

Appendix U: Example of Available Environmental Monitoring Data

**Deepwater Horizon (MC252) Incident Response
Sampling / Monitoring Program Information**

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Lead Group	Sampling Program	Program Type	Purpose	Analytical Request Form (ARF#)	Matrix	Organics																					
						VOCs by TO15 ¹	VOC 8260 ¹	TCLP VOC	VOA +20 tics	VOC/BTEX (GS O-5506-06)	BTEX	TCLP Benzene	SVOC 8270	TCLP SVOC	PAHs	PAH 8270 SIM [a=43 PAH]	SVOC/PAHs (GS O-3116-87)	SVOC/PAHs (GS O-5506-06)	Alkane 16-PAHs	Alkylated PAHs	UV Extraction	Fingerprinting	TCEQ1006	ASTMD2887	ASTMD5134	ASTMD5739	ASTMD2622
BP		Air Monitoring	Industrial hygiene.	ARF	Air	X																					
BP		Air Sampling	Establish a baseline of pre-impact conditions.	ARF	Air								X												X	X	
BP		Sediment Sampling		ARF	SE								X												X	X	
BP	RAT	Water Sampling	Surface Water Sampling	ARF 01	SW					X	X														X		
BP	WS	Multi-Media Sampling	Oil/Debris/Water (TCLP)	ARF 02						X																	
BP	RAT	Oil Sampling	Assess anomalous results identified by other parties. OPS determines whether skimming operations are warranted. Oil (weathered/source), Floating oil sheen	ARF 03	Oil								X											X			
BP		Multi-Media Sampling	Swabs of Multimedia (Seafood)	ARF 04	FH																						
BP		Oil Sampling	Weathered Oil	ARF 04-1	Oil												X	X	X	X							
BP		Water/Oil Sampling	Water/Oil	ARF 05	SW/Oil	X				X			X								X	X	X	X	X	X	
BP	SOS	Oil Sampling	Submerged Oil Sample in Timbalier	ARF 05-1	Oil								X				X				X				X		
BP	DDSP	Air Sampling	Coastline Community	ARF 07	Air	X	X																				
BP	FRAT	Oil/Tarball Sampling		ARF 08	Tarball								X				X				X				X		
BP	RAT	Oil Sampling	Floating Oil Sheen	ARF 08-1	Oil																				X		
BP	DEEP	Multi-Media Sampling	Aquatic Tox Biodeg. Studies	ARF 09	SW/SE																						
BP	Weathered Oil	Oil Sampling	Weathered Oil (EPA split samples)	ARF 9-1	Oil		X						X				X										
BP	Study	Oil Study	Weathered Oil Treatment Study	ARF 10																							
BP	PS	Water Sampling	Production Platform Water Intake	ARF 10-1	SW																			X	X		
BP	SMART	Water Monitoring	Oil Dispersant Impacts	ARF 11													X	X	X								
BP	DEEP	Water Sampling	SW and Oil - Dispersant Studies	ARF 12	SW								X			X				X				X			
BP	Study	Oil Study	Oil- Treatability Study	ARF 13																							
BP	Study	Oil Study	Oil- Treatability Study	ARF 14																							
BP	SOS	Sentinel Snare Sampling	Determine submerged oil in nearshore areas using sentinel snares. If oil is present, determine if it is MC252 oil.	ARF 15	Oil								X			X			X					X	X		
BP	Coastal Surface Water	Water Sampling	Surface Waters (coastal)	ARF 16	SW		X						X			X									X		
BP	Vessel IH	Air Sampling	Industrial hygiene - Offshore Vessels (near source)	ARF 17	Air	X																					

Deepwater Chemical Analysis														Physical Characteristics					
Sampling / Analysis		Chemical Analysis												Inorganic		Organic			
Lead Group	Sampling Program	Program Type		Pest/PCBs 8085/8082		DOC		TOC 415.1		NIOSH 1403 (Alcohols)		NIOSH 5523 (Glycols)		NRDA		Inorganic			
BP		Air Monitoring		X															
BP		Air Sampling																	
BP		Sediment Sampling																	
BP	RAT	Water Sampling																	
BP	WS	Multi-Media Sampling								X									X
BP	RAT	Oil Sampling															X	X	X
BP		Multi-Media Sampling																	
BP		Oil Sampling																	
BP		Water/Oil Sampling																	
BP	SOS	Oil Sampling												X	X				
BP	DDSP	Air Sampling	X															X	
BP	FRAT	Oil/Tarball Sampling																	
BP	RAT	Oil Sampling																	
BP	DEEP	Multi-Media Sampling																	
BP	Weathered Oil	Oil Sampling				X													
BP	Study	Oil Study																	
BP	PS	Water Sampling																	
BP	SMART	Water Monitoring														X	X	X	X
BP	DEEP	Water Sampling												X					
BP	Study	Oil Study																	
BP	Study	Oil Study																	
BP	SOS	Sentinel Snare Sampling																	
BP	Coastal Surface Water	Water Sampling						X			X								
BP	Vessel IH	Air Sampling																	

		Deepwater Horizon Sampling / Monitoring		Monitoring Parameter / Test												Timing												
Lead Group	Sampling Program	Program Type		Diagnostic (Cause of Death)	Fluorometry	CTD	DO Probe	LISST	O2	H2S	PM 2.5	PM10	VOC	SO2	TNMOC	Benthic Invertebrates	Cytochrome P450 1A	Algea	Bacteria	Toxicity	Acute Tox.	Chronic Tox	Bioaccumulation	Sediment Tox	Completed? Y/N	Frequency/Duration	Analytical Turn Around Time	
BP		Air Monitoring							X						X												ASAP	
BP		Air Sampling																									ASAP	
BP		Sediment Sampling																										
BP	RAT	Water Sampling																									ASAP	
BP	WS	Multi-Media Sampling																										
BP	RAT	Oil Sampling																							Daily	ASAP		
BP		Multi-Media Sampling																										
BP		Oil Sampling																										
BP		Water/Oil Sampling																										
BP	SOS	Oil Sampling																										
BP	DDSP	Air Sampling							X																		2 day	
BP	FRAT	Oil/Tarball Sampling																										
BP	RAT	Oil Sampling																										
BP	DEEP	Multi-Media Sampling																	X	X	X	X	X	X		ASAP		
BP	Weathered Oil	Oil Sampling																										
BP	Study	Oil Study																										
BP	PS	Water Sampling																									ASAP	
BP	SMART	Water Monitoring																										
BP	DEEP	Water Sampling																									ASAP	
BP	Study	Oil Study																										
BP	Study	Oil Study																										
BP	SOS	Sentinel Snare Sampling																							Daily	ASAP		
BP	Coastal Surface Water	Water Sampling																										
BP	Vessel IH	Air Sampling																									ASAP	

Deepwater Horizon (MC252) Incident Response
Sampling / Monitoring Program Information

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Lead Group	Sampling Program	Program Type	Purpose	Analytical Request Form (ARF#)	Matrix	VOCs by TO15 ¹	VOC 8260 ¹	TCLP VOC	VOA +20 tics	VOC/BTEX (GS O-5506-06)	BTEX	TCLP Benzene	SVOC 8270	TCLP SVOC	PAHs	Organics										
																PAH 8270 SIM [a=43 PAH]	SVOC/PAHs (GS O-3116-87)	SVOC/PAHs (GS O-5506-06)	TCEQ1006	ASTMD2887	ASTMD5134	ASTMD5739	ASTMD2622	TPH	TPH/SHC	TPH (DRO, GRO, ORO) 8015
BP	FRAT	Water Sampling	Surface Water at Depth	ARF 18-replaced by ARF 24	SW										X								X			
BP	SR	Oil Sampling	Samples of ACTUAL Source Oil	ARF 19	SR										X											
BP	SR	Oil Sampling	Samples of ACTUAL Source Oil	ARF 20																						
BP	SR	Water Sampling	Platform Potable Water Treatment System	ARF 21	SW																			X		
BP	DDSP	Water/Oil Sampling	Brooks McCall/Ocean Veritas - effectiveness of deep-sea dispersant injections	ARF 22R4	SW/Oil	X X					X					X X										
BP	Plume Monitoring	Water Sampling	Surface/Subsurface Dispersed Plume Monitoring	ARF 23	SW			X							X									X		
BP	LOOP	Water Sampling	To determine if there is TPH in intake water used for ship ballast.	ARF 24	SW										X									X		
BP	TKMS	Mud Samping	Top kill mud sampling for disposal	ARF 25	ST						X															
BP	SR	Water/Oil Sampling	Characterize oil and water samples for archiving and shipping	ARF 26	SW/Oil	X X						X X				X								X X		
BP	ERS	Water Sampling	surfacewater, dispersant	ARF 27, R2	SW										X				X X							
BP	WS	Oil Sampling	Big gulp oil samples	ARF 28	Oil																					
BP	SR	Oil Sampling	Oil collection for recovery potential	ARF 29	Oil										X											
BP	SR	Oil Sampling	Weathered crude emulsion breaker testing	ARF 31	Oil																					
BP	SR	Oil Sampling	oil samples following burn events	ARF 32	Oil										X									X X		
BP	SENTINEL	Solids Sampling	Sentinel Snare Sampling (solids)	ARF 33, Rev1	Solids							X														
BP	DEEP	Water/Oil Sampling	SW and Oil- Dispersant Impacts	ARF 34	SW/Oil			X			X													X		
BP	TKMS	Mud Samping	Top kill mud sampling for disposal	ARF 35	TKMD						X															
BP	DEEP	Water Sampling	SW and Dispersant	ARF 36	SW							X				X			X					X		
BP	SR	Tissue/Water Sampling	Sampling dead fish and sw near fish kill	ARF 37	SW/Tissue		X X					X				X			X					X		
BP	SR	Sediment Sampling	Residue on pool filter	ARF 38	SE							X				X			X					X X		
BP	CBG	Oil Sampling	Analyzing weathered oil to determine ignitability for the purpose of conducting in-situ burns	ARF 39	Oil/WO																					
BP	MarshSorb	Sorbant Sampling	Organic sorbents will be applied to oil salt marsh pre and post application	ARF 40	BO							X				X X			X							
BP	DISP	Water Sampling	Collect surface water samples along the delta and analyze for dispersants	ARF 41	SW							X														
BP	SCAT	Sand Sampling	Grand Isle Sand Beach Cleaning and Miswaco beach cleaning confirmation	ARF 42	Q/S							X												X X		
BP	SR	Oil Sampling	Collect pre-burn oil samples from areas that are proposed to be burned, determine the effectiveness of in situ burning	ARF 43 Rev1	S							X											X X			

Deepwater Horizon Sampling / Monitoring			Monitoring Parameter / Test															Timing							
Lead Group	Sampling Program	Program Type	Diagnostic (Cause of Death)		Monitoring Parameter / Test																				
			Fluorometry	CTD	DO Probe	LISST	O2	H2S	PM 2.5	PM10	VOC	SO2	TNMOC	Benthic Invertebrates	Cytochrome P450 1A	Algea	Bacteria	Toxicity	Acute Tox.	Chronic Tox	Bioaccumulation	Sediment Tox	Completed? Y/N	Frequency/Duration	Analytical Turn Around Time
BP	FRAT	Water Sampling																							
BP	SR	Oil Sampling																							
BP	SR	Oil Sampling																							
BP	SR	Water Sampling																						ASAP	
BP	DDSP	Water/Oil Sampling																							
BP	Plume Monitoring	Water Sampling																	X					ASAP	
BP	LOOP	Water Sampling																							
BP	TKMS	Mud Samping																							
BP	SR	Water/Oil Sampling																							
BP	ERS	Water Sampling																							
BP	WS	Oil Sampling																							
BP	SR	Oil Sampling																							
BP	SR	Oil Sampling																							
BP	SR	Oil Sampling																							
BP	SENTINEL	Solids Sampling																							
BP	DEEP	Water/Oil Sampling																							
BP	TKMS	Mud Samping																							
BP	DEEP	Water Sampling																							
BP	SR	Tissue/Water Sampling																							
BP	SR	Sediment Sampling																X							
BP	CBG	Oil Sampling																							
BP	MarshSorb	Sorbant Sampling																							
BP	DISP	Water Sampling																							
BP	SCAT	Sand Sampling																							
BP	SR	Oil Sampling																							

Deepwater Horizon (MC252) Incident Response <i>Sampling / Monitoring Program Information</i>							Chemical Analysis												Organics						Inorganics								
Lead Group	Sampling Program	Program Type	Purpose	Analytical Request Form (ARF#)	Matrix	VOCs by TO15 ¹	VOC 8260 ¹	TCLP VOC	VOA +20 tics	VOC/BTEX (GS O-5506-06)	BTEX	TCLP Benzene	SVOC 8270	TCLP SVOC	PAHs	PAH 8270 SIM [a=43 PAH]	SVOC/PAHs (GS O-3116-87)	SVOC/PAHs (GS O-5506-06)	Alkane 16-PAHs	Alkylated PAHs	UV Extraction	Fingerprinting	TCEQ1006	ASTMD2887	ASTMD5134	ASTMD5739	ASTMD2622	TPH	TPH/SHC	TPH (DRO, GRO, ORO) 8015	GCFID Trace 8015M	TPH by UV/Vis: 418.1	O&G 1664
BP	SR	Suspended Sediment Sampling	Samples of suspended sediments will be collected to determine if oil is present/related to MC252	ARF 44	S										X														X	X			
BP	WS	Waste Sampling	Waste characterization	ARF 45	Q/S			X					X	X				X															
BP	SR	Water Sampling	Water in area of turtles found on beach	ARF 46	Q				X	X					X				X										X				
BP	WS	Waste Sampling	Waste water sampling at BOP site	ARF 47	Q			X							X																		
BP	SR	Fingerprinting	determine source material for high profile calls from residents	ARF 48	Q/S/O											X				X													
BP	Waste	Dispersant Sampling	dispersant presence or absence for expo	ARF 49	O											X				X													
BP	SR	Water Sampling	testing trip blanks for low level volatiles	ARF 50	Q			X																									
BP	SR	Oil Sampling	Oil or Sheen samples from ballast tanks from shuttle tanker	ARF 51	O/S				X							X				X													

Lead Group	Deepwater Chemical Analysis Sampling / Analytes												Physical Characteristics									
	Sampling Program		Program Type		Pest/PCBs 8085/8082		DOC		TOC 415.1		NIOSH 1403 (Alcohols)		NIOSH 5523 (Glycols)		NRDA		Inorganic					
BP	SR	Suspended Sediment Sampling																				
BP	WS	Waste Sampling													X							
BP	SR	Water Sampling															X					
BP	WS	Waste Sampling													X							
BP	SR	Fingerprinting														X						
BP	Waste	Dispersant Sampling													X							
BP	SR	Water Sampling													X							
BP	SR	Oil Sampling													X							

Deepwater Horizon Sampling / Monitoring			Monitoring Parameter / Test														Timing										
Lead Group	Sampling Program	Program Type	Diagnostic (Cause of Death)		Fluorometry	DO Probe	LISST	O2	H2S	PM 2.5	PM10	VOC	SO2	TNMOC	Benthic Invertebrates	Cytochrome P450 1A	Algae	Bacteria	Toxicity	Acute Tox.	Chronic Tox	Bioaccumulation	Sediment Tox	Completed? Y/N	Frequency/Duration	Analytical Turn Around Time	
BP	SR	Suspended Sediment Sampling																									
BP	WS	Waste Sampling																									
BP	SR	Water Sampling																									
BP	WS	Waste Sampling																									
BP	SR	Fingerprinting																									
BP	Waste	Dispersant Sampling																									
BP	SR	Water Sampling																									
BP	SR	Oil Sampling																									