or at anchor due to inclement weather*** and ISB operations did not take place.
- It is planned to conduct Tier 1 helicopter SMART over flights to observe dispersant operations tomorrow should they be conducted and if weather permits helicopter operations.
- M/V *International Peace* is currently in port waiting on better seas and weather. It is not anticipated that she will be operating tomorrow due to continued adverse weather conditions. No SMART Tier 2 or Tier 3 monitoring will be conducted.
- No SMART Team Tier 1 flights were conducted on June 30; therefore, no QA/QC reports are attached.
- No burn box is shown at this time, since the ISB fleet will be in port tomorrow.
- The A Whale operating box is shown.
- Forecast sea state through Sunday showing skimming and ISB limitations is provided as Attachment 5.
- ***ALL RESPONSE OPERATIONS MAY BE CANCELED DUE TO WEATHER TOMORROW***

It should be noted, that due to the adverse weather, there has been no skimming, ISB or dispersant activities for the past five (5) days. Skimming and ISB operations are not scheduled for tomorrow. It is anticipated that significant quantities of dispersible oil will be observed, if flight operations are conducted.

Accordingly, in accordance with the Directive, the Houma Unified Command respectfully requests an exemption to apply EC9500A in volumes on dispersible oil slicks located today as shown in Table 1 not to exceed ~~60,000~~ 20,000 gallons for a period not to exceed 12 hours. As aerial dispersant is the primary response tool for tomorrow, we have mobilized the reconnaissance and deployment resources and request an initial 10,000 gallons for early opportunistic targets. This will be coupled with further reconnaissance and target identification. A subsequent request will be forwarded later in the day based on the full set of spotter reports.

Sincerely,

Houma Unified Command

Exemption approved subject to the above:

(b) (6)

Date: 7-3-10

James A. Watson
Rear Admiral, USCG

Attachment 1

Federal On-Scene Coordinator

Dispersant Zone Map for 3 July 2010 with Oil Targets from Spotter Operations on 2 July

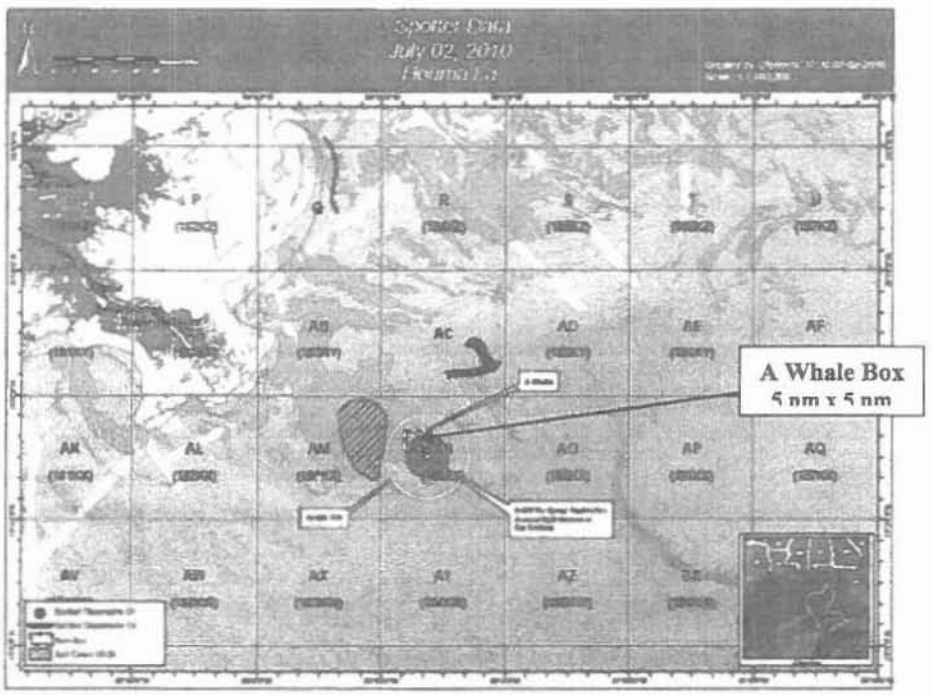


TABLE 1* Dispersible Oil Report July 2, 2010

Zone	# of slicks reported	Area in acres	Estimated percentage dispersible oil	Dispersant Needed** (1/20 DOR)
AC	1	20,480	25	25,600
AC	1	24,320	10	12,160
AM	1	141,000	5	35,250
Q	1	Found not suitably responsive to dispersant application		---
				73,010
Dispersant Sprayed Today The requested amount for 7/3/10 will be based on tomorrow mornings reconnaissance with an initial request for 10,000 gals. Estimated Dispersant Needed 7/03/2010				**12,737** **60,273**

***Note: Table 1 shows our intentions based upon our observations the day before these actions take place. Size and location of slicks will change. Activities within slick areas e.g., skimming operations, in-situ burning, etc., or weather conditions may require revisions to the actual operational plan implemented.**

****Note: Dispersant needed is based upon area in acres x % dispersible oil x 5 gallons per acre**

Attachment 2

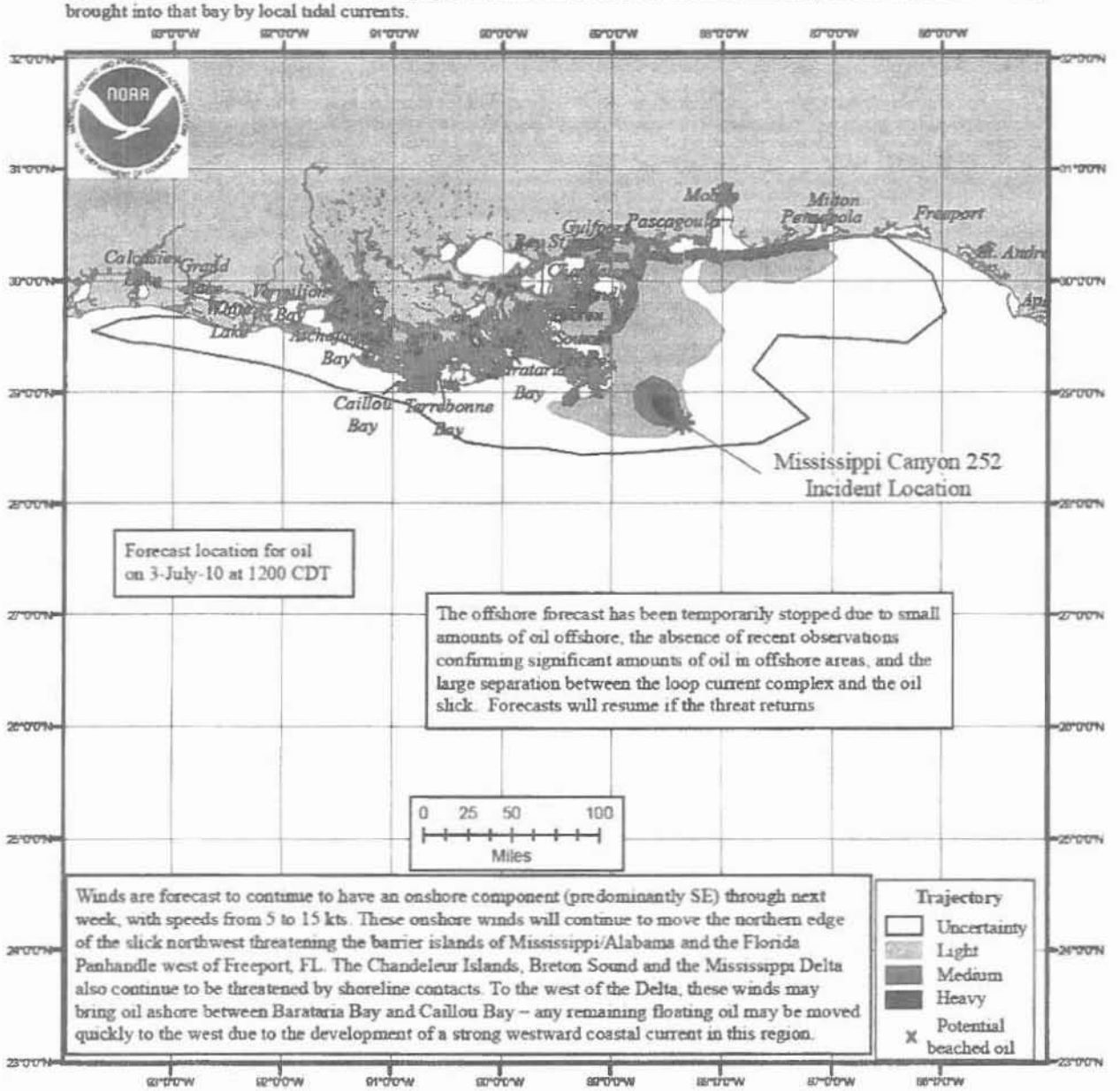
Nearshore Surface Oil Forecast Deepwater Horizon MC252

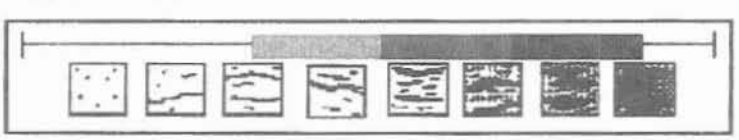
NOAA/NOS/OR&R

Nearshore

Estimate for: 1200 CDT, Saturday, 7/03/10
Date Prepared: 2100 CDT, Thursday, 7/01/10

This forecast is based on the NWS spot forecast from Thursday, July 1 PM. Currents were obtained from several models (NOAA Gulf of Mexico, West Florida Shelf/USF, TGLO/TAMU, NAVO/NRL) and HFR measurements. The model was initialized from Wednesday-Thursday satellite imagery analysis (NOAA/NESDIS). The leading edge may contain tarballs that are not readily observable from the imagery (hence not included in the model initialization). Oil near bay inlets could be brought into that bay by local tidal currents.





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

Next Forecast:
July 2nd PM

Attachment 3

Vessel Status Board

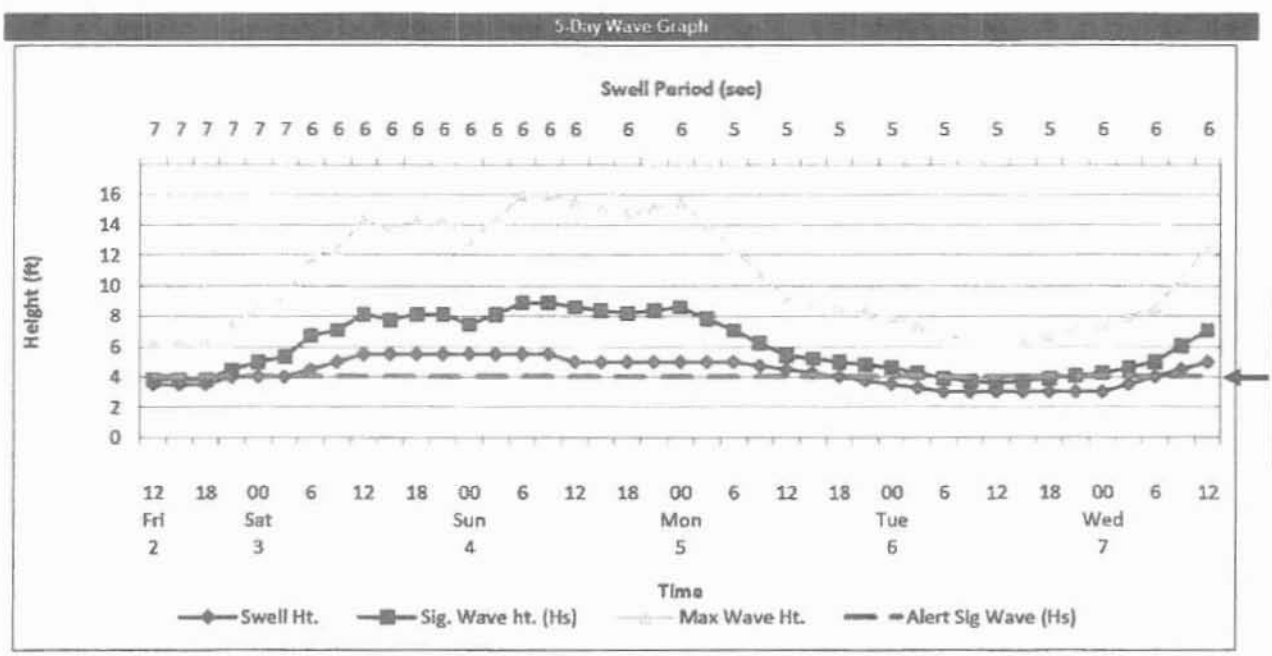
All Vessels Are Currently In Port Due To Inclement Weather And The Anticipation Is That Skimming Capacity Will Remain In Port Tomorrow

Attachment 4

QA / QC Reports

No spraying, No SMART Flights and No Reports on June 30th.

Attachment 5

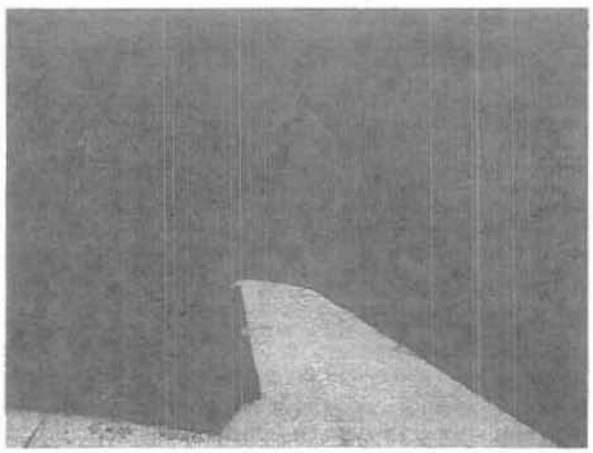


Skimming feet to start operational pullback. ISB stop operations 2 feet

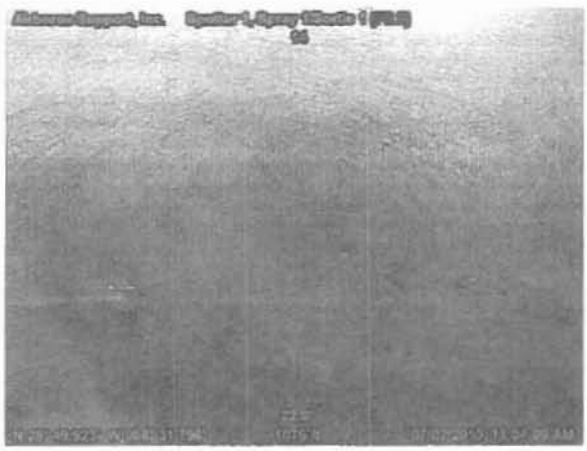
Maximum Wave Height is defined as the average of the highest .1% of all waves

PHOTOGRAPHS

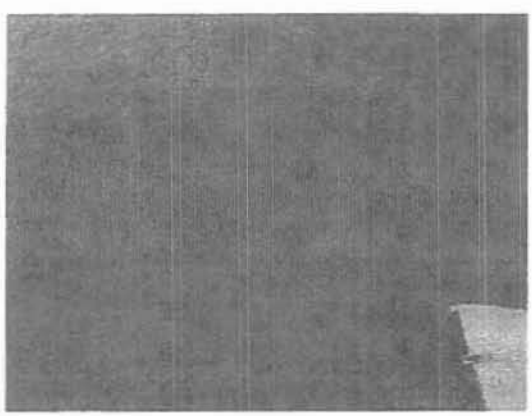
Zone AC (8 nm x 4 nm)



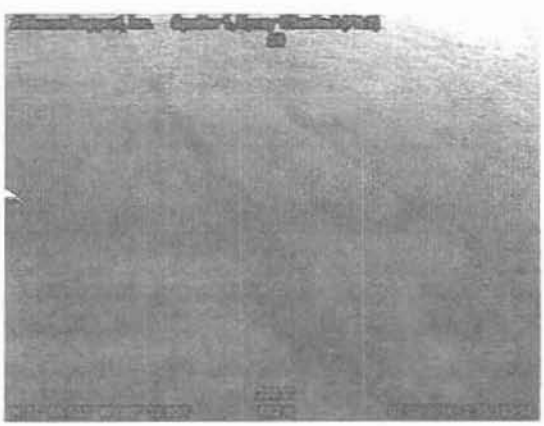
Zone AM (20 nm x 11 nm)



Zone AC (8 nm x 4 nm)



Zone AM (20 nm x 11 nm)



James A. Watson
Rear Admiral, USCG
Federal On-Scene Coordinator

July 3, 2010

Dear Admiral Watson:

In compliance with the May 26, 2010, Dispersant Monitoring and Assessment Directive - Addendum 3 (the "Directive"), BP Exploration & Production Inc. ("BP") has eliminated the surface application of dispersants, except in cases where an exemption is requested and justified, and approved by the Federal On-Scene Coordinator.

Houma Unified Command had nine (9) spotter visual reports on 3 July from aircraft out of both Stennis and Houma Bases. These spotters were able to identify oil slicks, however, in the opinion of the spotters and the Aerial Dispersant Group, these oil slicks were not of sufficient thickness to warrant aerial dispersant application. Today's aerial dispersant operations did not apply the 10,000 gallons that was initially approved by the FOSC; therefore, no additional amounts of dispersants were requested.

Weather will be a significant issue tomorrow for both surface and air operations. The Sunday forecast calls for flying conditions that may negatively impact both aerial spraying and reconnaissance flights. The forecast calls for an 80% probability of rain/thunderstorms, winds of 17-29 knots out of the E-ESE, wind waves averaging over 6 feet, significant wave height over 7 feet, with maximum wave height averaging 13.5 feet, ceilings of 500 feet or less and visibility of 4-7 nm.

The NOAA Surface Oil Forecast for July 4th shows extensive areas of heavy and medium oil (Attachment 2) that are or may adversely impact the shoreline, including sensitive wetlands.

Houma Unified Command anticipates that due to the weather, if oil slicks are identified, the most viable means of response will be the use of dispersants to reduce the risk of oil land fall, since tomorrow will be the 6th straight day of no skimming or ISB activities taking place.

Prior to spray operations tomorrow morning, the spotter aircraft will identify the high value targeted slicks and we will prepare a report of the location and dispersant volumes needed for application as soon as practicable tomorrow. It is anticipated that the forecasted weather pattern will consist of low ceilings and rain/thunderstorms which will make it difficult to execute reconnaissance or dispersant spray missions.

Pursuant to a request this date from Unified Command, the following information is provided.

- Estimated size of identified dispersible oil slick targets proposed in designated zones: Today air reconnaissance flights observed oil but none of the slicks were in our opinion of sufficient thickness to warrant expenditure of dispersant, therefore no dispersant was applied on the observed slicks. Please note that we have added Attachment 6 which is a spotter report describing and depicting the typical oil structure that has been observed today.

- Explicit justification for why these targets can't be skimmed or addressed by other mechanical means: The weather is forecast to exceed the capability to skim and conduct ISB operations.

Source Skimming Assets:	2 vessels offshore not skimming, other assets in port
Non-Source Skimming Assets:	All vessels in port
ISB Assets:	All vessels in port
A Whale	Operating offshore for testing of system.

Note: With the A Whale offshore there is the potential for conflicts in both surface skimming, burning and aerial dispersant operating areas.

- Consequently, source and non-source skimming vessels as well as ISB will not be in action tomorrow.
- Today, most offshore recovery assets (skimmers, etc.) are ***in port or at anchor due to inclement weather*** and ISB operations did not take place.
- It is planned to conduct Tier 1 helicopter SMART over flights to observe dispersant operations tomorrow should they be conducted and if weather permits helicopter operations.
- M/V *International Peace* is currently in port waiting on better seas and weather. It is not anticipated that she will be operating tomorrow due to continued adverse weather conditions. No SMART Tier 2 or Tier 3 monitoring will be conducted.
- SMART Team Tier 1 flights on July 1 were unable to go offshore due to weather; therefore, no QA/QC reports are attached.
- No burn box is shown at this time, since the ISB fleet will be in port tomorrow.
- The A Whale operating box is shown and is subject to change.
- Forecast sea state through Sunday showing skimming and ISB limitations is provided as Attachment 5.
- ***ALL RESPONSE OPERATIONS MAY BE CANCELED DUE TO WEATHER TOMORROW***

It should be noted, that as of today, due to the adverse weather, there has been no skimming, ISB or dispersant activities for the past five (5) days. Skimming and ISB operations are not scheduled for tomorrow.

In accordance with the Directive, the Houma Unified Command respectfully requests an exemption to apply EC9500A. As aerial dispersant is the primary response tool for tomorrow, we have mobilized the reconnaissance and deployment resources and request an initial 10,000 gallons for early opportunistic targets. This will be coupled with further reconnaissance and target identification tomorrow morning. A subsequent request will be forwarded later in the day based on the full set of spotter reports.

Sincerely,

Houma Unified Command

Exemption approved subject to the above:

(b) (6)

Date: 7/4/10

James A. Watson
Rear Admiral, USCG
Federal On-Scene Coordinator

Attachment 1

Dispersant Zone Map for 3 July 2010 with Oil Targets from Spotter Operations on 2 July

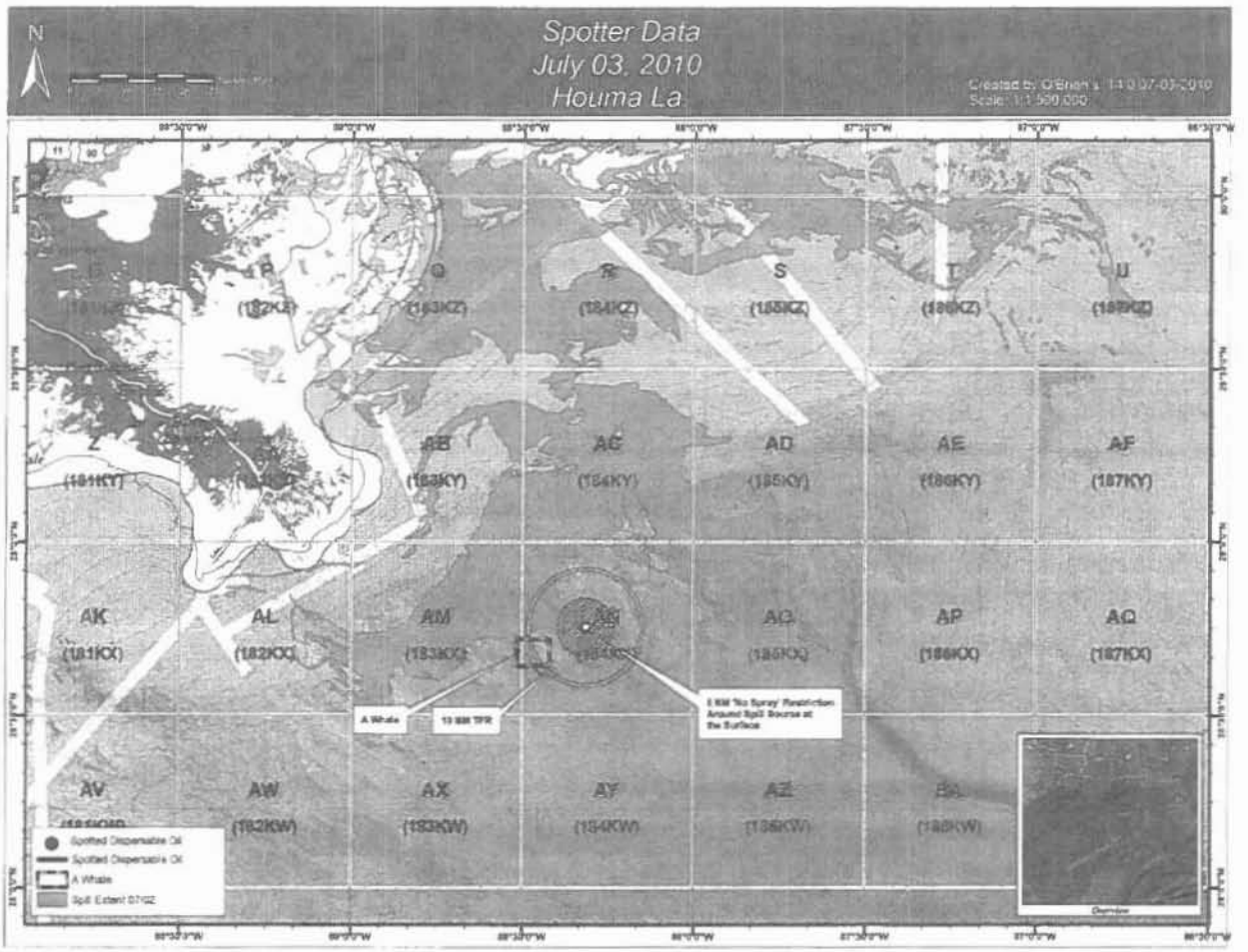


TABLE 1* Dispersible Oil Report July 3, 2010

Zone	# of slicks reported	Area in acres	Estimated percentage dispersible oil	Dispersant Needed** (1/20 DOR)
			Minimal Dispersible Oil Observed	
Dispersant Sprayed Today 0 Gallons The requested amount for 7/4/10 will be based on tomorrow mornings reconnaissance An initial request for 10,000 gals. is being made Estimated Dispersant Needed 7/04/2010				

***Note: Table 1 shows our intentions based upon our observations the day before these actions take place. Size and location of slicks will change. Activities within slick areas e.g., skimming operations, in-situ burning, etc., or weather conditions may require revisions to the actual operational plan implemented.**

****Note: Dispersant needed is based upon area in acres x % dispersible oil x 5 gallons per acre**

Attachment 2

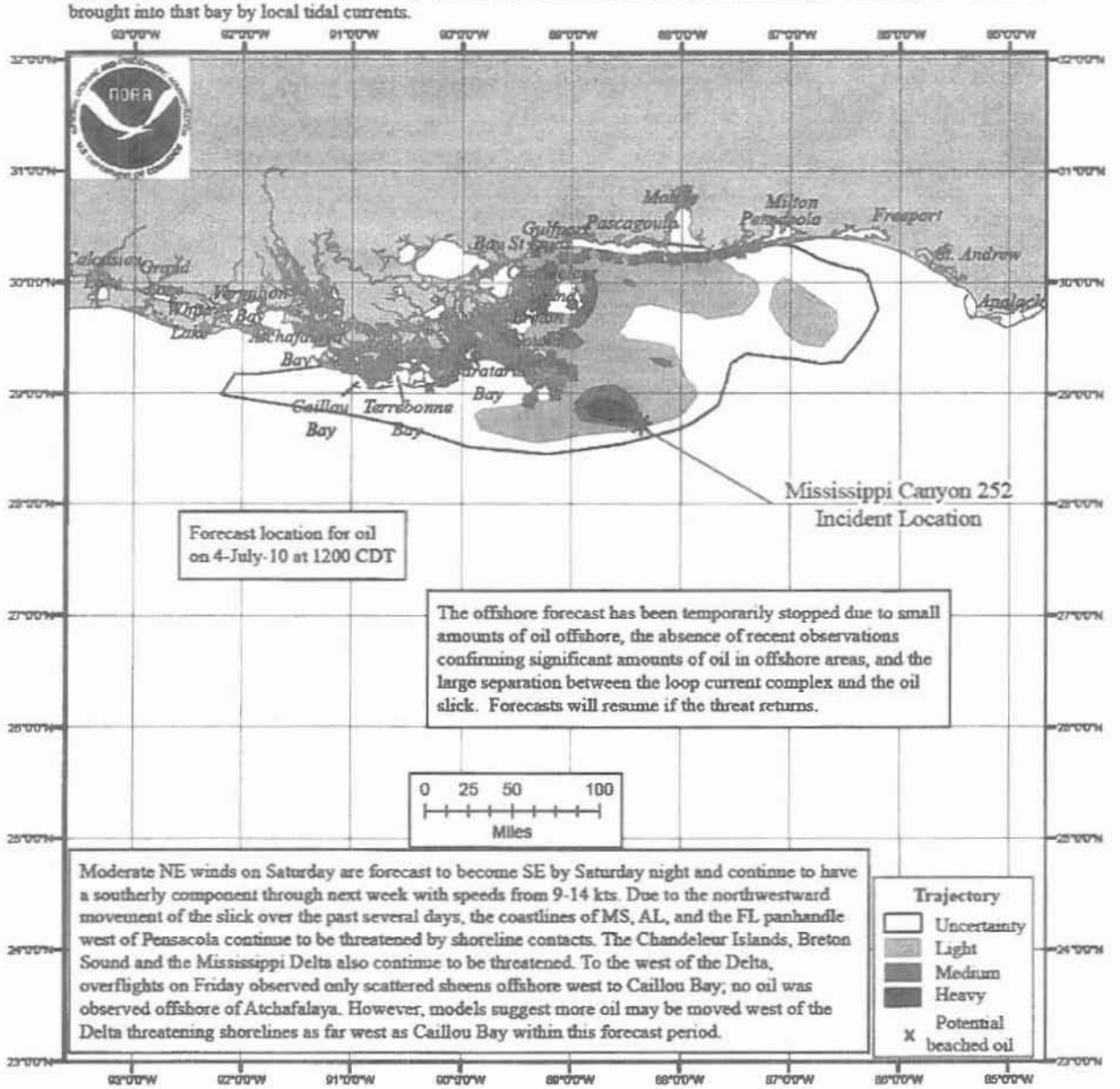
Nearshore Surface Oil Forecast Deepwater Horizon MC252

NOAA/NOS/OR&R

Nearshore

Estimate for: 1200 CDT, Sunday, 7/04/10
Date Prepared: 2100 CDT, Friday, 7/02/10

This forecast is based on the NWS spot forecast from Friday, July 2 PM. Currents were obtained from several models (NOAA Gulf of Mexico, West Florida Shelf/USF, TGLO/TAMU, NAVO/NRL) and HFR measurements. The model was initialized from Friday satellite imagery analysis (NOAA/NESDIS) and overflights. The leading edge may contain tarballs that are not readily observable from the imagery (hence not included in the model initialization). Oil near bay inlets could be brought into that bay by local tidal currents.



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

Next Forecast:
July 3rd PM

Attachment 3

Vessel Status Board

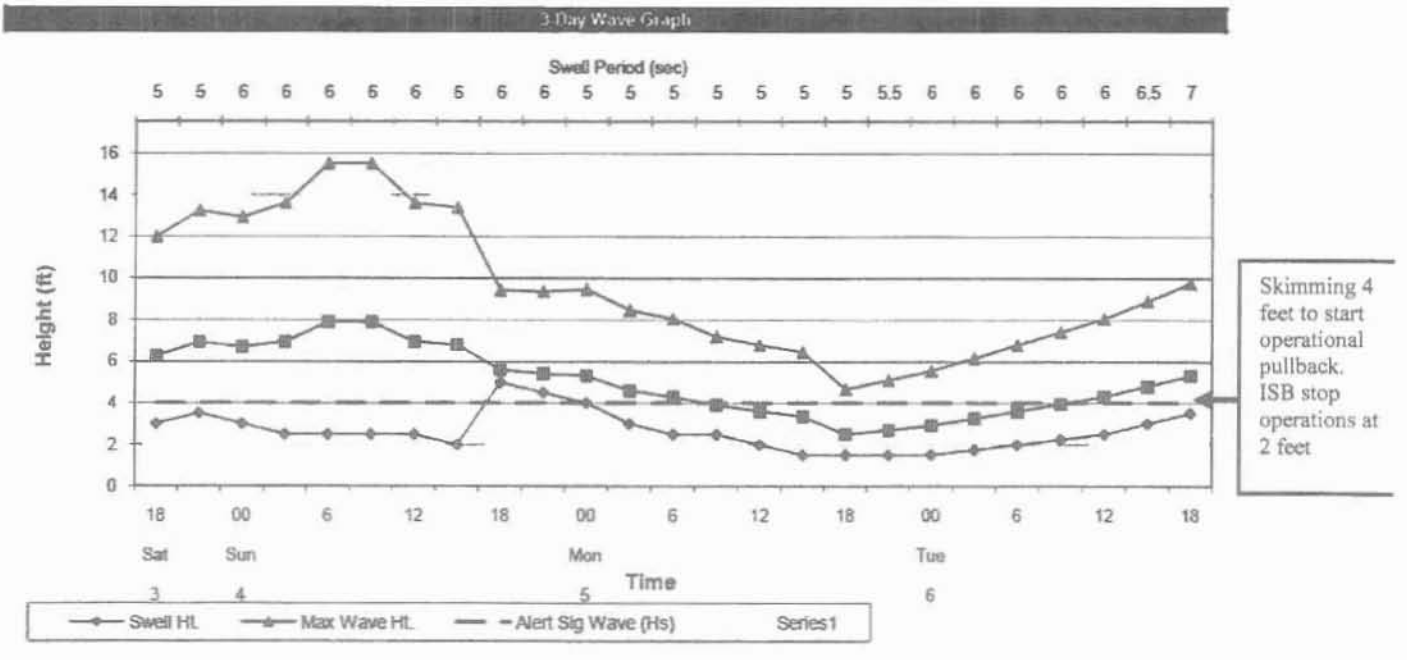
All Vessels Are Currently In Port Due To Inclement Weather And The Anticipation Is That Skimming Capacity Will Remain In Port Tomorrow

Attachment 4

QA / QC Reports

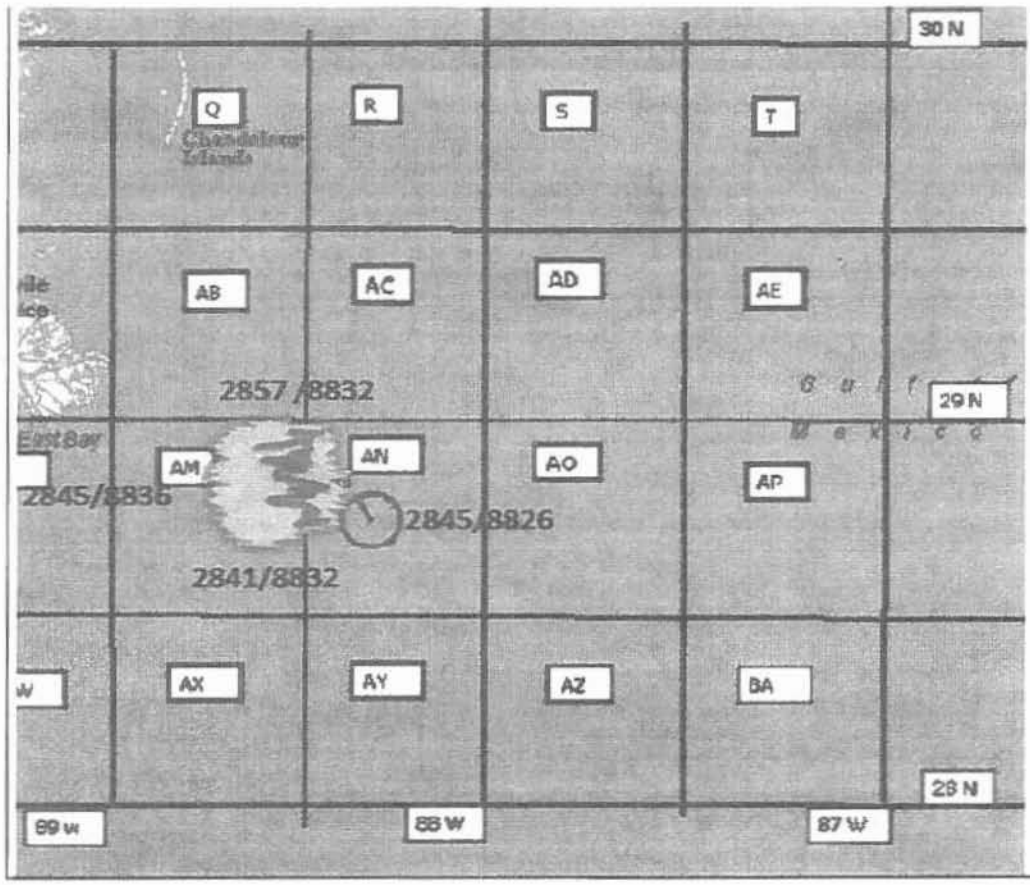
Weather prevented SMART Flights on July 1st.

Attachment 5



Skimming 4 feet to start operational pullback. ISB stop operations at 2 feet

Attachment 6



Date: 03JUL10

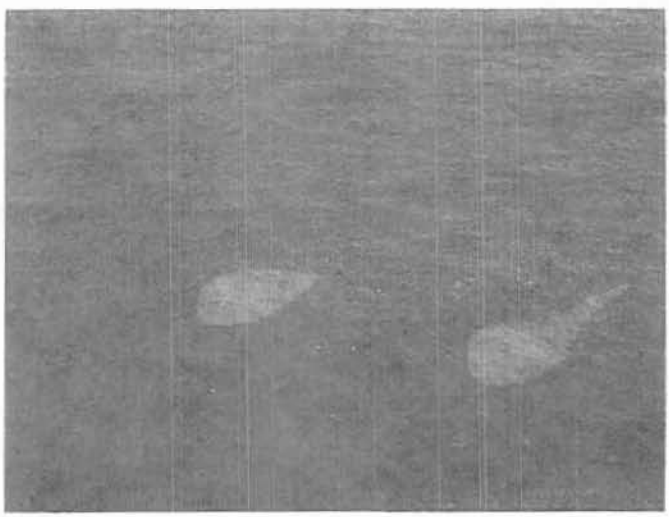
Time: 0630/0900
(start/end)

Flight #: 1

Zones Observed: AM

Large area of sheen located between coordinated on map.

Narrow embedded streamers of reddish emulsified oil north to south along the eastern border of the sheen. Very few streamers of reddish brown oil. Streamers are unorganized. Within the coordinates given, Metallic Sheen coverage 95% Visible water (no sheen) 4% Non-dispersible oil 1%



Emusified oil patties in Zone AL Not dispersible

bp

Douglas J. Suttles
Chief Operating Officer

BP Exploration & Production Inc.
501 WestLake Park Boulevard
Houston, TX 77079
(b) (6)

July 5, 2010

Rear Admiral James A. Watson
Federal On-Scene Coordinator
United States Coast Guard

Weekly Source Control Surface Dispersant Plan
(July 8 through July 14, 2010)

Dear Admiral Watson,

In compliance with the May 26, 2010, Dispersant Monitoring and Assessment Directive - Addendum 3 (the "Directive"), BP Exploration & Production Inc. ("BP") submitted a weekly Source Control Surface Dispersant Plan for the week July 1 to July 7, which you approved on June 30. The plan allowed for a maximum daily application volume (calendar day) of 6,000 gallons, unless more was required to control VOCs. From July 1 through July 5, the average daily volume applied was ~487 gallons. The maximum daily application was 1,473 gallons on July 2.
The current offshore air monitoring plan for source control (2200-T2-DO-PN-4002-4 signed May 25, 2010) identifies air monitoring instrumentation, location and action levels to respond to VOC excursions. In addition, vapor suppression guidelines (attachment 1) were put in place May 29, 2010 to provide additional granularity for action requirements. The air monitoring data is transparent to USCG and EPA.

BP respectfully requests approval of the Weekly Source Control Dispersant Plan for July 8 though July 14, as follows

Date	Expected Maximum Volume per calendar day (gals)
July 8	6000
July 9	6000
July 10	6000
July 11	6000
July 12	6000
July 13	6000
July 14	6000

Should VOC monitoring dictate further deployment in accordance with the Air Monitoring Plan for Source Control, BP also respectfully requests to exceed these volumes as required.

Sincerely,

(b) (6)

Douglas J. Suttles

THE EXPECTED MAXIMUM APPLICATION OF DISPERSANT OF 6,000 GALLONS PER DAY WILL SERVE TO MITIGATE EXPECTED VOC EXCURSIONS ASSOCIATED WITH CAPPING ACTIVITIES PURSUANT TO REDUCING THE FLOW FROM THE WELL OVER A SEVERAL DAY PROCESS (b) (6)

Approval granted subject to the above:

(b) (6)

Date: 7/7/2010

ROY A. NASH

Rear Admiral ~~James A. Watson~~
Federal On-Scene Coordinator
United States Coast Guard

Attachment 1
Vapor Suppression Guidelines
May 29, 2010

These guidelines pertain to deployment and use of dispersant vessels and fire fighting vessels in Source Control Operations. The guidance provides additional detail around action levels specified in the Offshore Air Monitoring Plan for Source Control (2200-T2-DO-PN-4002-4). In addition, this guidance aligns with Dispersant Procedures for Vessels Adriatic and HOS Super H (2200-T2-LC-RP-4091) and Fire Fighting Vessels Operating (Priorities and Procedures (2200-T2-DO-PR-4057).

All vessels experiencing VOC levels exceeding 50PPM are directed to report it to Source Control SimOps Branch Director. Application of dispersant should be coordinated through the Source Control SimOps Branch Director.

Recommended actions for VOC management:

- VOC levels of 20 to 70ppm
  - Use Rem Forza and Kay Marine 5 vessels for wide spray water pattern to suppress and redirect vapors

- VOC over 70ppm
  - Notify Source Control SimOps Branch Director to coordinate dispersant use
  - Use HOS Super H and Adriatic as primary dispersant vessels
  - Use Rem Forza and Kay Marine 5 vessels to apply dispersant when wide spray water pattern is not effective

Addendum to Weekly Source Control Surface Dispersant Plan
(July 8 through July 14, 2010)

The approval of the referenced surface dispersant plan granted on July 7, 2010 is amended as follows:

The maximum 6,000 gallon daily surface dispersant application rate is only authorized during active well-cap replacement operations. The expected maximum application of dispersant of 6,000 gallons per day during the top cap removal procedures will mitigate expected VOC excursions associated with capping activities pursuant to reducing the increased flow from the well over this several day process.

Thanks to the diligent efforts of all involved parties, the daily surface dispersant application rate to control VOCs has been reduced to under 200 gallons over the past two weeks. Prior to commencing the well-cap replacement operation and once it is completed the maximum daily surface dispersant application rate is not expected to exceed 3,000 gallons daily unless a spike in VOC monitoring dictate further deployment.

(b) (6)

Date: 7/8/2010

Rear Admiral Roy A. Nash
Deputy, Federal On-Scene Coordinator
United States Coast Guard

bp

Douglas J. Suttles
Chief Operating Officer

BP Exploration & Production Inc.
501 WestLake Park Boulevard
Houston, TX 77079
(b) (6)

July 6, 2010

Rear Admiral James A. Watson
Federal On-Site Coordinator
United States Coast Guard

Re: Source Control Subsea Dispersant Forward Plan

Dear Admiral Watson,

This letter is in response to your request that BP Exploration & Production Inc. ("BP") provide a high-level description of its plans going forward with regard to the use of dispersants. Specifically, you asked that we describe BP's planned dispersant use after the improvements to the containment system by the implementation of the Helix producer concept.

BP is moving forward with the installation of the Free Standing Riser 1 system that BP projects will have the capacity to contain an additional 20 - 25 MMBOPD from the MC252 well (the "Well") to the Helix Producer. The current weather conditions make the timing for the start-up of the Helix Producer system uncertain. The earliest projected date for the start-up is July 7, 2010, with it being more likely that the date will be around July 10, 2010. BP anticipates it will take approximately 5 days after the start-up of the Helix Producer system for it to stabilize to the point that we will know how effective it will be at containing the flow from the Well.

As a general principle, (under all conditions the use of subsea dispersant will be held under the 15,000 gallon limit in accordance with the May 26, 2010, Dispersants Monitoring and Assessment Directive) the more effective the Helix Producer system is in containing the flow from the Well, the less subsea dispersant it will be used. If the addition of the Helix Producer system virtually eliminates the escape of oil into the sea, BP will be able to suspend the application of subsea dispersant altogether. However, under this circumstance, BP believes it is critical that we maintain the capability to apply subsea dispersant to meet unforeseen contingencies such as weather disruptions or equipment failures.

If there is still flow from the Well escaping into the sea after installation of the Helix Producer system at a significantly reduced rate, BP will continue to apply subsea dispersant at a proportionately reduced rate. The attached table updates our 6 June 2010 document entitled GoM Drilling, Completions and Interventions- MC252: Guidance on Subsea Dispersants Application OPS Note #3 based on the monitoring and performance data that has been collected. For safety reasons, in accordance with current practices, BP plans to maintain the ability to apply surface dispersant capability as required for prompt VOC control in the case of operational difficulty.

Please let me know if there is any additional information we can provide regarding BP's planned dispersant use.

(b) (6)

Douglas J. Suttles

Approval granted subject to the above:

(b) (6)

Date: 7-11-10

Jim Watson
Rear Admiral, USCG
Federal On-Scene Coordinator

Attachment 1

- Assume flow rate of 53,000 bbls/day
- Calculate oil escaping by subtracting oil captured by containment system from 53,000 bbls/day
- Apply dispersant at dispersant to oil ratio of 1:75
- Line shows not to exceed 15,000 gallons

Estimated Volume of Oil Captured by Containment Systems (000s barrels per day)	Target EC9500A Subsea Dispersant Application Rate (gallons per minute)[1]
Total Containment	0
> 45	3
40 to 45	4
35 to 40	6
30 to 35	8
25 to 30	10

[1]Averaged over 24-hour period

James A. Watson
Rear Admiral, USCG
Federal On-Scene Coordinator

July 7, 2010

Dear Admiral Watson:

In compliance with the May 26, 2010, Dispersant Monitoring and Assessment Directive - Addendum 3 (the "Directive"), BP Exploration & Production Inc. ("BP") has eliminated the surface application of dispersants, except in cases where an exemption is requested and justified, and approved by the Federal On-Scene Coordinator.

Houma Command had eleven (11) spotter/recon flights on 7 July from aircraft out of both Stennis and Houma Base.

Oil slicks were observed but mostly sheen. One small 400 acre slick with dispersible oil located in Zone AN with estimates of up to 50% dispersible oil was located and targeted. Since the dispersible oil calculation required approximately 1,000 gallons of dispersant, Zone AN was switched from Stennis and given to Houma to apply with a more appropriately sized aircraft the BT-67. SMART 1 did observe the spray mission today and they were pleased with the data/observations.

Weather may again be a factor tomorrow for skimming and ISB operations. Both skimming and ISB activities will attempt to recommence recovery/response operations as the weather and sea states continue to rapidly moderate. Most skimming and ISB resources will be transiting back out to the site tomorrow and some resources may not have a full day of daylight operations due to their transit back to operational areas.

The Thursday forecast calls for 10% precipitation, winds of 11-15 knots out of the SE-ESE, wind waves of 3 feet, significant wave height of approximately 5 feet, with maximum wave heights less than 8.5 feet, unlimited ceilings and visibility of 12-15 nm.

The NOAA Surface Oil Forecast for July 8th shows extensive areas of heavy and medium oil (Attachment 2) that are or may adversely impact the shoreline, including sensitive wetlands.

Houma Unified Command continues to anticipate the most viable means of response will be the use of dispersants to reduce the risk of shoreline impact. The heavy weather and significant sea state over the past week enhanced the natural dispersion of the oil and also made it very difficult for spotter aircraft to see surface oil. Aerial Dispersants believes that with the moderating sea state, surface oil may become more visible than it has been for the past week as well as the reduction in the natural wave generated dispersion activity which will require mechanical/burn/dispersant removal actions versus natural dispersion.

Prior to spray operations tomorrow morning, the recon/spotter aircraft will identify the high value targeted slicks and we will prepare a report of the location and dispersant volumes needed for application as soon as practicable.

Pursuant to a request this date from Unified Command, the following information is provided.

1-Estimated size of identified dispersible oil slick targets proposed in designated zones: Today air reconnaissance flights observed dispersible oil located in Zone AN. The relatively small slick was approximately 400 acres with estimates of up to 50% dispersible oil.

2-Explicit justification for why these targets can't be skimmed or addressed by other mechanical means: The significant wave height is forecasted to exceed maximums to conduct ISB & could adversely impact

skimming operations. The weather forecast should be extremely suitable for dispersant operations so aerial dispersants may be the most effective and viable response tool.

- **Skimming units:** Transiting to operating areas- Recommencement of skimming operations
- **ISB Assets:** Transiting to operating areas- Recommencement of burn operations
- **A Whale:** Operating offshore for testing of system.

3-Today, offshore recovery assets, skimmers, etc. were in port due to adverse weather and it is anticipated that these vessels will recommence skimming operations sometime during tomorrows daylight hours. ISB operations did not take place today and they are anticipated to attempt to recommence burn operations tomorrow late in the day.

4-It is planned to conduct Tier 1 helicopter SMART over flights to observe dispersant operations tomorrow should they be conducted and if weather permits helicopter operations.

5-M/V *International Peace* is currently in port waiting on better seas and weather. It is anticipated that she will be operating tomorrow. No SMART Tier 2 or Tier 3 monitoring will be conducted.

6-SMART Team Tier 1 QA/QC checklists are not available due to no spraying activities having taken place where SMART 1 was involved.

7-The A Whale is subject to the 2 NM no spray criteria.

8-Forecast sea state through Friday showing skimming and ISB limitations is provided as Attachment 5.

9-***ALL AERIAL DISPERSANT RESPONSE OPERATIONS MAY BE CANCELED DUE TO WEATHER TOMORROW***

In accordance with the Directive, the Houma Unified Command respectfully requests an exemption to apply EC9500A. As aerial dispersant is the primary response tool for tomorrow, we have mobilized the reconnaissance and deployment resources and request an initial 10,000 gallons for early opportunistic targets. This will be coupled with further reconnaissance and target identification tomorrow morning. A subsequent request will be forwarded later in the day based on the full set of spotter reports.

Sincerely,

Houma Unified Command

Exemption approved subject to the above:

(b) (6)

Date: 7-8-10

James A. Watson
Rear Admiral, USCG
Federal On-Scene Coordinator (FOSC)

Attachment 1

Dispersant Zone Map for 7 July 2010 with Oil Targets from Spotter Operations on 6 July

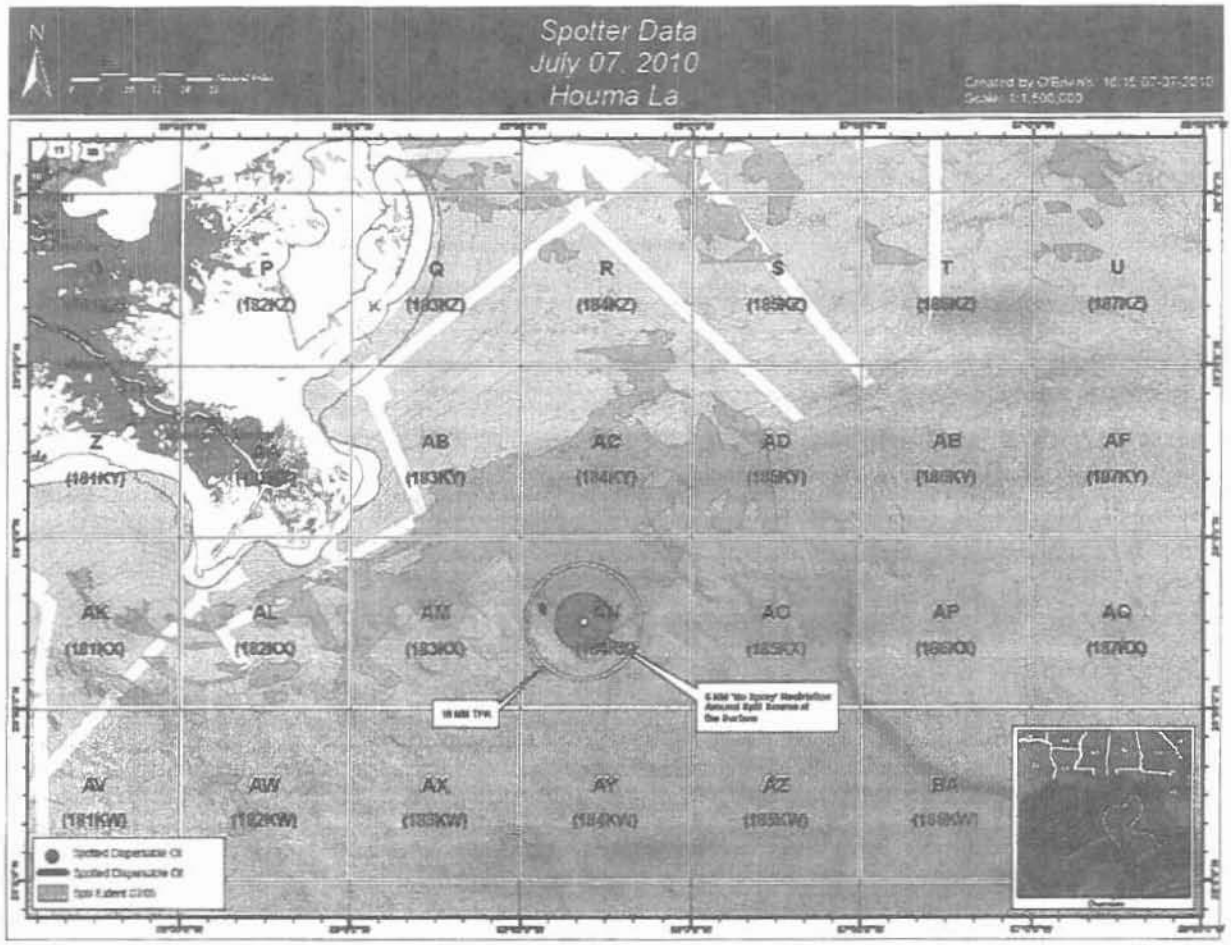


TABLE 1* Dispersible Oil Report July 7, 2010

Zone	# of slicks reported	Area in acres	Estimated percentage dispersible oil	Dispersant Needed** (1/20 DOR)
AN	1	400	50%	1,000 gallons
				1,000 gallons
Dispersants were Sprayed Today- 1,000 Gallons The requested amount for 7/8/10 will be based on tomorrow mornings reconnaissance An initial request for 10,000 gals. is being made due to the anticipation of finding dispersible oil requiring that amount of dispersants. Estimated Dispersant Needed 7/8/2010 based upon full morning spotter reports				

***Note: Table 1 shows our intentions based upon our observations the day before these actions take place. Size and location of slicks will change. Activities within slick areas e.g., skimming operations, in-situ burning, etc., or weather conditions may require revisions to the actual operational plan implemented.**

****Note: Dispersant needed is based upon area in acres x % dispersible oil x 5 gallons per acre**

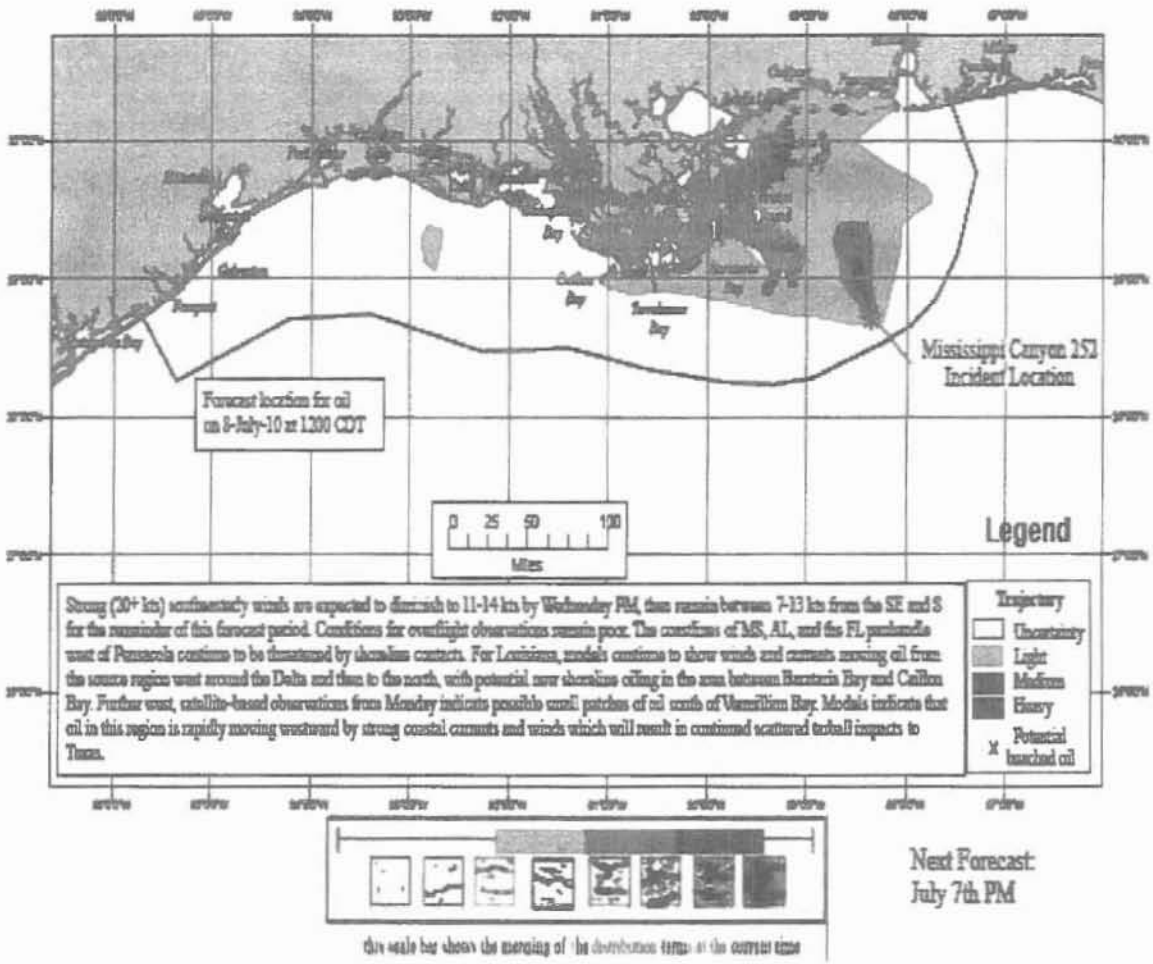
Attachment 2

Nearshore
Surface Oil Forecast
Deepwater Horizon MC252

NOAA/NOS/OR&R | Nearshore

Estimate for: 1200 CDT, Thursday, 7/08/10
Date Prepared: 2100 CDT, Tuesday, 7/06/10

This forecast is based on the NWS spot forecast from Tuesday, July 6 PM. Currents were obtained from several models (NOAA Gulf of Mexico, West Florida Shelf/USF, TGLO/TAMU, NAVO/NRL) and HFR measurements. The model was initialized from Sunday-Tuesday satellite imagery analysis (NOAA/NESDIS) and Tuesday overflights. The leading edge may contain tarballs that are not readily observable from the imagery (hence not included in the model initialization). Oil near bay inlets could be brought into that bay by local tidal currents.



Strong (20+ kts) southeasterly winds are expected to diminish to 11-14 kts by Wednesday PM, then remain between 7-13 kts from the SE and S for the remainder of this forecast period. Conditions for overflight observations remain poor. The coastlines of MS, AL, and the FL panhandle west of Pensacola continue to be threatened by shoreline contacts. For Louisiana, models continue to show winds and currents moving oil from the source region west around the Delta and then to the north, with potential new shoreline oiling in the area between Barataria Bay and Caillou Bay. Further west, satellite-based observations from Monday indicate possible small patches of oil south of Vermilion Bay. Models indicate that oil in this region is rapidly moving westward by strong coastal currents and winds which will result in continued scattered tarball impacts to Texas.

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

Next Forecast:
July 7th PM

Attachment 3

Vessel Status Board

DEEPWATER HORIZON Date/Time July 8, 2010 07JUL BBLS Skimmed: 0
OFFSHORE NON-SOURCE SKIMMING GROUP 1

		TOTAL	SKIMMING	OFFLOADING	Unscheduled Maintenance	Scheduled Maintenance	Enroute	Ordered
SKIMMERS		12	0		1	1	1	
TANK VESSELS		4	N/A				2	
VESSELS OTHER		1	N/A					
WORKBOATS		6	N/A	N/A				

		ON SCENE WEATHER	COMMENTS: Skimming vessels are on standby/anchorage until weather conditions permit for safe skimming operations.
WIND		SE 10-15KT	
WAVE		4 - 6'	
SWELL			

Kind/Type	Skimmer Type	Skimming Vessel	Assignment	Status	Location	ETA	Notes:
CG VOSS	RVI/Weir	Orisera	Gulfmark	Standby	IVO Baptiste Collette, MS River		Moored at anchorage area
CG VOSS		Charles M. Calleja		Standby	IVO Baptiste Collette, MS River		Moored at anchorage area
CG VOSS	RVI/Weir	Odyssa Quest	NRC	Standby	IVO Baptiste Collette, MS River		Moored at anchorage area
CG VOSS	RVI/Weir	Odyssa Mariner	NRC	Standby	IVO Baptiste Collette, MS River		Moored at anchorage area
CG VOSS	RVI/Weir	Miss Megan	NRC	Standby	Moored Venice		
CG VOSS	RVI/Weir	Sir Lancelot	NRC	Standby	Head of Passes Anchorage, MS		Moored
CG VOSS	RVI/Weir	Lauren Lacosta	NRC	Standby	Enroute Port Fourchon		Moored
CG VOSS	RVI/Weir	Gulf Scout (Being Demobed)	NRC	Enroute	Replacement vessel enroute	Coming Offline	Replacement: Calleis Navigator
CG VOSS	RVI/Weir	C Aggressor	NRC	Standby	Moored Venice		
Supsalv ESSM	RVI/Weir	Pope Benedict XVI	NRC	Unscheduled Maint.	Moored Port Fourchon	ETA 08JUL10	Reconfiguration
CG VOSS	RVI/Weir	HOS Express	BP America	Scheduled Maint.	Enroute Port Fourchon		HOS Express replaced HOS North
CG VOSS	RVI/Weir	Gulf Influence	NRC	Standby	Head of Passes Anchorage, MS		
		Offshore Barges				Remaining Storage bbls	
TV2							
TV2		TV 26KD/ TB Clinton Canac	NRC	Standby	Moored West Delta Area	13000	
TV2		TV GCS 236/ TB Mary Gellatly	BP	Enroute	Enroute Port Fourchon	37000	ETA 05JUL10
TV2		TV Connecticut/ Tug Joan Moran	BP	Standby	Moored West Delta Area	37000	Completing USCG Inspection

		Crew/Re-supply					
WB2		Transporter	Re-Supply	Standby	Moored Venice		
WB2		Waterse	Shuttle	Supply Run	Moored Feerchon		
WB2		Miss Lauren	Shuttle	Supply Run	Moored Feerchon		
WB2							
WB2		Jambon Supplier	2602 Support	Standby	Moored Venice		
WB2		Rob Bordelon	CT Support	Scheduled Maint.	Moored Feerchon		Outfitting to support CT Barge
		Jason K McCall		Standby	Moored Feerchon		
Kind/Type		Command and Control	Assignment	Status	Location		
WB2		Bumble Bee	NRC	Command	Enroute Venice, LA		VHF radio OOC

DEEPWATER HORIZON **Date/Time** **7/7/10 16:53**
Offshore Skimming Group 2

Kind	Total	Skimming	Offloading	Unscheduled Maintenance	Scheduled Maintenance	Enroute	Ordered	Standby
OSRV	25	0	0	1	1	0	0	23
TANK VESSELS	5	N/A	1	0	0	0	0	4
VESSELS OTHER	2	N/A	N/A	1	0	0	0	1
WORKBOATS	18	N/A	N/A	0	0	0	0	18
TUGBOAT	8	N/A	N/A	0	0	0	0	8

	ON SCENE WEATHER	Comments:
WIND	14-16 kts ESE	
WAVE	6'	
SWELL	Unavailable	

	Other Vessels						Telephone
	Vessel	Assignment	Status	Location	ETA		
VSO	Seacor Lee	Command	Unscheduled Maint	MC-252		Source Group Command Vessel	713-565-2535
VSO	Seacor Pride (offloading vessel)	Offload Support	Standby	Fourchon			713-395-7642

Kind/Type	Vessel	Assignment	Status	Location	ETA	Notes:	Telephone
OSRV/RV1	Louisiana Responder	MSRC	Scheduled Maint	Ft Jackson			
OSRV/RV1	Gulf Coast Responder	MSRC	Standby	Venice		WX Standby	
OSRV/RV1	Texas Responder	MSRC	Standby	Venice		WX Standby	
OSRV/RV1	Maine Responder	MSRC	Standby	Venice		WX Standby	
OSRV/RV1	Mississippi Responder	MSRC	Standby	Venice		WX Standby	
OSRV/RV1	Southern Responder	MSRC	Standby	Venice		WX Standby	
OSRV/RV1	Delaware Responder	MSRC	Standby	Ft Jackson		WX Standby	
OSRV/RV1	Virginia Responder	MSRC	Standby	Venice		WX Standby	
OSRV/RV1	CGA HOSS Barge (Crosby Sun)	TF HOSS	Standby	Venice		WX Standby	713-395-7472
OSRV/RV1	Seacor Vanguard (Current Buster 2 ea)		Standby	Venice		WX Standby	985-518-9642
OSRV/RV1	Seacor Vantage (Current Buster)	Buster	Unscheduled Maint	Gulfport		Swapping out with John Cognill	985-249-4193
OSRV/RV1	Bryan Giles (w/CGA FRU) - Ampol	CGA	Standby	Venice			
OSRV/RV1	International Trooper (w/CGA FRU)- Ampol	CGA	Standby	Venice		WX Standby	001-88165-149-8485
OSRV/RV1	Kim B (w/CGA FRU) - Ampol	CGA	Standby	Venice		WX Standby	
OSRV/RV1	Mr. Alex (w/CGA FRU)- Ampol	CGA	Standby	Venice		WX Standby	
OSRV/RV1	Rene (Navy Marco)	Fed	Standby	Venice		WX Standby	504-208-6601
OSRV/RV1	Seacor Washington (Dutch arm)	Command	Standby	Fourchon		OSG2 Command Vessel	504-626-6963
OSRV/RV1	HOS Maybigue (Dutch arm)		Standby	Fourchon		WX Standby	832-250-9755
OSRV/RV1	HOS Sweetwater (Dutch Arm)		Standby	Fourchon		WX Standby	504-620-7502
OSRV/RV1	Candie Clipper (Ocean Buster)		Standby	Fourchon		WX Standby	
OSRV/RV1	JMC-300/RHEA (Gulp 2)		Standby	Anchor		WX Standby	
OSRV/RV1	Kylie Williams (Ocean Buster/Vane)		Standby	Fourchon		WX Standby	337-504-8274
OSRV/RV1	Southern Cross (Ocean Buster)		Standby	Fourchon		WX Standby	985-360-8201
OSRV/RV1	Amy Chouest (Ocean Buster)		Standby	Fourchon		WX Standby	
OSRV/RV1	A Whale (Bird weir)		Standby	MC-252		Initialed	011-870-7649-51421

	Offshore Barges				Remaining Storage bbls		
TV2	MSRC 402 Barge (Kimberly Cotte)	TF Storage	Standby	Pilottown	40,360		
TV1	MSRC 452 Barge (Tara Crosby)	TF Storage	Standby	Fort Jackson	45000		
TV1	MSRC 570 Barge (Crosby Clipper)	TF Storage	Standby	Fort Jackson	57000		
TV1	K-Sea DBL-155 (Rebel)	TF Storage	Offloading	Pilottown	125000		646-303-9850
TV1	Energy 8001/Superior Servbec Coatner	TF Storage	Standby	Fourchon	80000		646-671-0008

	Boom Boats						
	Vessel	Assignment		Location	ETA		
WB2	Sea Fox	Source	Standby	Venice		WX Standby	251-979-3453
WB2	Betty G	Source	Standby	Venice		WX Standby	251-404-2691
WB2	Ms. Alfred	Source	Standby	Venice		WX Standby	
WB2	Ms. Addison	Source	Standby	Venice		WX Standby	985-677-1949
WB2	Jolianne Marie	Source	Standby	Venice		WX Standby	985-709-7119
WB1	St. Ignatius Loyola	Source	Standby	Venice		WX Standby	850-596-4180
WB1	Hercules	Source	Standby	Venice		WX Standby	713-751-6022
WB1	Brutus	Source	Standby	Venice		WX Standby	713-751-6033
WB1	Mtr Matoy	Source	Standby	Venice		WX Standby	409-939-6873
WB1	Mr Randolf	Source	Standby	Venice		WX Standby	985-413-9450
WB1	Black Tip	Source	Standby	Venice		WX Standby	228-326-4502
WB1	Dog Fish	Source	Standby	Venice		WX Standby	321-961-9304

DEEPWATER HORIZON **Date/Time 07/07/10 1700 HRS**
OFFSHORE SKIMMING GROUP III

Kind	Total	Skimming	Offloading	Unscheduled Maintenance	Scheduled Maintenance	Enroute	Ordered	Standby
SKIMMERS	9	0	0	1	0	0	0	8
TANK VESSELS	2	N/A	0	0	0	0	0	2
VESSELS OTHER	1	N/A	N/A	0	0	0	0	1
WORKBOATS	3	N/A	N/A	0	0	0	0	3
TUGBOAT	3	N/A	N/A	0	0	0	0	3

	ON SCENE WEATHER
WIND	SSE 10 - 15 kts
WAVE	7 - 9 ft
SWELL	

Comments: NRC Perseverence in for repairs to hull.

	Other Vessels					
	Vessel	Assignment	Status	Location	ETA	
VSO	Queen Bee	Command	Standby	Fourchon		Source Grp Comnd Vessel

Kind/Type	Vessel	Assignment	Status	Location	ETA	Notes:
RV1/Belt	NRC Admiral (Marco)	NRC	Standby	Fourchon		weather hold
RV1/Weir-disc	NRC Energy (Crucial)	NRC	Standby	Fourchon		weather hold
RV1/Belt	NRC Guardian (Marco)	NRC	Standby	Fourchon		weather hold
RV1/Belt	NRC Perseverence (Marco)	NRC	Unscheduled Maint.	Fourchon		In for repairs
RV1/Disc	NRC Liberty (Crucial)	NRC	Standby	Fourchon		weather hold
RV1/Disc	Seahorse VI (Crucial)	NRC	Standby	Fourchon		weather hold
RV1/Weir	Lana Rose (Weir)	NRC	Standby	Fourchon		weather hold
RV1/Belt	Pauline T(Marco)	NRC	Standby	Venice		weather hold
RV1/Belt	Resolve Pioneer(Marco)	NRC	Standby	Fourchon		weather hold

	Offshore Barges				Remaining Storage bbls	
TV2	NRC Defender	TF Storage	Standby	Venice		
TV2	NRC Valiant	TF Storage	Standby	Venice		

	Boom Boats					
	Vessel	Assignment		Location	ETA	

	Crew/Re-supply					
WB2	Eversedy	Re-supply	Standby	Venice		
WB2	Miss Wynter	Re-supply	Standby	Venice		
WB2	Lady Nina	Re-supply	Standby	Venice		

Kind/Type	Tugboats	Assignment	Status	Location	ETA	Notes:
TB	Helena Marie	NRC	Standby	Venice		
TB	Tesla I	NRC	Standby	Venice		
TB	Angelica E	NRC	Standby	Venice		

Kind/Type	Inland Barges	Assignment	Status	Location	Remaining Storage	
0						

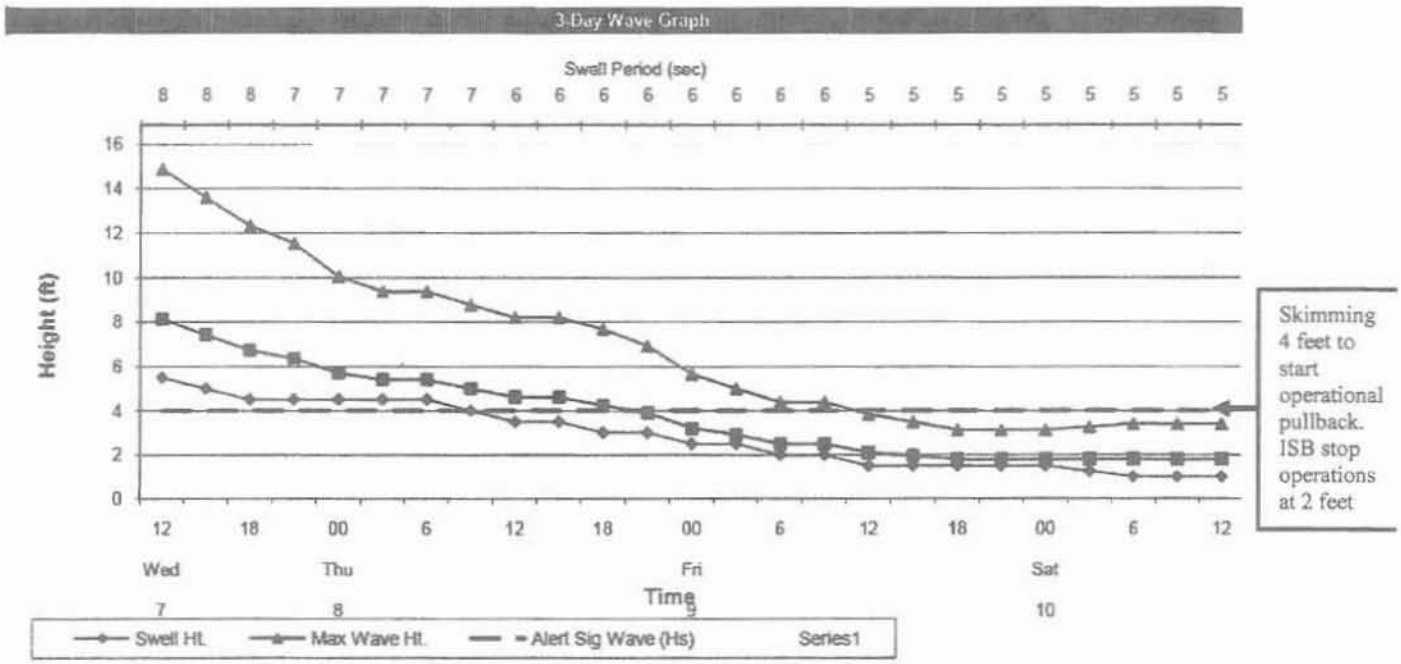
Attachment 4

QA / QC Reports

No QA/QC Checklists for this period are available.

SMART 1 did observe the spray mission today.

Attachment 5



Aerial Dispersants Operations - Houma Status Report

May 12, 2010

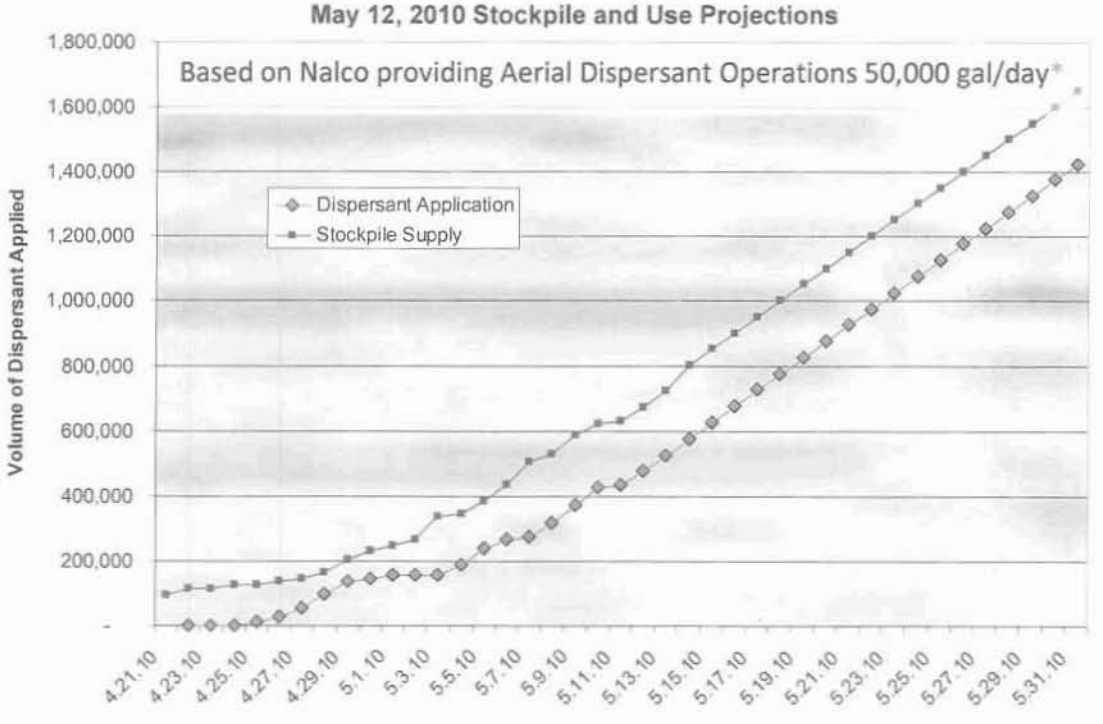
Note: This information is the reporting for aerial dispersant spraying

Dispersant Aerial Spray Summary:

1. Total Amount of Dispersant Applied on May 12, 2010 (gallons):	39,710
2. Total Sorties on May 12, 2010465:	12
3. Total Amount of Dispersant Applied to date (gallons):	475,957
4. Total Sorties to date:	177
5. Total Area Covered by Dispersant Applications to date (mi^2):	148.7
6. Total Dispersant Stockpiles on the ground as of 5.12.2010 – 1200 PM (gallons):	195,465*
7. Dispersant Stockpile Expected Arrival as of 5.13.10 – 1200 PM (gallons):	22,000
8. Estimated Total Dispersant as of 5.13.2010 - 1200 PM (gallons):	217,465*
9. Projected Days Operational at maximum rate of 50,000 gal/day (days):	unlimited

* This volume is still being reconciled and verified with procurement, staging, receiving and finance.

Dispersant Stockpile Supply and Use Projections



*Includes stock pile arrivals from Hawaii.

Asset Summary On Scene	
Spray Aircraft:	
C-130 – Stennis (1 IAR, 1 Lynden, 3 USAF)	5
DC-3 - Houma	2
BT-67 - Houma	1
King Air – 2 – Stennis (can be used for spotting)	2
AT-802 – Stennis	1
TOTAL:	11
Spotter Aircraft:	
King Air – 5 – Stennis	5
Aztec - Houma	1
Aero COMDR - Houma	1
TOTAL:	7
TOTAL AIRCRAFT:	18
PRIORITY Spray Assets Identified*	
Spray Aircraft:	LEAD TIME
C-130 – OSR-UK (20,000 gal/day) + 8-person support team with 2 flight crews	1 – 28 hours
C-130 – OSR-Singapore - (20,000 gal/day)	1 – 72 hours
C-130 – Lynden (Alaska) - (20,000 gal/day)	1 – 5+days
C-130 – IAR (15,000 gal/day)	1 – TBD
AT 802 (Agriculture Spray Planes) (5,000 gal/day)	1
*NOTE: These assets will not be activated until sufficient stockpile of dispersants are available for their use. Estimate that dispersant operations will need approximately 75,000 gallons per day of dispersant for these air craft spray systems.	
Additional Spray Assets Identified	
Neat Sweep	In area

Activity Update:

In response to the Operations Review conducted on 11 May 2010 the following actions were taken:

1. Dispersant spraying was revised to target black and brown dispersible oil near the source and not to spray the pinkish/reddish emulsions near shore.
2. ASI has arranged to have flow rate and droplet size calibration tests for the BT-67 and DC-3 conducted this week. ASI continues to provide spotter aircraft to support dispersant operations.
3. An Oil Dispersant Spotter Debrief Form was prepared to capture information on the results of spraying and the spotters will stay on scene after spraying to photograph the treated oil.
4. Arrangements will be made for the NOAA SSC to provide observer oil identification training to spotters.
5. Briefed Houma Dispersant Group and Stennis and Houma bases concerning the Operations Review and the changes being made.
6. Coordinated with USCG SMART members to share photographs of treated oil and dispersant operations, and fluorometry data.
    - Developed Boat Dispersant Spray procedures to use neat spraying systems. A copy of the procedures is attached.
    - Provided dispersant spray trajectories and flight plans for aerial spraying operations to address potential near shore human exposure issues. Records showed dispersant spraying was considerably distant from reported exposure and considered not responsible.
7. Dispersant Science Group worked on the following:
    - Providing scientific justification for continued dispersant use.
    - Developed final draft sampling plan for water chemistry needs.
    - Outfitted the International Peace for boat application of dispersant, SMART evaluation, and chemical and biological sampling.
    - Prepared organization charts for Aerial Dispersant Group. See Attached.

Objectives

Objectives for May 12th were to focus spraying on thick oil areas outside of 5 nm radius around spill source. Additionally, boat spray testing of alternate dispersants will continue near the source area.

Requirements

Aircraft spotters should be on site in their zone at 0800 and spray aircraft may pre-stage to the site at 0830. Spray operations to commence approximately 0900.

DISPERSANT APPLICATION GUIDANCE FOR 12 MAY

Maintain **3 nm** boundary separation if unable to coordinate air-to-air with other spotter or OMAHA 99.

Spotters should recon area inbound and outbound for subsequent targets. Report new targets to Dispersant Group via base manager.

Notes: Changes to previous orders are underlined.

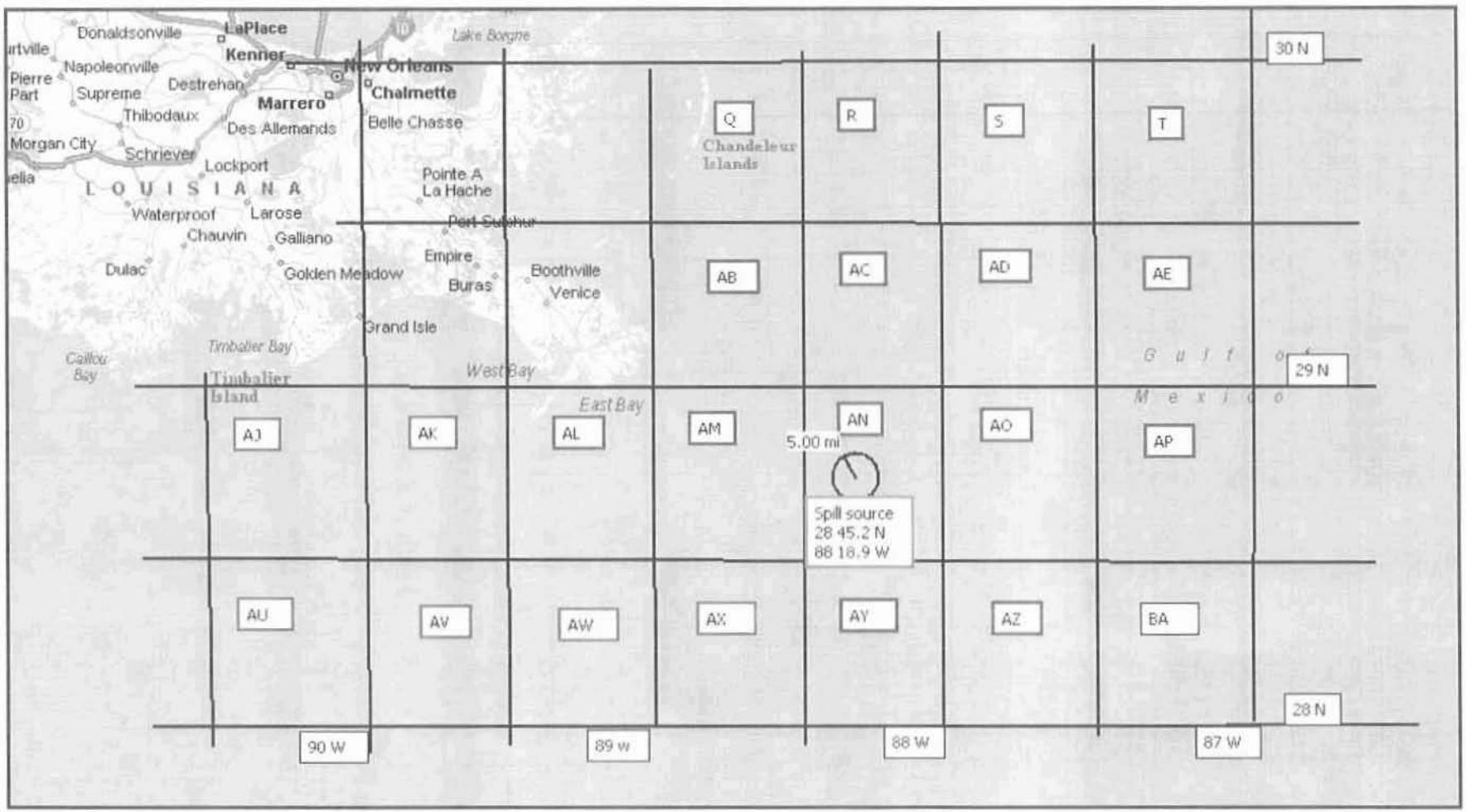
1. FOSC approval has been granted since 22 April for application of dispersants in pre-approved areas.
2. No dispersant spraying within the greater of **3 nm** offshore or depths less than **10 meters**.
3. No dispersant flying within **5 nm** of the spill source at surface:
   28 45.2 N 88 18.9 W
4. Remain **2 nm** from boats, platforms, and marine mammals.
5. Target black and brown oil as this is the freshest and most dispersible oil. Rate is 5 gallons per acre. Quality versus Quantity. Do not target Red/Pink emulsified oil.
6. Spotter aircraft remain on site up to 30 minutes to visually assess effects on dispersed area and document with photographs.
7. Report takeoff and landing times to assigned coordinators as they occur to the best of your abilities. Report areas sprayed Latitude/Longitude, time stated spraying, number of passes, and gallons applied.
8. Primary air to air communication frequency is now 126.4. Secondary is 123.45. Primary surface to air frequency is 122.9. Secondary is 123.45.
   a. Contact P3 aircraft "Omaha 99" for flight advisories.
   b. Also SMART vessels, Surveillance "Transport 950", "Seacor Lee" command vessel, and other Spotters.
9. Use discreet IFF codes as provided on separate correspondence. This removes need to file DVFR flight plans.
10. Houma ASI tasking: Provide spotter for boat spray alternate dispersant testing. M/V "Armstrong" to depart South Pass at 0800 and remain 3 to 30 nm from shore to conduct vessel spray operations. Coordination on 122.9 primary, Marine Channel 81a Secondary.
11. Stennis tasking Smart Mission 04 Warrior. M/V "Warrior" will arrive at intersection of zone AN and AY at 28 30 N 88 30 W to conduct SMART dispersant effectiveness tests in vicinity. Stennis Base send spotter (with marine radio) to arrive at 1130 to coordinate. Coordination on 122.9 primary; Marine Channel 81a Secondary.

Primary emphasis is always on Safety: **Aviate, Navigate, Communicate!**

AFF Automatic Flight Following:

- Air Force North - https://www.aff.gov/afn/afnorth.kmz
- Civilian - https://www.aff.gov/cgi-bin/aff.dll

Aerial Dispersant Operations Divisions:



Dispersant Spray Assets

Aircraft Information –May 11, 2010						
Type	**Owner/ Operator**	**Tail #**	**Payload (gal)**	**Airport / Status**	**Purpose & Altitude**	**Comments**
Spotters						
King Air	MSRC (Dynamic)	N39Q		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N98N		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N41J		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N79W		Stennis	Spotter – 1,000' to 1,500'	
King Air	MSRC (Dynamic)	N37H		Stennis	Spotter – 1,000' to 1,500'	
Aztec (PA 23)	ASI	N141183		Houma	Backup Spotter	
Aero COMDR	ASI	N38WA		Houma	Spotter	
Recon						
King Air	ASI	N275		Houma	Recon	
Helo	ASI	759P		Houma	Recon	
Sprayers						
King Air	MSRC (Dynamic)	N7198Y	240	Stennis	Spray: 75'	Available for both Spray and Spotter duties
King Air	MSRC (Dynamic)	N71999D	240	Stennis	Spray: 75'	Available for both Spray and Spotter duties
C-130	IAR	N117TG	3,000	Stennis	Spray: 75'	
C-130	MSRC (Lynden)	N403LC	5,000	Stennis	Spray: 75'	Plus 5 other crew members
C-130	Air Force	105	1,675	Stennis	Spray: 75'	
C-130	Air Force	106	1,675	Stennis	Spray: 75'	Cargo ops with spray capability
C-130	Air Force	107	1,750	Stennis	Spray: 75'	
AT-802		N9002K	800	Stennis	Spray: 50'	
BT-67	ASI	N932H	1,800	Houma	Spray: 75'	
DC-3	ASI	N64766	1,000	Houma	Spray: 75'	
DC-3	ASI	N64767	1,000	Houma – Standby	Spray: 75'	

Dispersant Application Totals

Dispersant Statistics Applied by Day						
Date	**Dispersant Type (gallons)**		**Daily Totals**	**# Sorties**	**Acres Covered** (5 gal/acre application rate)	**Square Miles covered**
	9500	**9527**				
21 April 2010	Initial Response Date					
22 April 2010	0	1,800	1,800	1	360	0.56
23 April 2010	0	0	0	0	0	0
24 April 2010	0	0	0	0	0	0
25 April 2010	0	11,604	11,604	9	2,320.8	3.7
26 April 2010	0	14,486	14,486	10	2,897.2	4.5
27 April 2010	11,191	15,887	27,078	5	5,415.6	8.5
28 April 2010	27,269	14,874	42,143	15	8,428.6	13.2
29 April 2010	36,913	4,000	40,913	13	8,182.6	12.8
30 April 2010	4,900	0	4,900	1	980.0	1.5
1 May 2010	3,550	8,103	11,653	4	2,330.6	3.6
2 May 2010	0	0	0	0	0	0
3 May 2010	0	0	0	0	0	0
4 May 2010	10,561	23,712	34,273	12	6,854.6	10.7
5 May 2010	30,905	18,670	49,575	18	9915	15.5
6 May 2010	13,032	15,738	28,770	11	5,754	9.0
7 May 2010	5,582	1,688	7,270	4	1,454	2.3
8 May 2010	17,813	23,877	41,690	17	8,338	13.0
9 May 2010	29,034	26,898	55,932	21	11,186.4	17.5
10 May 2010	29,240	26,980	56,220	22	11,244	17.6
11 May 2010	7,940	0	7,940	2	1,588	2.5
12 May 2010	39,710	0	39,710	12	7,942	12.4
TOTALS	**267,640**	**208,317**	**475,957**	**177**	**95,191**	**148.86**

DAILY AERIAL DISPERSANT APPLICATION PLAN

DATE: 5/12/2010	TIME: 0530 local	STAGING AIRPORTS: Stennis Int'l / Houma	AIRPORT ID: KHSA / KHUM

DISP. STAGING APT SPVSR (Name & Phone #): (Stennis)Tim Spoerl (b) (6) / (Houma) Mark Cochrane (b) (6)

SPILL SITE INFORMATION:

SPILL LOCATION:	Latitude: 28 55 N	Longitude: 87.21 W N	Size: 40 mi radius
GEOGRAPHICAL REFERENCE:	112 nm SSE Stennis Airport		

SPILL SITE APPROACH INFORMATION:

ENTRY POINT:	Latitude:	See OPS Chart N	Longitude:	See OPS Chart W	Altitude	See OPS Chart ft
EXIT POINT:	Latitude:	See OPS Chart N	Longitude:	See OPS Chart W	Altitude	See OPS Chart ft
HOLDING AREA:	Latitude:	See OPS Chart N	Longitude:	See OPS Chart W	Altitude	See OPS Chart ft

SPILL SITE WX:	WIND: SSE 11-27	CLG: UNL	VIS: 10 nm	SUNRISE: 0605	SUNSET: 1937

(Attach Wilken's Weather Report for weather at the spill site and the staging airport)

DOSAGE (GPA): 5 **ADD'L INST:** See required setbacks and no fly area's on operational plan

COMMS

PRIMARY VHF COM: 126.40 MHz	SECONDARY VHF COM: 123.45 MHz	EMERGENCY VHF COM: 121.5 MHz
PRIMARY VHF COM: Surface to Air 127.85 MHz / SECONDARY VHF COM: Surface to Air 123.45 MHz		
MARINE RADIO: Channel 16 then switch to Channel 9/ SATELLITE PHONE: Aircraft will contact through the Disp. Staging Airport Supervisor		

AIRCRAFT INFORMATION:

Type:	Tail #:	Call Sign:	Airport ETA:	Purpose & Altitude:	PIC/Crew:	Passengers:
King Air Dynamic	N7198Y	98Y	Stennis	Spotter: 1000'-1500'	PIC: Vince Kane Kevin Smith	None
King Air Dynamic	N39Q	39Q	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot:	None
King Air Dynamic	N7199D	99D	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N98N	98N	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N41J	41J	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N79W	79W	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N37H	37H	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
C-130 IAR	N117TG	7TG	Stennis	Spray: 75'	PIC: Dave Kunz Co-pilot: TBD	None
C-130 Lynden	N403LC	3LC	Stennis	Spray: 75'	PIC: Capt Redman Co-pilot:	plus 5 other crew members
AT 802	N9002K	02K	Stennis	Spray 90'	PIC: TBD Co-pilot: TBD	None
C-130 USAFR	105	105	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 USAFR	106	106	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 USAFR	107	107	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
BT-67 ASI	N932H	32H	Houma	Spray: 75'	Co-pilot: TBD	None
DC-3 ASI	N64767	767	Houma Standby	Spray: 75'	PIC: TBD	None
DC-3 ASI	N64766	766	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
Aztec ASI	N141183	183	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Aero CMDRA ASI	N547GA	7GA	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Aircraft below are not directly part of the Dispersant Group / Cordination and assistance from the aircraft below is nessasary.						
King Air	N275	N275	Houma Jet	Recon		
Helo PHI	759P		Houma	Recon		
NOAA		NOAA 46		Surveillance		
U.S. Customs	P-3	Omaha 99		Communications		
Canada	Transport 950		Houma	Surveillance		

DAILY ACTIVITY SCHEDULE FOR __~~12~~ May_2010__ (Date)		Dispersant Group Staging Airport Supervisor (DGSAS):
TIME	ACTIVITY	
	Report to Airfield	All aircraft
	Pilot and Support Team Daily Operational Briefing (mandatory)	0600 local
	Commence Flight Operations	0630 local
	Terminate Flight Operations	2000 local
	Pilot and Support Team Daily Debriefing on Operations	2030 local

DAILY OPERATIONAL BRIEFING AGENDA:

Safety Issues:	SAR flights beware of and check in onsite
Weather:	See Wilkins Wx and airport weather service
Communications Air and Ground:	Sat Comm and standard freq
Application Dosage and Pattern to be used:	5.0 gpa racetrack
Approach Information:	TBD
Oil Spill Location and Description:	TBD
Operational Procedures and Changes:	None at this time
Flight Schedule:	See schedule page 2

FUELING/FBO:

Contact Name: Tim Spoerl Stennis Airport acting as FBO — Business Hours Services: 0500 - 2000

Contact Phone: (b) (6) — After Hours Services:

DESIGNATED DISPERSANT LOADING AREA:

Location: ramp off the end of the runway

Contractor Name: Steve Henne MSRC in charge

Contractor Phone: (b) (6)

REPORTING REQUIREMENTS AND PROCEDURES*:

SatLoc Files:

Photographs and Videos:

Observation Logs:

* MSRC aircraft are responsible to ensure SatLoc files, photographs, videos and observation logs are provided to the Dispersant Group Staging Airport Supervisor (DGSAS) after every sortie or at the end of the operational period. Other aircraft operators are responsible to maintain and submit logs after each sortie or daily which state the amount of dispersant applied, number of passes, dosage rates, altitude and speeds dispersant was applied and the time for starting and stopping dispersant application for each pass.

TSA/AIRPORT SECURITY REQUIREMENTS: Hangar door to be kept locked, no entry without MSRC person escort

DATE: May 12, 2010

Payload #	TYPE A/C	TAIL #	PURPOSE	FUEL LOAD (#/Hrs:Min)	PAYLOAD GAL & TYPE	TOTAL FLT TIME	DPT TIME EST/ACT	ENTRY ETA EST/ACT	EXIT ETA EST/ACT	RETURN ETA EST/ACT
	BE90	79W	Spotter	6	0	2:50	0530/0811	0615	0810	0850/1143
1	C-130	N117TG	Spray	4	2885/9500	2:10	0620/0845	0640	0810	0830/1031
2	C-130	N403LC	Spray	4	5002/9500	2:10	0625/0857	0645	0815	0835/1117
	Aztec	14183	Spotter	Spotter for vessel disp. Spray			0740	0815	0905	0950
3	BE-07	N923EL	Spray	4	2000	2:15	0920	0940	0935	0955
4	DC-3	N94706	Spray	4	1000	2:30	0929	0954	0945	0945
	BE90	98Y	Spotter	4	0	2:50	845			1219
5	C-130	105	Spray	4	1887/9500	2:30	0830/0925	0900	0930	1001/1138
	BE90	79W	Spotter	4	0	2:50	0920	0942	1017	1145
6	C-130	107	Spray	4	1750	2:30	0845	0915	0945	1015
	BE90	37H	Spotter	6	0	2:35	1033			1447
	BE90	39Q	Spotter	6	0	2:35	0955/1043	0925	1205	1240/1418
7	C-130	N117TG	Spray	4	3063/9500	2:30	1000/1123	1030	1200	1230/1327
8	C-130	N403LC	Spray	4	5000/9500	2:30	1005/1206	1035	1205	1235/1352
	Aero Cmdr	N547GA	Spotter	5	0	2:10	1125	1205	1250	1335
9	BE-07	N923EL	Spray	4	2000	2:05	1100	1205	1220	1305
10	DC-3	N94706	Spray	4	1000	2:00	1105	1210	1230	1330
	BE90	39Q	Spotter	4	0	2:50	1150/1043	1220	1345	1430/1418
11	C-130	105	Spray	4	1938/9500	2:30	1215/1218	1245	1320	1400/1435
	BE90	79W	Spotter	4	0	2:50	1140	1232	1245	1410
12	C-130	107	Spray	4	1750	2:30	1210	1247	1320	1350
	BE90	79W	Spotter	6	0	2:40	1355/1305	1425	1505	1540/1702
13	C-130	N117TG	Spray	4	3058/9500	2:30	1400/1308	1430	1505	1540/1550
14	C-130	N403LC	Spray	4	5002/9500	2:30	1400/1447	1430	1505	1535/1620
	Aero Cmdr	N547GA	Spotter	5	0	2:20	1510	1605	1645	1720
15	BE-07	N923EL	Spray	4	2000	2:05	1500	1607	1625	1725
16	DC-3	N94706	Spray	4	1000	2:00	1505	1605	1640	1540
	BE90	37H	Spotter	6	0	1:55	1655/1533	1725	1810	1845/1900
17	C-130	N117TG	Spray	4	3012/9500	2:30	1700/1650	1730	1805	1835/1825
18	C-130	N403LC	Spray	4	5002/9500	2:40	1700/1712	1735	1810	1840/1842
	BE90	39Q	Spotter	4	0	2:50	1745/1539	1830	1907	2000/1856
19	C-130	105	Spray	4	1961/9500	2:30	1805/1540	1835	1905	1945/1715
	BE90	79W	Spotter	4	0	2:50	1755	1930	2005	2030
20	C-130	107	Spray	4	1750	2:30	1807	1935	1905	1937
	BE90	39Q	Spotter	4	0	2:50	1539			1856
21	C-130	106	Spray	4	1900/9500	2:30	1645			1800

Combined SiteTotals	39,710	9500	9527	Totals by Site
	Stennis	39,710	0	39,710
	Houma	0	0	0

Flights in yellow were canceled.

DAILY AERIAL DISPERSANT APPLICATION PLAN

DATE: 5/13/2010	TIME: 0530 local	STAGING AIRPORTS: Stennis Int'l / Houma	AIRPORT ID: KHSA / KHUM

DISP. STAGING APT SPVSR (Name & Phone #): (Stennis)Tim Spoerl (b) (6) / (Houma) Mark Cochrane (b) (6)

SPILL SITE INFORMATION:

SPILL LOCATION:	Latitude:	28.55 N	Longitude:	87.21 W	N	Size:	40 mi radius
GEOGRAPHICAL REFERENCE:	112 nm SSE Stennis Airport						

SPILL SITE APPROACH INFORMATION:

ENTRY POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude:	See OPS Chart ft
EXIT POINT:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude:	See OPS Chart ft
HOLDING AREA:	Latitude:	See OPS Chart	N	Longitude:	See OPS Chart	W	Altitude:	See OPS Chart ft

SPILL SITE WX:	WIND: SE 10-26	CLG: UNL	VIS: 10 nm	SUNRISE: 0605	SUNSET: 1937

(Attach Wilken's Weather Report for weather at the spill site and the staging airport)

DOSAGE (GPA): 5 **ADD'L INST:** See required setbacks and no fly area's on operational plan

COMMS			
	PRIMARY VHF COM: 126.40 MHz	SECONDARY VHF COM: 123.45 MHz	EMERGENCY VHF COM: 121.5 MHz
	PRIMARY VHF COM: Surface to Air 122. 9 MHz / SECONDARY VHF COM: Surface to Air 123.45 MHz		
	MARINE RADIO: Channel 16 then switch to Channel 9/ SATELLITE PHONE: Aircraft will contact through the Disp. Staging Airport Supervisor		

AIRCRAFT INFORMATION:

Type:	Tail #:	Call Sign:	Airport ETA:	Purpose & Altitude:	PIC/Crew:	Passengers:
King Air Dynamic	N7198Y	98Y	Stennis	Spotter: 1000'-1500'	PIC: Vince Kane Kevin Smith	None
King Air Dynamic	N39Q	39Q	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot:	None
King Air Dynamic	N7199D	99D	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N98N	98N	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N41J	41J	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N79W	79W	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
King Air Dynamic	N37H	37H	Stennis	Spotter: 1000'-1500'	PIC: TBD Co-pilot: TBD	None
C-130 IAR	N117TG	7TG	Stennis	Spray: 75'	PIC: Dave Kunz Co-pilot: TBD	None
C-130 Lynden	N403LC	3LC	Stennis	Spray: 75'	PIC: Capt Redman Co-pilot:	plus 5 other crew members
AT 802	N9002K	02K	Stennis	Spray 50'	PIC: TBD Co-pilot: TBD	None
C-130 USAFR	105	105	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 USAFR	106	106	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
C-130 USAFR	107	107	Stennis	Spray: 75'	PIC: TBD Co-pilot: TBD	None
BT-67 ASI	N932H	32H	Houma	Spray: 75'	Co-pilot: TBD	None
DC-3 ASI	N64767	767	Houma Standby	Spray: 75'	PIC: TBD	None
DC-3 ASI	N64766	766	Houma	Spray: 75'	PIC: TBD Co-pilot: TBD	None
Aztec ASI	N141183	183	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Aero CMDRA ASI	N547GA	7GA	Houma	Spotter	PIC: TBD Co-pilot: TBD	None
Aircraft below are not directly part of the Dispersant Group / Cordination and assistance from the aircraft below is nessasary.						
King Air	N275	N275	Houma Jet	Recon		
Helo PHI	759P		Houma	Recon		
NOAA		NOAA 46		Surveillance		
U.S. Customs	P-3	Omaha 99		Communications		
Canada	Transport 950		Houma	Surveillance		

DAILY ACTIVITY SCHEDULE FOR __13 May_2010__ (Date)		Dispersant Group Staging Airport Supervisor (DGSAS):
TIME	ACTIVITY	
	Report to Airfield	All aircraft
	Pilot and Support Team Daily Operational Briefing (mandatory)	0600 local
	Commence Flight Operations	0630 local
	Terminate Flight Operations	2000 local
	Pilot and Support Team Daily Debriefing on Operations	2030 local

DAILY OPERATIONAL BRIEFING AGENDA:

Safety Issues:	SAR flights beware of and check in onsite
Weather:	See Wilkins Wx and airport weather service
Communications Air and Ground:	Sat Comm and standard freq
Application Dosage and Pattern to be used:	5.0 gpa racetrack
Approach Information:	TBD
Oil Spill Location and Description:	TBD
Operational Procedures and Changes:	None at this time
Flight Schedule:	See schedule page 2

FUELING/FBO:

Contact Name: Tim Spoerl Stennis Airport acting as FBO — Business Hours Services: 0500 - 2000

Contact Phone: (b) (6) — After Hours Services:

DESIGNATED DISPERSANT LOADING AREA:

Location: ramp off the end of the runway

Contractor Name: Steve Henne MSRC in charge

Contractor Phone: (b) (6)

REPORTING REQUIREMENTS AND PROCEDURES*:

SatLoc Files:

Photographs and Videos:

Observation Logs:

* MSRC aircraft are responsible to ensure SatLoc files, photographs, videos and observation logs are provided to the Dispersant Group Staging Airport Supervisor (DGSAS) after every sortie or at the end of the operational period. Other aircraft operators are responsible to maintain and submit logs after each sortie or daily which state the amount of dispersant applied, number of passes, dosage rates, altitude and speeds dispersant was applied and the time for starting and stopping dispersant application for each pass.

TSA/AIRPORT SECURITY REQUIREMENTS: Hangar door to be kept locked, no entry without MSRC person escort

DATE: May 13, 2010

Payload #	TYPE A/C	TAIL #	PURPOSE	FUEL LOAD (#/Hrs:Min)	PAYLOAD GAL & TYPE	TOTAL FLT TIME	DPT TIME EST/ACT	ENTRY ETA EST/ACT	EXIT ETA EST/ACT	RETURN ETA EST/ACT
	BE90	79W	Spotter	6	0	2:50	0530	0615	0810	0850
1	C-130	N117TG	Spray	4	3000	2:10	0620	0640	0810	0830
2	C-130	N403LC	Spray	4	5000	2:10	0625	0645	0815	0835
	Aero Cmdr	N547GA	Spotter	5	0	2:10	0740	0815	0905	0950
3	BT-67	N932H	Spray	4	2000	2:15	0720	0820	0835	0935
4	DC-3	N64766	Spray	4	1000	2:30	0724	0824	0845	0945
	BE90	41J	Spotter	4	0	2:50	0815	0900	1015	1135
5	C-130	105	Spray	4	1900	2:30	0830	0900	0930	1001
	BE90	98N	Spotter	4	0	2:50	0820	0902	1017	1145
6	C-130	107	Spray	4	1900	2:30	0845	0915	0945	1015
	BE90	39Q	Spotter	6	0	2:35	0955	0925	1205	1240
7	C-130	N117TG	Spray	4	3000	2:30	1000	1030	1200	1230
8	C-130	N403LC	Spray	4	5000	2:30	1005	1035	1205	1235
	Aero Cmdr	N547GA	Spotter	5	0	2:10	1125	1205	1250	1335
9	BT-67	N932H	Spray	4	2000	2:05	1100	1205	1220	1305
10	DC-3	N64766	Spray	4	1000	2:30	1105	1110	1230	1330
	BE90	N7199D	Spotter	4	0	2:50	1150	1220	1345	1430
11	C-130	105	Spray	4	1900	2:30	1215	1245	1320	1400
	BE90	79W	Spotter	4	0	2:50	1140	1222	1345	1410
12	C-130	107	Spray	4	1900	2:30	1218	1247	1325	1355
	BE90	N7198Y	Spotter	6	0	2:40	1355	1425	1505	1540
13	C-130	N117TG	Spray	4	3000	2:30	1400	1430	1505	1540
14	C-130	N403LC	Spray	4	5000	2:30	1400	1430	1505	1535
	Aero Cmdr	N547GA	Spotter	5	0	2:20	1510	1605	1645	1730
15	BT-67	N932H	Spray	4	2000	2:25	1500	1605	1625	1725
16	DC-3	N64766	Spray	4	1000	2:30	1505	1605	1640	1740
	BE90	39Q	Spotter	6	0	1:55	1655	1725	1810	1845
17	C-130	N117TG	Spray	4	3000	2:30	1700	1730	1805	1835
18	C-130	N403LC	Spray	4	5000	2:40	1700	1735	1810	1840
	BE90	98N	Spotter	4	0	2:50	1745	1830	1907	2000
19	C-130	105	Spray	4	1900	2:30	1805	1835	1905	1945
	BE90	79W	Spotter	4	0	2:50	1750	1830	1907	2030
20	C-130	107	Spray	4	1900	2:30	1807	1835	1907	1937

Combined SiteTotals		9500	9527	[illegible]
	Stennis			
	Houma			

Aerial Dispersant Ops
Spotter Debrief Form

Date		Pilot/Copilot	
Spotter Aircraft #		Take off	Land
Zone (s)			
Weather on scene			

Spray Aircraft #		Spray commence time	
Payload # fm schedule		Spray end time	
		Zone	
# of spray runs		Gen'l location (circle)	NW NE / Center / SW SE
Photos?	Y/N		
Spotter Evaluation			

Spray Aircraft #		Spray commence time	
Payload # fm schedule		Spray end time	
		Zone	NW NE
# of spray runs		Gen'l location	SE SW / Center
Photos?	Y/N		
Spotter Evaluation			

Signature	

Aerial Dispersant Ops
Spotter Debrief Form

Date		Pilot/Copilot	
Spotter Aircraft #		Take off	Land
Zone (s)			
Weather on scene			

Spray Aircraft #		Spray commence time	
Payload # fm schedule		Spray end time	
		Zone	
# of spray runs		Gen'l location (circle)	NW NE / Center / SW SE
Photos?	Y/N		
Spotter Evaluation			

Spray Aircraft #		Spray commence time	
Payload # fm schedule		Spray end time	
		Zone	NW NE
# of spray runs		Gen'l location	SE SW / Center
Photos?	Y/N		
Spotter Evaluation			

Signature	

Vessel Mounted Spray Ops Technical Sheet

Objective

The ability to apply neat chemical dispersants to smaller, isolated patches of oil closer to shore, has been identified as part of the tactical action plan. The high degree of manoeuvrability offered by small vessels in comparison to large scale aerial application systems facilitates accurate targeting of slicks and better control of application rates. However these benefits have to be balanced with slower transit times and lower dispersant payloads. The spray systems at the disposal of the Operations Division Dispersants Group are designed to be fitted to vessels of opportunity and this document will attempt to identify the key parameters when selecting vessels for conducting boat spray operations.

Outline

Due to the large coverage area of the MC 252 spill, the ability to be able to operate over a long range from the staging base would be beneficial. In addition the function to be able to operate in more confined waters or no-fly zones, such as areas of high oil platform density, will be advantageous. For this purpose the ideal vessel specifications below have been broken in to these two separate operating zones;

Offshore	**Near shore** (1/2 mile pending approval)
• Large, clear working deck (minimum 60ft x 20ft)to store sufficient dispersant stock for prolonged operational periods	• Adequate working space to safely store a minimum of 2 tote tanks, spray pump & booms (approx 20ft x 12ft)
• Potential to fix spray booms at the forecastle (bow)	• Spray booms to be bow mounted.
• Minimal bow freeboard (max 10ft) in order to minimise the effect of wind drift. The use of drop tubes can help to minimise this effect.	• Reduced draught for shallow water transits.
• If possible sleeping quarters onboard will support prolonged operations without the need to return to port.	• Adequate shelter / welfare facilities on board for all day operations
	

Once suitable vessels have been identified and requested, installation of the spray system should be supervised by a trained operative to ensure correct positioning and fitting. Prior to any untrained crews leaving port a detailed safety brief, in accordance with BP's dispersant safety document, & basic training in the operation of the system should be given. Copies of all relevant MSDS shall be made available to crews. On a daily basis objectives should be set.

Spray Boom Fixing Schematic

For best spraying results it is best to mount the spray arms as near to the bow as possible, this allows for better mixing of the dispersant through the bow wave. Drop height from nozzle end to sea surface should between three - nine (3-9) feet, this will maximise the effectiveness of the dispersant. For freeboards in excess of nine feet the use of drop tubes is recommended.

Pre- Spray Summary

- Vessels to be audited for suitability, including potential for correct spray boom positioning.
- Training to be given to vessel crews by qualified staff prior to leaving port.
- MSDS and correct levels of PPE to be made available to spray crews (splash goggles, chemical resistant gloves, polycoated Tyvek suit, non skid rubber boots).

Spray Operations

- Records of quantities of dispersant sprayed, position and visual evaluation to be kept.
- Once fitted spray systems to be calibration tested with water to confirm nozzle flow rate.
- Desired dosage rate and corresponding vessel speed, as prescribed in operating manual to be strictly observed. Particular attention to be paid to avoiding excessive bow wave and deflecting oil away from the spray.

- Boat spray operations to be co-ordinated with SMART team monitoring activities. Communication with aerial spotter aircraft to be conducted on air band radios channel 122.9.
- Future requirements for forward planning purposes to be kept and communicated to ICP
- Logistics chain and transfer systems for replenishing dispersant to be in place.

Aerial Dispersant's Group Organization – Houma CP
May12, 2010

Position	Agency
Aerial Dispersants Group Supervisor (1)	Obrien's → C. A Huber, Inc.
• Charlie Huber (John Joeckel relief)	
Dispersant Group Deputy Supervisor (2)	
• Ken Schacht (Jeff Jappe relief MSRC)	MSRC/ C. A Huber, Inc.
• Mike Gass (Dave Garner relief CCA)	Clean Caribbean Cooperative
Air Operations and Charting Documentation (7)	
○ Ken Schacht (Jeff Jappe relief) – Stennis Aviation Liaison	MSRC
○ Mike Gass (Dave Garner relief) – Houma Aviation Liaison	Clean Caribbean Cooperative
○ Maj. Mark Breidenbaugh USAF Aviation Liaison	USAF
○ Lt. Col Dan Sarachene USAF Aviation Liaison	USAF
○ Ed Rosenberg - AT-802	C. A Huber, Inc. →Vervision, Inc
Boat Spray and Boat Sampling Coordinator	
○ Marcus Russell	OSR, Ltd
Plotting / Tracking the Spray	
▪ John LaCaze	Obrien's
Aviation Consultant and Air Operations (1)	
○ Rich Landrum (Vern Albert relief)	C. A Huber, Inc. →AirWing, Inc.
Report Preparation and Analysis (1)	C. A Huber, Inc.→SEA Consulting Inc
○ Debbie Scholz (Don Costanzo relief)	
Stockpile Operations and Logistics (2)	
○ John Daigle	MSRC
○ Ed Rosenberg	C. A. Huber, Inc. →Vervision
Stockpile Evaluation / Testing / Dispersant Impact (7)	
○ Randy Belore	Swift → SL Ross
○ Marie BenKinney	Exponent
○ John Brown	Exponent
○ Tom Coolbaugh	ExxonMobil
○ Alexis Steen	ExxonMobil
○ Ken Trudel	Swift → SL Ross
○ Ann Hayward Walker	C. A Huber, Inc. →SEA Consulting

REMOTE BASES

Position	Agency
Stennis Air Base – Kiln, MS (102 personnel)	
• Don Toenshoff – Base Manager (2) Brenda Wedge (admin)	MSRC
○ Tim Spoerl – Base Coordinator (13 MSRC personnel onsite)	MSRC
○ Linda Whitman (12)	Clean Caribbean Cooperative
○ Erik Demicco (Skip Przelomski relief)	Clean Caribbean Cooperative
○ Jason Heyn – GIS MapSTAR SME (1)	MSRC→Heynsight
○ Billy Grantham (8 IAR personnel onsite)	MSRC → IAR
○ Skip Przelomski	Clean Caribbean Cooperative
○ T.K. Rosolina (26 Dynamic Personnel onsite)	MSRC → Dynamic Aviation
○ Major Tancer USAF (40 USAFR onsite)	USAF
Houma Air Base – Houma, LA (25 personnel)	
• Howard Barker – Base Manager	ASI, Inc.
○ Brad Barker – Base Coordinator	ASI, Inc
○ Mark Cochrane – Staging Manager	OBrien's
• Scotty Meador – AT -802 Base Manager	NRC - Lane Aviation
AT-802 Crew (2)	NRC – Lane Aviation

James A. Watson
Rear Admiral, USCG
Federal On-Scene Coordinator

July 1, 2010

Dear Admiral Watson:

In compliance with the May 26, 2010, Dispersant Monitoring and Assessment Directive - Addendum 3 (the "Directive"), BP Exploration & Production Inc. ("BP") has eliminated the surface application of dispersants, except in cases where an exemption is requested and justified, and approved by the Federal On-Scene Coordinator.

Houma Unified Command had two (2) spotter visual reports on 1 July from aircraft out of Stennis Base and these spotters were able to identify oil slicks that were estimated to require over 20,000 gallons of dispersant. Because of weather conditions, Houma Base was able to launch only one reconnaissance flight which returned to base shortly due to deteriorating weather.

Weather will again be an issue tomorrow, but significantly improved from the past few days. The Friday forecast calls for flying conditions that will have showers, winds of 6-12 knots from the SE-ESE, maximum significant wave height 4 feet, ceilings of 17,000 feet or less, visibility of 6 nm with a 20%-30% chance of rain.

The NOAA Surface Oil Forecast for July 2nd shows extensive areas of heavy and medium oil (Attachment 2) that are or may adversely impact the shoreline, including sensitive wetlands.

Houma Unified Command anticipates that due to the weather, if oil slicks are identified, the most viable means of response will be the use of dispersants to reduce the risk of oil land fall especially with the continuation of southerly and easterly winds.

Prior to spray operations tomorrow morning, the spotter aircraft will identify the high value targeted slicks and we will prepare a report of the location and dispersant volumes needed for application as soon as practicable tomorrow. It is anticipated that the thunderstorm pattern that has existed in the previous couple of days will moderate, although the continued presence of rain showers may continue to make it difficult to execute reconnaissance or dispersant spray missions.

Pursuant to a request this date from Unified Command, the following information is provided.

- Estimated size of identified dispersible oil slick targets proposed in designated zones: Today there were limited air surveillance operations and the only two reconnaissance flights observed dispersible oil slicks in Zone AC as shown in See Table 1.

- Explicit justification for why these targets can't be skimmed or addressed by other mechanical means: The weather is moderating and the forecast wind wave heights for tomorrow averaging 2 feet, with significant wave height averaging 4 feet and maximum wave height averaging 6.8 feet.

Source Skimming Assets:	All vessels in port
Non-Source Skimming Assets:	All vessels in port
ISB Assets:	All vessels in port

- Consequently, source and non-source skimming vessels as well as ISB will not be in action tomorrow.
- Today, all offshore recovery assets (skimmers, etc.) are ***in port or at anchor due to inclement weather*** and ISB operations did not take place.
- It is planned to conduct Tier 1 helicopter SMART over flights to observe dispersant operations tomorrow should they be conducted.
- M/V *International Peace* is currently in port waiting on better seas and weather. It is not anticipated that she will get underway and on station until later in the day Friday at the earliest, weather permitting.
- QA/QC SMART Team 2 June 27th report (Attachment 4).
- No burn box is shown at this time, since the ISB fleet will be in port tomorrow.
- Forecast sea state through Sunday showing skimming and ISB limitations is provided as Attachment 5.
- ***ALL RESPONSE OPERATIONS MAY BE CANCELED DUE TO WEATHER TOMORROW***

It should be noted, that due to the adverse weather, there has been no skimming, ISB or dispersant activities for the past three (3) days. Skimming and ISB operations are not scheduled for tomorrow. With the anticipation of the weather moderating over the next couple of days, it is anticipated that significant quantities of dispersible oil will be observed and there will be flying weather conducive for air operations.

Accordingly, in accordance with the Directive, the Houma Unified Command respectfully requests an exemption to apply EC9500A on dispersible oil slicks based on the morning reconnaissance flights. As aerial dispersant presents the primary mechanism for spill response, we have mobilized the reconnaissance and deployment resources and request an initial ~~15,000~~ 20,000 gallons for early opportunistic targets. This will be coupled with further reconnaissance and target identification. If further targets are identified, a subsequent request will be issued later in the day.

Sincerely,

Houma Unified Command

Exemption approved subject to the above:

(b) (6)

Date: 7-2-10

James A. Watson
Rear Admiral, USCG
Federal On-Scene Coordinator

Attachment 1

Dispersant Zone Map for 2 July 2010 with Oil Targets from Spotter Operations on 1 July

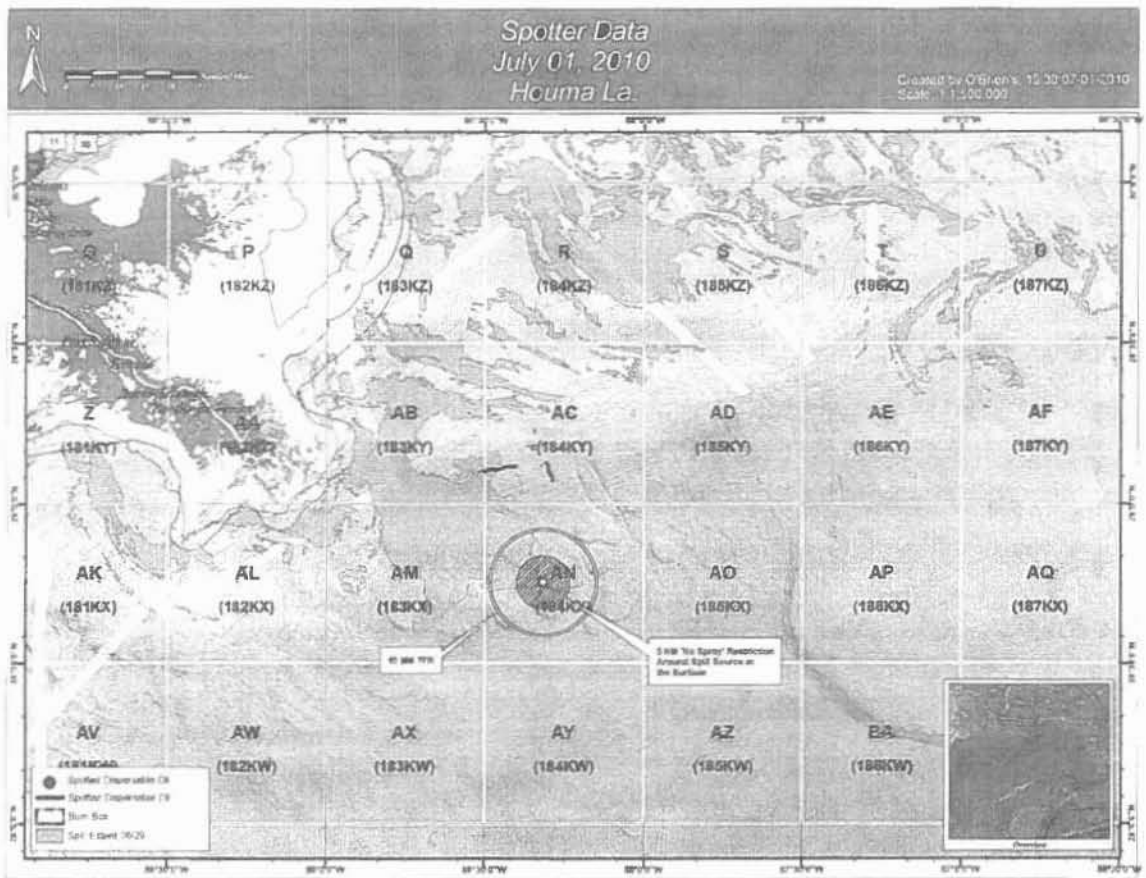


TABLE 1 Dispersible Oil Report July 1, 2010

Zone	# of slicks reported	Area in acres	Estimated percentage dispersible oil	Dispersant Needed (1/20 DOR)
AC	2	4,224	95%	20,064
Dispersant Approved: 20,000 gallons - Sprayed Today The requested amount for 7/2/10 will be based on tomorrow mornings reconnaissance with an initial request for 15,000 g as it is expected with 4 days of no response operations there will be considerable surface oil.				17,852

Note: Table 1 shows our intentions based upon our observations the day before these actions take place. Size and location of slicks will change. Activities within slick areas e.g., skimming operations, in-situ burning, etc., or weather conditions may require revisions to the actual operational plan implemented.

Attachment 2

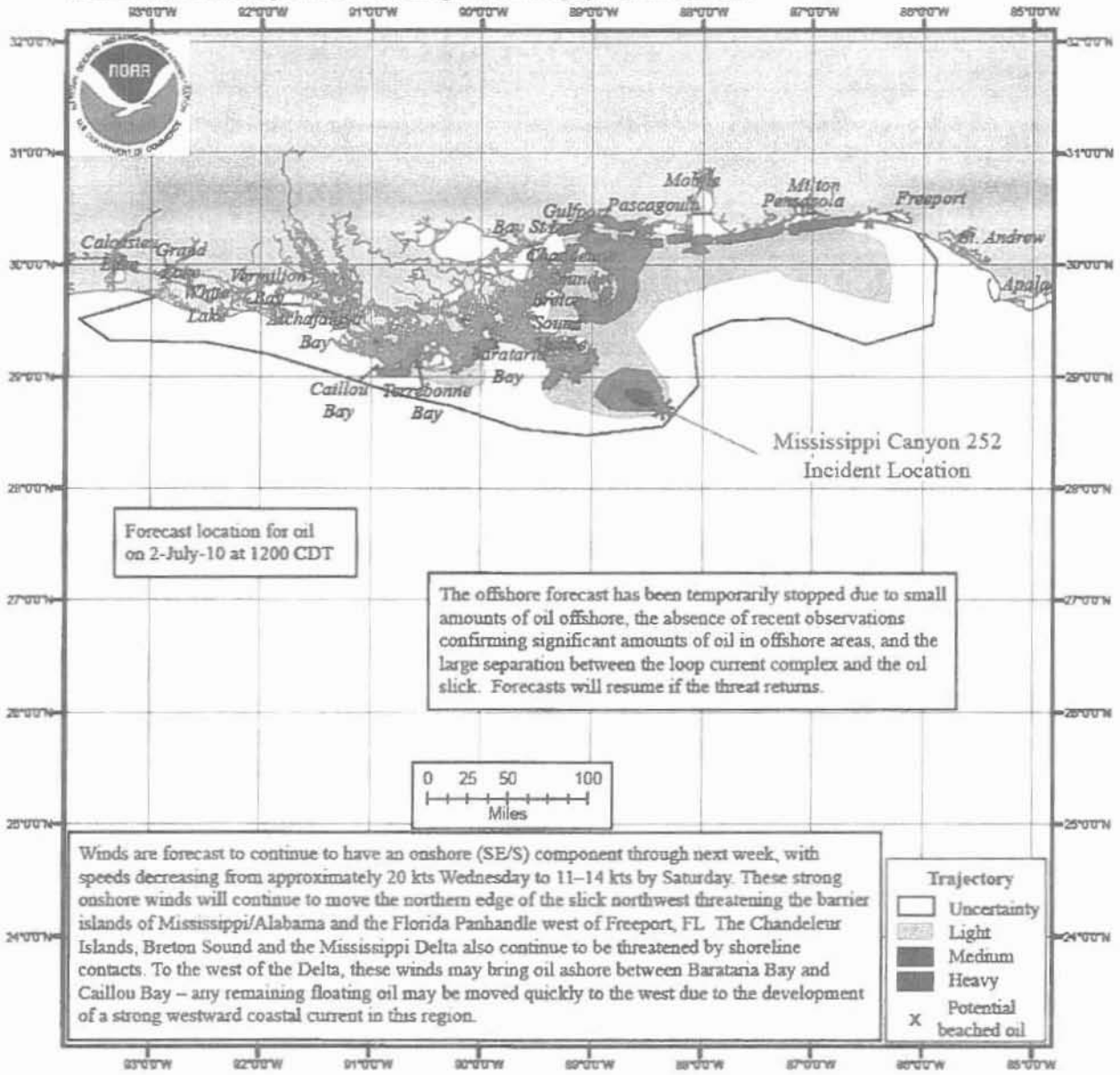
Nearshore Surface Oil Forecast Deepwater Horizon MC252

NOAA/NOS/OR&R

Nearshore

Estimate for: 1200 CDT, Friday, 7/02/10
Date Prepared: 2100 CDT, Wednesday, 6/30/10

This forecast is based on the NWS spot forecast from Wednesday, June 30 PM. Currents were obtained from several models (NOAA Gulf of Mexico, West Florida Shelf/USF, TGLO/TAMU, NAVO/NRL) and HFR measurements. The model was initialized from Tuesday-Wednesday satellite imagery analysis (NOAA/NESDIS) and Wednesday overflight observations. The leading edge may contain tarballs that are not readily observable from the imagery (hence not included in the model initialization). Oil near bay inlets could be brought into that bay by local tidal currents.



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

Next Forecast:
July 1st PM

Attachment 3

Vessel Status Board

All Vessels Are Currently In Port Due To Inclement Weather And The Anticipation Is That Skimming Capacity Will Remain In Port Tomorrow

Attachment 4

QA / QC Report for 6/27/10

Deepwater Horizon Incident – Houma Incident Command Center

SMART Tier 1 Data Quality Assessment and Review

SMART Tier 1 data consists of observations summarized in an Activity Log (Unit Log ICS 214-CG) and pre- and post-application photographs and associated photo log of dispersant spray operations. This form documents the results of a preliminary quality assessment review of these documents.

Smart Air Team #: 2 Date: 6/27/2010

Operational Period: 20100627 0700 to 20100627 1506

Data Review (Check documents that were reviewed)

☑ Unit Log – ICS 214-CG

☑ Photographs (How many reviewed? 9)

☑ Photo Log

☐ Dispersant Observation Reporting Form 30 – not included in package

Assessment (Check appropriate box(s))

☑ Concur with SMART observer findings (reasonableness of findings)

☐ Issues of note from data review. Briefly describe.

dispersion along edges of the oil patch, with 'café-au-lait' color change

☑ Dispersant is effective based on review of Activity Log, photographs, and photo log.

☐ Results inconclusive with respect to dispersant effectiveness.

☐ Other. Briefly describe.

noticeable changes to oil patch

Reviewed by Dispersant Assessment Group Member (Print name, sign, and date)

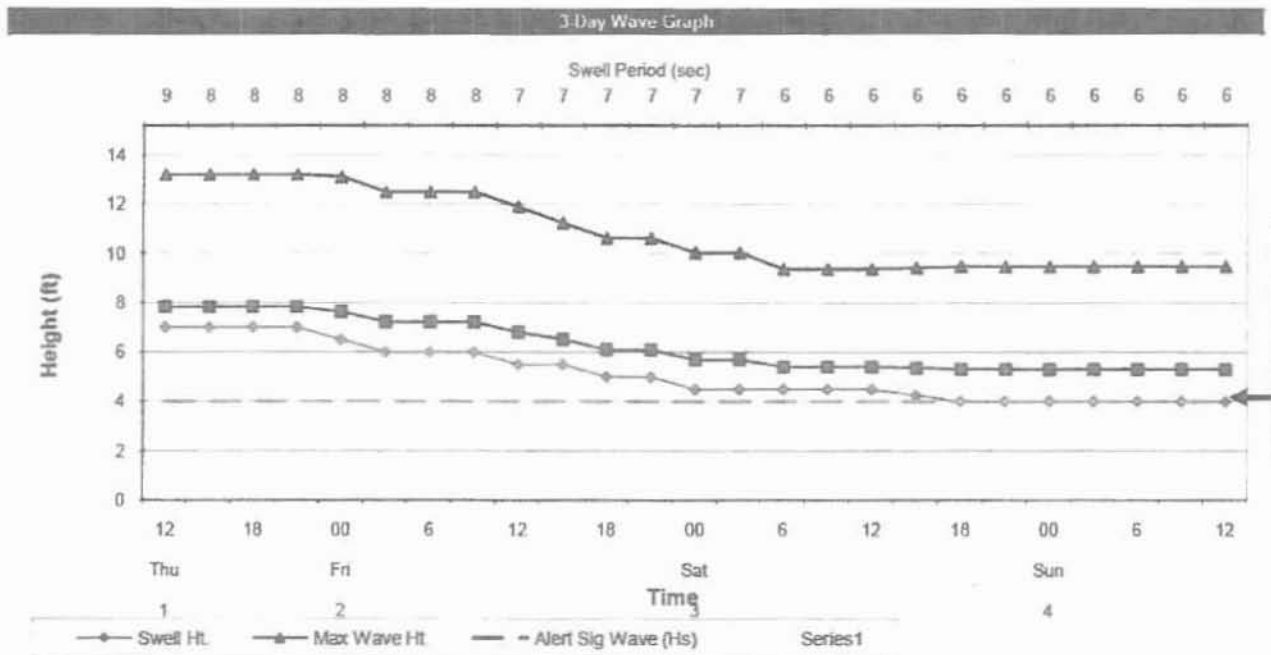
Name: Mark Benkiney Signature: (b) (6) Date: 6/30/10

Reviewed by NOAA SSC (Print name, sign, and date)

Name: JAY ROBSTEIN Signature: (b) (6) Date: 6/30/10

Template Updated 20100619

Attachment 5



Skimming 4 feet to start operational pullback. ISB stop operations at 2 feet

bp

Douglas J. Suttles
Chief Operating Officer

BP Exploration & Production Inc.
501 WestLake Park Boulevard
Houston, TX 77079
(b) (6)

July 11, 2010

Rear Admiral James A. Watson
Federal On-Scene Coordinator
United States Coast Guard

Exemption to Dispersant Monitoring and Assessment Directive – Addendum 3

Dear Admiral Watson,

BP respectfully requests an exemption to the Directive's maximum daily application of subsea dispersant for Sunday, July 11, 2010. Consistent with the Capping Stack Installation Plan sent to Admiral Allen on July 9, 2010, we are currently injecting 12 gallons per minute of subsea dispersant into the exiting oil stream. This is to ensure safe working conditions for the +1400 people on vessels working near the source. While we will continue to adjust the dispersant injection rate based upon winds, observed VOCs and oil capture volume, if we maintain 12 gpm, we will exceed 15,000 gallons for July 11.

An increase in subsea dispersant use is consistent with the Guidance on Subsea Dispersant Application you signed on June 23, which states, "For the purpose of VOC control, increases in the application rate of subsurface dispersants will be limited to conditions where winds are weak (< 10 knots) or VOC readings indicate potential health concerns. While this authority is granted to the OSC in the National Contingency Plan, all attempts will be made to maintain the 15,000 gallon per day subsurface cap outlined in Addendum 3 of the Dispersant Monitoring and Assessment Directive." The increase in subsea dispersant is also consistent with the Source Control Subsea Dispersant Forward Plan signed by Doug Suttles on July 6 and awaiting your signature. Assuming a flow rate of 53,000 bbls/day, a capture rate of 8,000 bbls/day, and a dispersant to oil ratio of 75 as stipulated by the USCG and EPA, the target daily dispersant volume would be 25,200 gallons or 17.5 gallons/minute.

The amount of subsea dispersant needed for VOC control has many controlling factors, including oil containment volume, wind conditions, and ocean currents. As you are aware, the amount of oil being captured decreased by ~18,000 barrels yesterday when the previous cap was removed. While we continue to bring the Helix Producer on line as quickly as is safely and operationally prudent, until it is operational, the amount of oil coming to the surface is greater than it has been recently. Additionally, winds are less than 10 knots today and the NOAA forecast is for winds to continue to be light. Finally, while ocean currents are currently bringing the oil to the surface to the southeast of the central operational area, if this current shifts or dissipates, the oil could revert to coming up directly under the main operational area, increasing the risk of VOCs.

Consistent with all of the above, we are requesting an exemption from the 15,000 gallon limit for July 11, 2010. Unless we see an increase in VOCs, we intend to hold our subsea dispersant rate at approximately 12 gpm, which would result in a total volume for today of less than 20,000 gallons. Further, the Helix Producer should begin capturing oil today, and thus we expect we will only need a one day exemption to proactively prevent dangerous VOC conditions during this time of crucial operations near the source.

Sincerely,

(b) (6) RTF

Douglas J. Suttles

Approval granted subject to the above:

(b) (6)

Date: 7-11-10

Rear Admiral James A. Watson
Federal On-Scene Coordinator
United States Coast Guard

James A. Watson
Rear Admiral, USCG
Federal On-Scene Coordinator

July 2, 2010

Dear Admiral Watson:

In compliance with the May 26, 2010, Dispersant Monitoring and Assessment Directive - Addendum 3 (the "Directive"), BP Exploration & Production Inc. ("BP") has eliminated the surface application of dispersants, except in cases where an exemption is requested and justified, and approved by the Federal On-Scene Coordinator.

Houma Unified Command had 6 spotter visual reports on 2 July from aircraft out of both Stennis and Houma Bases. These spotters were able to identify oil slicks that were estimated to require 65,000 gallons of dispersant. Today aerial dispersant operations applied the 10,000 gallons that was initially approved and another 10,000 gallons that was approved approved by FOSC. actual applied yesterday was 12,737 gals.

Weather will be a significant issue tomorrow. The Saturday forecast calls for flying conditions that may preclude aerial spraying with rain and thundershowers, winds of 20-28 knots from the N-NE-ENE, significant wave height over 7.5 feet, ceilings of 500 feet or less, visibility of 2 nm with a 80% chance of rain.

The NOAA Surface Oil Forecast for July 3rd shows extensive areas of heavy and medium oil (Attachment 2) that are or may adversely impact the shoreline, including sensitive wetlands.

Houma Unified Command anticipates that due to the weather, if oil slicks are identified, the most viable means of response will be the use of dispersants to reduce the risk of oil land fall, since tomorrow will be the 5th straight day of no skimming or ISB activities taking place.

Prior to spray operations tomorrow morning, the spotter aircraft will identify the high value targeted slicks and we will prepare a report of the location and dispersant volumes needed for application as soon as practicable tomorrow. It is anticipated that the forecasted weather pattern consisting of low ceilings and rain/thunderstorms will make it difficult to execute reconnaissance or dispersant spray missions.

Pursuant to a request this date from Unified Command, the following information is provided.

- Estimated size of identified dispersible oil slick targets proposed in designated zones: Today there were several air reconnaissance flights observing dispersible oil slicks in Zone AC & AM as shown Table 1.

- Explicit justification for why these targets can't be skimmed or addressed by other mechanical means: The weather is forecast to exceed the capability to skim and conduct ISB operations.

Source Skimming Assets:	All vessels in port
Non-Source Skimming Assets:	All vessels in port
ISB Assets:	All vessels in port
A Whale	Operating offshore for testing of system

- Consequently, source and non-source skimming vessels as well as ISB will not be in action tomorrow.
- Today, all offshore recovery assets (skimmers, etc.) are ***in port or at anchor due to inclement weather*** and ISB operations did not take place.
- It is planned to conduct Tier 1 helicopter SMART over flights to observe dispersant operations tomorrow should they be conducted and if weather permits helicopter operations.
- M/V *International Peace* is currently in port waiting on better seas and weather. It is not anticipated that she will be operating tomorrow due to continued adverse weather conditions. No SMART Tier 2 or Tier 3 monitoring will be conducted.
- No SMART Team Tier 1 flights were conducted on June 30; therefore, no QA/QC reports are attached.
- No burn box is shown at this time, since the ISB fleet will be in port tomorrow.
- The A Whale operating box is shown.
- Forecast sea state through Sunday showing skimming and ISB limitations is provided as Attachment 5.
- ***ALL RESPONSE OPERATIONS MAY BE CANCELED DUE TO WEATHER TOMORROW***

It should be noted, that due to the adverse weather, there has been no skimming, ISB or dispersant activities for the past five (5) days. Skimming and ISB operations are not scheduled for tomorrow. It is anticipated that significant quantities of dispersible oil will be observed, if flight operations are conducted.

Accordingly, in accordance with the Directive, the Houma Unified Command respectfully requests an exemption to apply EC9500A in volumes on dispersible oil slicks located today as shown in Table 1 not to exceed ~~60,000~~ 20,000 gallons for a period not to exceed 12 hours. As aerial dispersant is the primary response tool for tomorrow, we have mobilized the reconnaissance and deployment resources and request an initial 10,000 gallons for early opportunistic targets. This will be coupled with further reconnaissance and target identification. A subsequent request will be forwarded later in the day based on the full set of spotter reports.

Sincerely,

Houma Unified Command

Exemption approved subject to the above:

(b) (6)

Date: 7-3-10

James A. Watson
Rear Admiral, USCG

Attachment 1

Federal On-Scene Coordinator

Dispersant Zone Map for 3 July 2010 with Oil Targets from Spotter Operations on 2 July

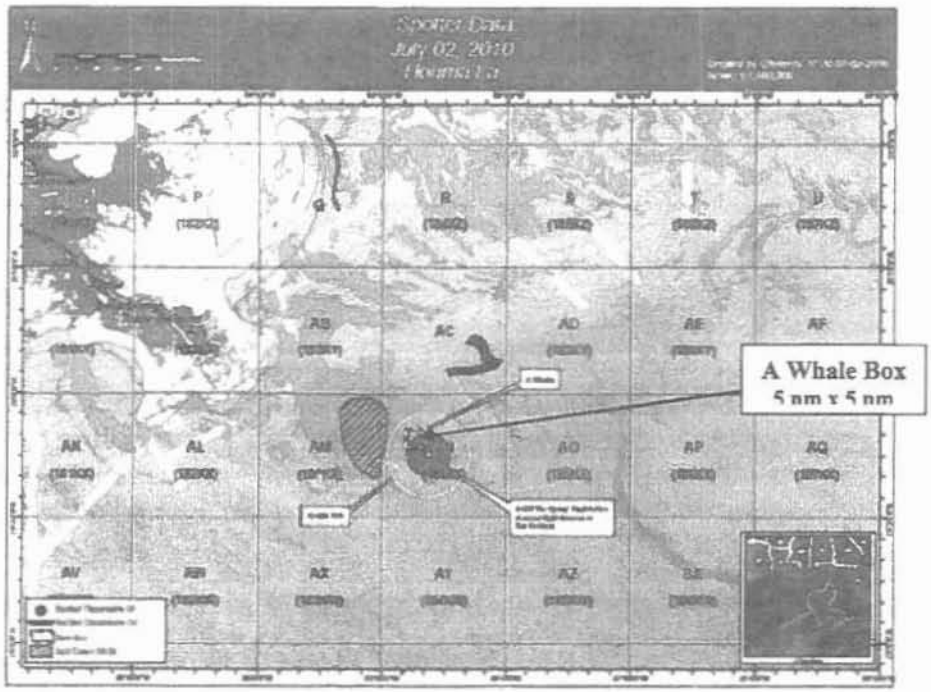


TABLE 1* Dispersible Oil Report July 2, 2010

Zone	# of slicks reported	Area in acres	Estimated percentage dispersible oil	Dispersant Needed** (1/20 DOR)
AC	1	20,480	25	25,600
AC	1	24,320	10	12,160
AM	1	141,000	5	35,250
Q	1	Found not suitably responsive to dispersant application		---
				73,010
Dispersant Sprayed Today The requested amount for 7/3/10 will be based on tomorrow mornings reconnaissance with an initial request for 10,000 gals. Estimated Dispersant Needed 7/03/2010				**12,737** **60,273**

***Note: Table 1 shows our intentions based upon our observations the day before these actions take place. Size and location of slicks will change. Activities within slick areas e.g., skimming operations, in-situ burning, etc., or weather conditions may require revisions to the actual operational plan implemented.**

****Note: Dispersant needed is based upon area in acres x % dispersible oil x 5 gallons per acre**

Attachment 2

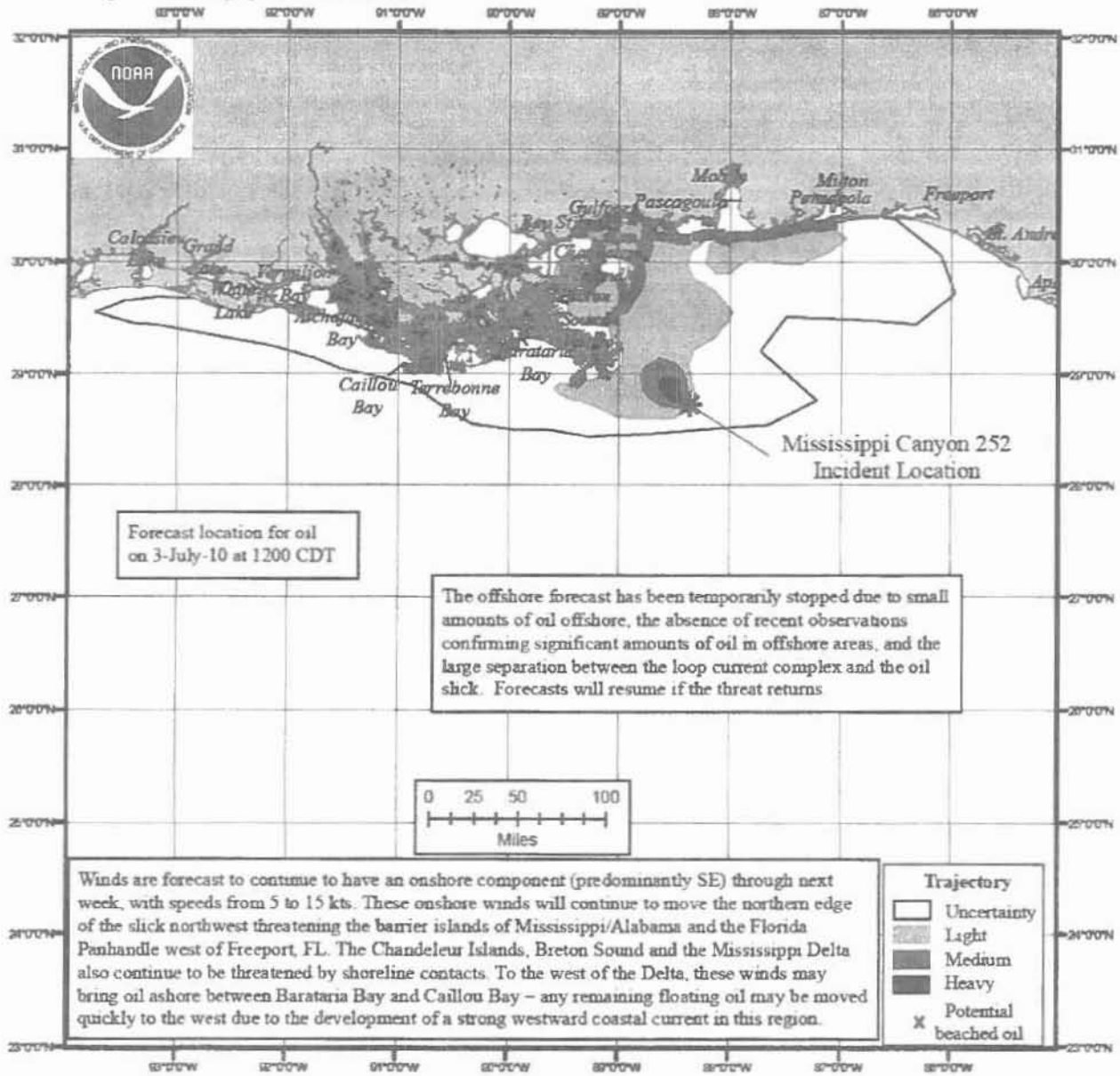
Nearshore Surface Oil Forecast Deepwater Horizon MC252

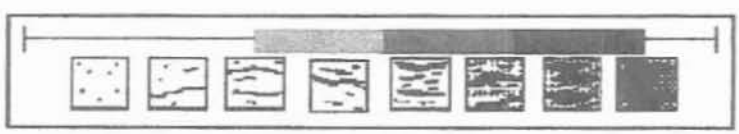
NOAA/NOS/OR&R

Nearshore

Estimate for: 1200 CDT, Saturday, 7/03/10
Date Prepared: 2100 CDT, Thursday, 7/01/10

This forecast is based on the NWS spot forecast from Thursday, July 1 PM. Currents were obtained from several models (NOAA Gulf of Mexico, West Florida Shelf/USF, TGLO/TAMU, NAVO/NRL) and HFR measurements. The model was initialized from Wednesday-Thursday satellite imagery analysis (NOAA/NESDIS). The leading edge may contain tarballs that are not readily observable from the imagery (hence not included in the model initialization). Oil near bay inlets could be brought into that bay by local tidal currents.





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

Next Forecast:
July 2nd PM

Attachment 3

Vessel Status Board

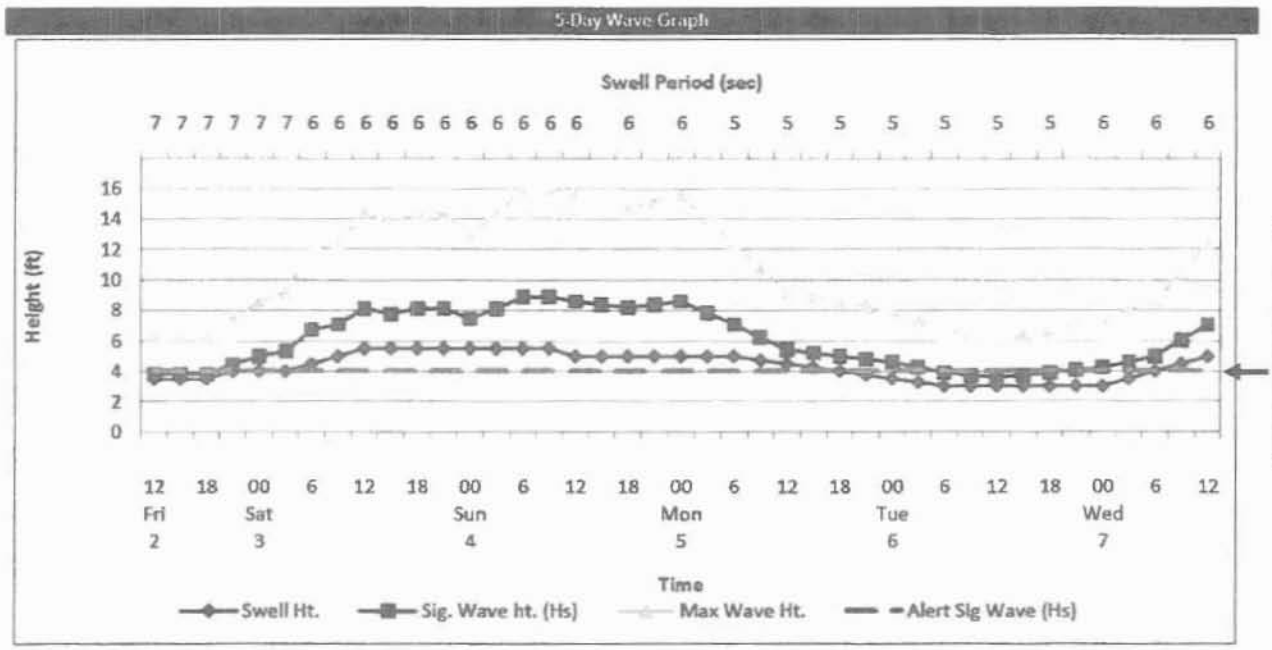
All Vessels Are Currently In Port Due To Inclement Weather And The Anticipation Is That Skimming Capacity Will Remain In Port Tomorrow

Attachment 4

QA / QC Reports

No spraying, No SMART Flights and No Reports on June 30th.

Attachment 5

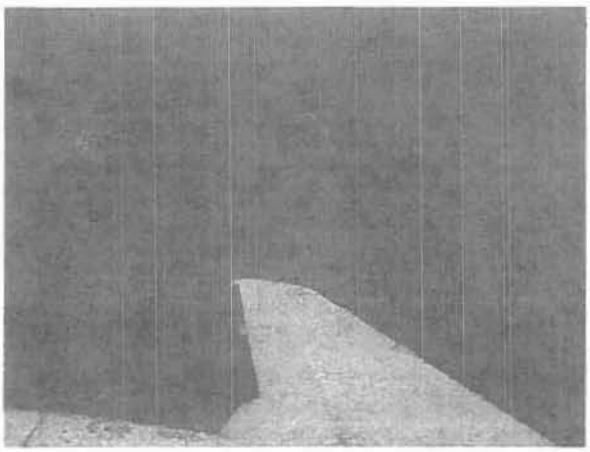


Skimming feet to start operational pullback. ISB stop operations 2 feet

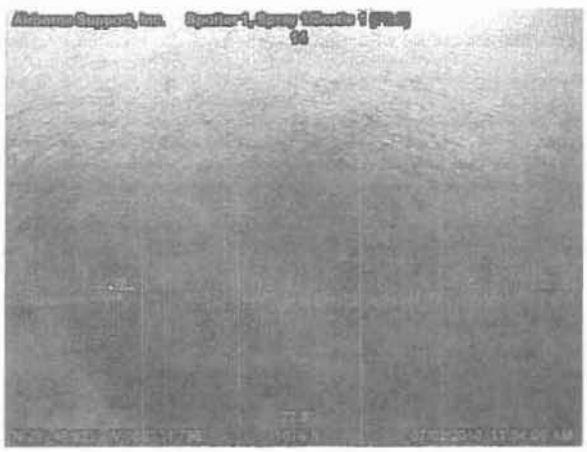
Maximum Wave Height is defined as the average of the highest .1% of all waves

PHOTOGRAPHS

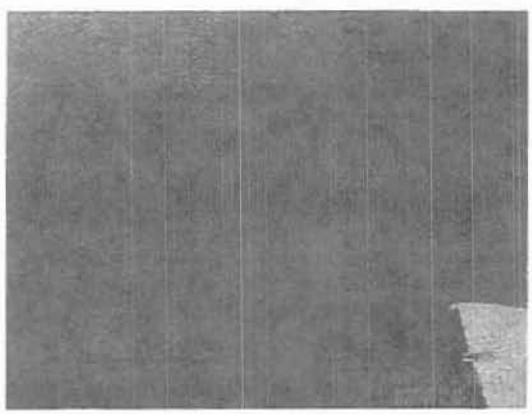
Zone AC (8 nm x 4 nm)



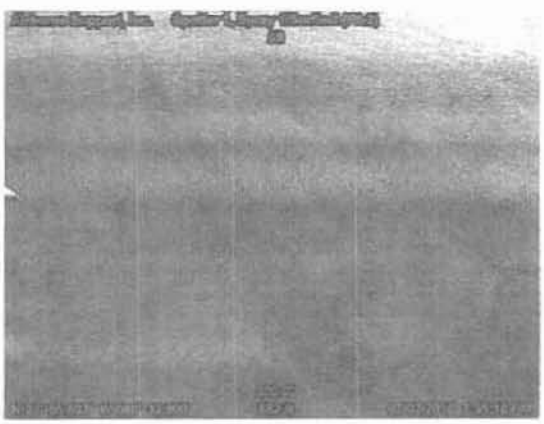
Zone AM (20 nm x 11 nm)



Zone AC (8 nm x 4 nm)



Zone AM (20 nm x 11 nm)



James A. Watson
Rear Admiral, USCG
Federal On-Scene Coordinator

July 3, 2010

Dear Admiral Watson:

In compliance with the May 26, 2010, Dispersant Monitoring and Assessment Directive - Addendum 3 (the "Directive"), BP Exploration & Production Inc. ("BP") has eliminated the surface application of dispersants, except in cases where an exemption is requested and justified, and approved by the Federal On-Scene Coordinator.

Houma Unified Command had nine (9) spotter visual reports on 3 July from aircraft out of both Stennis and Houma Bases. These spotters were able to identify oil slicks, however, in the opinion of the spotters and the Aerial Dispersant Group, these oil slicks were not of sufficient thickness to warrant aerial dispersant application. Today's aerial dispersant operations did not apply the 10,000 gallons that was initially approved by the FOSC; therefore, no additional amounts of dispersants were requested.

Weather will be a significant issue tomorrow for both surface and air operations. The Sunday forecast calls for flying conditions that may negatively impact both aerial spraying and reconnaissance flights. The forecast calls for an 80% probability of rain/thunderstorms, winds of 17-29 knots out of the E-ESE, wind waves averaging over 6 feet, significant wave height over 7 feet, with maximum wave height averaging 13.5 feet, ceilings of 500 feet or less and visibility of 4-7 nm.

The NOAA Surface Oil Forecast for July 4th shows extensive areas of heavy and medium oil (Attachment 2) that are or may adversely impact the shoreline, including sensitive wetlands.

Houma Unified Command anticipates that due to the weather, if oil slicks are identified, the most viable means of response will be the use of dispersants to reduce the risk of oil land fall, since tomorrow will be the 6th straight day of no skimming or ISB activities taking place.

Prior to spray operations tomorrow morning, the spotter aircraft will identify the high value targeted slicks and we will prepare a report of the location and dispersant volumes needed for application as soon as practicable tomorrow. It is anticipated that the forecasted weather pattern will consist of low ceilings and rain/thunderstorms which will make it difficult to execute reconnaissance or dispersant spray missions.

Pursuant to a request this date from Unified Command, the following information is provided.

- Estimated size of identified dispersible oil slick targets proposed in designated zones: Today air reconnaissance flights observed oil but none of the slicks were in our opinion of sufficient thickness to warrant expenditure of dispersant, therefore no dispersant was applied on the observed slicks. Please note that we have added Attachment 6 which is a spotter report describing and depicting the typical oil structure that has been observed today.

- Explicit justification for why these targets can't be skimmed or addressed by other mechanical means: The weather is forecast to exceed the capability to skim and conduct ISB operations.

Source Skimming Assets:	2 vessels offshore not skimming, other assets in port
Non-Source Skimming Assets:	All vessels in port
ISB Assets:	All vessels in port
A Whale	Operating offshore for testing of system.

Note: With the A Whale offshore there is the potential for conflicts in both surface skimming, burning and aerial dispersant operating areas.

- Consequently, source and non-source skimming vessels as well as ISB will not be in action tomorrow.
- Today, most offshore recovery assets (skimmers, etc.) are ***in port or at anchor due to inclement weather*** and ISB operations did not take place.
- It is planned to conduct Tier 1 helicopter SMART over flights to observe dispersant operations tomorrow should they be conducted and if weather permits helicopter operations.
- M/V *International Peace* is currently in port waiting on better seas and weather. It is not anticipated that she will be operating tomorrow due to continued adverse weather conditions. No SMART Tier 2 or Tier 3 monitoring will be conducted.
- SMART Team Tier 1 flights on July 1 were unable to go offshore due to weather; therefore, no QA/QC reports are attached.
- No burn box is shown at this time, since the ISB fleet will be in port tomorrow.
- The A Whale operating box is shown and is subject to change.
- Forecast sea state through Sunday showing skimming and ISB limitations is provided as Attachment 5.
- ***ALL RESPONSE OPERATIONS MAY BE CANCELED DUE TO WEATHER TOMORROW***

It should be noted, that as of today, due to the adverse weather, there has been no skimming, ISB or dispersant activities for the past five (5) days. Skimming and ISB operations are not scheduled for tomorrow.

In accordance with the Directive, the Houma Unified Command respectfully requests an exemption to apply EC9500A. As aerial dispersant is the primary response tool for tomorrow, we have mobilized the reconnaissance and deployment resources and request an initial 10,000 gallons for early opportunistic targets. This will be coupled with further reconnaissance and target identification tomorrow morning. A subsequent request will be forwarded later in the day based on the full set of spotter reports.

Sincerely,

Houma Unified Command

Exemption approved subject to the above:

(b) (6)

Date: 7/4/10

James A. Watson
Rear Admiral, USCG
Federal On-Scene Coordinator

Attachment 1

Dispersant Zone Map for 3 July 2010 with Oil Targets from Spotter Operations on 2 July

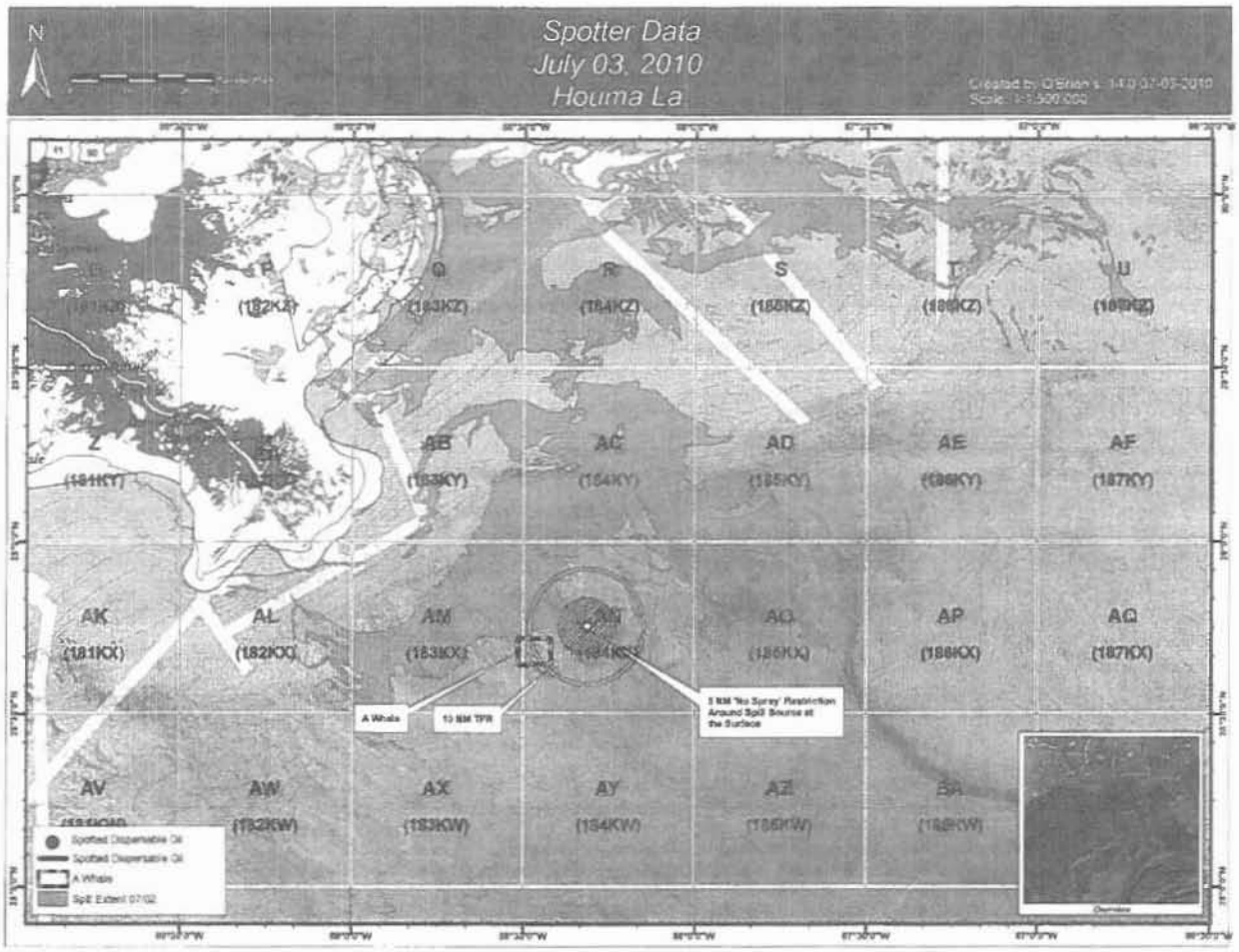


TABLE 1* Dispersible Oil Report July 3, 2010

Zone	# of slicks reported	Area in acres	Estimated percentage dispersible oil	Dispersant Needed** (1/20 DOR)
			Minimal Dispersible Oil Observed	
Dispersant Sprayed Today 0 Gallons The requested amount for 7/4/10 will be based on tomorrow mornings reconnaissance An initial request for 10,000 gals. is being made Estimated Dispersant Needed 7/04/2010				

***Note: Table 1 shows our intentions based upon our observations the day before these actions take place. Size and location of slicks will change. Activities within slick areas e.g., skimming operations, in-situ burning, etc., or weather conditions may require revisions to the actual operational plan implemented.**

****Note: Dispersant needed is based upon area in acres x % dispersible oil x 5 gallons per acre**

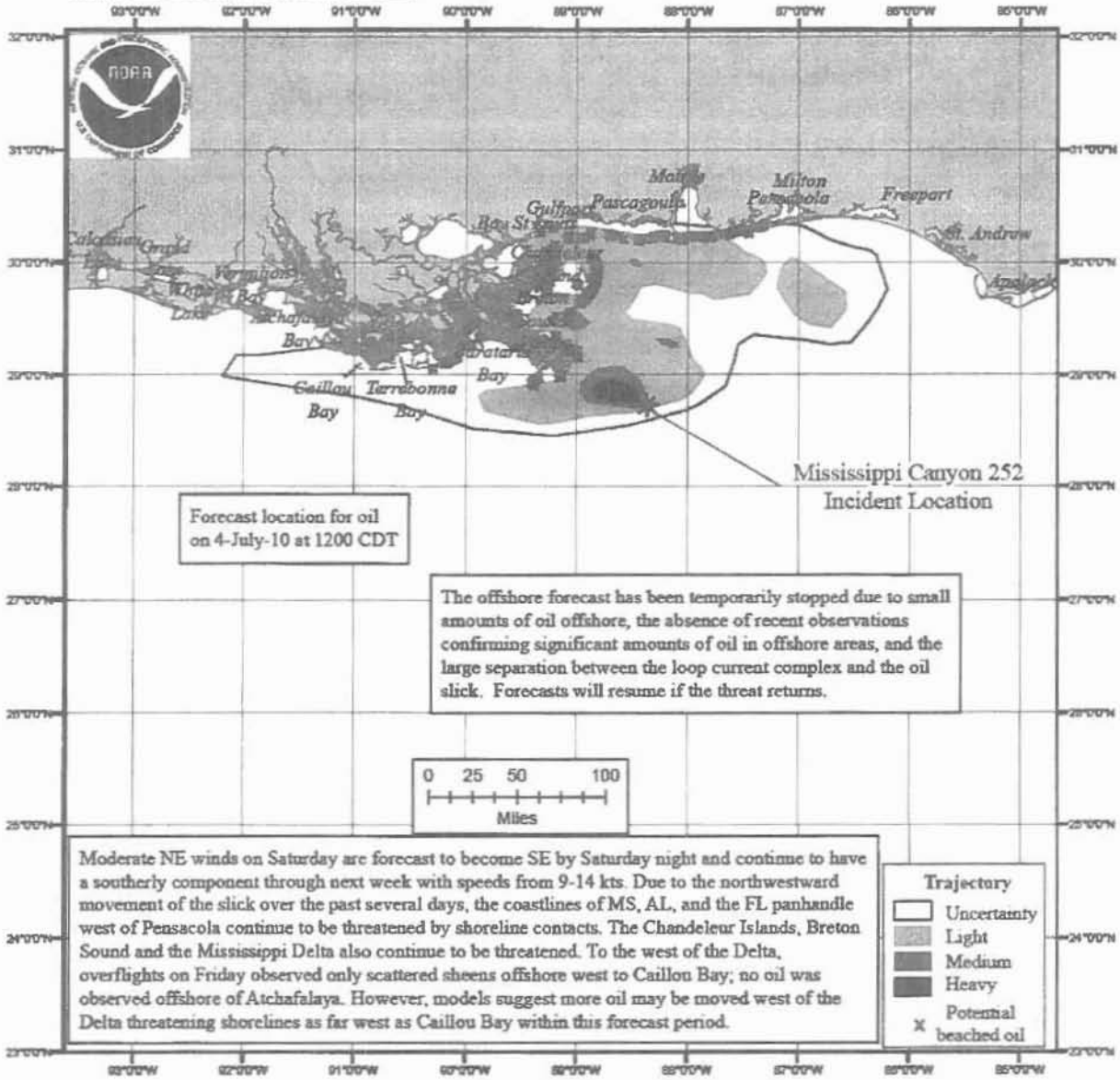
Attachment 2

Nearshore Surface Oil Forecast Deepwater Horizon MC252

NOAA/NOS/OR&R **Nearshore**

Estimate for: 1200 CDT, Sunday, 7/04/10
Date Prepared: 2100 CDT, Friday, 7/02/10

This forecast is based on the NWS spot forecast from Friday, July 2 PM. Currents were obtained from several models (NOAA Gulf of Mexico, West Florida Shelf/USF, TGLO/TAMU, NAVO/NRL) and HFR measurements. The model was initialized from Friday satellite imagery analysis (NOAA/NESDIS) and overflights. The leading edge may contain tarballs that are not readily observable from the imagery (hence not included in the model initialization). Oil near bay inlets could be brought into that bay by local tidal currents.



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

Next Forecast:
July 3rd PM

Attachment 3

Vessel Status Board

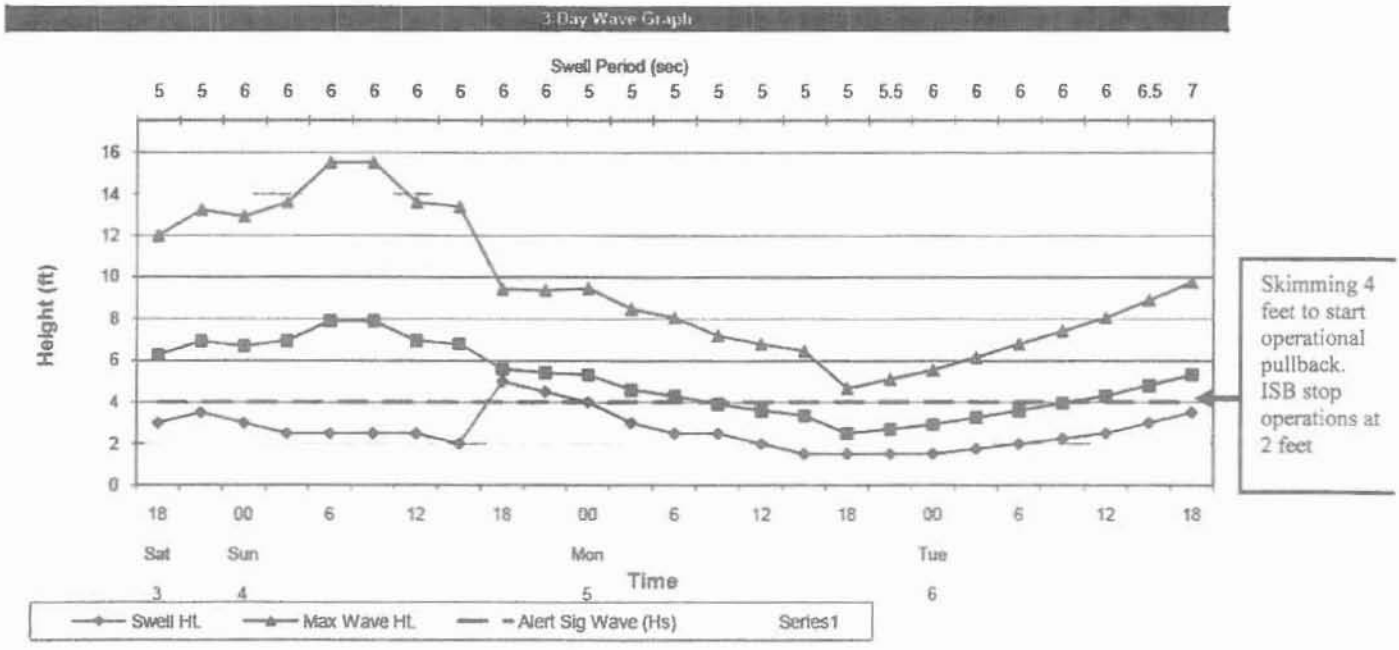
All Vessels Are Currently In Port Due To Inclement Weather And The Anticipation Is That Skimming Capacity Will Remain In Port Tomorrow

Attachment 4

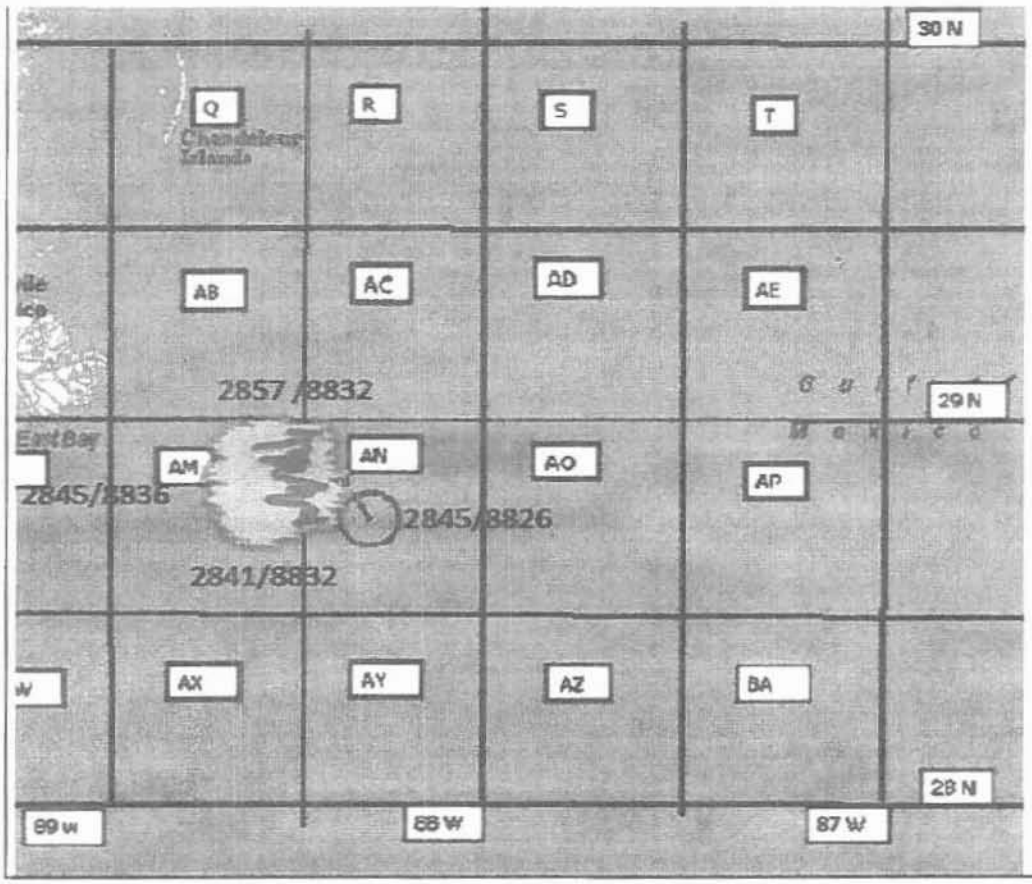
QA / QC Reports

Weather prevented SMART Flights on July 1st.

Attachment 5



Attachment 6



Date: 03JUL10

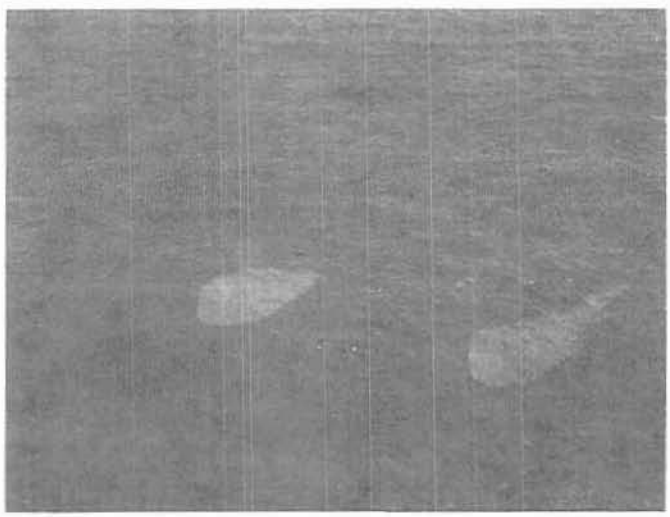
Time: 0630/0900
(start/end)

Flight #: 1

Zones Observed: AM

Large area of sheen located between coordinated on map.

Narrow embedded streamers of reddish emulsified oil north to south along the eastern border of the sheen. Very few streamers of reddish brown oil. Streamers are unorganized. Within the coordinates given, Metallic Sheen coverage 95%
Visible water (no sheen) 4%
Non-dispersible oil 1%



Emusified oil patties in Zone AL Not dispersible

bp

Douglas J. Suttles
Chief Operating Officer

BP Exploration & Production Inc.
501 WestLake Park Boulevard
Houston, TX 77079
(b) (6)

July 5, 2010

Rear Admiral James A. Watson
Federal On-Scene Coordinator
United States Coast Guard

Weekly Source Control Surface Dispersant Plan
(July 8 through July 14, 2010)

Dear Admiral Watson,

In compliance with the May 26, 2010, Dispersant Monitoring and Assessment Directive - Addendum 3 (the "Directive"), BP Exploration & Production Inc. ("BP") submitted a weekly Source Control Surface Dispersant Plan for the week July 1 to July 7, which you approved on June 30. The plan allowed for a maximum daily application volume (calendar day) of 6,000 gallons, unless more was required to control VOCs. From July 1 through July 5, the average daily volume applied was ~487 gallons. The maximum daily application was 1,473 gallons on July 2.
The current offshore air monitoring plan for source control (2200-T2-DO-PN-4002-4 signed May 25, 2010) identifies air monitoring instrumentation, location and action levels to respond to VOC excursions. In addition, vapor suppression guidelines (attachment 1) were put in place May 29, 2010 to provide additional granularity for action requirements. The air monitoring data is transparent to USCG and EPA.

BP respectfully requests approval of the Weekly Source Control Dispersant Plan for July 8 though July 14, as follows

Date	Expected Maximum Volume per calendar day (gals)
July 8	6000
July 9	6000
July 10	6000
July 11	6000
July 12	6000
July 13	6000
July 14	6000

Should VOC monitoring dictate further deployment in accordance with the Air Monitoring Plan for Source Control, BP also respectfully requests to exceed these volumes as required.

Sincerely,

(b) (6)

Douglas J. Suttles

THE EXPECTED MAXIMUM APPLICATION OF DISPERSANT OF 6,000 GALLONS PER DAY WILL SERVE TO MITIGATE EXPECTED VOC EXCURSIONS ASSOCIATED WITH CAPPING ACTIVITIES PURSUANT TO REDUCING THE FLOW FROM THE WELL OVER A SEVERAL DAY PROCESS (b) (6)

Approval granted subject to the above:

(b) (6)

Date: 7/7/2010

ROY A. NASH
Rear Admiral ~~James A. Watson~~
Federal On-Scene Coordinator
United States Coast Guard

Attachment 1
Vapor Suppression Guidelines
May 29, 2010

These guidelines pertain to deployment and use of dispersant vessels and fire fighting vessels in Source Control Operations. The guidance provides additional detail around action levels specified in the Offshore Air Monitoring Plan for Source Control (2200-T2-DO-PN-4002-4). In addition, this guidance aligns with Dispersant Procedures for Vessels Adriatic and HOS Super H (2200-T2-LC-RP-4091) and Fire Fighting Vessels Operating (Priorities and Procedures (2200-T2-DO-PR-4057).

All vessels experiencing VOC levels exceeding 50PPM are directed to report it to Source Control SimOps Branch Director. Application of dispersant should be coordinated through the Source Control SimOps Branch Director.

Recommended actions for VOC management:

- VOC levels of 20 to 70ppm
  - Use Rem Forza and Kay Marine 5 vessels for wide spray water pattern to suppress and redirect vapors

- VOC over 70ppm
  - Notify Source Control SimOps Branch Director to coordinate dispersant use
  - Use HOS Super H and Adriatic as primary dispersant vessels
  - Use Rem Forza and Kay Marine 5 vessels to apply dispersant when wide spray water pattern is not effective

Addendum to Weekly Source Control Surface Dispersant Plan
(July 8 through July 14, 2010)

The approval of the referenced surface dispersant plan granted on July 7, 2010 is amended as follows:

The maximum 6,000 gallon daily surface dispersant application rate is only authorized during active well-cap replacement operations. The expected maximum application of dispersant of 6,000 gallons per day during the top cap removal procedures will mitigate expected VOC excursions associated with capping activities pursuant to reducing the increased flow from the well over this several day process.

Thanks to the diligent efforts of all involved parties, the daily surface dispersant application rate to control VOCs has been reduced to under 200 gallons over the past two weeks. Prior to commencing the well-cap replacement operation and once it is completed the maximum daily surface dispersant application rate is not expected to exceed 3,000 gallons daily unless a spike in VOC monitoring dictate further deployment.

(b) (6)

Date: 7/8/2010

Rear Admiral Roy A. Nash
Deputy, Federal On-Scene Coordinator
United States Coast Guard

bp

Douglas J. Suttles
Chief Operating Officer

BP Exploration & Production Inc.
501 WestLake Park Boulevard
Houston, TX 77079
(b) (6)

July 6, 2010

Rear Admiral James A. Watson
Federal On-Site Coordinator
United States Coast Guard

Re: Source Control Subsea Dispersant Forward Plan

Dear Admiral Watson,

This letter is in response to your request that BP Exploration & Production Inc. ("BP") provide a high-level description of its plans going forward with regard to the use of dispersants. Specifically, you asked that we describe BP's planned dispersant use after the improvements to the containment system by the implementation of the Helix producer concept.

BP is moving forward with the installation of the Free Standing Riser 1 system that BP projects will have the capacity to contain an additional 20 - 25 MMBOPD from the MC252 well (the "Well") to the Helix Producer. The current weather conditions make the timing for the start-up of the Helix Producer system uncertain. The earliest projected date for the start-up is July 7, 2010, with it being more likely that the date will be around July 10, 2010. BP anticipates it will take approximately 5 days after the start-up of the Helix Producer system for it to stabilize to the point that we will know how effective it will be at containing the flow from the Well.

As a general principle, (under all conditions the use of subsea dispersant will be held under the 15,000 gallon limit in accordance with the May 26, 2010, Dispersants Monitoring and Assessment Directive) the more effective the Helix Producer system is in containing the flow from the Well, the less subsea dispersant it will be used. If the addition of the Helix Producer system virtually eliminates the escape of oil into the sea, BP will be able to suspend the application of subsea dispersant altogether. However, under this circumstance, BP believes it is critical that we maintain the capability to apply subsea dispersant to meet unforeseen contingencies such as weather disruptions or equipment failures.

If there is still flow from the Well escaping into the sea after installation of the Helix Producer system at a significantly reduced rate, BP will continue to apply subsea dispersant at a proportionately reduced rate. The attached table updates our 6 June 2010 document entitled GoM Drilling, Completions and Interventions- MC252: Guidance on Subsea Dispersants Application OPS Note #3 based on the monitoring and performance data that has been collected. For safety reasons, in accordance with current practices, BP plans to maintain the ability to apply surface dispersant capability as required for prompt VOC control in the case of operational difficulty.

Please let me know if there is any additional information we can provide regarding BP's planned dispersant use.

(b) (6)

Douglas J. Suttles

Approval granted subject to the above:

(b) (6)

Date: 7-11-10

Jim Watson
Rear Admiral, USCG
Federal On-Scene Coordinator

Attachment 1

- Assume flow rate of 53,000 bbls/day
- Calculate oil escaping by subtracting oil captured by containment system from 53,000 bbls/day
- Apply dispersant at dispersant to oil ratio of 1:75
- Line shows not to exceed 15,000 gallons

Estimated Volume of Oil Captured by Containment Systems (000s barrels per day)	Target EC9500A Subsea Dispersant Application Rate (gallons per minute)[1]
Total Containment	0
> 45	3
40 to 45	4
35 to 40	6
30 to 35	8
25 to 30	10

[1]Averaged over 24-hour period

James A. Watson
Rear Admiral, USCG
Federal On-Scene Coordinator

July 7, 2010

Dear Admiral Watson:

In compliance with the May 26, 2010, Dispersant Monitoring and Assessment Directive - Addendum 3 (the "Directive"), BP Exploration & Production Inc. ("BP") has eliminated the surface application of dispersants, except in cases where an exemption is requested and justified, and approved by the Federal On-Scene Coordinator.

Houma Command had eleven (11) spotter/recon flights on 7 July from aircraft out of both Stennis and Houma Base.

Oil slicks were observed but mostly sheen. One small 400 acre slick with dispersible oil located in Zone AN with estimates of up to 50% dispersible oil was located and targeted. Since the dispersible oil calculation required approximately 1,000 gallons of dispersant, Zone AN was switched from Stennis and given to Houma to apply with a more appropriately sized aircraft the BT-67. SMART 1 did observe the spray mission today and they were pleased with the data/observations.

Weather may again be a factor tomorrow for skimming and ISB operations. Both skimming and ISB activities will attempt to recommence recovery/response operations as the weather and sea states continue to rapidly moderate. Most skimming and ISB resources will be transiting back out to the site tomorrow and some resources may not have a full day of daylight operations due to their transit back to operational areas.

The Thursday forecast calls for 10% precipitation, winds of 11-15 knots out of the SE-ESE, wind waves of 3 feet, significant wave height of approximately 5 feet, with maximum wave heights less than 8.5 feet, unlimited ceilings and visibility of 12-15 nm.

The NOAA Surface Oil Forecast for July 8th shows extensive areas of heavy and medium oil (Attachment 2) that are or may adversely impact the shoreline, including sensitive wetlands.

Houma Unified Command continues to anticipate the most viable means of response will be the use of dispersants to reduce the risk of shoreline impact. The heavy weather and significant sea state over the past week enhanced the natural dispersion of the oil and also made it very difficult for spotter aircraft to see surface oil. Aerial Dispersants believes that with the moderating sea state, surface oil may become more visible than it has been for the past week as well as the reduction in the natural wave generated dispersion activity which will require mechanical/burn/dispersant removal actions versus natural dispersion.

Prior to spray operations tomorrow morning, the recon/spotter aircraft will identify the high value targeted slicks and we will prepare a report of the location and dispersant volumes needed for application as soon as practicable.

Pursuant to a request this date from Unified Command, the following information is provided.

1-Estimated size of identified dispersible oil slick targets proposed in designated zones: Today air reconnaissance flights observed dispersible oil located in Zone AN. The relatively small slick was approximately 400 acres with estimates of up to 50% dispersible oil.

2-Explicit justification for why these targets can't be skimmed or addressed by other mechanical means: The significant wave height is forecasted to exceed maximums to conduct ISB & could adversely impact

skimming operations. The weather forecast should be extremely suitable for dispersant operations so aerial dispersants may be the most effective and viable response tool.

- **Skimming units:** Transiting to operating areas- Recommencement of skimming operations
- **ISB Assets:** Transiting to operating areas- Recommencement of burn operations
- **A Whale:** Operating offshore for testing of system.

3-Today, offshore recovery assets, skimmers, etc. were in port due to adverse weather and it is anticipated that these vessels will recommence skimming operations sometime during tomorrows daylight hours. ISB operations did not take place today and they are anticipated to attempt to recommence burn operations tomorrow late in the day.

4-It is planned to conduct Tier 1 helicopter SMART over flights to observe dispersant operations tomorrow should they be conducted and if weather permits helicopter operations.

5-M/V *International Peace* is currently in port waiting on better seas and weather. It is anticipated that she will be operating tomorrow. No SMART Tier 2 or Tier 3 monitoring will be conducted.

6-SMART Team Tier 1 QA/QC checklists are not available due to no spraying activities having taken place where SMART 1 was involved.

7-The A Whale is subject to the 2 NM no spray criteria.

8-Forecast sea state through Friday showing skimming and ISB limitations is provided as Attachment 5.

9-***ALL AERIAL DISPERSANT RESPONSE OPERATIONS MAY BE CANCELED DUE TO WEATHER TOMORROW***

In accordance with the Directive, the Houma Unified Command respectfully requests an exemption to apply EC9500A. As aerial dispersant is the primary response tool for tomorrow, we have mobilized the reconnaissance and deployment resources and request an initial 10,000 gallons for early opportunistic targets. This will be coupled with further reconnaissance and target identification tomorrow morning. A subsequent request will be forwarded later in the day based on the full set of spotter reports.

Sincerely,

Houma Unified Command

Exemption approved subject to the above:

(b) (6)

Date: 7-8-10

James A. Watson
Rear Admiral, USCG
Federal On-Scene Coordinator (FOSC)

Attachment 1

Dispersant Zone Map for 7 July 2010 with Oil Targets from Spotter Operations on 6 July

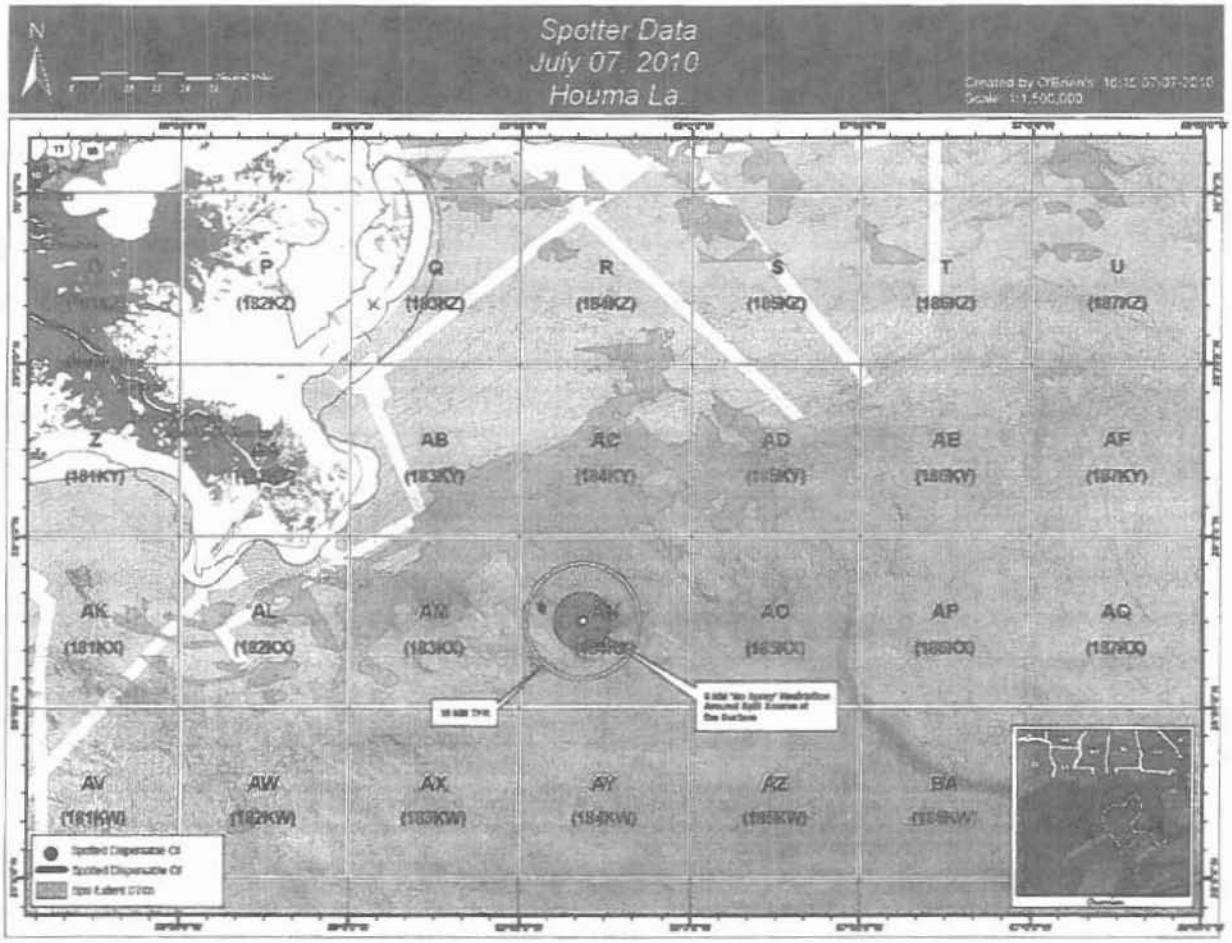


TABLE 1* Dispersible Oil Report July 7, 2010

Zone	# of slicks reported	Area in acres	Estimated percentage dispersible oil	Dispersant Needed** (1/20 DOR)
AN	1	400	50%	1,000 gallons
				1,000 gallons
Dispersants were Sprayed Today- 1,000 Gallons The requested amount for 7/8/10 will be based on tomorrow mornings reconnaissance An initial request for 10,000 gals. is being made due to the anticipation of finding dispersible oil requiring that amount of dispersants. Estimated Dispersant Needed 7/8/2010 based upon full morning spotter reports				

***Note: Table 1 shows our intentions based upon our observations the day before these actions take place. Size and location of slicks will change. Activities within slick areas e.g., skimming operations, in-situ burning, etc., or weather conditions may require revisions to the actual operational plan implemented.**

****Note: Dispersant needed is based upon area in acres x % dispersible oil x 5 gallons per acre**

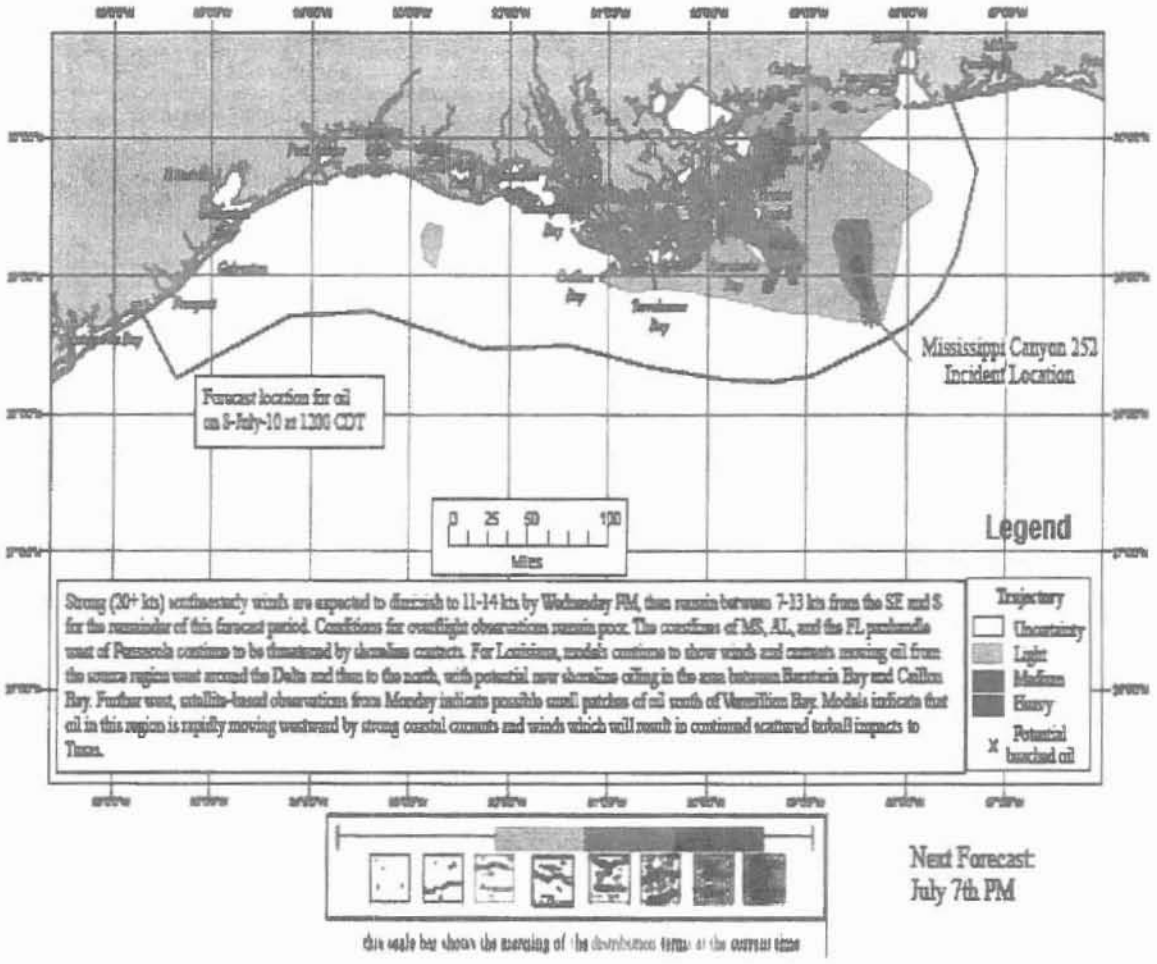
Attachment 2

Nearshore Surface Oil Forecast Deepwater Horizon MC252

NOAA/NOS/OR&R | Nearshore

Estimate for: 1200 CDT, Thursday, 7/08/10
Date Prepared: 2100 CDT, Tuesday, 7/06/10

This forecast is based on the NWS spot forecast from Tuesday, July 6 PM. Currents were obtained from several models (NOAA Gulf of Mexico, West Florida Shelf/USF, TGLO/TAMU, NAVO/NRL) and HFR measurements. The model was initialized from Sunday-Tuesday satellite imagery analysis (NOAA/NESDIS) and Tuesday overflights. The leading edge may contain tarballs that are not readily observable from the imagery (hence not included in the model initialization). Oil near bay inlets could be brought into that bay by local tidal currents.



Strong (20+ kts) southeasterly winds are expected to diminish to 11-14 kts by Wednesday PM, then remain between 7-13 kts from the SE and S for the remainder of this forecast period. Conditions for overflight observations remain poor. The coastline of MS, AL, and the FL panhandle west of Pensacola continue to be threatened by shoreline contact. For Louisiana, models continue to show winds and currents moving oil from the source region west around the Delta and then to the north, with potential new shoreline oiling in the area between Barataria Bay and Caillou Bay. Further west, satellite-based observations from Monday indicate possible small patches of oil south of Vermilion Bay. Models indicate that oil in this region is rapidly moving westward by strong coastal currents and winds which will result in continued scattered tarball impacts to Texas.

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

Next Forecast:
July 7th PM

Attachment 3

Vessel Status Board

DEEPWATER HORIZON Date/Time July 8, 2010 07JUL BBLS Skimmed: 0
OFFSHORE NON-SOURCE SKIMMING GROUP 1

		TOTAL	SKIMMING	OFFLOADING	Unscheduled Maintenance	Scheduled Maintenance	Enroute	Ordered
SKIMMERS		12	0		1	1	1	
TANK VESSELS		4	N/A				2	
VESSELS OTHER		1	N/A					
WORKBOATS		6	N/A	N/A				

		ON SCENE WEATHER	COMMENTS: Skimming vessels are on standby/anchorage until weather conditions permit for safe skimming operations.
WIND		BF 10-15KT	
WAVE		4 - 6'	
SWELL			

Kind/Type	Skimmer Type	Skimming Vessel	Assignment	Status	Location	ETA	Notes:
CG VOSS	RVI/Weir	Orleans	GulfMark	Standby	IVO Baptiste Collette, MS River		Moored at anchorage area
CG VOSS		Charles M. Calisis		Standby	IVO Baptiste Collette, MS River		Moored at anchorage area
CG VOSS	RVI/Weir	Odyssea Quest	NRC	Standby	IVO Baptiste Collette, MS River		Moored at anchorage area
CG VOSS	RVI/Weir	Odyssea Mariner	NRC	Standby	IVO Baptiste Collette, MS River		Moored at anchorage area
CG VOSS	RVI/Weir	Miss Megan	NRC	Standby	Moored Venice		
CG VOSS	RVI/Weir	Sir Lancelot	NRC	Standby	Head of Passes Anchorage, MS		Moored
CG VOSS	RVI/Weir	Laurea Lacosta	NRC	Standby	Enroute Port Fourchon		Moored
CG VOSS	RVI/Weir	Gulf Scout (Being Demobed)	NRC	Enroute	Replacement vessel enroute	Coming Offline	Replacement: Calisis Navigator
CG VOSS	RVI/Weir	C Aggressor	NRC	Standby	Moored Venice		
Superb ESSM	RVI/Weir	Pope Benedict XVI	NRC	Unscheduled Maint.	Moored Port Fourchon	ETA 08JUL10	Reconfiguration
CG VOSS	RVI/Weir	HOS Express	BP America	Scheduled Maint.	Enroute Port Fourchon		HOS Express replaced HOS North
CG VOSS	RVI/Weir	Gulf Influence	NRC	Standby	Head of Passes Anchorage, MS		
		Offshore Barges				Remaining Storage bbls	
TV2							
TV2		TV 2600 TB Clinton Cenac	NRC	Standby	Moored West Delta Area	13000	
TV2		TV GCS 236/ TB Mary Gellatly	BP	Enroute	Enroute Port Fourchon	37000	ETA 05JUL10
TV2		TV Connecticut/ Tug Joan Moran	BP	Standby	Moored West Delta Area	37000	Completing USCG Inspection

		Crew/Re-supply					
WB2		Transporter	Re-Supply	Standby	Moored Venice		
WB2		Wetarse	Shuttle	Supply Run	Moored Fourchon		
WB2		Miss Lauren	Shuttle	Supply Run	Moored Fourchon		
WB2							
WB2		Jambon Supplier	2802 Support	Standby	Moored Venice		
WB2		Rob Bordelon	CT Support	Scheduled Maint.	Moored Fourchon		Outfitting to support CT Barge
		Jason K McCall		Standby	Moored Fourchon		
Kind/Type		Command and Control	Assignment	Status	Location		
WB2		Bumble Bee	NRC	Command	Enroute Venice, LA		VHF radio OOC

DEEPWATER HORIZON **Date/Time** **7/7/10 16:53**
Offshore Skimming Group 2

Kind	Total	Skimming	Offloading	Unscheduled Maintenance	Scheduled Maintenance	Enroute	Ordered	Standby
OSRV	25	0	0	1	1	0	0	23
TANK VESSELS	5	N/A	1	0	0	0	0	4
VESSELS OTHER	2	N/A	N/A	1	0	0	0	1
WORKBOATS	18	N/A	N/A	0	0	0	0	18
TUGBOAT	8	N/A	N/A	0	0	0	0	8

	ON SCENE WEATHER	Comments:
WIND	14-16 kts ESE	
WAVE	6'	
SWELL	Unavailable	

	Other Vessels						Telephone
	Vessel	Assignment	Status	Location	ETA		
VCO	Seacor Lee	Contracts	Unscheduled Maint	MC-252		Escape Group Command Vessel	713-568-5535
VSO	Seacor Pride (offloading vessel)	Offload Support	Standby	Fourchon			713-395-7642

Kind/Type	Vessel	Assignment	Status	Location	ETA	Notes:	Telephone
OSRV/RV1	Louisiana Responder	MSRC	Scheduled Maint	Ft Jackson			
OSRV/RV1	Gulf Coast Responder	MSRC	Standby	Venice		WX Standby	
OSRV/RV1	Texas Responder	MSRC	Standby	Venice		WX Standby	
OSRV/RV1	Maine Responder	MSRC	Standby	Venice		WX Standby	
OSRV/RV1	Mississippi Responder	MSRC	Standby	Venice		WX Standby	
OSRV/RV1	Southern Responder	MSRC	Standby	Venice		WX Standby	
OSRV/RV1	Delaware Responder	MSRC	Standby	Ft. Jackson		WX Standby	
OSRV/RV1	Virginia Responder	MSRC	Standby	Venice		WX Standby	
OSRV/RV1	CGA HOSS Barge (Crosby Sun)	TF HOSS	Standby	Venice		WX Standby	713-395-7472
OSRV/RV1	Seacor Vanguard (Current Buster 2 ea)		Standby	Venice		WX Standby	985-518-9842
OSRV/RV1	Seacor Vantage (Current Buster)	Buster	Unscheduled Maint	Gulfport		Swapping out with John Cognil	985-285-4592
OSRV/RV1	Bryce Giles (w/CGA FRU) - Ampol	CGA	Standby	Venice			
OSRV/RV1	International Trooper (w/CGA FRU) - Ampol	CGA	Standby	Venice		WX Standby	001-88165-149-8486
OSRV/RV1	Kim B (w/CGA FRU) - Ampol	CGA	Standby	Venice		WX Standby	
OSRV/RV1	Mr. Alex (w/CGA FRU)- Ampol	CGA	Standby	Venice		WX Standby	
OSRV/RV1	Rene (Navy Marco)	Fed	Standby	Venice		WX Standby	504-208-4601
OSRV/RV1	Seacor Washington (Dutch arm)	Command	Standby	Fourchon		OSGZ Command Vessel	504-626-8963
OSRV/RV1	HOS Mystique (Dutch arm)		Standby	Fourchon		WX Standby	832-260-8755
OSRV/RV1	HOS Sweetwater (Dutch Arm)		Standby	Fourchon		WX Standby	504-620-7502
OSRV/RV1	Candie Clipper (Ocean Buster)		Standby	Fourchon		WX Standby	
OSRV/RV1	JMC-300/RHEA (Gulp 2)		Standby	Anchor		WX Standby	
OSRV/RV1	Kylie Williams (Ocean Buster/vane)		Standby	Fourchon		WX Standby	337-504-9274
OSRV/RV1	Southern Cross (Ocean Buster)		Standby	Fourchon		WX Standby	985-366-8201
OSRV/RV1	Amy Chauvel (Ocean Buster)		Standby	Fourchon		WX Standby	
OSRV/RV1	A Whale (Bred well)		Standby	MC-252		Initial test	011-870-7649-51421

	Offshore Barges				Remaining Storage bbls		
TV2	MSRC 402 Barge (Kimberly Colle)	TF Storage	Standby	Platform	40,300		
TV1	MSRC 452 Barge (Tara Crosby)	TF Storage	Standby	Fort Jackson	45000		
TV1	MSRC 570 Barge (Crosby Clipper)	TF Storage	Standby	Fort Jackson	57000		
TV1	K-Sea DBL-155 (Rebel)	TF Storage	Offloading	Platform	125000		646-303-9860
TV1	Energy 8001(Superior Service) Costner	TF Storage	Standby	Fourchon	80000		646-671-0008

	Boom Boats						
	Vessel	Assignment		Location	ETA		
WB2	Sea Fox	Source	Standby	Venice		WX Standby	251-979-3453
WB2	Betty G	Source	Standby	Venice		WX Standby	251-404-2691
WB2	Ms. Alisa	Source	Standby	Venice		WX Standby	
WB2	Ms. Addison	Source	Standby	Venice		WX Standby	985-677-1949
WB2	Jolleene Marie	Source	Standby	Venice		WX Standby	985-709-7119
WB1	St. Ignatius Loyola	Source	Standby	Venice		WX Standby	850-596-4180
WB1	Hercules	Source	Standby	Venice		WX Standby	713-751-6802
WB1	Brutus	Source	Standby	Venice		WX Standby	713-751-6033
WB1	Miz Mabry	Source	Standby	Venice		WX Standby	409-839-6873
WB1	Mr Randolf	Source	Standby	Venice		WX Standby	985-413-9450
WB1	Black Tip	Source	Standby	Venice		WX Standby	228-326-4552
WB1	Dog Fish	Source	Standby	Venice		WX Standby	321-961-9304

DEEPWATER HORIZON **Date/Time 07/07/10 1700 HRS**
OFFSHORE SKIMMING GROUP III

Kind	Total	Skimming	Offloading	Unscheduled Maintenance	Scheduled Maintenance	Enroute	Ordered	Standby
SKIMMERS	9	0	0	1	0	0	0	8
TANK VESSELS	2	N/A	0	0	0	0	0	2
VESSELS OTHER	1	N/A	N/A	0	0	0	0	1
WORKBOATS	3	N/A	N/A	0	0	0	0	3
TUGBOAT	3	N/A	N/A	0	0	0	0	3

	ON SCENE WEATHER
WIND	SSE 10 - 15 kts
WAVE	7 - 9 ft
SWELL	

Comments: NRC Perseverence in for repairs to hull.

	Other Vessels					
	Vessel	Assignment	Status	Location	ETA	
VSO	Queen Bee	Command	Standby	Fourchon		Source Grp Comnd Vessel

Kind/Type	Vessel	Assignment	Status	Location	ETA	Notes:
RV1/Belt	NRC Admiral (Marco)	NRC	Standby	Fourchon		weather hold
RV1/Weir-disc	NRC Energy (Crucial)	NRC	Standby	Fourchon		weather hold
RV1/Belt	NRC Guardian (Marco)	NRC	Standby	Fourchon		weather hold
RV1/Belt	NRC Perseverance (Marco)	NRC	Unscheduled Maint.	Fourchon		In for repairs
RV1/Disc	NRC Liberty (Crucial)	NRC	Standby	Fourchon		weather hold
RV1/Disc	Seahorse VI (Crucial)	NRC	Standby	Fourchon		weather hold
RV1/Weir	Lana Rose (Weir)	NRC	Standby	Fourchon		weather hold
RV1/Belt	Pauline T(Marco)	NRC	Standby	Venice		weather hold
RV1/Belt	Resolve Pioneer(Marco)	NRC	Standby	Fourchon		weather hold

	Offshore Barges				Remaining Storage bbls	
TV2	NRC Defender	TF Storage	Standby	Venice		
TV2	NRC Valiant	TF Storage	Standby	Venice		

	Boom Boats					
	Vessel	Assignment		Location	ETA	

	Crew/Re-supply					
WB2	Eversady	Re-supply	Standby	Venice		
WB2	Miss Wynter	Re-supply	Standby	Venice		
WB2	Lady Nina	Re-supply	Standby	Venice		

Kind/Type	Tugboats	Assignment	Status	Location	ETA	Notes:
TB	Helena Maria	NRC	Standby	Venice		
TB	Tesla I	NRC	Standby	Venice		
TB	Angelica E	NRC	Standby	Venice		

Kind/Type	Inland Barges	Assignment	Status	Location	Remaining Storage	
0						

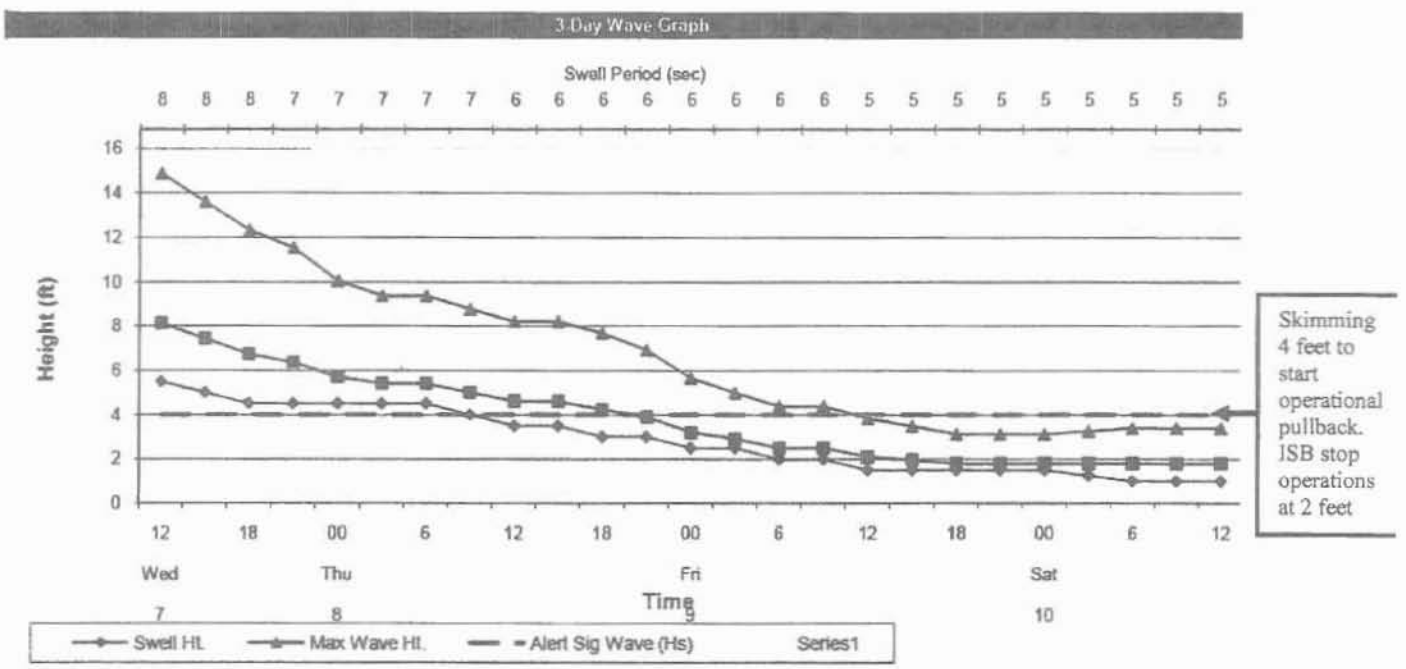
Attachment 4

QA / QC Reports

No QA/QC Checklists for this period are available.

SMART 1 did observe the spray mission today.

Attachment 5



bp

Douglas J. Suttles
Chief Operating Officer

BP Exploration & Production Inc.
501 WestLake Park Boulevard
Houston, TX 77079
(b) (6)

July 7, 2010

RADML James Watson
Federal On-Scene Coordinator
United States Coast Guard

Subsea Dispersant Injection Request for Severe Weather Exemption
From Sampling Protocol for Wednesday, July 7th 2010

On Tuesday, July 6th, the Brooks McCall completed three casts in line with the daily requirements for subsurface sampling of the Directives for Subsea Dispersant Injection. Due to the deteriorating weather sampling ceased for the day in the early afternoon. There is a safety protocol (attached) which delegates the responsibility for operational safety on the vessel to the Captain, and in certain circumstances relating to the welfare of the science crew, to the Chief Scientist

The current weather shows SE winds of 22-25 knots with 7-9 ft seas, with forecasts showing this subsiding to 6 ft tonight. In view of the current weather it is unlikely that the Brooks McCall will be able to take any sample casts on Wednesday due to the safety protocol. For the wellbeing of the personnel onboard we request that the vessel depart the well site and proceed to Port Fouchon.

I am requesting an exemption from the requirement to sample the water column during the 24 hour period of July 7, 2010 in order to continue Subsea Dispersant Injection operations to ensure VOC management and safe operations.

The Ocean Veritas is being readied for its next cruise and will be on station on Thursday July 8th – when much milder sea states are forecast.

I trust that this request be favorably reviewed.

Yo(b) (6)

Douglas J. Suttles

Approved (b) (6)
~~RADML James Watson~~ RDML Roy Nash
Deputy FOSC

Date 7/7/2010

DEEP WATER CTD and WATER SAMPLING

Authority to Continue or Stop Sampling Operations

July 2nd, 2010

While the Captain of the vessel is responsible for the overall safety of the vessel, its crew and scientists, the Chief Scientist is responsible for the decisions concerning sampling operations.

The purpose of this memorandum is to clearly establish the responsibilities and authorities of the Captain and Chief Scientist in deciding whether or not to continue operations.

1. The Captain/Chief Mate have the authority to stop sampling operations based on-
    a. Safety of vessel holding position during the approximately 2 hours required to deploy and retrieve the CTD; and
    b. The safety of two people to work on the rear deck of the vessel during CTD operations and sampling from the Niskin bottles, given the forecast conditions for any cast.
    c. Any other matter relating to maritime safety, including but not limited to VOC levels, instructions from SIMOPS, or other marine authorities.
2. The Chief Scientist has the authority to stop sampling or laboratory operations based on
    a. Consideration of the health and safety of the science crew including:-
        i. Any seasickness that cannot be adequately managed with standard sea-sickness medications
        ii. Stress and fatigue levels, which will largely be a function of people's experience working at sea, general fitness and management of work loads during adverse weather
        iii. Redundancy of personnel in positions, noting that in some cases there are roles that can be shared or delayed for short periods, allowing for people to rest between work period
        iv. Safety of working in the laboratory with regards to slips, falls and potential for injury due to rough seas.
    b. The feasibility and logistics of collecting robust data under the conditions. For example, management and counting of rotifers used in the toxicity testing may not be possible with substantial sea movement.
    c. Any other matter which, in the opinion of the Chief Scientist, must bring operations to a halt.
3. For the avoidance of doubt, the Captain has the sole authority in a decision to restart operations.
4. All Crew members have the right to "Stop the Job" if they believe a job to be unsafe.

GENERAL NOTES –

There are several more experienced members of the science crew, including general sea time and/or experience working on this project.

All personnel have been advised of the advantages of early commencement of seasickness medication and strategies for management of seasickness.

The Chief Scientist will at all times monitor the health and safety of the personnel, including appropriate management of any sickness or fatigue.

Although adverse weather or sea conditions may be likely to substantially slow the rate of work that is safe or feasible, unless conditions are severe enough that the Captain makes the decision to cease operations, at least one CTD cast should be possible during the day.

In all cases where adverse weather, sea state, or any other event is causing a significant delay to or is halting sampling operations the Chief Scientist will notify the BP Marine Scientist Coordinator as soon as possible.

Developed by Marine Science Coordinator and Vessel Chief Scientists
Unified Command New Orleans

Endorsed by Gulf of Mexico Marine Authority
BP America

James A. Watson
Rear Admiral, USCG
Federal On-Scene Coordinator

July 8, 2010

Dear Admiral Watson:

In compliance with the May 26, 2010, Dispersant Monitoring and Assessment Directive - Addendum 3 (the "Directive"), BP Exploration & Production Inc. ("BP") has eliminated the surface application of dispersants, except in cases where an exemption is requested and justified, and approved by the Federal On-Scene Coordinator.

Houma Command had thirteen (13) spotter/recon flights on 8 July from aircraft out of both Stennis and Houma Base. No spray missions were conducted so no dispersants were applied from our 10,000 gallon pre-approval. Morning observations indicated dispersible oil but evaluation by the Aerial Dispersants Group judged it to be more appropriate for skimming and the Offshore Group were given the coordinates to conduct skimming operations. Late in the afternoon, visible dispersible oil began to appear and two spray missions were evaluated for about 8,000 gallons, however being late in the day and our inability to move non-skimming skimmers fast enough from the area, we cancelled the spray missions.

Oil slicks were observed in the morning but mostly sheen but some dispersible oil was located. Afternoon recon flights began locating dispersible oil near the source that was not evident during the morning. We theorize that oil that has been in the adverse weather environment for the previous few days is now becoming visible as the weather/sea state improves.

As the weather continues to moderate, skimming and ISB operations will be available tomorrow for a full day of operation. Weather conditions are excellent for aerial dispersant operations.

The Friday forecast calls for 5%-10% precipitation, winds of 4-7 knots with easterly and variable winds, wind waves of 1 foot, significant wave height of approximately 2 feet, with maximum wave heights around 3 feet. Ceilings are forecasted to be unlimited with visibility 15 nm.

The NOAA Surface Oil Forecast for July 9th shows extensive areas of heavy and medium oil (Attachment 2) that are or may adversely impact the shoreline, including sensitive wetlands.

Houma Unified Command continues to anticipate that the most viable means of response will be the use of dispersants to reduce the risk of shoreline impact. The heavy weather and significant sea state over the past week enhanced the natural dispersion of the oil and also made it very difficult for spotter aircraft to see surface oil. Aerial Dispersants believes that as the sea state moderates, surface oil may become more visible than it has been for the past week.

Prior to spray operations tomorrow morning, the recon/spotter aircraft will identify the high value targeted slicks and we will prepare a report of the location and dispersant volumes needed for application as soon as practicable.

Pursuant to a request this date from Unified Command, the following information is provided.

A-Estimated size of identified dispersible oil slick targets proposed in designated zones: See Attachment 1.
B-Explicit justification for why these targets can't be skimmed or addressed by other mechanical means: The weather forecast should be suitable for skimming, ISB and dispersant operations. We anticipate that skimming and ISB resources will not be sufficient to handle the oil that will be observed as the weather improves and will require to be supplemented with aerial dispersants.

- **Skimming units:** Recommencement of skimming operations
- **ISB Assets:** Recommencement of burn operations
- **A Whale:** Operating offshore for testing of system.

C-Today, offshore recovery assets, skimmers, etc. were in port due to adverse weather and it is anticipated that these vessels will recommence skimming operations sometime during tomorrows daylight hours. ISB operations did not take place today and they are anticipated to recommence burn operations tomorrow.

D-It is planned to conduct Tier 1 helicopter SMART over flights to observe dispersant operations tomorrow should they be conducted. SMART Team Tier 1 QA/QC checklists are not yet available from the July 6th mission.

E-M/V *International Peace* is currently in port. No SMART Tier 2 or Tier 3 monitoring will be conducted.

F-The A Whale is subject to the 2 NM no spray criteria.

G-Forecast sea state through Friday showing skimming and ISB limitations is provided as Attachment 5.

In accordance with the Directive, the Houma Unified Command respectfully requests an exemption to apply EC9500A. As aerial dispersant is the primary response tool for tomorrow, we have mobilized the reconnaissance and deployment resources and ***request an initial 10,000 gallons*** for early opportunistic targets. This will be coupled with further reconnaissance and target identification tomorrow morning. A subsequent request will be forwarded later in the day based on the full set of spotter reports.

Sincerely,

Houma Unified Command

Exemption approved subject to the above:

(b) (6)

Date: 7-9-10

James A. Watson
Rear Admiral, USCG
Federal On-Scene Coordinator (FOSC)

Attachment 1

Dispersant Zone Map for 9 July 2010 with Oil Targets from Spotter Operations on 8 July

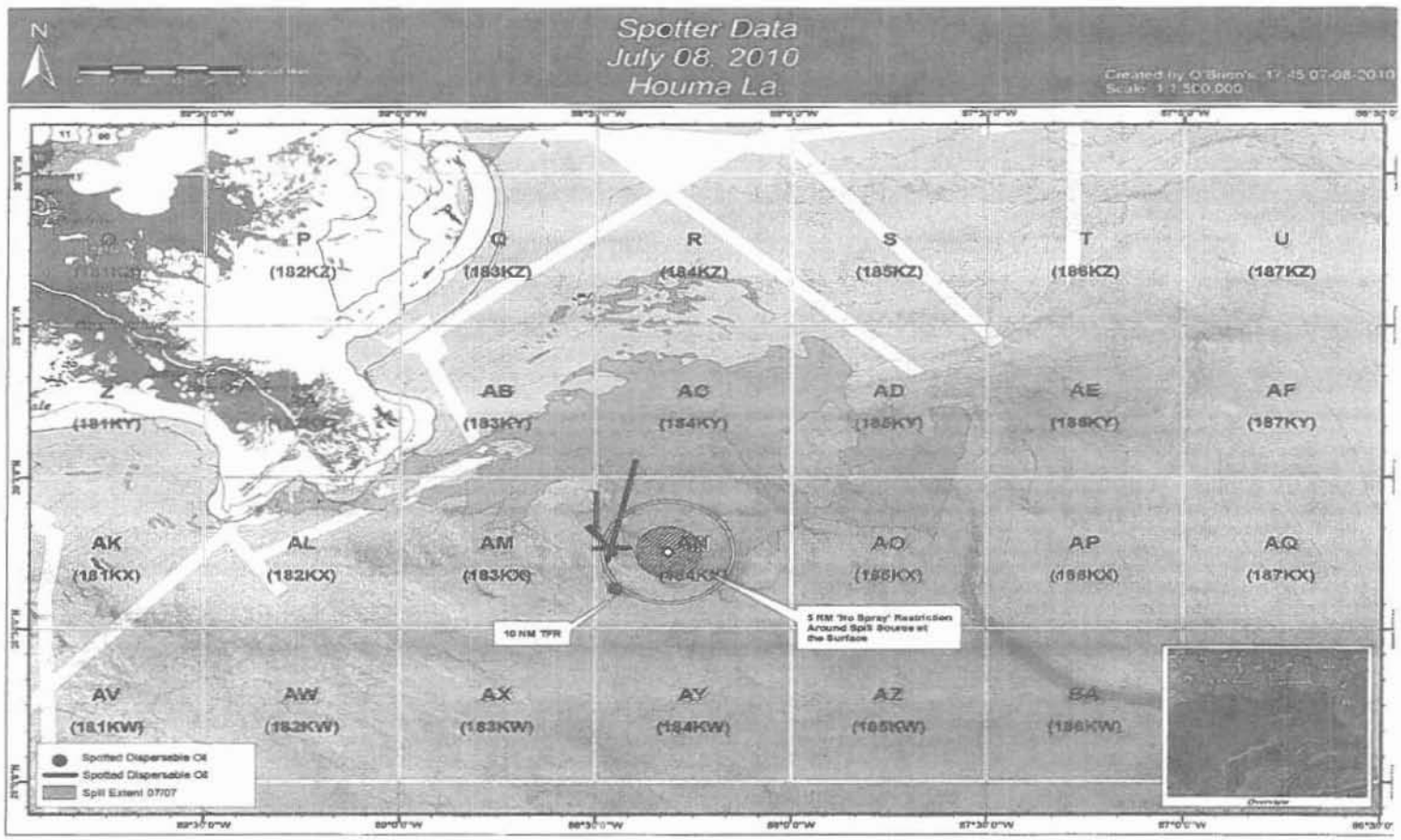


TABLE 1* Dispersible Oil Report July 8, 2010

Zone	# of slicks reported	Area in acres	Estimated percentage dispersible oil	Dispersant Needed** (1/20 DOR)
AC/AN	2	6560	35%	11,400
AN	1	3680	30%	6000
AM	1	85	25%	107
Dispersants were Sprayed Today- 0 - The requested amount for 7/9/10 will be based on tomorrow mornings reconnaissance An **initial request for 10,000 gals.** is being made due to the anticipation of finding dispersible oil requiring that amount of dispersants. Estimated Dispersant Needed 7/9/2010 based upon full morning spotter reports				**17,507**

***Note: Table 1 shows our intentions based upon our observations the day before these actions take place. Size and location of slicks will change. Activities within slick areas e.g., skimming operations, in-situ burning, etc., or weather conditions may require revisions to the actual operational plan implemented.**

****Note: Dispersant needed is based upon area in acres x % dispersible oil x 5 gallons per acre**

Attachment 2

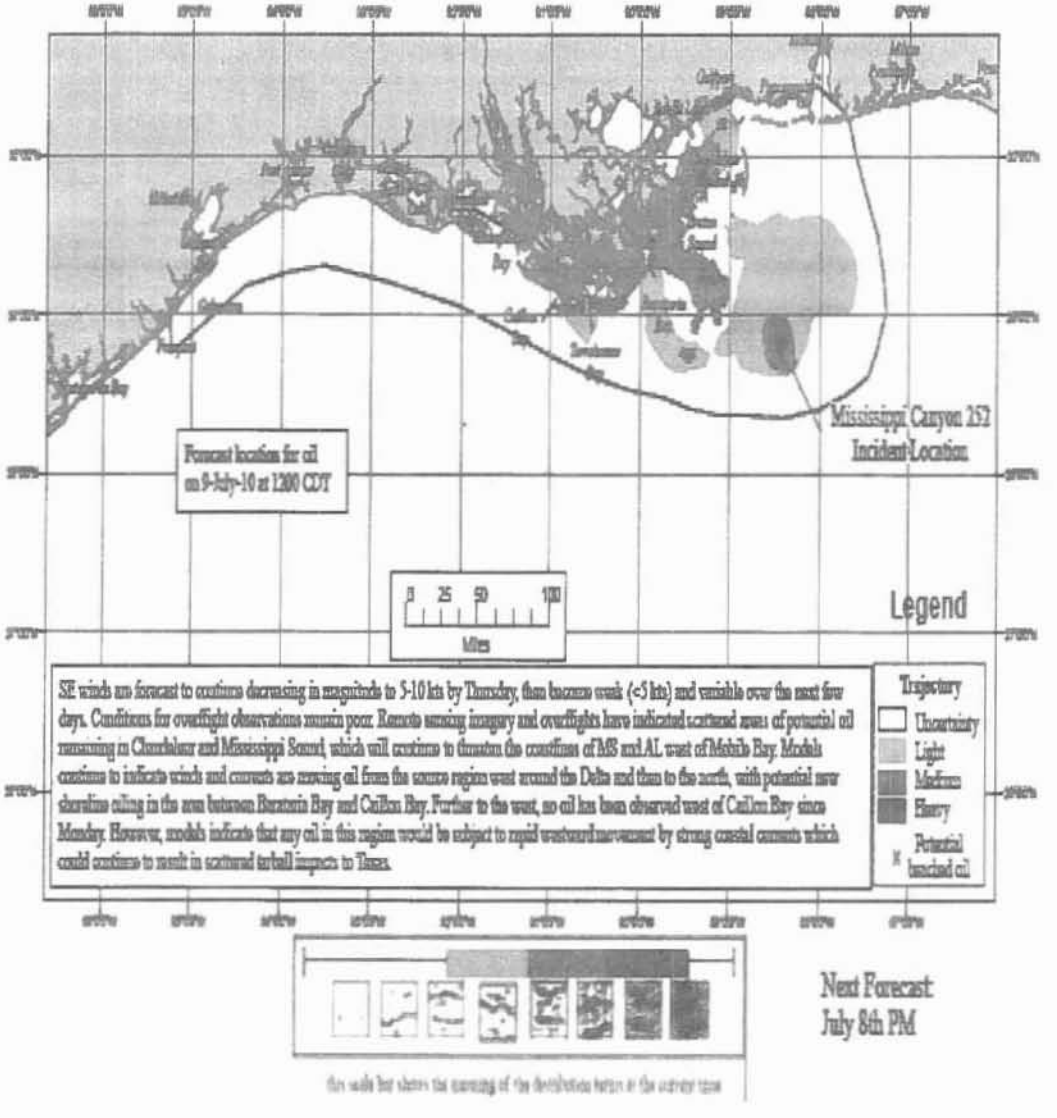
Nearshore Surface Oil Forecast Deepwater Horizon MC252

NOAA/NOS/OR&R | Nearshore

Estimate for: 1200 CDT, Friday, 7/09/10

Date Prepared: 2100 CDT, Wednesday, 7/07/10

This forecast is based on the NWS spot forecast from Wednesday, July 7 PM. Currents were obtained from several models (NOAA Gulf of Mexico, West Florida Shelf/USF, TGLO/TAMU, NAVO/NRL) and HFR measurements. The model was initialized from Wednesday satellite imagery analysis (NOAA/NESDIS) and overflights. The leading edge may contain tarballs that are not readily observable from the imagery (hence not included in the model initialization). Oil near bay inlets could be brought into that bay by local tidal currents.



SE winds are forecast to continue decreasing in magnitude to 5-10 kts by Thursday, then become weak (<5 kts) and variable over the next few days. Conditions for overflight observations remain poor. Remote sensing imagery and overflights have indicated scattered areas of potential oil remaining in Chandeleur and Mississippi Sound, which will continue to threaten the coastlines of MS and AL west of Mobile Bay. Models continue to indicate winds and currents are moving oil from the source region west around the Delta and then to the north, with potential new shoreline oiling in the area between Barataria Bay and Caillou Bay. Further to the west, no oil has been observed west of Caillou Bay since Monday. However, models indicate that any oil in this region would be subject to rapid westward movement by strong coastal currents which could continue to result in scattered tarball impacts to Texas.

Next Forecast:
July 8th PM

this scale bar shows the spreading of the trajectories within the uncertainty zone

Attachment 3

Vessel Status Board

EEPWATER HORIZON Date/Time July 8, 2010 07JUL BBLS Skimmed: 0
FFSHORE NON-SOURCE SKIMMING GROUP 1

		TOTAL	SKIMMING	OFFLOADING	Unscheduled Maintenance	Scheduled Maintenance	Enroute	Ordered
SKIMMERS		12	0		1	1	1	
TANK VESSELS		4	N/A				2	
'ESSELS OTHER		1	N/A					
WORKBOATS		6	N/A	N/A				

		ON SCENE WEATHER	COMMENTS: Skimming vessels are on standby/anchorage until weather conditions permit for safe skimming operations.
WIND		SE 10-15KT	
WAVE		4 - 6'	
SWELL			

Kind/Type	Skimmer Type	Skimming Vessel	Assignment	Status	Location	ETA	Notes:
CG VOSS	RV1/Weir	Orleans	GulfMark	Standby	IVO Baptiste Collette, MS River		Moored at anchorage area
CG VOSS		Charles M. Calais		Standby	IVO Baptiste Collette, MS River		Moored at anchorage area
CG VOSS	RV1/Weir	Odyssea Quest	NRC	Standby	IVO Baptiste Collette, MS River		Moored at anchorage area
CG VOSS	RV1/Weir	Odyssea Mariner	NRC	Standby	IVO Baptiste Collette, MS River		Moored at anchorage area
CG VOSS	RV1/Weir	Miss Megan	NRC	Standby	Moored Venice		
CG VOSS	RV1/Weir	Sir Lancelot	NRC	Standby	Head of Passes Anchorage, MS		Moored
CG VOSS	RV1/Weir	Lauren Lacoste	NRC	Standby	Enroute Port Fourchon		Moored
CG VOSS	RV1/Weir	Gulf Scout (Being Demobed	NRC	Enroute	Replacement vessel enroute	Coming Offline	Replacement: Calais Navigator
CG VOSS	RV1/Weir	C Aggressor	NRC	Standby	Moored Venice		
Supsalv ESSM	RV1/Weir	Pope Benedict XVI	NRC	Unscheduled Maint.	Moored Port Fourchon	ETA 06JUL10	Reconfiguration
CG VOSS	RV1/Weir	HOS Express	BP America	Scheduled Maint.	Enroute Port Fourchon		HOS Express replaced HOS North
CG VOSS	RV1/Weir	Gulf Influence	NRC	Standby	Head of Passes Anchorage, MS		
		Offshore Barges				Remaining Storage bbls	
TV2							
TV2		TV 2602/ TB Clinton Cenac	NRC	Standby	Moored West Delta Area	13000	
TV2		TV GCS 236/ TB Mary Gellatly	BP	Standby	Moored Venice	37000	
TV2		TV Connecticut/ Tug Joan Moran	BP	Standby	Moored West Delta Area	37000	Completing USCG Inspection

		Crew/Re-supply					
WB2		Transporter	Re-Supply	Standby	IVO Baptiste Collette, MS River		
WB2		Waterea	Shuttle	Supply Run	Moored Fourchon		
WB2		Miss Lauren	Shuttle	Supply Run	Moored Fourchon		
WB2							
WB2		Jambon Supplier	2602 Support	Standby	Moored Venice		
WB2		Reb Bordelon	CT Support	Scheduled Maint.	Moored Fourchon		Outfitting to support CT Barge
		Jason K McCall		Standby	Moored Fourchon		
Kind/Type		Command and Control	Assignment	Status	Location		
WB2		Bumble Bee	NRC	Command	Enroute Venice, LA		VHF radio OOC

DEEPWATER HORIZON **Date/Time** **7/8/10 8:51**
Offshore Skimming Group 2

Kind	Total	Skimming	Offloading	Unscheduled Maintenance	Scheduled Maintenance	Enroute	Ordered	Standby
OSRV	25	0	1	1	1	18	0	6
TANK VESSELS	5	N/A	1	0	0	0	0	4
VESSELS OTHER	2	N/A	N/A	0	0	2	0	0
WORKBOATS	18	N/A	N/A	0	0	4	0	14
TUGBOAT	8	N/A	N/A	0	0	0	0	8

	ON SCENE WEATHER	Comments:
WIND	14-16 kts ESE	
WAVE	6'	
SWELL	Unavailable	

	Other Vessels						Telephone
	Vessel	Assignment	Status	Location	ETA		
VSO	Seacor Lee	Command	Enroute	MC-252		Source Group Command Vessel	713-568-9635
VSO	Seacor Pride (offloading vessel)	Offload Support	Enroute	MC 252			713-395-7842

Kind/Type	Vessel	Assignment	Status	Location	ETA	Notes:	Telephone
OSRV/RV1	Louisiana Responder	MSRC	Scheduled Maint.	Ft. Jackson			
OSRV/RV1	Gulf Coast Responder	MSRC	Enroute	MC 252		WX Standby	
OSRV/RV1	Texas Responder	MSRC	Enroute	MC 252		WX Standby	
OSRV/RV1	Maine Responder	MSRC	Enroute	MC 252		WX Standby	
OSRV/RV1	Mississippi Responder	MSRC	Enroute	MC 252		WX Standby	
OSRV/RV1	Southern Responder	MSRC	Standby	Venice		WX Standby	
OSRV/RV1	Delaware Responder	MSRC	Enroute	MC 252		WX Standby	
OSRV/RV1	Virginia Responder	MSRC	Enroute	MC 252		WX Standby	
OSRV/RV1	CGA HOSS Barge (Crosby Sun)	TF HOSS	Offloading	Pilot Town		WX Standby	713-395-7472
OSRV/RV1	Seacor Vanguard (Current Buster 2 ea)		Standby	Venice		WX Standby	985-518-9842
OSRV/RV1	Seacor Vantage (Current Buster)	Buster	Enroute	Gulfport		Swapping out with John Coghill	985-745-4692
OSRV/RV1	Bryce Glen (w/CGA FRU) - Ampol	CGA	Enroute	Venice			
OSRV/RV1	International Trooper (w/CGA FRU) - Ampol	CGA	Enroute	Venice		WX Standby	001-88165-149-6485
OSRV/RV1	Kim B (w/CGA FRU) - Ampol	CGA	Enroute	Venice		WX Standby	
OSRV/RV1	Mr. Alex (w/CGA FRU)- Ampol	CGA	Enroute	Venice		WX Standby	
OSRV/RV1	Rene (Navy Marco)	Fed	Standby	Venice		U/W @ 1300 for USCG Inspection	504-208-4601
OSRV/RV1	Seacor Washington (Dutch arm)	Command	Enroute	Fourchon		OSG2 Command Vessel	504-620-5983
OSRV/RV1	HOS Mystique (Dutch arm)		Enroute	Fourchon		WX Standby	832-260-0755
OSRV/RV1	HOS Sweetwater (Dutch Arm)		Enroute	Fourchon		WX Standby	504-620-7502
OSRV/RV1	Candie Clipper (Ocean Buster)		Standby	Fourchon		WX Standby	
OSRV/RV1	JMC-300/RHEA (Gulp 2)		Standby	Anchor		WX Standby	
OSRV/RV1	Kylie Williams (Ocean Buster/Vane)		Enroute	Fourchon		WX Standby	337-504-0274
OSRV/RV1	Southern Cross (Ocean Buster)		Unscheduled Maint.	Fourchon		Ocean buster repair	985-360-0201
OSRV/RV1	Amy Chouest (Ocean Buster)		Enroute	Fourchon		WX Standby	
OSRV/RV1	A Whale (fixed weir)		Standby	MC-252		Initial test	011-870-7649-51421

	Offshore Barges				Remaining Storage bbls		
TV2	MSRC 402 Barge (Kimberly Colle)	TF Storage	Standby	Pilottown	40,300		
TV1	MSRC 452 Barge (Tara Crosby)	TF Storage	Standby	Fort Jackson	45000		
TV1	MSRC 570 Barge (Crosby Clipper)	TF Storage	Standby	Fort Jackson	57000		
TV1	K-Sea DBL-155 (Rebel)	TF Storage	Offloading	Pilottown	125000		646-303-9860
TV1	Energy 8001(Superior Service) Costner	TF Storage	Standby	Fourchon	80000		646-671-0008

	Boom Boats						
	Vessel	Assignment		Location	ETA		
WB2	Sea Fox	Source	Standby	Venice			251-979-3453
WB2	Betty G	Source	Enroute	MC 252			251-404-2691
WB2	Ms. Alissa	Source	Standby	Venice			662-288-3070
WB2	Ms. Addison	Source	Standby	Venice			985-677-1049
WB2	Julienne Marie	Source	Standby	Venice			985-709-7119
WB1	St. Ignatius Loyola	Source	Standby	Venice			850-596-4180
WB1	Hercules	Source	Enroute	MC 252			713-751-6022
WB1	Brutus	Source	Enroute	MC 252			713-751-6023
WB1	Mia Maloy	Source	Standby	Venice			409-939-6873
WB1	Mr Randolf	Source	Standby	MC 252			985-413-9450
WB1	Black Tip	Source	Standby	Venice		Crew change the U/W Noon	228-326-4552
WB1	Dog Fish	Source	Enroute	MC 252			321-961-9304

	Crew/Re-supply						
WB2	Mr. Leroy	Shuttle/Re-supply	Standby	Venice Based			
WB2	Fox	Ampol Re-supply	Standby	Venice Based			713-576-7779
WB2	Jean Perry	Shuttle/Re-supply	Standby	Venice Based			
WB2	Sea Hawk	Shuttle/Re-supply	Standby	Venice Based			
WB2	Chantise G	Shuttle/Re-supply	Standby	Venice Based			
WB2	Ben Charamie	Shuttle/Re-supply	Standby	Venice Based			

Kind/Type	Tugboats	Assignment	Status	Location	ETA	Notes:	
TB	Crosby Sun		Standby			Towing CGA-200	
TB	Kimberly Colle		Standby				
TB	Tara Crosby		Standby				
TB	Crosby Clipper		Standby				
TB	Rebel		Standby				
TB	Superior Service		Standby				
TB	Crosby Eagle		Standby				
TB	Susan Marie		Standby				

DEEPWATER HORIZON Date/Time 07/08/10 0800 HRS
OFFSHORE SKIMMING GROUP III

Kind	Total	Skimming	Offloading	Unscheduled Maintenance	Scheduled Maintenance	Enroute	Ordered	Standby
SKIMMERS	9	0	0	3	0	6	0	0
TANK VESSELS	2	N/A	0	0	0	0	0	2
VESSELS OTHER	1	N/A	N/A	0	0	1	0	0
WORKBOATS	3	N/A	N/A	0	0	0	0	3
TUGBOAT	3	N/A	N/A	0	0	0	0	3

	ON SCENE WEATHER
WIND	SSE 10 - 15 kts
WAVE	7 - 9 ft
SWELL	

Comments: M/V NRC Perserverance waiting ABS inspection. M/V NRC Admiral doing forepeak vent repaired, estimated completion 1030 hours. M/V Pauline T changing crane today.

	Other Vessels					
	Vessel	Assignment	Status	Location	ETA	
VSO	Queen Bee	Command	Enroute	Fourchon		Source Grp Comnd Vessel

Kind/Type	Vessel	Assignment	Status	Location	ETA	Notes:
RV1/Belt	NRC Admiral (Marco)	NRC	Unscheduled Maint.	Fourchon		Departing dock @ 1100 hrs
RV1/Weir-disc	NRC Energy (Crucial)	NRC	Enroute	Fourchon		Departing dock
RV1/Belt	NRC Guardian (Marco)	NRC	Enroute	Fourchon		Departing dock
RV1/Belt	NRC Perseverance (Marco)	NRC	Unscheduled Maint.	Fourchon		Waiting for ABS inspection
RV1/Disc	NRC Liberty (Crucial)	NRC	Enroute	Fourchon		Departing dock
RV1/Disc	Seahorse VI (Crucial)	NRC	Enroute	Fourchon		Departing dock
RV1/Weir	Lana Rose (Weir)	NRC	Enroute	Fourchon		Departing dock
RV1/Belt	Pauline T(Marco)	NRC	Unscheduled Maint.	Venice		Replacing Crane
RV1/Belt	Resolve Pioneer(Marco)	NRC	Enroute	Fourchon		Departing dock

	Offshore Barges				Remaining Storage bbls	
TV2	NRC Defender	TF Storage	Standby	Venice		Preparing to depart
TV2	NRC Valiant	TF Storage	Standby	Venice		Preparing to depart

	Boom Boats					
	Vessel	Assignment		Location	ETA	

	Crew/Re-supply					
WB2	Eveready	Re-supply	Standby	Venice		Preparing to depart
WB2	Miss Wynter	Re-supply	Standby	Venice		Preparing to depart
WB2	Lady Nina	Re-supply	Standby	Venice		Preparing to depart

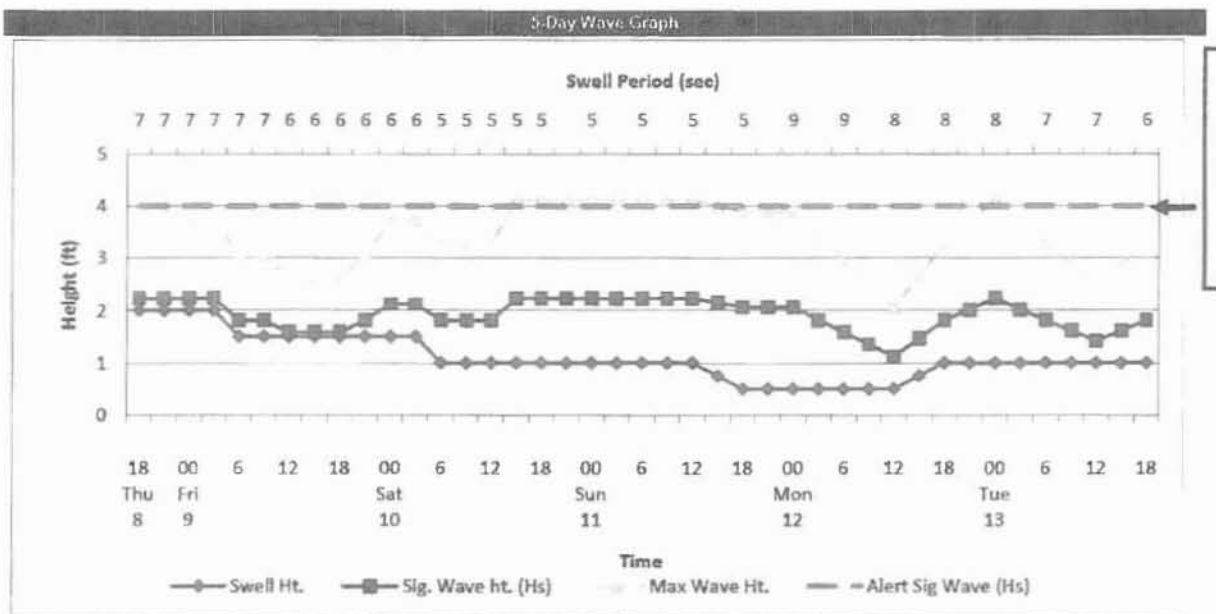
Kind/Type	Tugboats	Assignment	Status	Location	ETA	Notes:
TB	Helena Maria	NRC	Standby	Venice		Preparing to depart
TB	Tesla I	NRC	Standby	Venice		Preparing to depart
TB	Angelica E	NRC	Standby	Venice		Preparing to depart

Attachment 4

QA / QC Reports

No QA/QC Checklists for the July 6th spray mission are not yet available.

Attachment 5



Skimming 4 feet to start operational pullback. ISB stop operations at 2 feet

Maximum Wave Height is defined as the average of the highest .1% of all waves

Aerial Dispersant Group – Houma Status Report

July 26, 2010

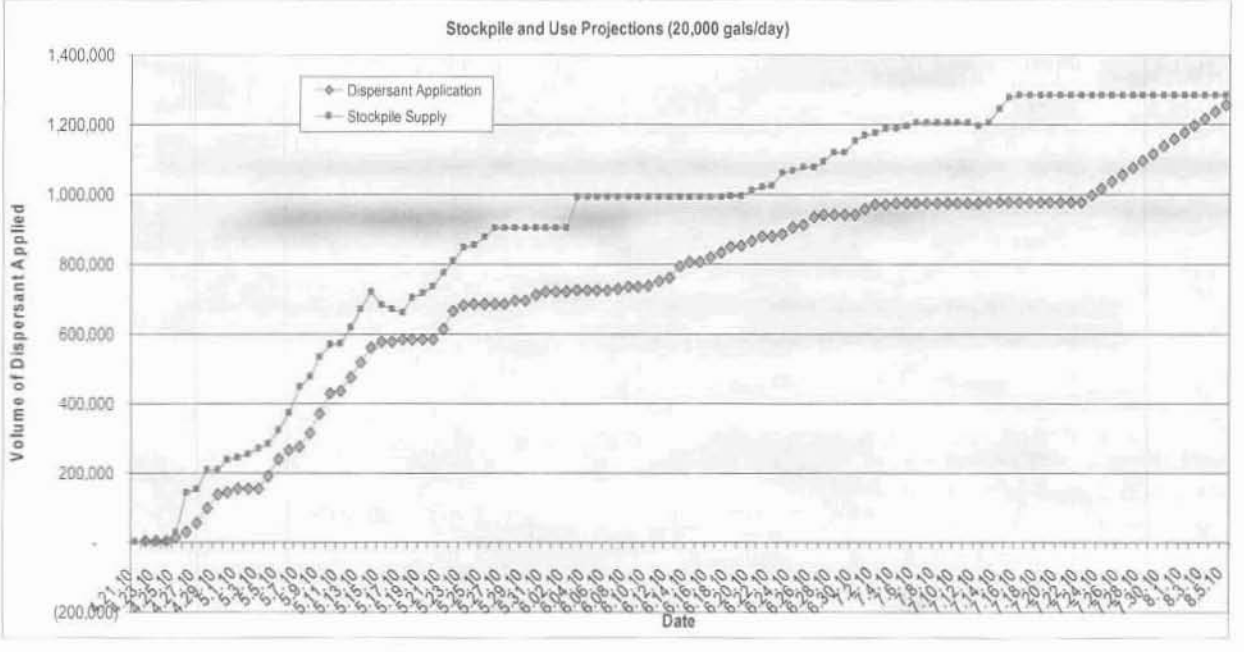
This report presents a snapshot of the aerial dispersant applications conducted on this date and summarizes the associated support activities.

Dispersant Aerial Spray Summary:

1. FOSC approved Application Volume for July 26, 2010 (gallons):	No request made
2. Total Amount of Dispersant Applied on July 26, 2010 (gallons):	0
3. Total Sorties on July 26, 2010:	0
4. Total Amount of Dispersant Applied to date (gallons):	976,237
5. Total Spray Sorties to date: Total Spotter/Reconnaissance Sorties to date:	406 1,025
6. Total Area Covered by Dispersant Applications to date (mi^2):	305
7. Total Dispersant Stockpiles on the ground as of 7.26.2010 – 1200 PM (gallons):	303,475
8. Dispersant Stockpile Expected Arrival as of 7.26.10 – 1200 PM (gallons)*:	0
9. Estimated Total Dispersant as of 7.27.2010 - 1200 PM (gallons):	303,475
10. Projected Days Operational at maximum rate of 20,000 gal/day (days):	15

* Future estimates for the delivery of EC9500A are based on production schedules provided by Procurement on 7.18.10 via email and discussions with Nalco.

Dispersant Stockpile Supply and Use Projections



Asset Summary On Scene	
Spray Aircraft:	
King Air – 2 – Stennis (can be used for spotting)	2
BT-67 – Houma (ASI)	1
DC-3 – Houma (ASI)	1
TOTAL:	4
Spotter Aircraft:	
Aztec – Houma (ASI)	1
Turbo COMDR – Houma (ASI)	1
TOTAL:	2
TOTAL AIRCRAFT:	6

Aerial Dispersant Activity Update for July 26, 2010:

- No flights are planned for tomorrow or in the future.
- No additional reports will be delivered after this date as it is not expected that the Aerial Dispersant Group – Houma will be activated again for this response. In the event that the Aerial Dispersant Group is activated, a report will be generated and distributed as previously established.
- A final report will be published upon demobilization of the Houma Aerial Dispersant Group.

SMART Tier 1 Update for July 23, 2010:

- No SMART Tier I observations were conducted today as there were no dispersant spray missions conducted.

Aerial Dispersant Group Operations Plan

There is no Aerial Dispersant Group Operations Plan provided in this report as there are no flights scheduled for tomorrow or anticipated in the future for the Aerial Dispersants Group - Houma.

Dispersant Spray Assets

Aircraft Information						
Type	**Owner/ Operator**	**Tail #**	**Payload (gal)**	**Airport**	**Purpose & Altitude**	**Comments**
Spotters						
Aztec (PA 23)	ASI	N141183		Houma	Backup Spotter	
Turbo COMDR	ASI	N690GG		Houma	Spotter	
Sprayers						
King Air	MSRC (Dynamic)	N7198Y	240	Stennis	Spray: 75'	Available for both Spray and Spotter duties
King Air	MSRC (Dynamic)	N7199D	240	Stennis	Spray: 75'	Available for both Spray and Spotter duties
BT-67	ASI	N932H	1,800	Houma	Spray: 75'	
DC-3	ASI	N64766	1,000	Houma	Spray: 75'	
Operational Spray Volume (1 load per plane) (gal)			3,280			
Total Operational Spray Maximum (gal) (4 sorties/ plane / day)			13,120			

Dispersant Application Totals

No spraying has been done, or is expected to be done in the coming days. The table showing the daily dispersant applications remains the same as the one reported in yesterday's daily status report. Please refer to the Aerial Dispersant Group – Houma Status Report for 7.22.10.pdf for the complete list. This report and previous ones can be obtained from the HSIN Deepwater Horizon – MC252 website under the ICP Houma - Aerial Dispersants Group.

(b) (6) LT

From: (b) (6) LT
Sent: Sunday, May 09, 2010 11:38 AM
To: HQS-PF-fldr-DCO-Incident Support Team
Subject: FW: RFI for Aerial Dispersant Flights from NOC
Attachments: Dispersants Operations Summary 5.8.10 all files.zip

Importance: High

Categories: Complete, Purple Category

-----Original Message-----
From: (b) (6) LCDR
Sent: Sunday, May 09, 2010 11:25 AM
To: (b) (6) LT
Subject: RE: RFI for Aerial Dispersant Flights from NOC
Importance: High

-----Original Message-----
From: (b) (6) LT
Sent: Sunday, May 09, 2010 10:24 AM
To: (b) (6) LCDR
Subject: FW: RFI for Aerial Dispersant Flights from NOC

(b) (6),

See below. About to put into HSIN and send your way.

V/R
LT (b) (6)

-----Original Message-----
From: National Command Center
Sent: Sunday, May 09, 2010 11:13 AM
To: HQS-PF-fldr-DCO-Incident Support Team
Cc: National Command Center
Subject: RFI for Aerial Dispersant Flights from NOC

DC NIC,

NOC is requesting more granularity for the dispersant flights. Specifically, they are requesting the agencies that are conducting the aerial dispersants (are any CG aircraft deploying dispersants?). Thanks.

V/r,
NCC IMT

Resource Name	Resource Id	Resource Kind	Resource Subkind
D9 VOSS Trailer and Gear 48-002		Equipment	Pump
HC144A - 2301	2301	Aircraft (Fixed Wing)	SAR/Law Enforcement
HC144A - 2305	2305	Aircraft (Fixed Wing)	SAR/Law Enforcement
HC144A - 2305	2305	Aircraft (Fixed Wing)	SAR/Law Enforcement
HC144A - 2305	2305	Aircraft (Fixed Wing)	SAR/Law Enforcement
HC144A - 2308	2308	Aircraft (Fixed Wing)	SAR/Law Enforcement
HC144A - 2308	2308	Aircraft (Fixed Wing)	SAR/Law Enforcement
HC144A - 2308	2308	Aircraft (Fixed Wing)	SAR/Law Enforcement
MH60J - 6010	6010	Aircraft (Helicopter)	SAR/Law Enforcement
MH65C - 6508	6508	Aircraft (Helicopter)	SAR/Law Enforcement
MH65C - 6531	6531	Aircraft (Helicopter)	SAR/Law Enforcement
MH65C - 6540	6540	Aircraft (Helicopter)	SAR/Law Enforcement
MH65C - 6540	6540	Aircraft (Helicopter)	SAR/Law Enforcement
MH65C - 6556	6556		
MH65C - 6576	6576	Aircraft (Helicopter)	SAR/Law Enforcement
MH65C - 6576	6576	Aircraft (Helicopter)	SAR/Law Enforcement
MH65C - 6605	6605	Aircraft (Helicopter)	SAR/Law Enforcement
MH65C - 6605	6605	Aircraft (Helicopter)	SAR/Law Enforcement
MH65C - 6605	6605	Aircraft (Helicopter)	SAR/Law Enforcement
MH65C - 6605	6605	Aircraft (Helicopter)	SAR/Law Enforcement
MH65C - 6605	6605	Aircraft (Helicopter)	SAR/Law Enforcement
WPB - 87332	87332	Vessels	SAR/Law Enforcement Vessel

Resource Type	Status	ETA	Assignment
	Available		Operations
1	Assigned		Unassigned
	Assigned		Unassigned
1	Assigned		Operations - Air Operations
	Available		Unassigned
	Assigned		Unassigned
1	Assigned		Operations - Air Operations
	Available		Unassigned
2	Assigned		Operations - Air Operations
	Assigned		Operations
3	Assigned		Operations - Air Operations
	Assigned		Operations
3	Available		Unassigned
	Assigned		Operations
	Assigned		Operations
	Assigned		Operations - Air Operations
	Assigned		Operations - Air Operations
	Available		Unassigned
	Available		Unassigned
	Assigned		Unassigned
	Available		Operations - Air Operations
	Ordered	211402ZAPR10	Operations

Agency	Actual Location	Position Title	Comments
			Reported to Mobile
USCG - CG AVTRACEN MOBILE			
USCG - CG AVTRACEN MOBILE			
USCG - CG AVTRACEN MOBILE			
USCG - CG AVTRACEN MOBILE			
USCG - CG AVTRACEN MOBILE			
USCG - CG AVTRACEN MOBILE			
USCG - CG AVTRACEN MOBILE			
USCG - CG AVTRACEN MOBILE			
USCG - CG AIRSTA NEW ORLEANS			
USCG - CG AVTRACEN MOBILE			
USCG - CG AIRSTA NEW ORLEANS			
USCG - CG AIRSTA NEW ORLEANS			
USCG - CG AIRSTA NEW ORLEANS			
USCG - CG AIRSTA NEW ORLEANS			
USCG - CG AIRSTA NEW ORLEANS			
USCG - CG AIRSTA NEW ORLEANS			
USCG - CG AIRSTA NEW ORLEANS			
USCG - CG AIRSTA NEW ORLEANS			
USCG - CG AIRSTA NEW ORLEANS			
USCG - CG AIRSTA NEW ORLEANS			
USCG - CGC RAZORBILL			

Secondary Kind(s)	Check-In Date/Time	Check-In Location
Equipment		
Aircraft (Fixed Wing)		
Aircraft (Fixed Wing)		
Aircraft (Fixed Wing)		
Aircraft (Fixed Wing); Personnel; Personnel Crews-Teams		
Aircraft (Fixed Wing)		
Aircraft (Helicopter)		
Aircraft (Helicopter)		
Aircraft (Helicopter)		
Aircraft (Helicopter)		
Aircraft (Helicopter)		
Aircraft (Helicopter)		
Aircraft (Helicopter)		
Aircraft (Helicopter)		

Leader Name	Contact Phone Number	Total Num Personnel	Location	ICS Position Qualifications

Field Verified	Channel/Frequency	Manifest	Equipment Weight	Order/Request Num	Home Base
No		No			
No		No			
No		No			
No		No			
No		No			
No		No			
No		No			
No		No			
No		No			
No		No			
No		No			
No		No			
No		No			
No		No			
No		No			
No		No			
No		No			
No		No			
No		No			
No		No			
No		No			
No		No			

Departure Point	Method of Travel	Other Special Qualifications	Entered By
			[redacted]

AIRCRAFT TRACKING FILE - 23 JUL 2010 / 0109 Z

ISO DH - Engaged Airframes Only (Enroute or in Theater within 30 Days)

	OPERATIONS					CAPABILITY		
	PARENT UNIT	TYPE	LOCATION	NUMBER	DISTRICT	STATUS	NOTES	ETR
1	ATLANTIC CITY	H65	MOB	6559	1	FMC		
2	CAPECOD	H60	MOB	6025	1	FMC		
3	BORINQUEN	H65	MOB	6579	7	FMC		
4	CLEARWATER	C130	CLR	15xx/17xx	7	FMC		
5	CLEARWATER	H60	CLR	60xx	7	FMC		
6	CLEARWATER (OPB)	H60	CLR	60xx	7	FMC		
7	HITRON	H65	NOLA	6547	7	NMCS	Right hand center fuel cell replacement	27 JUL 2010 / 2359 Z
8	HITRON	H65	NOLA	6554	7	FMC		
9	HITRON	H65	NOLA	6594	7	FMC		
10	MIAMI	H65	MOB	6608	7	PMC	CO pilots audio control panel inop	22 JUL 2010 / 2200 Z
11	MIAMI	HU25	MIA	21xx	7	FMC		
12	ATC MOBILE	C144	MOB	23xx	8	FMC		
13	ATC MOBILE	C144	MOB	23xx	8	FMC		
14	ATC MOBILE	H60	MOB	60xx	8	FMC		
15	ATC MOBILE	H65	MOB	65xx	8	FMC		
16	ATC MOBILE	H65	MOB	65xx	8	FMC		
17	NOLA	H65	NOLA	65xx	8	FMC		
18	NOLA (CTU)	H65	NOLA	6556	8	FMC		
19	DETROIT	H65	MOB	6524	9	FMC		
20	TRAVERSE CITY	H65	MOB	6529	9	FMC	100-hr Tail shaft inspection	21 JUL 2010 / 2000 Z
21	LOS ANGELES	H65	NOLA	6572	11	FMC		
22	NORTH BEND	H65	MOB	6514	13	NMCS	Change over contactor	26 JUL 2010 / 2330 Z

NOTES:

1 All 15xx/17xx, 21xx, 23xx, 60xx, 65XX aircraft come from the Air Station pool, specific tail numbers are not assigned to Deepwater Horizon

2 If shipboard deployed or unit unable to fully support Deepwater Horizon from their aircraft pool, NMC/PMC will be reported against a specific tail number

Supporting from home OPFAC

Legend:	
FMC	Fully Mission Capable
PMC	Partial Mission Capability
NMCM	No Mission Capability (Maintenance Issue)
NMCS	No Mission Capability (Supply Issue)
NMCD	No Mission Capability (Depot Maintenance)

TO Time	Aircraft	Tail #	Squawk	Base/Operator
USCBP				
0600	P3	Omaha 99		USCBP Jacksonville, FL
1200	P3	Omaha 99		USCBP Corpus Christi, TX
USCG				
BP/PHI				
0600	S-76	759P		Houma
0630	King Air	727B		Houma
0630	S-76	725P		Houma
0630	King Air	655BA		Houma
0630	S-76	790P		Venice
0700	S-76	519AL		HOUMA
0700	S-76			Houma
0700	206L	32041		Shoreline-Cocodrie-from Houma
0700	EC-135	335BG		Shoreline-Grand Isle-from exxon Mobil
0700	EC-135	935AL		Houma
0700	EC-135	4180F		HOUMA
0700	206L	203PH		
0800	EC-135	323PH		HOUMA
0800	S-76	522AL		Houma
0800	EC-135	326PH		SCAT Survey
0900	206L-3	8587X		Shoreline-Hopedale-TOCA Gas Plant
0930	S-76	522AL		HOUMA
1300	S-76	794P		Houma
Dispersants				
0530	BE90	37H	SPOTTER	Houma
0600	BE90	39Q	SPOTTER	Houma
0620	C130	N117TG	SPRAY	STENNIS
0625	C130	N403LC	SPRAY	STENNIS
1125	Aero Cmdr	N547GA	SPOTTER	Houma
0720	BT67	N932H	SPRAY	Houma
0724	DC3	N64766	SPRAY	Houma
0815	BE90	98Y	SPOTTER	Houma
0830	C130	106	SPRAY	STENNIS
0845	C130	108	SPRAY	STENNIS
0955	BE90	41J	SPOTTER	Houma
1000	C130	N117TG	SPRAY	STENNIS
1005	C130	N403LC	SPRAY	STENNIS
1125	Aero Cmdr	N547GA	SPOTTER	Houma
1100	BT67	N932H	SPRAY	Houma
1105	DC3	N64766	SPRAY	Houma
1150	BE90	89N	SPOTTER	Houma
1215	C130	106	SPRAY	STENNIS
1218	C130	108	SPRAY	STENNIS

1207	BE90	79W	SPOTTER	Houma
1237	AT802	02K	SPRAY	Houma
1355	BE90	N7198Y	SPOTTER	Houma
1400	C130	N117TG	SPRAY	STENNIS
1400	C130	N403LC	SPRAY	STENNIS
1510	Aero Cmdr	N547GA	SPOTTER	Houma
1500	BT67	N932H	SPRAY	Houma
1505	DC3	N64766	SPRAY	Houma
1655	BE90	80Y	SPOTTER	Houma
1700	C130	N117TG	SPRAY	STENNIS
1700	C130	N403LC	SPRAY	STENNIS
1745	BE90	89N	SPOTTER	Houma
1805	C130	106	SPRAY	STENNIS
1807	C130	108	SPRAY	STENNIS
F&W				
Transport Canada				
0600	Dash 8	950		Houma

Mission	Phone Contact	T/O	Land
[redacted]	[redacted]		
TFR Aerial C2	[redacted]		
TFR Aerial C2			
Aerial Teir 1- USCG	[redacted]		
Survey/Recon			
SLICK RECON			
Insitu Observation			
SMART-USCG			
SHORELINE-BOOTHVILE			
NRDA ECONOMISTS	[redacted]		
Whale Survey			
RAT TEAM			
HUM-ICY COAST	[redacted]		
SCAT SURVEY			
SCAT- Survey			
SCAT SURVEY			
USCG-PHOTO OPS			
[redacted]	[redacted]	[redacted]	[redacted]

Recon/Mapping			