

Anadarko Lone Creek Gathering, LLC

a subsidiary of:



Emergency Response Action Plan

Oil Storage Facility

Bone Springs Pipeline

Bone Springs, Texas

Prepared by

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Facility Information

General Information - Oil Storage Facility	
Facility Name:	Oil Storage Facility
Facility Address:	From Mentone, TX, take CR 200 south 8.7 miles and turn left (east) at Y. Drive 0.2 miles and bear left and Y. Continue 2.7 miles to lease road and turn left. Travel 1.8 miles to Facility.
County:	Loving County, Texas
Facility Phone Number:	N/A
Latitude/Longitude: degrees, minutes, seconds	(b) (7)(F)
Wellhead Protection Area:	Not in wellhead protection area
EPA ID#:	TBD
DOT-PHMSA ID#:	TBD
Owner/Operator of Facility:	Anadarko Lone Creek Gathering LLC
Owner/Operator Address:	Anadarko Lone Creek Gathering LLC (subsidiary of Anadarko Petroleum Inc.) 1201 Lake Robbins Drive The Woodlands, TX 77380 County: Montgomery
Phone Number:	1(800) 800-1101
Qualified Individual:	Brett Clark – Area Supv Work Address: 2924 St Hwy 302 Kermit, TX 79745 (b) (6) Emergency Phone Number: (432) 693-6666 Office Phone: (432) 684-2814
Alternate Qualified:	James Gonzalez – Sr. Foreman Work Address: 2924 St Hwy 302 Kermit, TX 79745 (b) (6) Emergency Phone Number: (432) 290-2726 Office Phone: (432) 684-2706
Date of Oil Storage Start up:	November 2012
Current Operations:	Crude Oil Terminal
NAICS code:	424710
Date(s) and Type(s) of Substantial Expansion(s):	N/A
Operator Statement of “Significant and Substantial Harm”:	As per 49 CFR.103, the significant and substantial harm criteria does not apply to the Oil Storage Facility nor the Bone Springs Oil Pipeline because both are located over one (1) mile from potentially affected environmentally sensitive areas.

PHYSICAL DESCRIPTION – TRUCK RACK**General:**

The Facility receives Crude Oil via a five (5) bay truck loading rack. Lanes 1 thru 4 are used for loading (unloading) operations only. Product is then piped to the Oil Storage Facility.

Truck Capacities:

The largest single compartment of any truck unloaded at the Facility is (b) (7)(F).

Discharge Prevention:

The truck rack is designed to allow any potentially spilled product to flow toward the drain. Collected product would be piped to the Oil Storage Facility Divert Tank.

(b) (7)(F)

PIPELINE LOCATION					
Counties Traversed:	Loving County				
PHYSICAL DESCRIPTION - PIPELINE					
General:					
<ul style="list-style-type: none"> The pipeline originates at the Oil Storage Facility and transports product to the Plains Blacktip Terminal. All storage tanks at the Oil Storage Facility fall solely under EPA jurisdiction only. The Facility does not have any dual jurisdictional storage tanks. 					
Pipeline Specifications:					
The basic specifications of the pipeline are as follows:					
<ul style="list-style-type: none"> Product Types: Pipe Detail: Line Length: 	<ul style="list-style-type: none"> Crude 10.75" 1.68 miles 				
Response Resources:					
Facility spill mitigation procedures and response guidelines are discussed later in the Plan for discharges that could result from any of the following potential scenarios:					
<ul style="list-style-type: none"> Pipeline rupture/leak Explosion and/or fire Equipment failure 					
These scenarios could result in the following discharge volume:					
Response Zone	Discharge Scenario	Potential Oil Group	DOT/PHMSA Planning Volume		
Bone Springs Pipeline	WCD	2	(b) (7)(F)		
This Worst Case Discharge volume is used in calculating the planning volume for response resources.					
RESPONSE ZONE INFORMATION					
General:					
<ul style="list-style-type: none"> The Response Zone includes the following: 					
RESPONSE ZONE					
Name of Pipeline	Type of Oil	Start Point	End Point	Counties	State
Bone Springs Pipeline	Crude	Oil Storage Facility	Plains Petroleum Storage and Pipeline Facility	Loving	TX

Diagrams

Figure 1

Aerial Map

Figure 2
Facility Diagram

Figure 3
Drainage Diagram

Figure 4
Evacuation Diagram

Figure 5
Facility Environmental Sensitivity Map

Figure 6
Pipeline Map

Figure 7
Pipeline Environmental Sensitivity Map

Notifications

Notification Instructions

The following internal notification should be made for each emergency incident, as the incident demands. In no event shall notification be delayed because the immediate supervisor is inaccessible.

Personnel	Notification Procedure	
First Responder	The employee at the scene who is most qualified to do so will render first aid or assistance and assign personnel to call emergency services and notify the Qualified Individual.	
Qualified Individual	The Qualified Individual will obtain details of the incident, assure that emergency services have been called, notify the Area Manager / Next Level Supervisor and EHS Representative and direct further on-site activities. The Qualified Individual will notify appropriate members of the Facility Emergency Response Team.	
Area Manager / Next Level Supervisor	The Area Manager / Next Level Supervisor will notify the Region Manager and Incident Commander.	
EHS Representative	The EHS Representative will:	
	a.	Notify appropriate regulatory agencies and EHS Manager.
	b.	Complete the appropriate incident reports.
	c.	Conduct necessary incident investigation.
Incident Commander or designee	The Incident Commander or designee will notify the appropriate personnel and will determine if the Emergency Response Room is to be activated and what Incident Management Team (IMT) members should be notified.	
Notes	All injuries / illnesses should be reported to the EHS Representative immediately. If any injury / illness falls under the "report immediately" guidelines, it is unacceptable to leave a message only – always continue to call through the chain of command until a person is reached.	

Reporting Procedures

Anadarko employees, contractors, and subcontractors are responsible for maintaining a vigilant watch for spills and releases of any magnitude from Anadarko facilities and operations. Personnel reporting spills and releases of regulated substances of any size or any type of emergency incident at an Anadarko facility will follow the reporting procedures listed below:

External Notifications (APC Form 416 (Report a Release) must be completed.)

Operations personnel are responsible for reporting spills and releases to water, threatening water, or a volume exceeding any regulatory threshold to the following regulatory agencies immediately:

1. National Response Center (Spills reaching navigable waters)
2. EPA (Spills related to NPDES discharge point)
3. Appropriate State & Local Regulatory Agencies

Internal Notifications (APC Form 416 (Report a Release) must be completed.)

Operations personnel are responsible for entering all non-agency reportable spills greater than one barrel and all agency reportable spills, regardless of size, into Anadarko's Spill/Release Reporting database. Electronic notifications are then made automatically to the appropriate personnel. Refer to Anadarko's Spill/Release reporting Program for more information.

After notification, EHS Department personnel will provide follow-up activities listed below:

1. Confirm notification by Field Personnel and complete additional notifications;
2. Provide subsequent written notifications and/or reports as required;
3. Conduct an incident investigation and recommend improvements as needed.

Facility Response Team Contact Information

NAME	PHONE #	RESPONSE TIME (MIN.)
Qualified Individual: Brett Clark, Area Supv	Office: (432) 684-2814 Cell: (432) 693-6666	1 hour
Alt. Qualified Individual: James Gonzales, Sr. Field Foreman	Office: (432) 684-2706 Cell: (432) 290-2726	1.5 hours
Lupe Martinez, Sr. Fieldman	Cell: (432) 448-2252	0.5 hours
John Pilcher, Sr. Fieldman	Cell: (432) 210-6162	1.5 hours
Johnathan Garcia, Fieldman I	Cell: (432) 296-2741	0.5 hours
Aaron Jennings, Fieldman I	Cell: (432) 296-2845	0.5 hours
Efren Ray, Fieldman III	Cell: (432) 813-6792	1.5 hours
Bill Woodruff, Staff Field Analyst	Cell: (432) 813-0433	1 hour
Ruben Chavarria, Sr. Field Analyst	Cell: (432) 290-8628	1.5 hours
Tommy Sawyer, Sr. Mechanic	Cell: (432) 741-9294	1 hour
Eddie Urias, Measurement Tech II	Cell: (432) 269-2871	1.5 hours

Incident Management Team Response Personnel Contact Information

NAME	TITLE	OFFICE	CELL	HOME
Incident Commander				(b) (6)
Reyes, Mario	General Manager	832-636-3431	832-381-0923	
Bosworth, Steve	Vice President Worldwide Drilling	832-636-3136	713-898-0732	
Altena, Dan	General Manager	832-636-2343	281-216-9812	
Griffie, Chuck	Operations Manager	832-636-8694	303-618-5020	
Sundland, Mark	Drilling Manager	832-636-8477	281-793-6449	
Kerr, Mark	Sr. Drilling Supt	979-778-4867	409-382-3696	
ER Facilitator				
Adams, Jerry	EHS Manager	832-636-8304	281-731-5931	
Gray, Mike	Director, EHS & Regulatory	832-636-2454	281-415-6964	
Safety Officer				
Ponikvar, David	Safety & Health Manager	832-636-3414	281-732-7887	
Spencer, Tim	EHS Manager	832-636-2508	832-585-4307	
Payne, Dusty	Sr. EHS Rep	832-636-3908		
Legal				
Urvan, Sean	Counsel	832-636-1664	309-229-9037	
Kuhn, Linda	Sr. Counsel	832-636-7506	281-630-4800	
Humanitarian Response				
Lucher, Jennifer	Sr. HR Business Partner	832-636-7031	832-627-9966	
Comeaux, Georgetta	Staff HR Analyst	832-636-8876	281-703-0004	
Schulze, Leah	Sr. HR Business Partner	832-636-3936	936-524-0663	
Vice President				
Lawler, Doug	Vice President Operation	832-636-1384	281-639-3436	
Rea, Danny	Vice President, Midstream	832-636-7122	713-906-8639	

(b) (6)

Planning Section Chief			
Gough, Rob	EHS Manager	832-636-1356	225-803-9375
Guidry, Chad	Sr. Env. & Regulatory Analyst	832-636-8881	281-813-9342
Betik, Julie	Sr. Staff Env & Regulatory Analyst	832-636-2609	281-793-7705
Cedillo, Rolando	EHS Manager	832-636-7081	210-394-5451
Operations Section Chief			
Cervený, Bruce	Sr. Staff Project Engineer	832-636-8376	281-387-8749
Bazaldua, Eric	Engineering Manager	832-636-1789	832-421-7551
Leblanc, Gary	Sr. Staff Facilities Eng	832-636-8635	832-247-6016
Maldondo, Lori	Project Eng II	832-636-2655	281-413-9272
Rovira, Scott	Drilling Oper Manager	832-636-2761	281-702-0652
Rushing, Tom	Production Manager	832-636-2503	281-382-4604
Wisler, Del	Production Eng Manager	832-636-2372	832-392-5420
Seefeldt, Mark	Production Eng Manager	832-636-4902	713-306-4495
Kapple, Dave	Production Eng Manager	832-636-2542	281-881-9069
Spackey, Ted	Production Eng Manager	832-636-2746	281-731-8914
Goebel, Gordon	Sr. Staff Analyst	832-636-4787	832-493-3237
Nosich, Keith	Completions Engineering Mgr	832-636-3143	713-898-6900
McRae, Jim	Drilling Oper Manager	832-636-2669	
Plemons, Billy	Drilling Oper Manager	832-636-4970	713-299-3837
Geary, Dan	Drilling Oper Manager	832-636-2377	713-294-3585
Stone, Justin	Drilling Oper Manager	832-636-2945	936-647-5175
Nichols Josh	Drilling Oper Manager	832-636-3487	281-615-9823
Logistics Section Chief			
Cronan, Kevin	Sr. Supply Chain Rep	832-636-2619	832-585-2885
Harvin, Barbara	Supply Chain Analyst	832-636-1385	281-704-2900
Bangert, Russell	Procurement Drilling	832-636-2660	281-733-8821

Technical Support				
Raney, Jim	Engineering Manager		832-636-3275	281-384-7924
Harris, Mike	Sr. Facilities Engineering Advisor		832-636-1161	713-819-2811
Communications Unit – GSC 62900				
Bryant, Michelle	Customer Support Lower Tower Manager		832-636-2388	281-755-5978
Finance Section Chief				
Wierzowiecki, John	AP & AFE Manager		832-636-7774	936-334-5422
Williams, Barry	Accounting Manager		832-636-2404	713-705-3838
Document Control				
Lambert, Charity	Engineering Technologist I		832-636-4976	281-222-6972
Strong, Trish	Staff Engineering Technologist		832-636-2815	281-352-1013
Surface Land				
Dodson, Chuck	Land Mgr		832-636-1256	281-743-0728
ERT Support				
Lee, Bob	Sr. Staff EHS	Bryan	979-778-4868	979-229-3948
Danton, David	Sr. Safety & Health Analyst	Pinnacle Plant	903-928-1227	903-948-6672
Henderson, Danny	Staff EHS Regulatory Analyst	Carthage	903-291-4200	903-754-9583
Turner, Bobby	Safety & Health Analyst II	Midland	432-230-4218	580-380-9252
Allan Henne	Staff EHS Rep	Liberal	600-544-6213	620-629-5337
Weaver, Eric	Sr. EHS Analyst	Midland	432-684-2808	432-413-2494
West, Shane	Sr. EHS Rep	Carthage	409-383-5457	409-200-1100
Chapman, DeCarlos	EHS Rep	Carrizo Springs	830-491-3341	830-255-6277

Gilliland, Chad	Sr. EHS Rep	Carrizo Springs	830-491-3321	830-255-9858	
Mullen, Devin	EHS Rep	Carrizo Springs	830-491-3358	830-322-8078	
Ramirez, Franco	Sr. EHS Rep	Carrizo Springs	830-491-3347	830-322-8079	
Barbier, Mark	EHS Rep	Williamsport	570-244-4029	570-360-3796	
Hall, Rick	Sr. EHS Rep	Williamsport	570-244-4056	570-932-1088	
Lock, Matthew	Staff EHS Rep	Williamsport	570-244-4051	570-932-0323	
Lorson, Jeff	Sr. EHS Rep	Williamsport	570-244-4062	570-220-1189	
Miller, Steven	EHS Rep	Williamsport	570-244-4048	304-951-8662	
Spinks, David	Sr. EHS Rep	The Woodlands	832-636-7047	281-460-2469	
McFarland, Michael	Sr. EHS Rep	Midland		713-557-6946	
Christian, Randall	Sr. EHS Rep	Carrizo Springs	830-491-3463	936-366-4580	
<i>Emergency Response Room #</i>	16079 in Anadarko Tower – ALR				
Fax Number	832-636-2266				
Speaker Phone	832-636-8250				

Houston Emergency Response Team Contact Information

NAME	TITLE	OFFICE	OFFICE	CELL	HOME
Schlagel, Phillip	Director, EHS & Regulatory	Woodlands	832-636-2970	720-470-9215	(b) (6)
McBride, David	Vice President – EHS	Woodlands	832-636-4896	832-474-1926	
Farris, Mike	EHS Mgr	Woodlands	832-636-2661	832-585-3914	
Weissling, Kent	EHS Advisor	Woodlands	832-636-2368	713-775-9591	
Meloy, Chuck	Sr. VP – US Onshore E&P	Woodlands	832-636-1601	713-876-6465	
Wilson, Kelly	EHS Manager	Woodlands	832-636-4910	832-278-9900	
Kastensmidt, Steve	Staff EHS Representative	Woodlands	832-636-3185	713-826-0850	
White, Joe	EHS Representative II	Woodlands	832-636-7028	832-837-9573	
White, Sylvia	Sr. EHS Representative	Woodlands	832-636-3849	281-682-0284	
Information Officer					
Hotline: 888-387-8973					
Christiansen, John	Dir, External Communication	Woodlands	832-636-8736	832-434-6884	
Cain, Brian	Sr. Staff Public Affairs Rep	Woodlands	832-636-3404	281-825-2010	
Ramirez, Christina	Public Affairs & Corporate Comm	Woodlands	832-636-8687	832-491-6777	

APC 416 (12/08)



Report a Release

Classification:	<input type="checkbox"/> Agency Reportable		<input type="checkbox"/> Non-Reportable	
Release Type:	<input type="checkbox"/> Spill	<input type="checkbox"/> NPDES Exceedance	<input type="checkbox"/> Excess Emission	<input type="checkbox"/> Sighting
Facility Information				
Facility				Cost Center
Office				Type of Facility
Current Operator				Lease / RRC No.
Qtr/Qtr		Section/ TX Survey	Township/ TX Block	Range/ TX Sec.
API#	State/ Survey/Country		County/ Block/Parish	
Latitude	Longitude		Field/OCSG#	
Release Information				
Field Contact	Source Latitude		Source Longitude	
Discovered		Approximate Released Date/Time		Controlled
Date	Time	Date	Time	Date
Describe Release				
Describe Probable Cause of Release				
Describe Actions to Control Release				
Type of Operation:	<input type="checkbox"/> Production <input type="checkbox"/> Drilling	<input type="checkbox"/> Midstream <input type="checkbox"/> Construction	<input type="checkbox"/> Other	Apparent Cause
Spill				
Material Released	Qty Released	Qty Into Waterway	Qty Recovered	
<input type="checkbox"/> Produced Water	bbl	bbl	bbl	
<input type="checkbox"/> Condensate	bbl	bbl	bbl	
<input type="checkbox"/> Crude Oil	bbl	bbl	bbl	
<input type="checkbox"/> Other:	bbl	bbl	bbl	
Excess Emission				
Type of Excess Emission:	<input type="checkbox"/> Equipment Malfunction <input type="checkbox"/> Startup	<input type="checkbox"/> Process Upset <input type="checkbox"/> Shutdown	Expected to last more than 24 hours?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Amt Flared:	scf	Amt Vented:	scf	Permit Number:
Supp Gas Amt:	scf	Supp Gas Heat Content:	btu/scf	Opacity %:
Impact				
Length:	ft	Width:	ft	Depth:
Contained within berm?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Onto Federal Land?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Size of Area Impacted:
Did the release enter or threaten surface water?	<input type="checkbox"/> Threatened surface water		<input type="checkbox"/> Entered surface water	<input type="checkbox"/> No, did not threaten or enter surface water
Did the release contact groundwater?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown	
Select Affected Media:	<input type="checkbox"/> Air <input type="checkbox"/> Building/Module <input type="checkbox"/> Deck	<input type="checkbox"/> Wetlands <input type="checkbox"/> Gravel <input type="checkbox"/> Subsurface	<input type="checkbox"/> Offsite Soil <input type="checkbox"/> Ice / Snow <input type="checkbox"/> Lined Impoundment	<input type="checkbox"/> Wellsite / Facility Pad <input type="checkbox"/> Ice Pad / Road <input type="checkbox"/> Unlined Impoundment
Corrective Actions				
Clean up Start			Clean up Stop	
Date	Time	Date	Time	
Describe Clean-up Measures (Who / What / How)				
Describe preventive measures planned to prevent future spills				
Weather				
Temp:	°F	Visibility:	<input type="checkbox"/> Clear <input type="checkbox"/> Rain	<input type="checkbox"/> Cloudy <input type="checkbox"/> Sleet
			<input type="checkbox"/> Dusty <input type="checkbox"/> Snow	<input type="checkbox"/> Fog
		Wind Dir. From:		Wind Velocity: knot
Contact Log				
Agency Contacted	Phone Number	Contact	Date / Time	Reference #
Remarks:				
Report Prepared by:			Date Prepared:	



Report a Release (Supplemental Information)

EPA Clean Water Act Section 308 (a) Request				
Discovered By?		Discovered How?		
Nearest Water Elevation		Source Elevation		
Location:	Latitude	Longitude	During Photo	After Photo
Source of Spill:				
End of Source:				
Draw:				
Temp Containment:				
Perm Containment:				
Nearest Water:				
Total Capacity of Source:	bbl	FRP # and Date:		
Facility Above Ground Oil Storage Capacity:	bbl	Facility Under Ground Oil Storage Capacity:		bbl
Source – Pipeline Info:		From	To	
Diameter:	in	Construction:	Throughput:	bbl/day
Reach a drainage feature?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Impact Sensitive Area?	<input type="checkbox"/> Yes <input type="checkbox"/> No	SPCC Plan? <input type="checkbox"/> Yes <input type="checkbox"/> No
What was the condition of the drainage feature at the time of the release?	<input type="checkbox"/> Dry <input type="checkbox"/> Damp <input type="checkbox"/> Standing / Pooling <input type="checkbox"/> Flowing <input type="checkbox"/> Frozen			
How often does the drainage feature have water flow?	<input type="checkbox"/> Continuous <input type="checkbox"/> Seasonal <input type="checkbox"/> Only after stormwater (rainfall or snowmelt) event which is _____ times a yr			
Describe impact to animals or vegetation				
Describe Environmental Impact				
How was quantity released determined?				
Describe the flow path from the end point of the release to the nearest water				
Describe type of water entered				
Describe upstream and downstream waters to which affected water is connected				
Describe the appearance of the water after release entered the water				
Describe the appearance of the adjacent soils / shoreline after the release entered the water or drainage feature				
Describe Oil handling training program				
Material Analyzed (Include locations / time, individual, lab name)				
Materials Reference Information				
Permit ID, Issuing Agency, Issue Date				
Agency, Fine Amount, Fine, Date				
All other individuals that may have information				
Agency	Agent on Site	When?		

EXTERNAL NOTIFICATIONS

REQUIRED NOTIFICATIONS		
AGENCY	ADDRESS	PHONE NUMBER
National Response Center (NRC)	c/o United States Coast Guard (CG-5335) – Stop 7581 2100 2 nd Street, SW Washington, DC 20593-0001	(800) 424-8802 (202) 267-2675 (202) 267-1322
Reporting Requirements: Type: All spills that impact or threaten navigable waters. Verbal: Immediately Written: Within 60 days of 1,000 gallons in a single event or two spill events within a twelve month period		
Environmental Protection Agency (EPA) Region VI	1445 Ross Avenue, Ste 1200 Dallas, TX 75202	(800) 424-8802 (Emergency) (800) 887-6063 (Non-Emergency)
Reporting Requirements: Type: Any spill that impacts or threatens navigable waters or the adjoining shoreline. Verbal: Immediately Written: A written report must be submitted to the Regional Administrator within 15 days from the date of the incident.		
Pipeline and Hazardous Materials Safety Administration (PHMSA)	East Building, 2 nd Floor 1200 New Jersey Ave., SE Washington, DC 20590	(800) 424-8802 (202) 366-4433
Reporting Requirements: Type: Any release of hazardous liquid or carbon dioxide that: <ul style="list-style-type: none"> • Results in an unintentional fire or explosion, • Causes a death or personal injury requiring hospitalization, • Causes property damage, including cleanup costs exceeding \$50,000, • Is significant in other respects, OR • Is 5 gallons or more Verbal: Immediately Written: A written report (PHMSA Form 7000-1) must be filed with the DOT within 30 days after discovery of the accident. This form must also be filed within 30 days for any spill that results in a loss of 5 or more gallons of hazardous liquid, carbon dioxide, or HVL, except for releases of less than 5 barrels resulting from a pipeline maintenance activity if the release is: <ul style="list-style-type: none"> • Not otherwise preventable • Does not impact a body of water • Confined to company property or ROW • Clean up promptly 		

OTHER POTENTIAL REQUIRED NOTIFICATIONS		
AGENCY	ADDRESS	PHONE NUMBER
Occupational Safety and Health Administration (OSHA)	200 Constitution Avenue Washington, DC 20210	(800) 321-6742
Reporting Requirements: Type: Any work-related incident, which results in the death of an employee or in-patient hospitalization of three or more employees. Verbal: Within 8 hours Written: As requested by Agency		
Texas Railroad Commission (RRC)	1701 N. Congress Ave Austin, TX 78701	(512) 463-6788
Reporting Requirements: Type: Oil or condensate spills of 5 barrels or greater, offsite produced water spills greater than 25 barrels or other amount recommended by RRC Districts, and any oil, condensate or produced water spill into surface water. Verbal: Immediately (within 2 hours) Written: For oil or condensate spills, follow up with written report (Form H-8) to the RRC District as soon as possible but no later than 30 days.		
Texas Commission on Environmental Quality (TCEQ)	12100 Park 35 Circle Austin, TX 78753	(800) 832-8224
Reporting Requirements: Type: Any release that exceeds the reportable quantity for that specific chemical to the agencies listed in the SARA Title III List of Lists. Verbal: Immediately (no later than 24 hours) Written: As requested by Agency		
Texas Public Utilities Commission	1701 N. Congress Avenue 7 th Floor Austin, TX 78701	(512) 463-6788
Reporting Requirements: Type: Any event that involves a release of gas, crude, hazardous liquids, or carbon dioxide from any pipeline which: <ul style="list-style-type: none"> • Caused a death or any personal injury requiring hospitalization; • Required taking any segment of a transmission line out of service, except as part of planned or routine maintenance or construction; • Resulted in unintentional ignition requiring emergency response; • Caused estimated damage to the property of the operator, others, or both totaling \$50,000 or more, including product loss; or • Could reasonable be judged by the operator as significant because of location, rerouting of traffic, evacuation of any building, media interest, etc. Verbal: Immediately (within 2 hours) Written: Within 30 days		

Local Emergency Services Contacts

ORGANIZATION	LOCATION	TELEPHONE
Mentone Orla Fire Department	Mentone, TX 79754	911
Pecos Fire Department	Pecos, TX 79772	911 / 432-445-3519
Kermit Fire Department	Kermit, TX 79745	(432) 586-2577
Reeves County Hospital	Texas Street, Pecos, TX	(432) 447-3551
Midland County Emergency Management Coordinator Fire Marshal: M. Dale Little	2435 E Highway 80 Midland TX 79706	432-688-4160 Phone after 5:00pm and weekends: 432-688-4600
Midland Fire Department Patrick Repman (Deputy Coordinator) HazMat / Emergency Management	FM 307 Harris Field	432-685-7337
Odessa Regional Medical Center	520 East Sixth Street in Odessa, TX	(432) 582-8000
Medical Center Hospital	500 W 4th St, Odessa, TX 79761	(432) 640-4000

Local Media and Other Stakeholders

ORGANIZATION	LOCATION	TELEPHONE
NewsWest 9 - KWES-TV (NBC)	NewsWest 9 Mailing Address P.O. Box 60150 Midland, TX 79711	NewsWest 9 Newsroom: (432)-567-9991 NewsWest 9 Main: (432)-567-9999
CBS7	Address: 4101 East 42nd St. Suite J7 Box 107 Odessa, TX 79762	News: 432.580.6397 Main: 432.580.5672
KPEJ 24 Fox West Texas	1550 W. I-20, Odessa, Texas 79750	(432) 580-0024

Emergency Response Contractors

CONTRACTORS	PHONE	ALTERNATE PHONE	LOCATION
EMERGENCY EQUIPMENT/ SERVICES			
Fischer Construction/Heavy Equipment	432-634-1334	432-332-7532	
Etech Environmental & Safety	432-557-6080	432-563-2200	
ROC Construction	432-556-2325		
NEIGHBORING FACILITIES			
None			
UTILITIES			
None			
WELL CONTROL			
Boot & Coats	281-931-8884		
Cudd Pressure Control	307-382-6650		
Wild Well Control	281-784-4700		
OTHER SUPPLIES			
McJunkin RedMan	830-468-3383	830-468-3383	
WILDLIFE RESPONSE			
Wildlife Rehab & Education	713-861-WILD	713-861-9453	
EMERGENCY RESPONSE PROVIDERS			
O'Brien's Response Management	985-781-0804 (24 hrs)		
Etech Environmental & Safety	432-557-6080	432-563-2200	

Response Actions

Initial Response Actions

Initial Response actions are those actions taken by personnel immediately upon becoming aware of a discharge or emergency incident. It is important to note that the actions described in this section are intended only as guidelines. The appropriate response to a particular incident may vary depending upon the nature and severity of the incident.

The first Anadarko employee on scene will function as the Person-in-Charge until relieved by an authorized supervisor who will assume the role of on-scene Incident Commander. Transfer of command will take place as more senior management respond to the incident.

Hazardous Spill or Gas Release

Line Break or Leak

- Notify the Foreman or supervisor on duty.
- Shut down pumping equipment.
- Close upstream and downstream block valves.
- Drain the line section, as the situation demands.
- Make appropriate DOT-PHMSA response notifications, including reporting requirements.
- Determine which environmentally sensitive areas may be threatened by the spill and direct the response operation to these locations.
- Request local authorities to establish traffic control in the area, as the situation demands.
- Ensure pipeline is gas-free before attempting any hot work on the system.
- Make all necessary repairs.
- Return the line to service once repairs are completed.

Storage Tank Leak

- Notify the Foreman or supervisor on duty.
- Shut down all tank battery product movement operations and isolate the tank.
- Initiate Confined Space Entry procedures, as applicable.
- Ensure that the containment area drainage valve is closed.
- If near tank bottom, consider filling the tank with water and maintain water bottom to suspend the discharge.
- Block all drainage of spilled material from travelling offsite.
- Request local authorities to establish traffic control in the area, as necessary.
- Remove product from containment area with an explosion proof pump, oil skimmer, and/or vacuum truck with skimmer attachments.
- If floating roof tank is submerged and tank must be drained, follow the facility operating procedure for landing floating roof and draining any liquids contained upon the floating roof.
- Ensure tank is gas-free before attempting any hot work on the system.
- Make all necessary repairs.
- Return the tank to service once repairs are complete and the tank has been tested.
- Clean up spilled product to eliminate any possible environmental problems.
- Determine which environmentally sensitive areas may be threatened by the spill and direct the response operation to these locations.
- If necessary, call an approved waste removal company to remove the remaining sludge and residue from the containment area

Truck Rack Spill

- Notify the Foreman or supervisor on duty.
- Evacuate personnel from the truck rack area, as the situation demands.
- Shut down all loading operating, pump motors and loading valves.
- Guard against all source of ignition.
- Stop all traffic from entering rack or hazardous area.
- If a line leak, close of riser valves and/or tank valves.

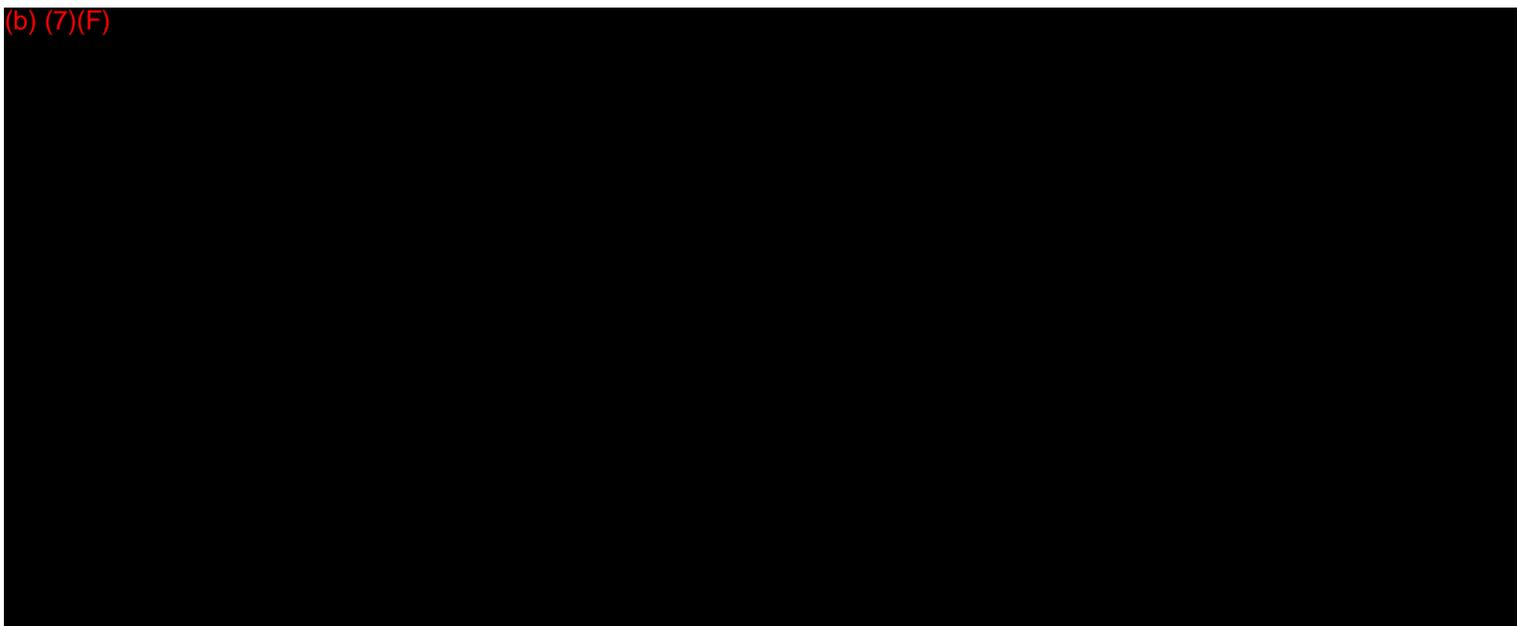
Fire/Explosion

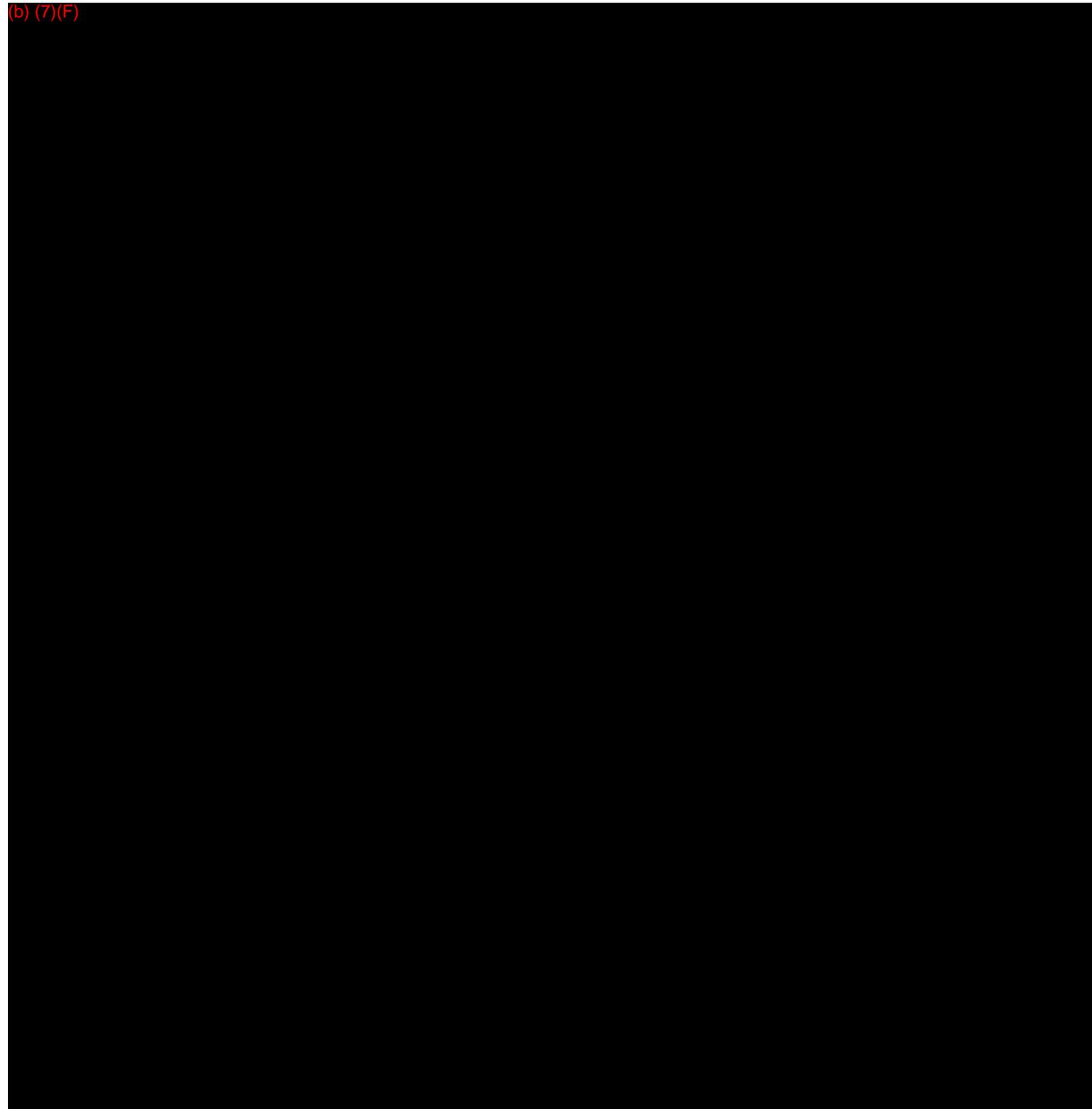
- Notify the Foreman or supervisor on duty.
- Shut down pumping equipment.
- Call 911 for emergency fire services.
- If time and circumstances allow, instruct all drivers to shutdown pumps, discontinue loading activities and disconnect hoses.
- If safe to do so, individuals may attempt to extinguish with the appropriate fire equipment.
- In the fire is too large for an individual to fight alone, shut down the Facility, evacuate personnel and move to a muster area or other safe distance to direct the fire department to the scene of the fire.
- Keep other personnel and vehicles from entering the danger area.
- Tell all drivers to stand by their trucks and await instructions, however, each person onsite should evacuate if necessary to protect themselves from harm.
- Close facility tank valves.

Vapor Cloud

- Sound the alarm and notify the Foreman or supervisor on duty. Vacate the area.
- The only proper action in the presence of a vapor cloud is to get away from it. Do not shut off electrical equipment.
- All personnel should report to the muster point for roll call and further instructions.
- Contact the appropriate agencies and potentially affected neighbors.

(b) (7)(F)





(b) (7)(F)

(b) (7)(F)

Natural Disasters

Tornado or Severe Storms

- Be Aware of Changing Weather Conditions
 - Tornado watch – conditions are right for the formation of a tornado
 - Tornado warning – a tornado has been sighted but is not in the area at this time
 - Tornado alert – a tornado has been sighted in the immediate area. Take cover immediately
- If Severe Weather Conditions Threaten
 - Monitor weather conditions and broadcasts for alerts or dangerous weather.
 - Alert Facility personnel of condition
 - Avoid dangerous storms, stay indoors or in shelter.
 - Seek shelter in a low level area away from glass
 - Stay in the shelter until “ALL CLEAR” has been issued
- Immediately After the Storm
 - Account for all personnel
 - Survey for damages to Facility property
 - Initiate team for any repairs needed

Facility-owned Equipment

Firefighting and Rescue Equipment			
Type	Operational Status	Quantity	Location
30lb ABC Extinguisher	Ready	6	See Diagram
30lb CO2 Extinguisher	Ready	6	See Diagram
4-gas monitor	Ready	1	See Diagram

Skimmers/Pumps					
Type/Model/Year	Operational Status	Quantity	Capacity bbl/day	Daily Effective Recovery Rate	Storage Location(s)
NONE					

Boom				
Type	Operational Status	Size (Length)	Containment Area	Storage Location(s)
Absorbent	Ready	(7) 3'x10'		Spill Trailer
Absorbent	Ready	(22) 3"x2'		Spill Trailer

Chemical Dispersants						
Type	Operational Status	Quantity/Amount	Date Purchased	Treatment Capacity	Storage Location(s)	Date Changed
		NONE				

Sorbents				
Brand Name/Type	Operational Status	Size	Treatment Capacity	Storage Location(s)
MOP	Ready	(9) 22lb bags		Spill Trailer

Hand Tools			
Type	Operational Status	Quantity	Storage Location

Personal Protective Equipment			
Type	Description	Quantity	Location
Inner gloves		200pr	Spill Trailer
Boot Covers	Vinyl	8pr	Spill Trailer
Coveralls	Tyvek	8	Spill Trailer
Gloves	PVC	8pr	Spill Trailer

Other Equipment			
Type	Description	Quantity	Location
Overpack	95 Gallon	1	Spill Trailer
Pillows	12"x12"x2"	22	Spill Trailer
Pads	18"x18"	200	Spill Trailer
Bulk Bag	Poly	1	Spill Trailer

Evacuation Procedures

Evacuation Planning

The primary evacuation routes were developed with the following factors taken into consideration:

- Location of stored materials
- Hazards imposed by spilled material
- Spill flow direction
- Prevailing wind direction and speed
- Arrival route of emergency response personnel and response equipment
- Transportation of injured personnel to the nearest emergency medical facility
- Muster point locations
- Shelter-in-place locations

Evacuation Response

In case of an emergency within the Facility that would necessitate evacuation, some or all of the following steps will be taken, depending upon the type of emergency and circumstances:

- Sound an alarm or give verbal alarm
- Call 911
- Shut down loading/unloading and pipeline operations
- Evacuate trucks from the Facility
- Divert incoming trucks to a safe distance away
- Evacuate all personnel to designated staging areas

The evacuation diagram located in Section 1 depicts the Facility evacuation routes and muster point locations.

Community evacuation plans are in place and local authorities coordinate all community evacuation procedures.

Hazard Identification Tanks (all aboveground)

Tank No.	Substance Stored	Quantity Stored (Gallons)	Tank Type / Year	Maximum Capacity (Gallons)	Failure / Cause	Secondary Containment Capacity (Gallons)
010	Crude Oil	(b) (7)(F)	Steel Welded / 2012	(b) (7)(F)	None	(b) (7)(F)
011	Crude Oil		Steel Welded / 2012		None	
TBD	Crude Oil		Steel Welded / 2012		None	
TBD	Crude Oil		Steel Welded / 2012		None	
TBD	Crude Oil		Steel Welded / 2012		None	

Anadarko Lone Creek Gathering LLC

a subsidiary of:



Integrated EPA/DOT Facility Response Plan

Oil Storage Facility

Bone Springs Pipeline

Bone Springs, Texas

Prepared by

William McCarson, McCarson Response Consulting

Contact: 713-906-9849

E-mail: william@mccarsonresponse.com

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**ANADARKO LONE CREEK GATHERING LLC
FACILITY RESPONSE PLAN
OIL STORAGE FACILITY
BONE SPRINGS, TEXAS**

APPROVED BY:

Brett Clark

**Brett Clark
Area Supervisor**

Date: 01/21/13

Response Plan Cover Sheet

Owner/Operator of Facility:	Anadarko Lone Creek Gathering LLC	
Facility Name:	Oil Storage Facility	
Facility Address (street address or route):	From Mentone, TX take CR 200 south 8.7 miles, turn left (east) at Y. Go 2/10 th of a mile and bear left at Y. Continue 2.7 miles to lease road and turn left. Travel 1.8 miles to location.	
City, State, and U.S. Zip Code:	Mentone, TX	
Facility Phone Number:	N/A	
Latitude (Degrees: North):	Longitude (Degrees: West):	
(b) (7)(F)		
Dun & Bradstreet Number:		
North American Industrial Classification System (NAICS) Code:	424710	
Largest Aboveground Oil Storage Tank Capacity (Gallons):	(b) (7)(F)	
Maximum Oil Storage Capacity (Gallons):		
Number of Aboveground Oil Storage Tanks:		
Worst-case Oil Discharge Amount (Gallons):		
Facility Distance to Navigable Water. Check the appropriate line: <ul style="list-style-type: none"> <input type="checkbox"/> 0 - ¼ mile <input type="checkbox"/> ¼ - ½ mile <input type="checkbox"/> ½ - 1 mile <input checked="" type="checkbox"/> >1 mile 		

Applicability of Substantial Harm Criteria

Does the facility transfer oil over-water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?

Yes _____ No X

Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and, within any storage area, does the facility lack secondary containment² that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation?

Yes _____ No X

Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments?

Yes X No _____

Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance such that a discharge from the facility would shut down a public drinking water intake?

Yes _____ No X

Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?

Yes _____ No X

Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining information, I believe that the submitted information is true, accurate, and complete.

Signature: Brett Clark

Name (Please type or print): Brett Clark

Title: Area Supervisor

Date: 01/09/13

Distribution List

Copy Number	Format	Plan Holder
1	Printed	Facility
2	Printed	EHS Department Anadarko Corporate Office 1201 Lake Robbins Drive The Woodlands, TX 77251
3	CD	Don Smith EPA Region VI 12th Floor, Suite 1200 1445 Ross Avenue Dallas, TX 75202
4	CD	Melanie Barber Department of Transportation Pipeline and Hazardous Materials Safety Administration Office of Pipeline Safety E Bldg., 2nd Floor Mailstop: E24-455 1200 New Jersey Avenue, SE Washington, DC 20590

1. Introduction

1.1. Purpose and Scope

This Integrated Facility Response Plan (Plan) has been developed in accordance with the regulations published in 40 CFR part 112.21 (EPA) and 49 CFR Part 194 (DOT-PHMSA). The purpose of this Plan is to assist personnel to prepare for and respond quickly and safely to a discharge originating from the **Oil Storage Facility** (herein referred to as "Facility") or the **Bone Springs Oil Pipeline**. This Plan presents details of the response actions planned for small, medium and worst-case discharges from petroleum aboveground storage tanks (ASTs) at the Anadarko Lone Creek Gathering LLC - Oil Storage Facility in Bone Springs, Texas and the Bone Springs Oil Pipeline.

The Oil Storage Facility is located in Loving County, Texas approximately 10.5 miles ENE of the intersection of Hwy 302 and Hwy 285. The nearest inhabited community is Mentone, TX, approximately 7 miles WNW.

The Facility is used to gather crude oil from other field storage facilities, then measure the oil as it is pumped via the Bone Springs Oil Pipeline to the Plains Blacktip Terminal. There is no treatment or separation of oil at the Facility.

The Facility is comprised of crude oil storage tanks, incoming and outgoing oil pipelines, and a truck loading rack. There is a small master control center room, but no habitable buildings and no warehouse.

The Oil Storage Facility receives crude oil from multiple oil gathering/storage areas via a non-DOT-PHMSA regulated pipeline. The oil is piped into (b) (7)(F) for onsite storage. Product is distributed via the Bone Springs Oil Pipeline to the Plains Blacktip Terminal. Product may be transported to or from the facility via tank truck in the event of a problem with the pipeline or the receiving facility, but trucking operations will not be standard operating procedure for the facility. The Oil Storage Facility falls solely under EPA jurisdiction while the Bone Springs Oil Pipeline falls solely under DOT-PHMSA jurisdiction. Transfer of jurisdiction from EPA to DOT-PHMSA occurs at the pipeline manifold.

The Bone Springs Oil Pipeline consists of a 1.68 mile pipeline, which delivers crude oil to the Plains Blacktip Terminal from the Oil Storage Facility via a 10" pipeline. (b) (7)(F)

1.2. Plan Review and Update Procedures

Annual EHS Review/Update

The EHS Representative will coordinate the following plan review and update procedures:

1. At least once each year, review and make appropriate revisions as required by operational or organizational changes.
2. At least once each year, review and make appropriate revisions as required by changes in the names and listed telephone numbers.
3. Review and make appropriate revisions as required by improved procedures or deficiencies identified during response team tabletop exercises or actual emergency responses.

Agency Revision Requirements

EPA

In accordance with 40 CFR 112.20(g)(3), this Plan will be reviewed periodically and modified to reflect changes at the facility. The Plan shall be revised and changes submitted to the EPA Region Coordinator within 60 days of each change that would substantially affect the implementation of the Plan.

EPA must be provided with one copy of the revised Plan or revised pages, in electronic format. The revisions must be submitted with the issued EPA ID Number. In addition to the periodic updates, the Plan will be resubmitted to EPA every five years from the last approval date.

DOT/PHMSA

The Plan shall be revised and changes submitted to the DOT/PHMSA Pipeline Response Plans Officer within 30 days of each change that would substantially affect the implementation of the Plan.

DOT/PHMSA must be provided with two copies of the revised Plan, in electronic format. The revised Plan copies must be submitted with the issued PHMSA Sequence Number. In addition to the periodic updates, the Plan will be resubmitted to DOT/PHMSA every five years from the last approval date.

Conditions Requiring Plan Changes

Conditions Requiring Changes	EPA	DOT
Material change in the facility's spill prevention and emergency response procedures.	X	X
Change in the Facility's configuration that materially alters the information included in the Plan.	X	X
Change in the type of oil handled, stored, or transferred that materially alters the required response resources.	X	X
A change in the name of the Oil Spill Removal Organization (OSRO).	X	X
Material change in capabilities of the Oil Spill Removal Organization(s) (OSROs) that provide equipment and personnel.	X	X
Any other changes that materially affect the implementation of the Plan.	X	X
A change in the listings of economically important or environmentally sensitive areas identified in the applicable ACP in effect six (6) months prior to the plan review.		X
Relocation or replacement of portions of the Facility (including the Pipeline) which in any way substantially affects the information included in the Plan, such as a change to the Worst Case Discharge Volume.		X
Emergency Response Procedures.		X
An extension of the existing pipeline or construction of a new pipeline in a response zone not covered by the previously approved plan.		X
The qualified individual.		X
A change in the NCP or an ACP that has significant impact on the equipment appropriate for response activities.		X

1.3. Regulatory Compliance

The development, maintenance, and use of this Plan implements Company policy and addresses the following regulatory requirements and guidelines:

- Federal Oil Pollution Act of 1990: U.S. DOT Final Rule for Transportation Related On-Shore Facilities (49 CFR Part 194)
- Federal Oil Pollution Act of 1990: U.S. Environmental Protection Agency Final Rule for Non-Transportation Related On-Shore Facilities (40 CFR Part 112.21)
- Occupational Safety and Health Administration (OSHA) requirements for emergency response plans (29 CFR 1910)

The Plan has been reviewed for consistency with the following documents:

- National Oil and Hazardous Substance Pollution Contingency Plan (40 CFR part 300)
- EPA Region VI – Area Contingency Plan prepared pursuant to section 311(j)(4) of the Clean Water Act

1.4. Facility Information

General Information - Oil Storage Facility	
Facility Name:	Oil Storage Facility
Facility Address:	From Mentone, TX take CR 200 south 8.7 miles, turn left (east) at Y. Go 2/10th of a mile and bear left at Y. Continue 2.7 miles to lease road and turn left. Travel 1.8 miles to location.
County:	Loving County, Texas
Facility Phone Number:	N/A
Latitude/Longitude: degrees, minutes, seconds	(b) (7)(F)
Wellhead Protection Area:	Not in wellhead protection area
EPA ID#:	TBD
DOT-PHMSA ID#:	TBD
Owner/Operator of Facility:	Anadarko Lone Creek Gathering LLC
Owner/Operator Address:	Anadarko Lone Creek Gathering LLC (subsidiary of Anadarko Petroleum Inc.) 1201 Lake Robbins Drive The Woodlands, TX 77380 County: Montgomery
Phone Number:	1(800) 800-1101
Qualified Individual:	Brett Clark – Area Supv Work Address: 831 South East Ave. Kermit, TX 79745 (b) (6) Emergency Phone Number: (432) 693-6666 Office Phone: (432) 684-2814
Alternate Qualified:	James Gonzalez – Sr. Foreman Work Address: 831 South East Ave. Kermit, TX 79745 (b) (6) Emergency Phone Number: (432) 290-2726 Office Phone: (432) 684-2706
Date of Oil Storage Start up:	December 2012
Current Operations:	Crude Oil Terminal
NAICS code:	424710
Date(s) and Type(s) of Substantial Expansion(s):	N/A
Operator Statement of “Significant and Substantial Harm”:	As per 49 CFR.103, the significant and substantial harm criteria does not apply to the Oil Storage Facility nor the Bone Springs Oil Pipeline because both are located over one (1) mile from potentially affected environmentally sensitive areas.

PHYSICAL DESCRIPTION – TRUCK RACK**General:**

The Facility receives Crude Oil via a five (4) bay truck loading rack. Lanes 1 thru 4 are used for loading (unloading) operations. Product is then piped to the Oil Storage Facility.

Truck Capacities:

The largest single compartment of any truck unloaded at the Facility is (b) (7)(F).

Discharge Prevention:

The truck rack is designed to allow any potentially spilled product to flow toward the drain. Collected product would be piped to the Oil Storage Facility divert tank.

(b) (7)(F)

PIPELINE LOCATION					
Counties Traversed:	Loving County				
PHYSICAL DESCRIPTION - PIPELINE					
General:					
<ul style="list-style-type: none"> The pipeline originates at the Oil Storage Facility and transports product to the Plains Blacktip Terminal. All storage tanks at the Oil Storage Facility fall solely under EPA jurisdiction only. The Facility does not have any dual jurisdictional storage tanks. 					
Pipeline Specifications:					
The basic specifications of the pipeline are as follows:					
<ul style="list-style-type: none"> Product Types: Pipe Detail: Line Length: 	<ul style="list-style-type: none"> Crude 10.75" 1.68 miles 				
Response Resources:					
Facility spill mitigation procedures and response guidelines are discussed later in the Plan for discharges that could result from any of the following potential scenarios:					
<ul style="list-style-type: none"> Pipeline rupture/leak Explosion and/or fire Equipment failure 					
These scenarios could result in the following discharge volume:					
Response Zone	Discharge Scenario	Potential Oil Group	DOT/PHMSA Planning Volume		
Bone Springs Pipeline	WCD	2	(b) (7)(F)		
This Worst Case Discharge volume is used in calculating the planning volume for response resources.					
RESPONSE ZONE INFORMATION					
General:					
<ul style="list-style-type: none"> The Response Zone includes the following: 					
RESPONSE ZONE					
Name of Pipeline	Type of Oil	Start Point	End Point	Counties	State
Bone Springs Pipeline	Crude	Oil Storage Facility	Plains Petroleum Storage and Pipeline Facility	Loving	TX

1.5. Diagrams

Figure 1
Aerial Map

Figure 2
Facility Diagram

Figure 3
Drainage Diagram

Figure 4
Evacuation Diagram

Figure 5
Facility Environmental Sensitivity Map

Figure 6
Pipeline Map

Figure 7
Pipeline Environmental Sensitivity Map

2. Notifications

2.1. Notification Instructions

The following internal notification should be made for each emergency incident, as the incident demands. In no event shall notification be delayed because the immediate supervisor is inaccessible.

Personnel	Notification Procedure						
First Responder	The employee at the scene who is most qualified to do so will render first aid or assistance and assign personnel to call emergency services and notify the Qualified Individual.						
Qualified Individual	The Qualified Individual will obtain details of the incident, assure that emergency services have been called, notify the Area Manager / Next Level Supervisor and EHS Representative and direct further on-site activities. The Qualified Individual will notify appropriate members of the Facility Emergency Response Team.						
Area Manager / Next Level Supervisor	The Area Manager / Next Level Supervisor will notify the Region Manager and Incident Commander.						
EHS Representative	The EHS Representative will: <table border="1"> <tbody> <tr> <td>a.</td> <td>Notify appropriate regulatory agencies and EHS Manager.</td> </tr> <tr> <td>b.</td> <td>Complete the appropriate incident reports.</td> </tr> <tr> <td>c.</td> <td>Conduct necessary incident investigation.</td> </tr> </tbody> </table>	a.	Notify appropriate regulatory agencies and EHS Manager.	b.	Complete the appropriate incident reports.	c.	Conduct necessary incident investigation.
a.	Notify appropriate regulatory agencies and EHS Manager.						
b.	Complete the appropriate incident reports.						
c.	Conduct necessary incident investigation.						
Incident Commander or designee	The Incident Commander or designee will notify the appropriate personnel and will determine if the Emergency Response Room is to be activated and what Incident Management Team (IMT) members should be notified.						
Notes	All injuries / illnesses should be reported to the EHS Representative immediately. If any injury / illness falls under the "report immediately" guidelines, it is unacceptable to leave a message only – always continue to call through the chain of command until a person is reached.						

2.2. Reporting Procedures

Anadarko employees, contractors, and subcontractors are responsible for maintaining a vigilant watch for spills and releases of any magnitude from Anadarko facilities and operations. Personnel reporting spills and releases of regulated substances of any size or any type of emergency incident at an Anadarko facility will follow the reporting procedures listed below:

External Notifications (APC Form 416 (Report a Release) must be completed.)

Operations personnel are responsible for reporting spills and releases to water, threatening water, or a volume exceeding any regulatory threshold to the following regulatory agencies immediately:

1. National Response Center (Spills reaching navigable waters)
2. EPA (Spills related to NPDES discharge point)
3. Appropriate State & Local Regulatory Agencies

Internal Notifications (APC Form 416 (Report a Release) must be completed.)

Operations personnel are responsible for entering all non-agency reportable spills greater than one barrel and all agency reportable spills, regardless of size, into Anadarko's Spill/Release Reporting database. Electronic notifications are then made automatically to the appropriate personnel. Refer to Anadarko's Spill/Release reporting Program for more information.

After notification, EHS Department personnel will provide follow-up activities listed below:

1. Confirm notification by Field Personnel and complete additional notifications;
2. Provide subsequent written notifications and/or reports as required;
3. Conduct an incident investigation and recommend improvements as needed.

Facility Response Team Contact Information

NAME	PHONE #	RESPONSE TIME (MIN.)
Qualified Individual: Brett Clark, Area Supv	Office: (432) 684-2814 Cell: (432) 693-6666	1 hour
Alt. Qualified Individual: James Gonzales, Sr. Field Foreman	Office: (432) 684-2706 Cell: (432) 290-2726	1.5 hours
Lupe Martinez, Sr. Fieldman	Cell: (432) 448-2252	0.5 hours
John Pilcher, Sr. Fieldman	Cell: (432) 210-6162	1.5 hours
Johnathan Garcia, Fieldman I	Cell: (432) 296-2741	0.5 hours
Aaron Jennings, Fieldman I	Cell: (432) 296-2845	0.5 hours
Efren Ray, Fieldman III	Cell: (432) 813-6792	1.5 hours
Bill Woodruff, Staff Field Analyst	Cell: (432) 813-0433	1 hour
Ruben Chavarria, Sr. Field Analyst	Cell: (432) 290-8628	1.5 hours
Tommy Sawyer, Sr. Mechanic	Cell: (432) 741-9294	1 hour
Eddie Urias, Measurement Tech II	Cell: (432) 269-2871	1.5 hours

Incident Management Team Response Personnel Contact Information

NAME	TITLE	OFFICE	CELL	HOME
Incident Commander				(b) (6)
Reyes, Mario	General Manager	832-636-3431	832-381-0923	
Bosworth, Steve	Vice President Worldwide Drilling	832-636-3136	713-898-0732	
Altena, Dan	General Manager	832-636-2343	281-216-9812	
Griffie, Chuck	Operations Manager	832-636-8694	303-618-5020	
Sundland, Mark	Drilling Manager	832-636-8477	281-793-6449	
Kerr, Mark	Sr. Drilling Supt	979-778-4867	409-382-3696	
ER Facilitator				
Adams, Jerry	EHS Manager	832-636-8304	281-731-5931	
Gray, Mike	Director, EHS & Regulatory	832-636-2454	281-415-6964	
Safety Officer				
Ponikvar, David	Safety & Health Manager	832-636-3414	281-732-7887	
Spencer, Tim	EHS Manager	832-636-2508	832-585-4307	
Payne, Dusty	Sr. EHS Rep	832-636-3908		
Legal				
Urvan, Sean	Counsel	832-636-1664	309-229-9037	
Kuhn, Linda	Sr. Counsel	832-636-7506	281-630-4800	
Humanitarian Response				
Lucher, Jennifer	Sr. HR Business Partner	832-636-7031	832-627-9966	
Comeaux, Georgetta	Staff HR Analyst	832-636-8876	281-703-0004	
Schulze, Leah	Sr. HR Business Partner	832-636-3936	936-524-0663	
Vice President				
Lawler, Doug	Vice President Operation	832-636-1384	281-639-3436	
Rea, Danny	Vice President, Midstream	832-636-7122	713-906-8639	

Planning Section Chief			
Gough, Rob	EHS Manager	832-636-1356	225-803-9375
Guidry, Chad	Sr. Env. & Regulatory Analyst	832-636-8881	281-813-9342
Betik, Julie	Sr. Staff Env & Regulatory Analyst	832-636-2609	281-793-7705
Cedillo, Rolando	EHS Manager	832-636-7081	281-684-5587
Operations Section Chief			
Cervený, Bruce	Sr. Staff Project Engineer	832-636-8376	281-387-8749
Bazaldua, Eric	Engineering Manager	832-636-1789	832-421-7551
Leblanc, Gary	Sr. Staff Facilities Eng	832-636-8635	832-247-6016
Maldondo, Lori	Project Eng II	832-636-2655	281-413-9272
Rovira, Scott	Drilling Oper Manager	832-636-2761	281-702-0652
Rushing, Tom	Production Manager	832-636-2503	281-382-4604
Wisler, Del	Production Eng Manager	832-636-2372	832-392-5420
Seefeldt, Mark	Production Eng Manager	832-636-4902	713-306-4495
Kapple, Dave	Production Eng Manager	832-636-2542	281-881-9069
Spackey, Ted	Production Eng Manager	832-636-2746	
Goebel, Gordon	Sr. Staff Analyst	832-636-4787	832-493-3237
Nosich, Keith	Completions Engineering Mgr	832-636-3143	713-898-6900
McRae, Jim	Drilling Oper Manager	832-636-2669	
Plemons, Billy	Drilling Oper Manager	832-636-4970	713-299-3837
Geary, Dan	Drilling Oper Manager	832-636-2377	713-294-3585
Stone, Justin	Drilling Oper Manager	832-636-2945	936-647-5175
Nichols Josh	Drilling Oper Manager	832-636-3487	281-615-9823
Logistics Section Chief			
Cronan, Kevin	Sr. Supply Chain Rep	832-636-2619	832-585-2885
Harvin, Barbara	Supply Chain Analyst	832-636-1385	281-704-2900
Bangert, Russell	Procurement Drilling	832-636-2660	281-733-8821

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Technical Support				
Raney, Jim	Engineering Manager		832-636-3275	281-384-7924
Harris, Mike	Sr. Facilities Engineering Advisor		832-636-1161	713-819-2811
Communications Unit – GSC 62900				
Bryant, Michelle	Customer Support Lower Tower Manager		832-636-2388	281-755-5978
Finance Section Chief				
Wierzowiecki, John	AP & AFE Manager		832-636-7774	936-334-5422
Williams, Barry	Accounting Manager		832-636-2404	713-705-3838
Document Control				
Lambert, Charity	Engineering Technologist I		832-636-4976	281-222-6972
Strong, Trish	Staff Engineering Technologist		832-636-2815	281-352-1013
Surface Land				
Dodson, Chuck	Land Mgr		832-636-1256	281-743-0728
ERT Support				
Lee, Bob	Sr. Staff EHS	Bryan	979-778-4868	979-229-3948
Danton, David	Sr. Safety & Health Analyst	Pinnacle Plant	903-928-1227	903-948-6672
Henderson, Danny	Staff EHS Regulatory Analyst	Carthage	903-291-4200	903-754-9583
Turner, Bobby	Safety & Health Analyst II	Midland	432-230-4218	580-380-9252
Allan Henne	Staff EHS Rep	Liberal	600-544-6213	620-629-5337
Weaver, Eric	Sr. EHS Analyst	Midland	432-684-2808	432-413-2494
West, Shane	Sr. EHS Rep	Carthage	409-383-5457	409-200-1100
Chapman, DeCarlos	EHS Rep	Carrizo Springs	830-491-3341	830-255-6277

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Gilliland, Chad	Sr. EHS Rep	Carrizo Springs	830-491-3321	830-255-9858	
Mullen, Devin	EHS Rep	Carrizo Springs	830-491-3358	830-322-8078	
Ramirez, Franco	Sr. EHS Rep	Carrizo Springs	830-491-3347	830-322-8079	
Barbier, Mark	EHS Rep	Williamsport	570-244-4029	570-360-3796	
Hall, Rick	Sr. EHS Rep	Williamsport	570-244-4056	570-932-1088	
Lock, Matthew	Staff EHS Rep	Williamsport	570-244-4051	570-932-0323	
Lorson, Jeff	Sr. EHS Rep	Williamsport	570-244-4062	570-220-1189	
Miller, Steven	EHS Rep	Williamsport	570-244-4048	304-951-8662	
Spinks, David	Sr. EHS Rep	The Woodlands	832-636-7047	281-460-2469	
McFarland, Michael	Sr. EHS Rep	Midland		713-557-6946	
Christian, Randall	Sr. EHS Rep	Carrizo Springs	830-491-3463	936-366-4580	
<i>Emergency Response Room #</i>	16079 in Anadarko Tower – ALR				
Fax Number	832-636-2266				
Speaker Phone	832-636-8250				

Houston Emergency Response Team Contact Information

NAME	TITLE	OFFICE	OFFICE	CELL	HOME
Schlagel, Phillip	Director, EHS & Regulatory	Woodlands	832-636-2970	720-470-9215	(b) (6)
McBride, David	Vice President – EHS	Woodlands	832-636-4896	832-474-1926	
Farris, Mike	EHS Mgr	Woodlands	832-636-2661	832-585-3914	
Weissling, Kent	EHS Advisor	Woodlands	832-636-2368	713-775-9591	
Meloy, Chuck	Sr. VP – US Onshore E&P	Woodlands	832-636-1601	713-876-6465	
Wilson, Kelly	EHS Manager	Woodlands	832-636-4910	832-278-9900	
Kastensmidt, Steve	Staff EHS Representative	Woodlands	832-636-3185	713-826-0850	
White, Joe	EHS Representative II	Woodlands	832-636-7028	832-837-9573	
White, Sylvia	Sr. EHS Representative	Woodlands	832-636-3849	281-682-0284	
Information Officer					
Hotline: 888-387-8973					
Christiansen, John	Dir, External Communication	Woodlands	832-636-8736	832-434-6884	
Cain, Brian	Sr. Staff Public Affairs Rep	Woodlands	832-636-3404	281-825-2010	
Ramirez, Christina	Public Affairs & Corporate Comm	Woodlands	832-636-8687	832-491-6777	

APC 416 (12/08)



Report a Release

Classification:	<input type="checkbox"/> Agency Reportable		<input type="checkbox"/> Non-Reportable	
Release Type:	<input type="checkbox"/> Spill	<input type="checkbox"/> NPDES Exceedance	<input type="checkbox"/> Excess Emission	<input type="checkbox"/> Sighting
Facility Information				
Facility			Cost Center	
Office			Type of Facility	
Current Operator			Lease / RRC No.	
Qtr/Qtr		Section/ TX Survey	Township/ TX Block	Range/ TX Sec.
API#	State/ Survey/Country		County/ Block/Parish	
Latitude	Longitude		Field/OCSG#	
Release Information				
Field Contact	Source Latitude		Source Longitude	
Discovered		Approximate Released Date/Time		Controlled
Date	Time	Date	Time	Date
Describe Release				
Describe Probable Cause of Release				
Describe Actions to Control Release				
Type of Operation:	<input type="checkbox"/> Production <input type="checkbox"/> Drilling	<input type="checkbox"/> Midstream <input type="checkbox"/> Construction	<input type="checkbox"/> Other	Apparent Cause
Spill				
Material Released	Qty Released	Qty Into Waterway	Qty Recovered	
<input type="checkbox"/> Produced Water	bbl	bbl	bbl	
<input type="checkbox"/> Condensate	bbl	bbl	bbl	
<input type="checkbox"/> Crude Oil	bbl	bbl	bbl	
<input type="checkbox"/> Other:	bbl	bbl	bbl	
Excess Emission				
Type of Excess Emission:	<input type="checkbox"/> Equipment Malfunction <input type="checkbox"/> Startup	<input type="checkbox"/> Process Upset <input type="checkbox"/> Shutdown	Expected to last more than 24 hours?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Amt Flared:	scf	Amt Vented:	scf	Permit Number:
Supp Gas Amt:	scf	Supp Gas Heat Content:	btu/scf	Opacity %:
Impact				
Length:	ft	Width:	ft	Depth:
Contained within berm?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Onto Federal Land?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Size of Area Impacted:
Did the release enter or threaten surface water?	<input type="checkbox"/> Threatened surface water		<input type="checkbox"/> Entered surface water	<input type="checkbox"/> No, did not threaten or enter surface water
Did the release contact groundwater?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown	
Select Affected Media:	<input type="checkbox"/> Air <input type="checkbox"/> Building/Module <input type="checkbox"/> Deck	<input type="checkbox"/> Wetlands <input type="checkbox"/> Gravel <input type="checkbox"/> Subsurface	<input type="checkbox"/> Offsite Soil <input type="checkbox"/> Ice / Snow <input type="checkbox"/> Lined Impoundment	<input type="checkbox"/> Wellsite / Facility Pad <input type="checkbox"/> Ice Pad / Road <input type="checkbox"/> Unlined Impoundment
Corrective Actions				
Clean up Start		Clean up Stop		
Date	Time	Date	Time	
Describe Clean-up Measures (Who / What / How)				
Describe preventive measures planned to prevent future spills				
Weather				
Temp:	°F	Visibility:	<input type="checkbox"/> Clear <input type="checkbox"/> Rain	<input type="checkbox"/> Cloudy <input type="checkbox"/> Sleet
			<input type="checkbox"/> Dusty <input type="checkbox"/> Snow	<input type="checkbox"/> Fog
Wind Dir. From:		Wind Velocity:	knot	
Contact Log				
Agency Contacted	Phone Number	Contact	Date / Time	Reference #
Remarks:				
Report Prepared by:			Date Prepared:	



Report a Release (Supplemental Information)

EPA Clean Water Act Section 308 (a) Request				
Discovered By?		Discovered How?		
Nearest Water Elevation		Source Elevation		
Location:	Latitude	Longitude	During Photo	After Photo
Source of Spill:				
End of Source:				
Draw:				
Temp Containment:				
Perm Containment:				
Nearest Water:				
Total Capacity of Source:	bbl	FRP # and Date:		
Facility Above Ground Oil Storage Capacity:	bbl	Facility Under Ground Oil Storage Capacity:		bbl
Source – Pipeline Info:		From	To	
Diameter:	in	Construction:	Throughput:	bbl/day
Reach a drainage feature?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Impact Sensitive Area?	<input type="checkbox"/> Yes <input type="checkbox"/> No	SPCC Plan? <input type="checkbox"/> Yes <input type="checkbox"/> No
What was the condition of the drainage feature at the time of the release?	<input type="checkbox"/> Dry <input type="checkbox"/> Damp <input type="checkbox"/> Standing / Pooling <input type="checkbox"/> Flowing <input type="checkbox"/> Frozen			
How often does the drainage feature have water flow?	<input type="checkbox"/> Continuous <input type="checkbox"/> Seasonal <input type="checkbox"/> Only after stormwater (rainfall or snowmelt) event which is _____ times a yr			
Describe impact to animals or vegetation				
Describe Environmental Impact				
How was quantity released determined?				
Describe the flow path from the end point of the release to the nearest water				
Describe type of water entered				
Describe upstream and downstream waters to which affected water is connected				
Describe the appearance of the water after release entered the water				
Describe the appearance of the adjacent soils / shoreline after the release entered the water or drainage feature				
Describe Oil handling training program				
Material Analyzed (Include locations / time, individual, lab name)				
Materials Reference Information				
Permit ID, Issuing Agency, Issue Date				
Agency, Fine Amount, Fine, Date				
All other individuals that may have information				
Agency	Agent on Site	When?		

EXTERNAL NOTIFICATIONS

REQUIRED NOTIFICATIONS		
AGENCY	ADDRESS	PHONE NUMBER
National Response Center (NRC)	c/o United States Coast Guard (CG-5335) – Stop 7581 2100 2 nd Street, SW Washington, DC 20593-0001	(800) 424-8802 (202) 267-2675 (202) 267-1322
Reporting Requirements: Type: All spills that impact or threaten navigable waters. Verbal: Immediately Written: Within 60 days of 1,000 gallons in a single event or two spill events within a twelve month period		
Environmental Protection Agency (EPA) Region VI	1445 Ross Avenue, Ste 1200 Dallas, TX 75202	(800) 424-8802 (Emergency) (800) 887-6063 (Non-Emergency)
Reporting Requirements: Type: Any spill that impacts or threatens navigable waters or the adjoining shoreline. Verbal: Immediately Written: A written report must be submitted to the Regional Administrator within 15 days from the date of the incident.		
Pipeline and Hazardous Materials Safety Administration (PHMSA)	East Building, 2 nd Floor 1200 New Jersey Ave., SE Washington, DC 20590	(800) 424-8802 (202) 366-4433
Reporting Requirements: Type: Any release of hazardous liquid or carbon dioxide that: <ul style="list-style-type: none"> • Results in an unintentional fire or explosion, • Causes a death or personal injury requiring hospitalization, • Causes property damage, including cleanup costs exceeding \$50,000, • Is significant in other respects, OR • Is 5 gallons or more Verbal: Immediately Written: A written report (PHMSA Form 7000-1) must be filed with the DOT within 30 days after discovery of the accident. This form must also be filed within 30 days for any spill that results in a loss of 5 or more gallons of hazardous liquid, carbon dioxide, or HVL, except for releases of less than 5 barrels resulting from a pipeline maintenance activity if the release is: <ul style="list-style-type: none"> • Not otherwise preventable • Does not impact a body of water • Confined to company property or ROW • Clean up promptly 		

OTHER POTENTIAL REQUIRED NOTIFICATIONS		
AGENCY	ADDRESS	PHONE NUMBER
Occupational Safety and Health Administration (OSHA)	200 Constitution Avenue Washington, DC 20210	(800) 321-6742
Reporting Requirements: Type: Any work-related incident, which results in the death of an employee or in-patient hospitalization of three or more employees. Verbal: Within 8 hours Written: As requested by Agency		
Texas Railroad Commission (RRC)	1701 N. Congress Ave Austin, TX 78701	(512) 463-6788
Reporting Requirements: Type: Oil or condensate spills of 5 barrels or greater, offsite produced water spills greater than 25 barrels or other amount recommended by RRC Districts, and any oil, condensate or produced water spill into surface water. Verbal: Immediately (within 2 hours) Written: For oil or condensate spills, follow up with written report (Form H-8) to the RRC District as soon as possible but no later than 30 days.		
Texas Commission on Environmental Quality (TCEQ)	12100 Park 35 Circle Austin, TX 78753	(800) 832-8224
Reporting Requirements: Type: Any release that exceeds the reportable quantity for that specific chemical to the agencies listed in the SARA Title III List of Lists. Verbal: Immediately (no later than 24 hours) Written: As requested by Agency		
Texas Public Utilities Commission	1701 N. Congress Avenue 7 th Floor Austin, TX 78701	(512) 463-6788
Reporting Requirements: Type: Any event that involves a release of gas, crude, hazardous liquids, or carbon dioxide from any pipeline which: <ul style="list-style-type: none"> • Caused a death or any personal injury requiring hospitalization; • Required taking any segment of a transmission line out of service, except as part of planned or routine maintenance or construction; • Resulted in unintentional ignition requiring emergency response; • Caused estimated damage to the property of the operator, others, or both totaling \$50,000 or more, including product loss; or • Could reasonable be judged by the operator as significant because of location, rerouting of traffic, evacuation of any building, media interest, etc. Verbal: Immediately (within 2 hours) Written: Within 30 days		

Local Emergency Services Contacts

ORGANIZATION	LOCATION	TELEPHONE
Mentone Orla Fire Department	Mentone, TX 79754	911
Pecos Fire Department	Pecos, TX 79772	911 / 432-445-3519
Kermit Fire Department	Kermit, TX 79745	(432) 586-2577
Reeves County Hospital	Texas Street, Pecos, TX	(432) 447-3551
Midland County Emergency Management Coordinator Fire Marshal: M. Dale Little	2435 E Highway 80 Midland TX 79706	432-688-4160 Phone after 5:00pm and weekends: 432-688-4600
Midland Fire Department Patrick Repman (Deputy Coordinator) HazMat / Emergency Management	FM 307 Harris Field	432-685-7337
Odessa Regional Medical Center	520 East Sixth Street in Odessa, TX	(432) 582-8000
Medical Center Hospital	500 W 4th St, Odessa, TX 79761	(432) 640-4000

Local Media and Other Stakeholders

ORGANIZATION	LOCATION	TELEPHONE
NewsWest 9 - KWES-TV (NBC)	NewsWest 9 Mailing Address P.O. Box 60150 Midland, TX 79711	NewsWest 9 Newsroom: (432)-567-9991 NewsWest 9 Main: (432)-567-9999
CBS7	Address: 4101 East 42nd St. Suite J7 Box 107 Odessa, TX 79762	News: 432.580.6397 Main: 432.580.5672
KPEJ 24 Fox West Texas	1550 W. I-20, Odessa, Texas 79750	(432) 580-0024

Emergency Response Contractors

CONTRACTORS	PHONE	ALTERNATE PHONE	LOCATION
<i>EMERGENCY EQUIPMENT/ SERVICES</i>			
Fischer Construction/Heavy Equipment	432-634-1334	432-332-7532	
Etech Environmental & Safety	432-557-6080	432-563-2200	
ROC Construction	432-556-2325		
<i>NEIGHBORING FACILITIES</i>			
None			
<i>UTILITIES</i>			
None			
<i>WELL CONTROL</i>			
Boot & Coots	281-931-8884		
Cudd Pressure Control	307-382-6650		
Wild Well Control	281-784-4700		
<i>OTHER SUPPLIES</i>			
McJunkin RedMan	830-468-3383	830-468-3383	
<i>WILDLIFE RESPONSE</i>			
Wildlife Rehab & Education	713-861-WILD	713-861-9453	
<i>EMERGENCY RESPONSE PROVIDERS</i>			
O'Brien's Response Management	985-781-0804 (24 hrs)		
Etech Environmental & Safety	432-557-6080	432-563-2200	

3. Response Actions

3.1. Initial Response Actions

Initial Response actions are those actions taken by personnel immediately upon becoming aware of a discharge or emergency incident. It is important to note that the actions described in this section are intended only as guidelines. The appropriate response to a particular incident may vary depending upon the nature and severity of the incident.

The first Anadarko employee on scene will function as the Person-in-Charge until relieved by an authorized supervisor who will assume the role of on-scene Incident Commander. Transfer of command will take place as more senior management respond to the incident.

3.2. Hazardous Spill or Gas Release

Line Break or Leak

- Notify the Foreman or supervisor on duty.
- Shut down pumping equipment.
- Close upstream and downstream block valves.
- Drain the line section, as the situation demands.
- Make appropriate DOT-PHMSA response notifications, including reporting requirements.
- Determine which environmentally sensitive areas may be threatened by the spill and direct the response operation to these locations.
- Request local authorities to establish traffic control in the area, as the situation demands.
- Ensure pipeline is gas-free before attempting any hot work on the system.
- Make all necessary repairs.
- Return the line to service once repairs are completed.

Storage Tank Leak

- Notify the Foreman or supervisor on duty.
- Shut down all tank battery product movement operations and isolate the tank.
- Initiate Confined Space Entry procedures, as applicable.
- Ensure that the containment area drainage valve is closed.
- If near tank bottom, consider filling the tank with water and maintain water bottom to suspend the discharge.
- Block all drainage of spilled material from travelling offsite.
- Request local authorities to establish traffic control in the area, as necessary.
- Remove product from containment area with an explosion proof pump, oil skimmer, and/or vacuum truck with skimmer attachments.
- If floating roof tank is submerged and tank must be drained, follow the facility operating procedure for landing floating roof and draining any liquids contained upon the floating roof.
- Ensure tank is gas-free before attempting any hot work on the system.
- Make all necessary repairs.
- Return the tank to service once repairs are complete and the tank has been tested.
- Clean up spilled product to eliminate any possible environmental problems.
- Determine which environmentally sensitive areas may be threatened by the spill and direct the response operation to these locations.
- If necessary, call an approved waste removal company to remove the remaining sludge and residue from the containment area

Truck Rack Spill

- Notify the Foreman or supervisor on duty.
- Evacuate personnel from the truck rack area, as the situation demands.
- Shut down all loading operating, pump motors and loading valves.
- Guard against all source of ignition.
- Stop all traffic from entering rack or hazardous area.
- If a line leak, close of riser valves and/or tank valves.

3.3. Fire/Explosion

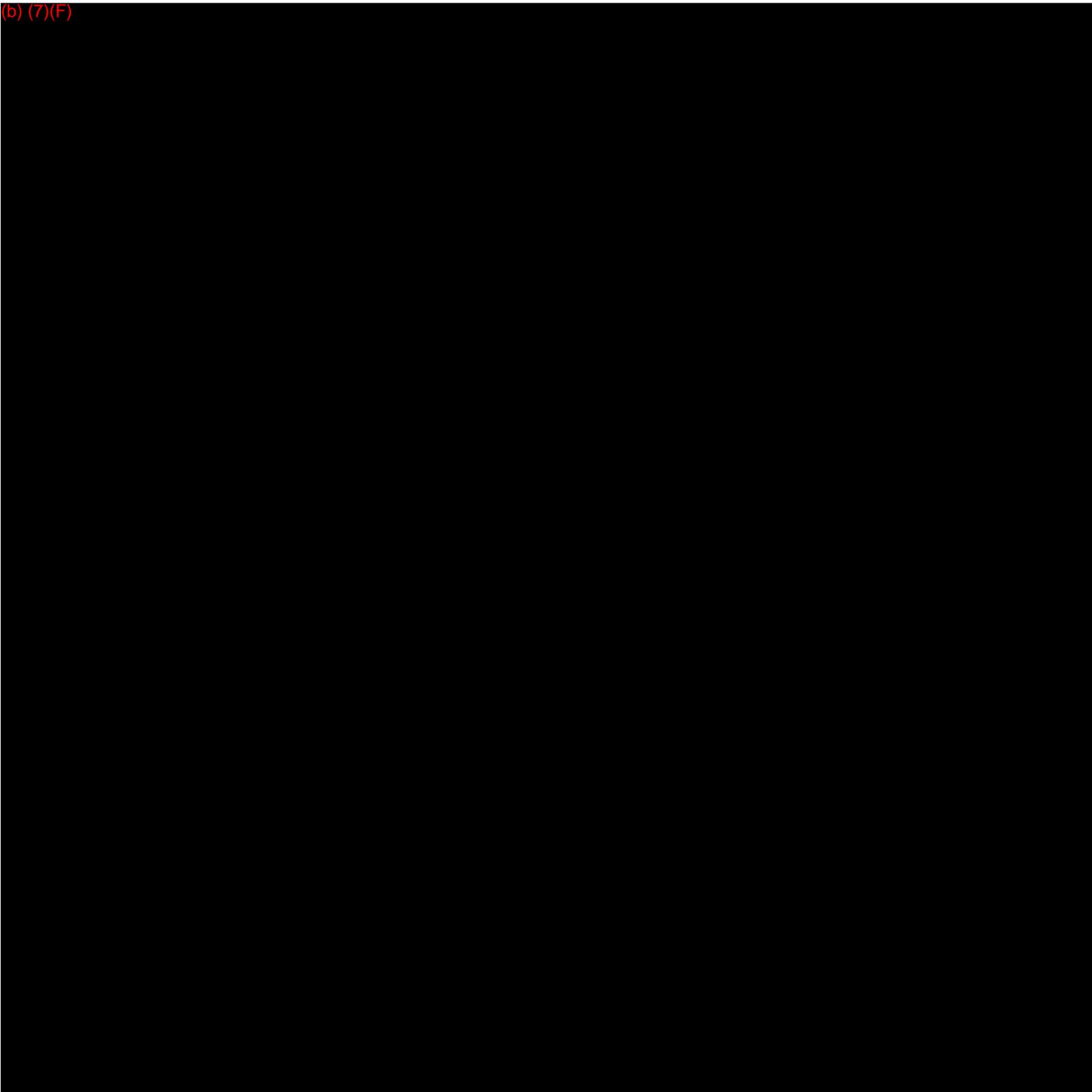
- Notify the Foreman or supervisor on duty.
- Shut down pumping equipment.
- Call 911 for emergency fire services.
- If time and circumstances allow, instruct all drivers to shutdown pumps, discontinue loading activities and disconnect hoses.
- If safe to do so, individuals may attempt to extinguish with the appropriate fire equipment.
- In the fire is too large for an individual to fight alone, shut down the Facility, evacuate personnel and move to a muster area or other safe distance to direct the fire department to the scene of the fire.
- Keep other personnel and vehicles from entering the danger area.
- Tell all drivers to stand by their trucks and await instructions, however, each person onsite should evacuate if necessary to protect themselves from harm.
- Close facility tank valves.

3.4. Vapor Cloud

- Sound the alarm and notify the Foreman or supervisor on duty. Vacate the area.
- The only proper action in the presence of a vapor cloud is to get away from it. Do not shut off electrical equipment.
- All personnel should report to the muster point for roll call and further instructions.
- Contact the appropriate agencies and potentially affected neighbors

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3.6. Natural Disasters

Tornado or Severe Storms

- Be Aware of Changing Weather Conditions
 - Tornado watch – conditions are right for the formation of a tornado
 - Tornado warning – a tornado has been sighted but is not in the area at this time
 - Tornado alert – a tornado has been sighted in the immediate area. Take cover immediately
- If Severe Weather Conditions Threaten
 - Monitor weather conditions and broadcasts for alerts or dangerous weather.
 - Alert Facility personnel of condition
 - Avoid dangerous storms, stay indoors or in shelter.
 - Seek shelter in a low level area away from glass
 - Stay in the shelter until “ALL CLEAR” has been issued
- Immediately After the Storm
 - Account for all personnel
 - Survey for damages to Facility property
 - Initiate team for any repairs needed

3.7. Safety Awareness

It is the corporate policy of the Company to provide a safe workplace for all workers. All employees and contractors are responsible for maintaining the safety and health of all workers on the pipeline and the response operations. Prior to engaging in any spill response activity:

- All employees/contractors must have received orientation from the Company Safety Plan.
- All contractor response personnel must be in compliance with OSHA training requirements.
- All other personnel will have completed appropriate training for their position
- No employee/contractor shall engage in activities which place them at risk without the appropriate protective equipment and training.

Response Safety

All company and contractor personnel are expected to comply with the Site Safety Plan for each spill incident. Any concern regarding health or safety issues should be immediately addressed.

- The First Responder must consider a spill site is dangerous and the local atmosphere explosive until air-monitoring procedures prove that the area is safe.
- The First Responder must exit the area against or across the wind if possible and must also evacuate others who are working in the area.
- All injuries, no matter how minor, must be reported to the Safety Officer or Incident Commander in a timely manner.
- Prior to entering a spill area, a qualified person must perform an initial safety and health evaluation of the site.

Air Monitoring

A Safety Monitor shall be designated who is trained in the operation of air monitoring equipment. The Incident Commander must ensure that Safety Monitors are trained and that their equipment is maintained and ready for use.

- The air monitoring equipment shall be activated and checked at the location in which it is stored.
- Calibration of instruments should be performed before use.
- Air monitoring measurements which are to be made prior to entry into the spill area include:
 - Oxygen content
 - Lower Explosive Limit (LEL)
 - Benzene level
- LEL readings above 10% require immediate evacuation of the area and elimination of ignition sources.
- Oxygen readings below 19.5% require the use of air supplied respiratory protection.
- After assuring that there are no hazards relating to explosion or oxygen depletion, sampling for benzene or total petroleum hydrocarbons shall dictate the appropriate respiratory devices to be used by persons entering the area.
- The Incident Commander is responsible for industrial hygiene monitoring in the post discovery period.

Decontamination

Through training programs, Facility personnel know and understand the importance of the removal of hazardous substances from their person if they are contaminated. Eyewash stations and safety showers provide a means to quickly remove gross contamination of harmful agents, including gasoline. Personnel must immediately shower and remove any clothing which is wet or otherwise contaminated. Showers in the change room are to be used for thorough cleansing. Persons should inspect themselves thoroughly before donning a fresh change of clothing. Contaminated clothing should be disposed of properly. Contaminated personal protective equipment must be washed and sanitized before re-using. The washing of contaminated equipment is performed in a "contained area" to assure that the disposal of the wash water can be handled properly.

Establishing "Exclusion - Hot", "Decontamination - Decon", and "Support - Safe" zones are required to prevent the removal of contaminants from the contaminated area as well as unauthorized entry into contaminated areas.

- Regardless of the decontamination facilities available, all efforts to minimize personnel exposure should be taken.
- Decontamination facilities should be positioned prior to employee/ contractor entrance to areas where the potential for exposure to contamination exists. The appropriate Material Safety Data Sheets (MSDS) are available to aid health professionals treating the injured parties. MSDS' are separately maintained at the Facility.
- Decontamination facilities should be designed to prevent further contamination of the environment and should have a temporary storage area for items that will be reused in the contaminated area.
- Particular attention should be paid to personal hygiene prior to eating, drinking, or smoking.

3.8 Emergency Medical Treatment and First Aid

On-site emergency medical response for a contaminated patient requires the same rapid assessment of the patient as any other situation, but requires the responders to be aware of other considerations that may affect the way they handle the patient.

Considerations include the following:

- The potential for contamination of the patient, responders, and equipment should be addressed. Responders should arrange to treat all patients AFTER the injured party has been decontaminated according to the Site Safety Plan.
- Site personnel should make the initial assessment of the patient and determine the severity of the injury/illness.
- If the treatment needed is critical care or "lifesaving" treatment, rapid decontamination of the injured/ill party should be started. Refer to the Site Safety Plan for steps to be taken in an "abbreviated" decontamination for medical treatment.
- The need for full decontamination should be carefully weighed against the need for prompt medical treatment.
- The ambulance responding to medical emergencies shall be contacted as soon as possible and instructed exactly where to respond when needed and the nature of the contaminant.
- MSDS information will be available from the Incident Commander and should be provided to medical personnel to alert them of decontamination requirements.
- If emergency medical treatment is needed, the Incident Commander, or his designated representatives, will request assistance from trained medical personnel.

4. Equipment/Response Resources

4.1. Emergency Response Equipment

Due to the Facility's location and minimal potential for impact upon navigable waters, the Facility is not equipped with oil spill response equipment such as boom, skimmers, dispersants, etc. However, response equipment is stored in a centralized Spill Response Trailer in the region. This equipment is maintained according to manufacturer's recommendations by Company and/or contracted personnel.

The Facility has contracts in place with earth moving equipment vendors, which can provide personnel and/or heavy equipment, necessary for immediate response to a discharge scenario. The Facility also has contracts in place with oil spill cleanup companies, which can provide additional support in the event of a worst-case discharge scenario.

4.2. Communications

Effective and efficient communications systems are essential for emergency response at every level. The communications system will be utilized to gather information and current status reports as well as to provide coordination and direction to widely separated work groups involved in search, containment/diversion, repair, traffic control, public control or evacuation, and restoration.

Communication of the overall spill response operation between the Company and the responsible government agencies in the Federal Regional Response Team (RRT) will occur between the Incident Commander and the Federal On-Scene Coordinator.

4.2.1. Central Communications System

Prearranged communication channels are of the utmost importance in dealing with Company emergencies. The notification procedures and telephone contacts documented in Section 2.0 will be reviewed in accordance with the earlier documented updating procedures. The predetermined communications channels include the following:

- A list of emergency telephone numbers for internal management and emergency response personnel
- A list of emergency telephone numbers for various external resources such as the Fire Departments, Public Officials and local agencies

4.2.2. Communications Equipment

Field communications during a spill response will be handled via radios, telephones, cellular phones, fax machines, and computers and will be maintained by Company personnel. In the event of a Worst Case Discharge, field communications will be enhanced with contract communications vendors.

4.3. Volunteers

Volunteers will not be utilized by the Facility for response operations. All volunteers will be referred to the State and/or Federal On-Scene Coordinator.

4.4. Cooperative/Mutual Aid Resources

The Facility is not part of any Cooperative or Mutual Aid agreements.

4.5. Facility-owned Equipment

Firefighting and Rescue Equipment			
Type	Operational Status	Quantity	Location
30lb ABC Extinguisher	Ready	6	See evacuation diagram
30lb CO2 Extinguisher	Ready	6	See evacuation diagram
4-gas monitor	Ready	1	See evacuation diagram

Skimmers/Pumps					
Type/Model/Year	Operational Status	Quantity	Capacity bbl/day	Daily Effective Recovery Rate	Storage Location(s)
NONE					

Boom				
Type	Operational Status	Size (Length)	Containment Area	Storage Location(s)
Absorbent	Ready	(7) 3'x10'		Spill Trailer
Absorbent	Ready	(22) 3"x2'		Spill Trailer

Chemical Dispersants						
Type	Operational Status	Quantity/Amount	Date Purchased	Treatment Capacity	Storage Location(s)	Date Changed
NONE						

Sorbents				
Brand Name/Type	Operational Status	Size	Treatment Capacity	Storage Location(s)
MOP	Ready	(9) 22lb bags		Spill Trailer

Hand Tools			
Type	Operational Status	Quantity	Storage Location

Personal Protective Equipment			
Type	Description	Quantity	Location
Inner gloves		200pr	Spill Trailer
Boot Covers	Vinyl	8pr	Spill Trailer
Coveralls	Tyvek	8	Spill Trailer
Gloves	PVC	8pr	Spill Trailer

Other Equipment			
Type	Description	Quantity	Location
Overpack	95 Gallon	1	Spill Trailer
Pillows	12"x12"x2"	22	Spill Trailer
Pads	18"x18"	200	Spill Trailer
Bulk Bag	Poly	1	Spill Trailer

4.6. Evacuation Procedures

Evacuation Planning

The primary evacuation routes were developed with the following factors taken into consideration:

- Location of stored materials
- Hazards imposed by spilled material
- Spill flow direction
- Prevailing wind direction and speed
- Arrival route of emergency response personnel and response equipment
- Transportation of injured personnel to the nearest emergency medical facility
- Muster point locations
- Shelter-in-place locations

Evacuation Response

In case of an emergency within the Facility that would necessitate evacuation, some or all of the following steps will be taken, depending upon the type of emergency and circumstances:

- Sound an alarm or give verbal alarm
- Call 911
- Shut down loading/unloading and pipeline operations
- Evacuate trucks from the Facility
- Divert incoming trucks to a safe distance away
- Evacuate all personnel to designated staging areas

The evacuation diagram located in Section 1 depicts the Facility evacuation routes and muster point locations.

Community evacuation plans are in place and local authorities coordinate all community evacuation procedures.

4.7. Contract Resources

The Facility has agreements in place with oil spill cleanup contractors that would be activated if necessary. These resources are contracted to ensure that sufficient personnel and equipment are available to protect environmentally and economically sensitive areas during a worst-case discharge scenario.



(09/06)

MASTER SERVICE CONTRACT

(Domestic)

This Master Service Contract (the "Agreement") dated the **29th day of January, 2007**, is entered into by and between Anadarko Petroleum Corporation and its affiliate companies (collectively "Company") and **Etech Environmental & Safety Solutions, Inc.** (Contractor"), sometimes referred to herein individually as a "Party" or collectively as "Parties". This Agreement shall be effective on the earlier of the date that the services commence or the date that both Parties have executed the Agreement (the "Effective Date").

1. Purpose and Scope - This Agreement is a master contract between Company and Contractor and shall control and govern all Work performed by Contractor for Company within the 50 United States and state and federal territorial waters. This Agreement may be amended for international Work upon written agreement of the Parties.

2. General Definitions:

- a. "Applicable Law(s)" means applicable statutes, regulations, rules, codes, whether governmental or industry, interim administrative orders and/or enforcement actions.
- b. "Company's Personnel" means all employees, supervisors, representatives, agents and other persons or entities to be provided by Company and/or its subcontractors to conduct operations at the Work Site.
- c. "Contractor's Personnel" means all employees, supervisors, representatives, agents and other persons to be provided by Contractor and/or its subcontractors for the performance of the Work under this Agreement.
- d. "Force Majeure" means acts of God, war, named tropical storms, strikes (excluding strikes, lock-outs or other industrial disputes or action amongst Contractor's Personnel), acts of the public enemy, quarantine, epidemic, blockade, civil disturbance, riots, insurrection, the compliance with any Applicable Law which makes continuance of Work impossible, or any other cause beyond the reasonable control of a Party.
- e. "Good(s)" means products, materials, supplies, tools, equipment, software, and other items provided by Contractor to Company in connection with the performance of the Work under this Agreement.
- f. "subcontractor(s)" means a contractor or subcontractor, at any tier; provided that the term "subcontractor" shall not, insofar only as it is used in relation to Company, include Contractor or any of Contractor's contractors or subcontractors, at any tier.
- g. "Third Party" or "Third Parties" means a person or entity other than Company Indemnitees and Contractor Indemnitees and their respective invitees.
- h. "Work" means the performance of services by Contractor for Company; and the utilization, preparation, provision, sale or lease of Goods by Contractor to Company, unless Goods are subject to existing Purchase Order Terms and Conditions.
- i. "Work Order" means an oral or written request for Work issued by Company to Contractor and, which has been accepted by Contractor, in writing or by performance. An example of a Work Order is attached hereto as Exhibit "A".
- j. "Work Site" means the particular well site or other location where Company has requested Contractor to perform the Work.
- k. The phrases "arising in connection with this Agreement" or "the performance of the Work under this Agreement" and/or similar phrases, shall be broadly construed to include, not only the Work, but also transportation to and from the Work Site as well as any occurrences at the Work Site, regardless of whether the action or occurrence is related to performance of Work under this Agreement.

3. Work Orders - All Work Orders should include agreement on the terms set forth in Exhibit "A". Nothing in any Work Order shall modify or change the terms contained in this Agreement.

4. Responsibilities of Contractor:

- a. Contractor-Furnished Items and Personnel - Contractor shall furnish at its own expense any Goods, services and personnel (skilled in their trades and trained in safety) necessary for the performance and timely completion of the Work, all in like new condition and suitable for the Work unless otherwise specified in the Work Order.
- b. Compliance with Laws - Contractor shall comply with all Applicable Laws. In the event a representative of Company or any governmental entity finds any violation of an Applicable Law during the performance of this Agreement, which is caused by Contractor and/or Contractor's Personnel, corrective action shall be taken immediately by Contractor at Contractor's sole expense without limitation of any rights of Company. If Company, in good faith, or any governmental entity is not satisfied with Contractor's and/or its subcontractors' corrective actions, Company shall have the right to take over such corrective actions at Contractor's sole expense without waiver of any other remedy or any acceptance of liability for the non-compliance.
- c. Commencement and Completion of Work - Contractor shall commence and complete the Work within the time agreed upon in the Work Order. In the event Contractor, absent a Force Majeure event, fails to commence or complete the Work as

STER SERVICE CONTRACT (DOMESTIC) - (Con. d)

specified in the Work Order or abandons or suspends the Work, Company shall have the right to take over and/or complete the Work, without waiver of any other remedy.

d. Property Protection - Contractor shall use all reasonable efforts to perform the Work in a manner which shall cause the minimum of inconvenience to and shall avoid damaging the interests and property of landowners and tenants wherever involved. To the extent Contractor damages any such property, Contractor shall restore it to the condition it was in immediately prior to causing such damage.

e. Permits - Unless otherwise specified in the Work Order, Contractor shall obtain and pay for all necessary permits, licenses and inspection clearance for Contractor and its subcontractors that are required to be obtained in their respective names in connection with the Work.

5. Warranties and Inspections:

a. Services Warranty - Contractor warrants that all services shall be performed in a good and workmanlike manner and shall comply with Company's specifications applicable to the services. Contractor shall reperform any nonconforming services at Contractor's sole expense and to the reasonable satisfaction of Company, or, at Company's option, refund to Company that portion of the consideration that is attributable to the nonconforming service. If Company elects to have Contractor reperform the nonconforming service and Contractor fails to promptly commence or complete such performance to the reasonable satisfaction of Company, then Company shall have the right to have the nonconforming service performed by other means, and Contractor shall be responsible for all reasonable costs incurred in doing so. The service warranty period shall be for a minimum of twelve (12) months or such longer period as may be agreed to by the Parties, beginning on the date following completion of the services when Company first uses the serviced item.

b. Products Warranty - Contractor warrants that all Goods (excluding rental equipment addressed below) are suitable for their intended purpose, free from defect in design and workmanship and that such Goods shall comply with all Applicable Laws. In addition, with respect to Goods purchased by Contractor from its subcontractors, its other suppliers, or Third Parties, Contractor agrees to assign to Company all warranties and guarantees received by Contractor from the manufacturer and suppliers of the Goods to the extent such warranties and guarantees are assignable. Contractor will promptly repair or replace, at Contractor's sole expense and to the reasonable satisfaction of Company, any defects in such Goods caused by defective design, workmanship or faulty materials. The products warranty shall be for a period of twelve (12) months or such longer period as may be agreed to by the Parties, beginning on the date that Company first uses the Good(s).

c. Rental Equipment Warranty - Contractor warrants that, upon delivery and throughout the rental period, all equipment, tools, or other items rented to Company ("Rental Equipment") shall comply with Company's specifications, be in good working condition (misuse by Company or Company's Personnel excepted), and, if requested by Company, shall include operating manuals, supplies and spare parts. Rental payments shall be waived by Contractor during any time period that the Rental Equipment fails to operate properly or is otherwise inoperable through no fault of Company. Contractor shall respond in a timely manner to repair or replace the equipment. Equipment misused by Company or Company's Personnel will be either repaired or replaced at Company's option and expense.

d. Warranty of Non-Infringement - Contractor represents and warrants that the use of any methods, processes or Goods furnished in connection with the Work shall not infringe on any license, copyright, or patent (issued or applied for).

e. Inspections - Company may inspect the Work at any time, but failure to inspect the Work shall not imply acceptance or waiver of any rights hereunder. If any inspection requires the Work to be dismantled and no defects are found, Company shall bear the actual expense of dismantling, repairing and replacing the dismantled portion of the Work. If a defect is discovered, Contractor shall bear the expense of dismantling, repairing and replacing the Work and restoring it to its proper condition.

6. Compensation - The consideration to be paid by Company to Contractor shall be the amount agreed upon in the Work Order; provided, however, that the amount to be paid for any service, labor or Good(s) furnished shall not exceed Contractor's then current rate schedule, including any applicable discounts, or those rates contained in any sourcing agreement between the Parties.

Contractor shall submit its final invoice for Work performed within sixty (60) days of completion and acceptance of the Work described in the applicable Work Order. Company will pay the undisputed amount of an invoice within thirty (30) days of receipt of such invoice. In the event Company disputes one or more items in an invoice, Company shall, within thirty (30) days of receipt of such invoice, notify Contractor of the item(s) under dispute. Company may withhold payment of such item(s) until settlement of the dispute. Payments made hereunder shall not prejudice the rights of Company under Section 7 of the Agreement. Company shall have the right to deduct from any payments, otherwise owing to Contractor hereunder, any amounts Contractor owes Company hereunder.

7. Right to Audit - Contractor and its subcontractors shall maintain a true and correct set of records pertaining to the Work and shall retain auditable records of labor, material, invoices and other supporting documents pertaining to the Work for a period of not less than three (3) years after completion of the Work. During said three (3) years, Company may, upon request, audit any and all records of Contractor and any of its subcontractors relating to the Work; provided, however, Contractor and any of its subcontractors shall have the right to exclude any trade secrets, formulas or processes from such inspection. Contractor and/or subcontractor shall respond in writing within sixty (60) days to all issues identified in an audit by Company or representatives of Company. Contractor and/or its subcontractors and Company shall work to expeditiously resolve all audit issues. Neither Contractor nor any subcontractor shall pay any commissions or fees or grant any rebates or other remuneration or gratuity to any employee, agent or officer of Company. Contractor and its subcontractors shall not grant any secret rebates, one to the other, and Contractor and its subcontractors shall not pay any commissions or fees to the employees, agents or officers of the other in connection with the Work.

STER SERVICE CONTRACT (DOMESTIC) - (Continued)

8. **Taxes and Liens** - Contractor agrees to pay and discharge all valid taxes, lienable claims, charges or other impositions imposed or to be imposed by Applicable Law on Contractor, arising in connection with this Agreement, except to the extent it is provided in the Work Order that local sales and use taxes, levied directly on the invoices for the Work, are to be borne in some other manner. Contractor agrees to comply with old age pension laws, unemployment laws, and the federal and state income tax withholding laws with reference to Contractor's employees engaged in the performance of the Work. Company shall have the right to withhold payment, without interest, and request Contractor to furnish proof satisfactory to Company that all claims for labor and Goods are satisfied or discharged. The amounts due Contractor shall be paid by Company to Contractor, subject to Company's rights to deduct money due to Company and to withhold payments in accordance with the requirements of any Applicable Law with respect to taxes and liens.

9. **Independent Contractor** - Contractor shall be an independent contractor with respect to all Work, and neither Contractor nor any of Contractor's Personnel shall be deemed for any purpose to be the employee, agent, servant or representative of Company. All responsibilities undertaken by Contractor in connection with the Work, including those concerning Contractor's Personnel, shall be undertaken in the name of Contractor and not in the name or for the account of Company. Furthermore, neither Contractor nor anyone used or employed by Contractor will have any authority to bind Company to any third parties without specific written authority from Company. Neither Contractor nor anyone used or employed by Contractor will have any right to any pension or welfare plans, including, without limitation, savings, retirement, medical, dental, insurance, or vacation plans sponsored by Company. Notwithstanding the foregoing, the Parties agree that the Work being performed by Contractor and Contractor's Personnel is an integral and essential part of Company's trade, business or occupation and that whenever Work is being performed in or offshore Louisiana or the Louisiana Workers' Compensation Act may be applicable, Contractor's Personnel whether direct, statutory, borrowed, or otherwise, are statutory employees of Company in accordance with the Louisiana Workers' Compensation Act, and the protections afforded a statutory employer under Louisiana law shall apply.

10. **Confidential Information** - Any of Company's non-public information, in whatever form, format or medium, whether oral or written, acquired, discussed, used or developed by Contractor or Contractor's Personnel in connection with the performance of the Work ("CPI"), shall be the property of Company and shall be for the exclusive benefit of Company, and neither Contractor nor Contractor's Personnel shall have any interest therein. Contractor shall hold and cause Contractor's Personnel to hold all CPI in the strictest of confidence, making no disclosures directly or indirectly to any person without the prior written consent of Company for any purpose other than performing the Work under this Agreement or exercising Contractor's rights hereunder. Contractor has no obligations with regard to any information which, other than by breach of this Agreement is: (a) lawfully already in or subsequently comes into its possession without restriction on disclosure; (b) developed by Contractor without use of any CPI; or (c) in the public domain, or subsequently comes into the public domain, through no fault of Contractor.

Neither Contractor nor any of Contractor's Personnel shall, without the prior written consent of Company: (i) make or issue any public announcement or statement with respect to the Work or the terms of this Agreement; (ii) supply to the press or other news media any information, photographs, or data related to the Work or this Agreement; and/or (iii) use Company's name, any Company trademark, or any Company logo in any Contractor materials, including without limitation, advertisements, websites, calendars, brochures and/or presentations.

11. **Intellectual Property:**

a. Contractor shall and shall cause Contractor's Personnel to grant and assign to Company all intellectual property, proprietary, or similar rights, including but not limited to any and all United States or foreign patents, copyright, copyright registrations, trademarks, trade names, trade secrets, and CPI (collectively "Intellectual Property Rights") arising out of the Work, and such Intellectual Property Rights shall automatically be the sole property of Company upon their conception or in the case of copyrightable works, upon their fixation in a tangible medium of expression, regardless of who conceived, authored, or otherwise created, made developed, or contributed to the Work. For all Intellectual Property Rights which are registerable, the grant and assignment herein shall be effective for both the initial registration period and any subsequent renewal period.

b. **Contractor's Retained Rights** - Contractor shall retain all Intellectual Property Rights that: (i) Contractor owned or created prior to the Effective Date; and/or (ii) Contractor created outside of the scope of Work ("Contractor Technology"). In order for Company to utilize any of the Work or to implement any of Contractor's recommendations, Contractor hereby grants Company a worldwide, nonexclusive, transferable, paid-up, irrevocable, royalty-free, perpetual license to: (i) use Contractor Technology that has been incorporated into any Work; and (ii) to utilize any process or method of any claim of any patent owned by Contractor.

12. **Choice of Law/Venue** - This Agreement shall be governed by and interpreted in accordance with **General Maritime Law**, but if **General Maritime Law is not applicable, the laws of the State of Texas (exclusive of any principles of conflicts of laws which would direct application of the substantive laws of another jurisdiction) shall govern.** In the event of a dispute over the meaning or application of this Agreement, it shall be construed fairly and reasonably and neither more strongly for nor against either Party. The Parties agree that in the event that litigation arises in connection with this Agreement or any Work, any action must be brought in Harris County, Texas.

13. **Indemnities:**

a. **Definitions** - In this Agreement, specifically including, but not limited to, this Section 13 and Exhibit "B":

(1) "Claim" or "Claims" means, unless specifically provided otherwise, all claims (including, but not limited to, those for property damage, pollution [including, without limitation, response costs, remediation costs, and damages to natural resources], bodily injury, personal injury, illness, disease, maintenance, cure, loss of parental or spousal consortium, wrongful death, loss of support, death, and wrongful termination of employment), damages, liabilities, losses, demands, liens, encumbrances, fines, penalties, causes of action of any kind (including actions *in rem* or *in personam*), obligations, costs, judgments, interest and awards (including payment of attorneys' fees and costs of litigation and investigation costs) or amounts, of any kind or character

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(except punitive or exemplary damages), whether under judicial proceedings, administrative proceedings or otherwise, or conditions in the premises of or attributable to any person or persons or any party or parties, breach of representation or warranty (expressed or implied), under any theory of tort, contract, breach of contract, (including any Claims which arise by reason of indemnification or assumption of liability contained in other contracts entered into by Company Indemnitees or Contractor Indemnitees), arising in connection with this Agreement or the performance of the Work under this Agreement, including, but not limited to, Claims which arise out of or are directly or indirectly connected with vessels and/or the ownership, possession, management, manning, maintenance, supply, operation (including, but not limited to, ingress, egress, loading and unloading operations) or navigation of any vessel.

(2) "Company Indemnitees" means Company, its co-venturers, if any, and its and their officers, directors, insurers and Company's Personnel.

(3) "Contractor Indemnitees" means Contractor, its co-venturers, if any, and its and their officers, directors, insurers and Contractor's Personnel.

(4) The term "REGARDLESS OF FAULT" MEANS WITHOUT REGARD TO THE CAUSE OR CAUSES OF ANY CLAIM, INCLUDING, WITHOUT LIMITATION, A CLAIM CAUSED IN WHOLE OR IN PART BY THE NEGLIGENCE (WHETHER SOLE, JOINT, CONCURRENT, COMPARATIVE, CONTRIBUTORY, ACTIVE, PASSIVE, GROSS, OR OTHERWISE), WILLFUL MISCONDUCT, STRICT LIABILITY, OR OTHER FAULT OF ANY MEMBER OF COMPANY INDEMNITEES, CONTRACTOR INDEMNITEES, INVITEES AND/OR THIRD PARTIES, AND WHETHER OR NOT CAUSED BY A PRE-EXISTING CONDITION OR THE UNSEAWORTHINESS OF ANY VESSEL OR UNAIRWORTHINESS OF ANY AIRCRAFT OF A PARTY WHETHER CHARTERED, OWNED, OR PROVIDED BY COMPANY INDEMNITEES OR CONTRACTOR INDEMNITEES.

b. General - The Parties agree that:

(1) This Section 13 shall exclusively govern the allocation of risks and liabilities of the Parties and shall control, notwithstanding any other provision contained elsewhere in this Agreement;

(2) Notwithstanding any provision in this Agreement to the contrary, this Agreement does not authorize one Party to sue for or collect from the other Party its own consequential or indirect damages, and each Party hereby waives any and all Claims it may have against the other Party for its own such damages, including, but not limited to, lost profits or business interruption, however same may be caused;

(3) The indemnity obligations contained in this Agreement do not include indemnification for punitive or exemplary damages under any law or otherwise;

(4) The indemnity obligations under this Agreement are effective to the maximum extent permitted by law. If a law is applied in a jurisdiction which prohibits or limits a Party's ability to indemnify the other, then that Party's liability shall exist to the full extent allowed by the law of the relevant jurisdiction;

(5) In support of the mutual indemnity obligations contained in Sub-sections 13(c)-(j) below, Contractor and Company shall provide, each for the benefit of the other, coverage and amounts of liability insurance which in no event shall be less than the minimum set out in Exhibit "B" herein;

(6) In the event either Party fails to furnish a defense and indemnity as provided for herein, the other Party shall be entitled to receive from the offending Party, in addition to its attorneys' fees, costs, expenses and any amounts paid in judgment or settlement, all costs, expenses, and attorneys' fees incurred in the enforcement of this Agreement. Furthermore, the prevailing Party in any litigation relating to this Agreement, other than that involving defense and indemnity which is addressed above, shall be entitled to recover its reasonable and necessary attorneys' fees and costs of litigation from the other Party; and

(7) Each Party will promptly notify the other Party after receipt of any Claim for which it may seek indemnification. Each Party also shall immediately notify the other of any occurrence in which physical injury occurs and to complete and provide the other Party with an accident report for each such occurrence.

c. Bodily Injury, Death, and Damage to Property of Contractor and Contractor's Personnel:

Notwithstanding anything to the contrary in the other provisions of this Agreement, **CONTRACTOR AGREES TO BE RESPONSIBLE FOR AND ASSUME ALL LIABILITY FOR AND HEREBY AGREES TO DEFEND, RELEASE, INDEMNIFY, AND HOLD HARMLESS COMPANY INDEMNITEES AGAINST CLAIMS ARISING IN CONNECTION WITH: (I) BODILY INJURY TO AND/OR DEATH OF CONTRACTOR'S PERSONNEL AND CONTRACTOR'S INVITEES; AND/OR (II) DAMAGE TO PROPERTY OF CONTRACTOR, CONTRACTOR'S PERSONNEL, AND ITS AND THEIR INVITEES; ARISING IN CONNECTION WITH THIS AGREEMENT, REGARDLESS OF FAULT;** provided, however, that if equipment or instruments of Contractor are lost in the well, below the rotary table, to the extent such losses are not caused by the negligence of Contractor's Personnel, and to the extent that the equipment or instruments are not insured by Contractor, Company shall, at its sole option, either recover same without cost to Contractor or pay the replacement cost for such equipment or instruments less reasonable depreciation. The indemnity obligations set forth in this Sub-section 13(c) shall include any medical, compensation, or other benefits paid by any member of Company Indemnitees and shall apply even if the employee is determined to be the borrowed or statutory employee of any member of Company Indemnitees.

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d. Bodily Injury, Death, and Damage to Property of Company and Company's Personnel:

Notwithstanding anything to the contrary in the other provisions of this Agreement, COMPANY AGREES TO BE RESPONSIBLE FOR AND ASSUME ALL LIABILITY FOR AND HEREBY AGREES TO DEFEND, RELEASE, INDEMNIFY, AND HOLD HARMLESS CONTRACTOR INDEMNITEES AGAINST CLAIMS ARISING IN CONNECTION WITH: (I) BODILY INJURY TO AND/OR DEATH OF COMPANY'S PERSONNEL AND COMPANY'S INVITEES; AND/OR (II) SUBJECT TO SECTION 5, DAMAGE TO PROPERTY OF COMPANY, COMPANY'S PERSONNEL, AND ITS AND THEIR INVITEES; ARISING IN CONNECTION WITH THIS AGREEMENT, REGARDLESS OF FAULT.

e. Pollution and Hazardous Materials and Substances:

(1) Contractor's Responsibilities - Subject to the indemnity obligations contained in Sub-sections 13(c)-(d), and notwithstanding anything to the contrary in the other provisions of this Agreement, CONTRACTOR AGREES TO BE RESPONSIBLE FOR AND ASSUME ALL LIABILITY FOR AND HEREBY AGREES TO DEFEND, RELEASE, INDEMNIFY AND HOLD HARMLESS COMPANY INDEMNITEES AGAINST CLAIMS FOR LOSS OF OR DAMAGE TO PROPERTY ON ACCOUNT OF AN UNAUTHORIZED RELEASE OR DISCHARGE (INCLUDING BUT NOT LIMITED TO ANY SPILLING, LEAKING, PUMPING, POURING, EMITTING, EMPTYING, INJECTING, ESCAPING, LEACHING, DUMPING, OR DISPOSING INTO THE ENVIRONMENT) OF ANY SUBSTANCE, MATERIAL, SEWERAGE, COMPOUND, MIXTURE, POLLUTANT, OR CONTAMINANT, WHICH ORIGINATES FROM CONTRACTOR'S PERSONNEL'S PROPERTY, REGARDLESS OF FAULT.

(2) Company's Responsibilities - Subject to the indemnity obligations contained in Sub-sections 13(c)-(d), and notwithstanding anything to the contrary in the other provisions of this Agreement, COMPANY AGREES TO BE RESPONSIBLE FOR AND ASSUME ALL LIABILITY FOR AND HEREBY AGREES TO DEFEND, RELEASE, INDEMNIFY AND HOLD HARMLESS CONTRACTOR INDEMNITEES AGAINST CLAIMS FOR LOSS OF OR DAMAGE TO PROPERTY ON ACCOUNT OF AN UNAUTHORIZED RELEASE OR DISCHARGE (INCLUDING BUT NOT LIMITED TO ANY SPILLING, LEAKING, PUMPING, POURING, EMITTING, EMPTYING, INJECTING, ESCAPING, LEACHING, DUMPING, OR DISPOSING INTO THE ENVIRONMENT) OF ANY SUBSTANCE, MATERIAL, SEWERAGE, COMPOUND, MIXTURE, POLLUTANT, OR CONTAMINANT, WHICH ORIGINATES FROM COMPANY'S PERSONNEL'S PROPERTY (INCLUDING THE WELL BORE) ON THE WORK SITE, REGARDLESS OF FAULT.

f. Debris and Wreck Removal - Contractor shall promptly remove all debris and/or wreckage of the property of Contractor and/or Contractor's Personnel to the extent requested by Company. CONTRACTOR AGREES TO BE RESPONSIBLE FOR AND ASSUME ALL LIABILITY FOR AND HEREBY AGREES TO DEFEND, RELEASE, INDEMNIFY AND HOLD HARMLESS COMPANY INDEMNITEES FOR THE COSTS OF REMOVAL OF SUCH PROPERTY AND FROM AND AGAINST CLAIMS ARISING IN CONNECTION WITH CONTRACTOR'S OR COMPANY'S OBLIGATION TO REMOVE SUCH DEBRIS OR WRECKAGE, REGARDLESS OF FAULT.

g. Liability to Third Parties - Subject to Sub-sections 13(c)-(f), Company agrees to be responsible for and assume all liability for and hereby agrees to defend, release, indemnify and hold harmless Contractor Indemnitees, and Contractor agrees to be responsible for and assume all liability for and hereby agrees to defend, release, indemnify and hold harmless Company Indemnitees from and against Claims by or in favor of or incurred by or sustained by any Third Party to the extent such Claim is caused by Company's Personnel or Contractor's Personnel, respectively.

h. Patent Liability - Notwithstanding anything to the contrary in the other provisions of this Agreement, CONTRACTOR AGREES TO BE RESPONSIBLE FOR AND ASSUME ALL LIABILITY FOR AND HEREBY AGREES TO DEFEND, RELEASE, INDEMNIFY AND HOLD HARMLESS COMPANY INDEMNITEES AND COMPANY AGREES TO BE RESPONSIBLE FOR AND ASSUME ALL LIABILITY FOR AND HEREBY AGREES TO DEFEND, RELEASE, INDEMNIFY AND HOLD HARMLESS CONTRACTOR INDEMNITEES FROM CLAIMS OF ANY PERSON OR ENTITY ARISING FROM INFRINGEMENT OR ALLEGED INFRINGEMENT OF COPYRIGHTS, TRADE SECRETS, PATENTS OR OTHER INTELLECTUAL PROPERTY RIGHTS ARISING UNDER ANY APPLICABLE LAWS COVERING THE PROPERTY, EQUIPMENT, METHODS OR PROCESSES FURNISHED OR DIRECTED BY CONTRACTOR'S PERSONNEL OR COMPANY'S PERSONNEL, RESPECTIVELY, REGARDLESS OF FAULT.

i. Liability for Non-Compliance with Applicable Laws - Contractor agrees to be responsible for and assume all liability for and hereby agrees to defend, release, indemnify and hold harmless Company Indemnitees from and against Claims arising in connection with Contractor Indemnitees' violation of Applicable Laws.

j. Liability for Taxes - Contractor agrees to be responsible for and assume all liability for and agrees to defend, release, indemnify, and hold harmless Company from and against Claims for the failure of Contractor Indemnitees to comply with Section 8 of the agreement.

k. Personal Contract - This Agreement shall be deemed a personal contract of Contractor which waives all benefits of the Shipowner's Limitation of Liability Act, 46 U.S.C. § 183, et seq. or any other similar laws as to Company Indemnitees. Neither Contractor nor its underwriters shall be entitled to assert such limitation of liability as to Claims asserted by Company Indemnitees. The Parties agree that Company Indemnitees are able to enforce all indemnity obligations and insurance coverage for their benefit under this Agreement to the maximum extent permitted by law.

14. Force Majeure - Neither Party shall be liable for any delay resulting from Force Majeure. If in Company's sole opinion the Force Majeure causes substantial suspension of the Work, Company may forthwith cancel this Agreement and/or terminate immediately all

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Work without further obligation except payment of Work properly performed and, if so specified in the Work Order, return of Contractor's Personnel and transportable equipment to shore or other agreed upon location. If Work is suspended due to a labor dispute by Contractor or Contractor's Personnel, then no payment shall be due Contractor for the period during which the Work is suspended.

15. Assignment/Subcontracting - Contractor shall not, without the prior written consent of Company, engage any subcontractor for performance of the Work or assign any rights arising under this Agreement, including but not limited to assignment of monies payable under this Agreement. In the event Company consents to the assignment of this Agreement or Contractor's use of a subcontractor, Contractor shall continue to be responsible for all obligations and liabilities under this Agreement.

16. Modifications, Amendments and Waivers - Nothing in this Agreement shall be construed as authorizing any employee of either Company or Contractor to modify, alter, amend or waive in any manner this Agreement. This Agreement may be amended, modified or otherwise altered or its provisions waived only by a written amendment, signed by an authorized representative of each Party. The waiver of any requirement or provision in this Agreement on any particular occasion shall not be deemed a waiver of such requirement or provision, or serve as a precedent, on other occasions. Although Company may from time to time sign Contractor's field tickets, forms for receipt, acknowledgment, documentation, terms of service or similar forms, the terms and conditions associated with such forms (by whatever title) shall not amend, modify, waive or release any aspect of this Agreement or any Work Order.

17. Notices - All notices, reports and communications required or permitted by this Agreement to be given or sent by one Party to the other shall be in writing and delivered by hand, mailed or faxed (with a copy by mail) as follows:

- a. If to Contractor, at _____
FAX (_____) _____, Attn: _____, and
- b. If to Company, at _____ P.O. Box 1130, Houston, TX 77251-1330
FAX (832) 636-2691 _____, Attn: _____ Supply Chain Management/Contracts _____.

Either Party may by notice to the other Party change its notice address or information. Notices shall be effective upon receipt.

18. Standards of Business:

a. United States Department of Transportation ("DOT") Regulations - If Contractor is subject to the rules and regulations of the United States Department of Transportation (hereinafter called "DOT"), Contractor agrees to implement and comply with all such rules and regulations as they pertain to drug testing, education and training of Contractor's Personnel. Upon request of Company, Contractor agrees to provide to Company a copy of Contractor's drug testing program, evidence of compliance therewith and any additional information requested pursuant to DOT rules and regulations.

b. Policies on Drugs, Alcohol and Firearms - Contractor agrees that Contractor's Personnel will be subject to Company's policy prohibiting the use, possession, transportation, promotion or sale of alcohol, illegal drugs, contraband or weapons. Contractor's Personnel may be required by Company to: (i) undergo drug and/or alcohol testing, including the submission of urine and/or blood samples; and (ii) undergo searches of their persons and/or vehicles, to the extent legally permissible.

c. Background Checks - Company shall have the right to conduct background checks on Contractor's Personnel who will be performing Work for Company. Contractor shall take all actions and execute all documents and shall cause Contractor's Personnel to take all actions and execute all documents as are necessary to assist Company in this process.

19. Equal Opportunity and Affirmative Action - Contractor agrees, in connection with the performance of Work under this Agreement relating to leases or rights-of-way agreements covering properties of the United States, to comply with the clauses thereof regarding the manner of conducting Work thereon. Unless exempt by law, Contractor agrees to comply with applicable Fair Employment practices, including but not limited to those set out in Executive Orders 11246 (Equal Employment Opportunity), 11701 (Employment of Disabled Veterans), 11758 (Employment of the Handicapped), and 11458 and 11625 (Minority Business Enterprises), and amendments thereto, or as such orders may be superseded. Contractor agrees that all provisions of such orders are made a part hereof by reference and are binding on Contractor to the same extent as if copied in full herein.

20. Citizenship of Contractor's Personnel - Contractor certifies that none of Contractor's Personnel who perform Work pursuant to this Agreement are unauthorized aliens as defined in The Immigration Reform and Control Act of 1986 and the rules and regulations promulgated pursuant thereto, all as amended from time to time. Contractor agrees, as required, to obtain a substantially similar certification from its contractors or subcontractors performing Work related to this Agreement. Contractor further agrees, if requested, to provide proof of citizenship of Contractor's Personnel who perform Work pursuant to this Agreement.

21. Termination:

a. Either Party may terminate this Agreement with respect to Work not then the subject of a Work Order, at any time without cause and without liability upon thirty (30) days prior written notice to the other Party. However, the provisions of this Agreement shall continue to apply to all existing Work Orders, and, except as provided in Sub-section (c) below, neither Party shall be relieved of its obligations and liabilities arising in connection with Work performed under any existing Work Order.

b. Notwithstanding the above, Company shall have the right to terminate any Work Order at any time without cause. In such case, Company shall pay Contractor for all Work properly performed prior to termination and shall reimburse Contractor for all documented direct expenses (not overhead or profit) reasonably and necessarily incurred by Contractor in the demobilization of Contractor's Goods and Contractor's Personnel.

MASTER SERVICE CONTRACT (DOMESTIC) - (Continued)

- c. Notwithstanding Sub-sections (a) and (b) above, Company shall have the right to immediately terminate this Agreement and/or any existing Work Order(s) without further obligation (except payment for Work properly performed) if Contractor: (i) breaches any warranty; (ii) becomes insolvent, or if insolvency, receivership, or bankruptcy proceedings are commenced by or against Contractor; (iii) fails to comply with Section 18 of this Agreement; or (iv) breaches any other material provision hereunder.
22. Entirety - This Agreement constitutes the sole and complete agreement of the Parties and supersedes all other agreements or representations of any kind, oral or otherwise, not included herein related to the Work. All prior master service contracts between the Parties are cancelled, and this Agreement shall govern any Work commenced during the term of this Agreement.
23. Incorporation by Reference - The Exhibits to this Agreement and any Work Order(s) are incorporated into this Agreement by reference hereto. In the event of a conflict between the provisions of this Agreement and those contained in the Exhibits and/or Work Orders, the provisions in the Agreement shall prevail.
24. Enforceability of the Agreement - If any part or provision of this Agreement is judicially declared invalid, such declaration shall not have the effect of invalidating or voiding the remainder of this Agreement. The Parties agree that the part(s) of this Agreement so held to be invalid, void or unenforceable shall be modified to the extent required to make it enforceable, or, if necessary, the Agreement shall be deemed to be amended to delete the unenforceable part or provision, and the remainder shall have the same force and effect as if such part or provision had never been included herein.
25. Survival of Terms - Notwithstanding the suspension or termination of this Agreement or any Force Majeure event, the Parties shall continue to be bound by the provisions of this Agreement that reasonably require some action or forbearance after such termination, including but not limited to those related to indemnities, warranties, confidentiality, intellectual property and insurance.
26. Headings - Headings or other subdivisions of this Agreement are inserted for convenience of reference and shall not limit or affect the legal construction of any provision hereof.
27. Binding Authority - Each of the persons executing this Agreement represents and warrants that he or she has full right and authority to execute this Agreement on behalf of Company or Contractor, as the case may be, and to bind such Party to the fulfillment of all of the provisions hereof.

ANADARKO PETROLEUM CORPORATION

By: 
 Name: JEFFREY T. FIFE
 Title: MGR. SUPPLY CHAIN MANAGEMENT
 Date: 5-10-07

ETECH ENVIRONMENTAL & SAFETY SOLUTIONS, INC.

By: 
 Name: FRED HOLMES
 Title: PRESIDENT
 Date: 01/31/2007

MASTER SERVICE CONTRACT (DOMESTIC) - (Continued)

EXHIBIT "A"

(OPTIONAL FORM)

WORK ORDER

The following description of the Work to be performed under this Master Service Contract dated the ____ day of _____, 20____, between Anadarko Petroleum Corporation and its affiliate companies (collectively "Company") and _____ ("Contractor"), is incorporated therein by reference thereto.

- (1) Job site location:
- (2) Description of Work to be performed by Contractor:
- (3) Contractor to commence work within ____ days from date of this Work Order when and as requested by Company. Work to be completed by: _____.
- (4) Personnel Contractor to furnish and qualifications:
- (5) Goods to be provided by Contractor:
- (6) Items to be furnished by Company:
- (7) Compensation to be paid Contractor (rates, fees, reimbursables, transportation and other charges):
- (8) Other:

ANADARKO PETROLEUM CORPORATION

CONTRACTOR _____
(INSERT FULL ENTITY NAME)

By: _____
Name: _____
Title: _____
Date: _____

By: _____
Name: _____
Title: _____
Date: _____

MASTER SERVICE CONTRACT (DOMESTIC) - (Cont'd)

EXHIBIT "B"

INSURANCE

Attached to and made part of this Master Service Contract dated the 29th day of January, 2007, between Anadarko Petroleum Corporation and its affiliate companies (collectively "Company") and Etech Environmental & Safety Solutions, Inc. ("Contractor").

As to all operations provided for in this Agreement, each Party shall carry and maintain for the benefit of the other Party, the following minimum insurance coverage with policy territory sufficient to cover the Work:

a. **Workmen's Compensation Insurance** with statutory limits in accordance with all applicable state, federal and maritime laws, and **Employer's Liability Insurance of \$1,000,000 per accident/occurrence**, including but not limited to an "Alternate Employer" or "Borrowed Servant" endorsement in favor of Company Indemnitees or Contractor Indemnitees, whichever is applicable. If the operations are over water or where the laws hereinafter mentioned apply, the Party shall carry the following additional insurance as applicable: **U.S. Longshoremen's and Harbor Worker's Compensation Act Liability** (including the Outer Continental Shelf Lands Act) for statutory limits, and **Maritime Employer's Liability of \$1,000,000 per accident/occurrence** (including, but not limited to, coverage for Jones Act, General Maritime Laws and Death on the High Seas Act; Transportation, Wages, Maintenance and Cure; Voluntary Compensation; Alternate Employer/Borrowed Servant endorsement in favor of Company Indemnitees or Contractor Indemnitees, whichever is applicable; and "In rem" endorsement).

b. **General Liability Insurance** with limits of **\$1,000,000 combined single limit per occurrence**, including, but not limited to, coverage for public liability including bodily injury and property damage liability, personal/advertising injury, contractual liability for those liabilities assumed by the Party herein, cross liability and severability of interest, liability for removal of wreck/debris, liability for pollution and cleanup on a sudden and accidental basis, products and completed operations, protective liability/independent contractors/work sublet, and with the "care, custody, and control exclusion" deleted.

c. **Automobile Liability Insurance** with limits of **\$1,000,000 combined single limit per accident/occurrence** for bodily/personal injury and property damage, including but not limited to coverage for all owned, hired and non-owned vehicles or automotive equipment used by or for the Party and contractual liability for those liabilities assumed by the Party herein.

d. **Property Insurance** covering the Party's machinery and equipment for its replacement value and including removal of wreck/debris coverage, or the Parties may self-insure for these items.

e. If applicable, for all vessels owned, operated, chartered, or brokered by or for the Party in connection with its Work under the Agreement, the Party shall carry or require the owner or operator of such vessels to carry:

(1) **Hull Insurance** for replacement cost value, including, but not limited to, coverage for Collision and Tower's Liability, Removal of Wreck on a voluntary basis or where required by law, regulation or contract. The phrase "as owner of vessel named herein" and all similar phrases purporting to limit the insurer's liability to that of an owner shall be deleted. The insurer shall waive its right to limit its liability to the value of the vessel but only with respect to Company Indemnitees or Contractor Indemnitees, whichever is applicable.

(2) **Protection and Indemnity Insurance** with limits of **\$1,000,000 combined single limit per occurrence**, including, but not limited to, coverage for contractual liability for those liabilities assumed by the Party herein, liability for pollution and cleanup on a sudden and accidental basis as per WQIS policy form or equivalent, full crew coverage, and coverage for remote offshore vehicles, submarines and diving operations (if these operations are to be performed under this Agreement), Collision and Tower's Liability, and Cargo Legal Liability. The insurer shall waive its right to limit its liability to the value of the vessel but only with respect to Company Indemnitees or Contractor Indemnitees, whichever is applicable. The phrase "as owner of vessel named herein" and all similar phrases purporting to limit the insurer's liability to that of an owner shall be deleted.

(3) **Charterer's Legal Liability Insurance** with limits of **\$1,000,000 combined single limit per occurrence**.

(4) The policies listed in (1) and (2) above shall provide that seaworthiness of vessels used to perform services under this Agreement is accepted by insurers (or that insurers shall waive in favor of Company Indemnitees or Contractor Indemnitees, whichever is applicable, the vessel owner's and/or Contractor's warranty of seaworthiness).

(5) The Parties shall delete the "watercraft exclusion" under the General Liability Insurance above.

f. If applicable, for all aircraft owned, operated, chartered, or brokered by or for the Party in connection with its Work under the Agreement, the Party shall carry or require the owner or operator of such aircraft to carry:

(1) **All Risks Hull Insurance** for replacement cost value, including but not limited to coverage for collision liability.

(2) **Aircraft Liability Insurance** with limits of **\$1,000,000 combined single limit per occurrence**, including but not limited to coverage for bodily injury, death and property damage, Passenger Liability, and contractual liability for those liabilities assumed by the Party herein.

(3) The policy listed in item (2) above shall provide a breach of warranty in favor of Company Indemnitees or Contractor Indemnitees, whichever is applicable.

STER SERVICE CONTRACT (DOMESTIC) - (Con. d)

g. **Umbrella Excess Liability Insurance** with limits of **\$10,000,000 per accident/occurrence** in excess of the primary liability coverage and limits above.

h. To the extent of the liabilities assumed by each Party herein, all of the above insurance shall be endorsed to provide that:

(1) The Party's insurers waive their right of subrogation (equitable or by assignment, express or implied, loan receipt or otherwise) against Company Indemnitees or Contractor Indemnitees, whichever is applicable.

(2) The Party's insurers name Company Indemnitees or Contractor Indemnitees, whichever is applicable, as additional insureds (except for Worker's Compensation and Property Insurance). For General Liability additional insured status, the CGL Additional Insured status form ISO CG 20 10 or equivalent shall be used.

(3) Such insurance coverage is primary over any insurance coverage maintained by Company Indemnitees or Contractor Indemnitees, whichever is applicable.

i. At the inception of this Agreement, annually thereafter, and whenever requested, Contractor shall furnish insurance certificates to evidence the insurance required herein, however, receipt of such certificates shall not relieve Contractor of any insurance obligations herein. Furthermore, receipt of such certificates or failure to object to same shall not be deemed to constitute a waiver of any of the insurance requirements required to be carried by Contractor herein. Contractor's insurance shall be carried with insurance companies satisfactory to Company and shall contain endorsements stating that insurer will give 30 days written notice to Company of non-renewal, cancellation, substantial amendment or alteration of such coverage. All self-insured amounts, deductible amounts, premiums, franchise amounts or other charges due with respect to Contractor's required insurance herein shall be the sole obligation of Contractor. Maintaining the prescribed insurance shall not relieve Contractor of any other obligation under this Agreement. Contractor will require and assure that each of its subcontractors shall carry and pay for insurance in amounts and on terms necessary to cover the Work and the obligations of the particular subcontractor.

j. **Louisiana Anti-Indemnity Statute Exception** - Notwithstanding Sub-sections (a) - (i) above, Contractor and Company agree that with respect to all Work performed in Louisiana, Company (on behalf of Company Indemnitees) has the option to pay Contractor's insurers the premium required by Contractor's insurer or their agents or authorized representatives to extend all or any one or more of Contractor's insurance policies to include coverage for Company Indemnitees, as additional insureds, as required under this Agreement, and such insurance protection shall be governed by Louisiana law. If Company makes this election, Contractor will arrange to have Company billed directly for the premium by Contractor's subject insurers, and Contractor will advise Company prior to the inception of this Agreement if the annual premium payable by Company will be in excess of \$1,000. At each subsequent renewal of Contractor's insurance, Contractor will advise Company of the amounts of the premium required for the extensions and arrange to have Company billed directly for the appropriate premium by its insurers or their agents or authorized representatives. Contractor warrants that such amount constitutes the full cost of extending such insurance protection to Company Indemnitees.

MASTER SERVICE CONTRACT - (CONTINUED)

(08/08-ENV)

RIDER

To that certain Master Service Contract (the "Agreement") dated the 29th day of January, 2007, between Anadarko Petroleum Corporation, a Delaware corporation, and its affiliate companies ("Company"), and **Etech Environmental & Safety Solutions, Inc.** ("Contractor"). Company and Contractor may hereinafter be referred to individually as a "Party" or collectively as "Parties." The provisions of this Rider shall be effective upon Contractor or Contractor Personnel conducting any or all of the following activities: 1) operation of Company or Company Personnel's equipment in such a manner as to cause and/or allow an unauthorized spill, release or discharge, 2) contracting with Company as part of a written Work Order to arrange for the disposal of waste on behalf of Company and/or Company Personnel, and/or 3) contracting with Company as part of a written Work Order to manage/direct waste disposal on behalf of Company and/or Company Personnel.

The following modifications are hereby adopted as part of the Agreement and are incorporated therein by reference thereto.

1. Add the following Sub-section (I.) to Section 13, Indemnities:

"(I.) Disposal of All Waste(s) – Notwithstanding anything to the contrary in this Agreement, in the event Waste (as defined by Applicable Law), other than incidental trash or municipal solid waste, is generated as a result of or in the performance of the Work and Contractor is retained to arrange or direct the disposal of such Waste, Contractor shall assume all risks and liabilities associated with the handling, characterization, transportation, storage, disposal and management of such Waste. **IN THE EVENT THAT A GOVERNMENTAL AGENCY OR COMPANY ALLEGES AND/OR DETERMINES THAT CONTRACTOR OR CONTRACTOR PERSONNEL HAVE CONDUCTED OR CAUSED TO BE CONDUCTED IMPROPER HANDLING, CHARACTERIZATION, TRANSPORTATION, STORAGE, DISPOSAL, AND/OR MANAGEMENT OF ANY WASTE, THEN CONTRACTOR SHALL DEFEND, RELEASE, INDEMNIFY AND HOLD HARMLESS COMPANY INDEMNITEES FROM AND AGAINST ANY AND ALL CLAIMS (INCLUDING BUT NOT LIMITED TO COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION LIABILITY ACT ("CERCLA"), RESOURCE CONSERVATION AND RECOVERY ACT ("RCRA"), CLEAN WATER ACT ("CWA") AND/OR CLEAN AIR ACT ("CAA")) OF ANY PERSON OR ENTITY RELATED TO THE WASTE WHERE SUCH CLAIMS ARISE FROM ACTS AND/OR ARE INCIDENT TO ACTS OR EVENTS WHICH OCCUR, REGARDLESS OF FAULT."**

2. Amend Exhibit "B" by inserting the following new Sub-section (g) and re-lettering the remaining Sub-sections accordingly:

"(g) Contractor's Pollution Liability Insurance with limits of at least **\$10,000,000 combined or single limit per occurrence.**"

Binding Authority - Each of the persons executing this Rider represents and warrants that he or she has full right and authority to execute this instrument on behalf of Company and Contractor, respectively, and to bind such Party to the fulfillment of all of the provisions hereof.

IN WITNESS WHEREOF, the Parties hereto have caused this Rider to be duly executed as of the Effective Date of the Agreement.



ANADARKO PETROLEUM CORPORATION

ETECH ENVIRONMENTAL & SAFETY SOLUTIONS, INC.

By: [Signature]By: [Signature]Name: JEFFREY T. FIFEName: Fred HolmesTitle: MGR. SUPPLY CHAIN MANAGEMENTTitle: PresidentDate: 7-22-09Date: June 29, 2009

CA 07/14
COPY

(08/01)

MASTER SERVICE CONTRACT

(Domestic)

This Master Service Contract (the "Agreement"), is made this 30th day of June, 2003, to be effective on said date or in any event as of the date that both Parties have executed the Agreement (the "Effective Date"), by and between Anadarko Petroleum Corporation, a Delaware corporation, and its affiliate companies, collectively hereinafter called "Company", and FISHER CONSTRUCTION, hereinafter called "Contractor", (Company and Contractor being referred to herein collectively as the "Parties" and individually as a "Party")

1. **Purpose and Scope** - This Agreement is a master contract between Company and Contractor whereby in consideration of the covenants and provisions hereinafter provided, it shall control and govern all services performed by Contractor for Company, and Contractor's provision to Company of products, equipment, supplies or materials utilized in connection with such services (hereinafter the "Work"). Unless the Parties agree otherwise in writing, this Agreement shall govern and control solely with respect to Work performed by Contractor for Company within the 50 United States and state and federal territorial waters. This Agreement does not obligate Company to order Work from Contractor, nor does it obligate Contractor to accept orders for Work, but this Agreement shall control and govern all Work accepted by Contractor and shall define the rights and obligations of Company and Contractor during the term hereof. During the term of this Agreement Contractor agrees to furnish all labor, equipment, and materials and all other things necessary for and to do and perform the following types of services which may be requested by Company by written or oral order: General Construction

2. **Definitions:**

(a) "Claim" or "Claims" means, unless specifically provided otherwise, all claims (including, but not limited to, those for property damage, bodily injury, personal injury, illness, disease, maintenance, cure, loss of consortium, loss of support, death, and wrongful termination of employment), damages, liabilities, losses, demands, liens, encumbrances, fines, penalties, causes of action of any kind (including actions in rem or in personam), obligations, costs, judgments, interest and awards (including payment of attorneys' fees and costs of litigation) or amounts, of any kind or character (except punitive or exemplary damages), whether under judicial proceedings, administrative proceedings or otherwise, or conditions in the premises of or attributable to any person or persons or any party or parties, breach of representation or warranty (expressed or implied), under any theory of tort, contract, breach of contract (including any Claims which arise by reason of indemnification or assumption of liability contained in other contracts entered into by Company Indemnitees or Contractor Indemnitees) arising out of, or incident to or in connection with this Agreement or the performance of the Work under this Agreement, including but not limited to Claims which arise out of or are directly or indirectly connected with vessels and/or the ownership, possession, management, manning, maintenance, supply, operation (including but not limited to ingress, egress, loading and unloading operations) or navigation of any vessel.

(b) "Company Indemnitees" means Company, its joint owners and venturers, if any, and its and their directors, agents, representatives, employees and insurers and its subcontractors and their employees.

(c) "Contractor Indemnitees" means Contractor, its affiliate companies, its joint owners and venturers, if any, and its and their directors, agents, representatives, employees and insurers and its subcontractors and their employees.

(d) "Third Party" or "Third Parties" means a person or entity other than Company Indemnitees and Contractor Indemnitees and their respective invitees

(e) The term "REGARDLESS OF FAULT" means WITHOUT REGARD TO THE CAUSE OR CAUSES OF ANY CLAIM, INCLUDING, WITHOUT LIMITATION, EVEN THOUGH A CLAIM IS CAUSED IN WHOLE OR IN PART BY THE NEGLIGENCE (WHETHER SOLE, JOINT, CONCURRENT, COMPARATIVE, CONTRIBUTORY, ACTIVE, PASSIVE, GROSS, OR OTHERWISE), WILLFUL MISCONDUCT, STRICT LIABILITY, OR OTHER FAULT OF ANY MEMBER OF COMPANY INDEMNITEES, CONTRACTOR INDEMNITEES, INVITEES AND/OR THIRD PARTIES, AND WHETHER OR NOT CAUSED BY A PRE-EXISTING CONDITION OR THE UNSEAWORTHINESS OF ANY VESSEL OR UNAIRWORTHINESS OF ANY AIRCRAFT OF A PARTY WHETHER CHARTERED, OWNED, OR PROVIDED BY COMPANY INDEMNITEES OR CONTRACTOR INDEMNITEES.

(f) "Work Site" means the particular well site or other location where Company has requested Contractor to perform the Work.

(g) The phrases "arising out of, or incident to or in connection with this Agreement or the performance of the Work under this Agreement" in the definition of "Claims" above and "arising out of or resulting from the performance of this Agreement" and similar phrases in Section 14 shall be broadly construed to include not only the Work, but also transportation to and from the Work Site as well as any occurrences at the Work Site, regardless of whether or not the act which causes the Claim is related to the performance of this Agreement.

3. **Work Orders** - Each job shall be the subject of an order for Work issued by Company to Contractor (the "Work Order"). The Work Order will be either oral or written, and provide, where applicable, a description of the Work to be performed and the consideration to be paid for same, the job location, equipment, services, supplies, and personnel to be provided by Contractor, and the items to be furnished by Company. If the Work Order is in writing, it may be in form similar to Attachment "A" or any other form that is agreed to by the Parties. Nothing in any Work Order, whether written or oral, shall modify or change the terms contained in this Agreement, which shall at all times govern and control. Although Company may from time to time sign Contractor's field tickets, forms for receipt, acknowledgment, documentation, terms of service or similar purposes, the terms and conditions associated with such forms (by whatever title) shall not amend, modify, waive or release any aspect of this Agreement or any Work Order.

4. **Responsibilities of Contractor:**

(a) **Contractor-Furnished Items** - Contractor shall furnish at its own expense any and all machinery, equipment, tools, repairs, spare parts, transportation, supplies and any other items necessary for the performance and timely completion of the Work (other than such items thereof as Company specifically agrees in the Work Order to furnish), all in new condition unless otherwise specified and suitable for the Work. Unless otherwise specified, Company furnished items will be delivered to Contractor at the Work Site or dockside, and Contractor shall protect them from loss or damage, verify their delivery and notify Company of shortages or items delivered in a discovered or apparent damaged condition.

Company isaContractor ME

(b) Personnel - Contractor shall furnish at its own expense any and all personnel, labor, expertise and supervision (skilled in their trades and trained in safety) necessary for the performance and timely completion of the Work. Contractor shall perform the Work in accordance with the specifications in the Work Order and any attachments thereto.

(c) Compliance with Laws - Contractor agrees that any action undertaken in connection with performance of this Agreement as well as any items supplied by Contractor hereunder shall be in compliance with all applicable laws, regulations, rules, standards and codes, whether governmental or industry.

(d) Commencement and Completion of Work - Contractor agrees to commence and complete Work within the times specified in the Work Order. If no commencement date is specified, Contractor agrees to commence said Work at the time requested by Company. If no completion date is specified, Contractor agrees to complete said Work with due diligence and in a timely manner. In the event Contractor fails to commence said Work within the time required or, having begun said Work, abandons it or for any reason suspends or refuses to continue it with due diligence (or in any event, for forty-eight hours), unless Contractor is prevented from commencing or continuing by Force Majeure, Company shall have the right to take over said Work and the materials, equipment and supplies used in connection therewith, and complete the Work or have the Work completed by means of other contractors without waiver of any other remedy.

5. Property Protection - Contractor shall use all reasonable efforts to perform the Work in a manner which shall cause the minimum of inconvenience to and shall avoid damaging interests and property of landowners and tenants wherever involved. To the extent Contractor damages any such property, Contractor shall restore it to the condition it was in immediately prior to causing such damage. Contractor shall assume all responsibility and risk during the performance of the Work in locating, crossing and avoiding contact with utility lines, pipelines, pole lines, sewers, water lines, cables, or other land facilities and shall promptly repair any damage to such facilities that occurs as a result of an act or omission of Contractor.

6. Permits - Unless specified to the contrary in the Work Order, Contractor shall obtain and pay for and cause its subcontractors to obtain and pay for at their cost all necessary permits, licenses and inspection clearance for Contractor, its subcontractors and their employees that are required to be obtained in their respective names in connection with the Work. In the event a representative of any governmental body regulating the Work finds any violation upon inspection of the Work Site during the performance of this Agreement, which is in any way related to Contractor and/or its subcontractors, corrective action shall be taken immediately by Contractor at Contractor's sole expense without limitation of any rights of Company.

7. Right to Audit - Contractor and each subcontractor shall maintain a true and correct set of records pertaining to the Work and shall retain auditable records of labor, material, invoices and other supporting documents pertaining to the Work for a period of not less than three years. Company may, upon request for a period of up to three years after completion of the Work, audit any and all records of Contractor and of any subcontractor relating to the Work; provided, however, Contractor and any subcontractor shall have the right to exclude any trade secrets, formulas or processes from such inspection. Contractor and/or subcontractor shall respond in writing within 80 days to all issues identified in an audit by Company or representatives of Company. Contractor and/or its subcontractor and Company shall work to expeditiously resolve all audit issues. Neither Contractor nor any subcontractor shall pay any commissions or fees or grant any rebates or other remuneration or gratuity to any employee, agent or officer of Company. Contractor and its subcontractors shall not grant any secret rebates, one to the other, and Contractor and its subcontractors shall not pay any commissions or fees to the employees, agents or officers of the other in connection with the Work.

8. Independent Contractor - Contractor shall be an independent contractor with respect to all Work, and neither Contractor nor anyone used or employed by Contractor shall be deemed for any purpose to be the agent, servant or representative of Company in the performance of such Work or any part thereof, or in any matter dealt with herein, and Company shall have no direction or control of Contractor, or its employees and agents, except in the results to be obtained. All responsibilities undertaken by Contractor in connection with the Work, including those concerning its employees and subcontractors, shall be undertaken in the name of Contractor and not in the name or for the account of Company. Neither Contractor nor anyone used or employed by Contractor will have any right to any pension or welfare plans, including, without limitation, savings, retirement, medical, dental, insurance, or vacation plans sponsored by Company. Furthermore, neither Contractor nor anyone used or employed by Contractor will have any authority to bind Company to any Third Parties without specific written authority from Company. It is understood that by this provision, neither Party is assuming any liability for the actions or omissions of the other Party, except as is stated in this Agreement. Notwithstanding the foregoing, the Parties recognize, acknowledge and agree that the Work being performed by Contractor is part of Company's trade, business or occupation and that whenever Work is being performed in or offshore Louisiana or the Louisiana Workers' Compensation Act may be applicable, the employees of Contractor and its subcontractors, if any, whether direct, statutory, borrowed, or otherwise, are statutory employees of Company in accordance with the Louisiana Workers' Compensation Act, and the protections afforded a statutory employer under Louisiana law shall apply.

9. Warranties and Inspections

(a) General Services Warranty - Contractor warrants that any and all services performed by Contractor and/or its subcontractors hereunder shall be performed in full compliance with Company's specifications applicable to said services, if any, and in a good and workmanlike manner. "Workmanlike manner" means services performed in a manner deemed proficient by those with the special knowledge, training, and experience to judge such services. Contractor shall re-perform the nonconforming services at Contractor's sole expense and to the reasonable satisfaction of Company, or at Company's option refund to Company that portion of the consideration that is attributable to the nonconforming service. If Company elects to have Contractor re-perform the nonconforming service, Contractor shall promptly commence re-performance. If Contractor fails to commence or complete such re-performance to the reasonable satisfaction of Company within a reasonable period of time after Company's request, then Company shall have the right to have the nonconforming service re-performed by any other contractor or Third Party (or by Company's own employees), and Contractor shall be responsible for all reasonable costs incurred as a result of such re-performance. The service warranty period shall be for a minimum period of 12 months or such longer period as may be agreed to by the Parties, beginning on the date Company first uses the serviced item and ending at midnight of the last day of the month in which the warranty expires.

(b) Products Warranty - Contractor warrants that any and all products, equipment (specifically excluding rental equipment which is addressed below) and materials, including service-related materials provided by Contractor and/or its subcontractors, are suitable for their intended purpose, free from defect in design and workmanship and that such products, equipment and materials shall comply with all laws, regulations, rules, standards and codes, whether governmental or industry. Contractor will promptly repair or replace at Contractor's sole expense and to the reasonable satisfaction of Company any defects in such products, equipment or materials caused by defective design, workmanship or faulty materials. The products warranty shall be for a period of 12 months or such longer period as may be agreed to by the Parties or as normally provided, beginning on the date that Company first uses the product and ending on midnight of the last day of the month in which the warranty expires.

(c) Rental Equipment Warranty - Contractor warrants that all equipment rented to Company shall meet or exceed Company's specifications upon delivery, be in good working condition throughout the rental period (misuse by Company or Company's subcontractors excepted), and, if requested by Company, shall include operating manuals, supplies and spare parts. Rental payments shall be waived by Contractor during any time period that equipment fails to operate properly or is otherwise inoperable

MASTER SERVICE CONTRACT (DOMESTIC) - (Continued)

through no fault of Company. In all instances Contractor shall respond in a timely manner to repair or replace the equipment. Equipment misused by Company or Company's other subcontractors will be either repaired or replaced at Company's option and at Company's expense. Equipment repaired or replaced by Company will meet or exceed the condition of the equipment upon delivery to Company less normal wear and tear during Company's use.

(d) Inspections - Company may make inspection of the Work at any time as is necessary to ensure compliance by Contractor with its obligations assumed hereunder, but failure to inspect or to discover or reject defective Work shall not imply acceptance thereof or waiver of any rights hereunder. If Company inspectors request that the finished Work be dismantled and it is found that no defects exist, Company shall bear the actual expense of dismantling, repairing and replacing of the dismantled portion of the finished Work, but if a defect is discovered, Contractor shall bear the expense of dismantling, repairing and replacing the defective Work and restoring the Work to its proper condition. If it is not practical for Contractor to make repairs, or at Company's option, Company shall have the right to engage an independent contractor at the expense of Contractor for any dismantling, repairing and replacing of defective Work.

10. Compensation - The consideration to be paid by Company to Contractor after inspection and approval of the Work shall be the amount agreed upon prior to the commencement of Work; provided, however, that the amount to be paid for any service or labor or material furnished or used in connection with such Work shall not exceed Contractor's usual and customary charge for such service, labor or material published in the then current rate schedule of Contractor, including any applicable discounts, to be supplied prior to the commencement of Work and annually thereafter in the locality where the Work is to be performed. Contractor shall submit its final invoice for Work performed within 60 days of completion and acceptance of the Work described in the applicable Work Order of Company.

Company will pay the undisputed amount of an invoice within thirty (30) days of receipt of such invoice. In the event Company disputes one or more items in an invoice, Company shall, within thirty (30) days of receipt of such invoice, notify Contractor of the item or items under dispute and the reasons therefor. Company may withhold payment of such items until settlement of the dispute. Payments made hereunder shall not in any event prejudice the right of Company to question the propriety or accuracy of any charges in respect of which any such payment was made in the exercise of Company's right under Section 7 of the Agreement.

11. Taxes and Liens - Contractor agrees to pay and discharge all valid taxes, lienable claims, charges or other impositions imposed or to be imposed by law on Contractor, arising out of, in connection with or resulting from the Work, and to comply with old age pension laws and unemployment laws with reference to Contractor's employees engaged in the performance of any Work. Contractor agrees to indemnify, release, defend and hold Company harmless against any liability for same, except to the extent it is provided in the Work Order that local sales and use taxes levied directly on the invoices for Contractor furnished services or materials are to be borne in some other manner. Company shall have the right to withhold payment without interest and request Contractor to furnish proof satisfactory to Company that all claims for labor and materials are satisfied or discharged. The amounts due Contractor, as herein provided, shall be paid by Company to Contractor, subject, however, to Company's rights to deduct money due to Company and to the right of Company to withhold payments in accordance with the requirements of any applicable law with respect to taxes and liens for labor or material.

12. Insurance - As to all operations provided for herein, each Party shall carry and maintain for the benefit of the other Party, the following minimum insurance coverage with policy territory sufficient to cover the Work:

(a) Workmen's Compensation Insurance with statutory limits in accordance with all applicable state, federal and maritime laws, and Employer's Liability Insurance of \$1,000,000 per accident/occurrence, including but not limited to an "Alternate Employer" and "Borrowed Servant" endorsement in favor of Company Indemnitees or Contractor Indemnitees, whichever is applicable. If the operations are over water or where the laws hereinafter mentioned apply, the Party shall carry the following additional insurance as applicable: U.S. Longshoremen's and Harbor Worker's Compensation Act Liability (including the Outer Continental Shelf Lands Act) for statutory limits, and Maritime Employer's Liability of \$1,000,000 per accident/occurrence (including but not limited to coverage for Jones Act, General Maritime Laws and Death on the High Seas Act, Transportation, Wages, Maintenance and Cure; Voluntary Compensation; Alternate Employer/Borrowed Servant endorsement in favor of Company Indemnitees or Contractor Indemnitees, whichever is applicable; and "In rem" endorsement).

(b) Comprehensive General Liability Insurance with limits of \$1,000,000 combined single limit per occurrence, including but not limited to coverage for public liability including bodily injury and property damage liability, personal/advertising injury, contractual liability for those liabilities assumed by the Party herein, cross liability and severability of interest, liability for pollution and cleanup on a sudden and accidental basis, products and completed operations, protective liability/independent contractors/work sublet, and with the "care, custody, and control exclusion" deleted.

(c) Automobile Liability Insurance with limits of \$1,000,000 combined single limit per accident/occurrence for bodily/personal injury and property damage, including but not limited to coverage for all owned, hired and non-owned vehicles or automotive equipment used by or for the Party and contractual liability for those liabilities assumed by the Party herein

(d) Property Insurance covering the Party's machinery and equipment for its replacement value and including removal of wreck/debris coverage, or the Parties may self-insure for these items.

(e) If applicable, for all vessels owned, operated, chartered, or brokered by or for the Party in connection with its Work under the Agreement, the Party shall carry or require the owner or operator of such vessels to carry (including the Umbrella Excess Liability Insurance):

(1) Hull Insurance for replacement cost value, including but not limited to coverage for Collision and Tower's Liability, Removal of Wreck on a voluntary basis or where required by law, regulation or contract. The phrase "as owner of vessel named herein" and all similar phrases purporting to limit the insurer's liability to that of an owner shall be deleted.

(2) Protection and Indemnity Insurance with limits of \$1,000,000 combined single limit per occurrence, including but not limited to coverage for contractual liability for those liabilities assumed by the Party herein, liability for pollution and cleanup on a sudden and accidental basis as per WQIS policy form or equivalent, full crew coverage, Collision and Tower's Liability, and Cargo Legal Liability. The insurer shall waive its right to limit its liability to the value of the vessel but only with respect to Company Indemnitees or Contractor Indemnitees, whichever is applicable. The phrase "as owner of vessel named herein" and all similar phrases purporting to limit the insurer's liability to that of an owner shall be deleted.

(3) Charterer's Legal Liability Insurance with limits of \$1,000,000 combined single limit per occurrence.

(4) The policies listed in (1) and (2) above shall provide that seaworthiness of vessels used to perform services under this Agreement is accepted by insurers (or that insurers shall waive in favor of Company Indemnitees or Contractor Indemnitees, whichever is applicable, the vessel owner's and/or Contractor's warranty of seaworthiness).

(5) The Parties shall delete the "watercraft exclusion" under the Comprehensive General Liability insurance above.

(f) If applicable, for all aircraft owned, operated, chartered, or brokered by or for the Party in connection with its Work under the Agreement, the Party shall carry or require the owner or operator of such aircraft to carry (including the Umbrella Excess Liability Insurance):

(1) All Risks Hull Insurance for replacement cost value, including but not limited to coverage for collision liability.

(2) Aircraft Liability Insurance with limits of \$1,000,000 combined single limit per occurrence, including but not limited to coverage for bodily injury, death and property damage, Passenger Liability, and contractual liability for those liabilities assumed by the Party herein.

(3) The policy listed in (2) above shall provide a breach of warranty in favor of Company Indemnitees or Contractor Indemnitees, whichever is applicable.

(g) Umbrella Excess Liability Insurance with limits of \$10,000,000 per accident/occurrence in excess of the primary liability coverages and limits above.

(h) To the extent of the liabilities assumed by each Party herein, all of the above insurance shall be endorsed to provide that:

(1) The Party's insurers waive their right of subrogation (equitable or by assignment, express or implied, loan receipt or otherwise) against Company Indemnitees or Contractor Indemnitees, whichever is applicable.

(2) The Party's insurers name Company Indemnitees or Contractor Indemnitees, whichever is applicable, as additional insureds (except for Worker's Compensation and Property Insurance).

(3) Such insurance coverage is primary over any insurance coverage maintained by Company Indemnitees or Contractor Indemnitees, whichever is applicable.

(i) At the inception of this Agreement, annually thereafter, and whenever requested, Contractor shall furnish insurance certificates to evidence the insurance required herein. Contractor's insurance shall be carried with insurance companies satisfactory to Company and shall contain endorsements stating that insurer will give thirty (30) days' written notice to Company of non-renewal, cancellation, substantial amendment or alteration of such coverage. All deductible amounts, premiums, franchise amounts or other charges due with respect to Contractor's required insurance herein shall be the sole obligation of Contractor. Maintaining the prescribed insurance shall not relieve Contractor of any other obligation under this Agreement. Contractor will require and assure that each of its subcontractors shall carry and pay for insurance in amounts and on terms necessary to cover the Work and the obligations of the particular subcontractor.

(j) Notwithstanding the foregoing, Contractor and Company agree that with respect to all Work performed in Louisiana or offshore Louisiana under this Agreement, Company (on behalf of Company Indemnitees) has the option to pay to Contractor's insurers the premium required by Contractor's insurer or their agents or authorized representatives to extend all of Contractor's insurance policies to include coverage for Company Indemnitees as required under this Agreement, and such insurance protection shall be governed by Louisiana law. If Company makes this election, Contractor will arrange to have Company billed for the premium by Contractor's insurers, and Contractor will advise Company prior to the inception of this Agreement if the premium will be in excess of \$250.00. At each subsequent renewal of Contractor's insurance, Contractor will advise Company the amounts of the premium required for the extensions and arrange to have Company billed for the appropriate premium by its insurers or their agents or authorized representatives. Contractor warrants that such amount constitutes the full cost of extending such insurance protection to Company Indemnitees.

13. Choice of Law/Venue - This Agreement shall be governed by and interpreted in accordance with GENERAL MARITIME LAW, BUT IF GENERAL MARITIME LAW IS NOT APPLICABLE, THE LAWS OF THE STATE OF TEXAS (EXCLUSIVE OF ANY PRINCIPLES OF CONFLICTS OF LAWS WHICH WOULD DIRECT APPLICATION OF THE SUBSTANTIVE LAWS OF ANOTHER JURISDICTION) SHALL GOVERN. In the event of a dispute over the meaning or application of this Agreement, it shall be construed fairly and reasonably and neither more strongly for nor against either Party. The Parties agree that in the event that litigation arises in connection with this Agreement or any Work, any action must be brought in Harris County, Texas.

14. Indemnities:

(a) Bodily Injury, Death, and Damage to Property of Contractor's Employees and Subcontractors:

Notwithstanding anything to the contrary in the other provisions of this Agreement, **CONTRACTOR AGREES TO BE RESPONSIBLE FOR AND ASSUME ALL LIABILITY FOR AND HEREBY AGREES TO DEFEND, RELEASE, INDEMNIFY, AND HOLD HARMLESS COMPANY INDEMNITEES AGAINST CLAIMS ARISING IN CONNECTION WITH: (i) BODILY INJURY TO AND/OR DEATH OF CONTRACTOR'S EMPLOYEES, CONTRACTOR'S SUBCONTRACTORS AND THEIR EMPLOYEES, AND CONTRACTOR'S INVITEES; AND/OR (ii) DAMAGE TO PROPERTY OF CONTRACTOR'S EMPLOYEES, CONTRACTOR'S SUBCONTRACTORS AND THEIR EMPLOYEES, AND CONTRACTOR'S INVITEES; ARISING OUT OF OR RESULTING FROM THE PERFORMANCE OF THIS AGREEMENT, REGARDLESS OF FAULT. THE INDEMNITY OBLIGATIONS SET FORTH IN THIS SUB-SECTION 14(a) SHALL INCLUDE ANY MEDICAL, COMPENSATION, OR OTHER BENEFITS PAID BY ANY MEMBER OF COMPANY INDEMNITEES AND SHALL APPLY EVEN IF THE EMPLOYEE IS DETERMINED TO BE THE BORROWED OR STATUTORY EMPLOYEE OF ANY MEMBER OF COMPANY INDEMNITEES.**

(b) Bodily Injury, Death, and Damage to Property of Company's Employees and Subcontractors:

Notwithstanding anything to the contrary in the other provisions of this Agreement, **COMPANY AGREES TO BE RESPONSIBLE FOR AND ASSUME ALL LIABILITY FOR AND HEREBY AGREES TO DEFEND, RELEASE, INDEMNIFY, AND HOLD HARMLESS CONTRACTOR INDEMNITEES AGAINST CLAIMS ARISING IN CONNECTION WITH: (i) BODILY INJURY TO AND/OR DEATH OF COMPANY'S EMPLOYEES, COMPANY'S SUBCONTRACTORS AND THEIR EMPLOYEES, AND COMPANY'S INVITEES; AND/OR (ii) DAMAGE TO PROPERTY OF COMPANY'S EMPLOYEES, COMPANY'S SUBCONTRACTORS AND THEIR EMPLOYEES, AND COMPANY'S INVITEES; ARISING OUT OF OR RESULTING FROM THE PERFORMANCE OF THIS AGREEMENT, REGARDLESS OF FAULT. THE INDEMNITY OBLIGATIONS SET FORTH IN THIS SUB-SECTION 14(b) SHALL INCLUDE ANY MEDICAL, COMPENSATION, OR OTHER BENEFITS PAID BY ANY MEMBER OF CONTRACTOR INDEMNITEES AND SHALL APPLY EVEN IF THE EMPLOYEE IS DETERMINED TO BE THE BORROWED OR STATUTORY EMPLOYEE OF ANY MEMBER OF CONTRACTOR INDEMNITEES.**

(c) Contractor's Property:

Subject to Section 15, and notwithstanding anything to the contrary in the other provisions of this Agreement, **CONTRACTOR AGREES TO BE RESPONSIBLE FOR AND ASSUME ALL LIABILITY FOR AND HEREBY AGREES TO DEFEND, RELEASE, INDEMNIFY, AND HOLD HARMLESS COMPANY INDEMNITEES FROM AND AGAINST CLAIMS ARISING IN CONNECTION WITH DAMAGE TO CONTRACTOR'S PROPERTY ARISING OUT OF OR RESULTING FROM THE PERFORMANCE OF THIS AGREEMENT, REGARDLESS OF FAULT.**

(d) Company's Property:

Subject to Section 9 and notwithstanding anything to the contrary in the other provisions of this Agreement, COMPANY AGREES TO BE RESPONSIBLE FOR AND ASSUME ALL LIABILITY FOR AND HEREBY AGREES TO DEFEND, RELEASE, INDEMNIFY, AND HOLD HARMLESS CONTRACTOR INDEMNITEES FROM AND AGAINST CLAIMS ARISING IN CONNECTION WITH DAMAGE TO COMPANY'S PROPERTY ARISING OUT OF OR RESULTING FROM THE PERFORMANCE OF THIS AGREEMENT, REGARDLESS OF FAULT.

(e) **Pollution and Hazardous Materials and Substances:**

(1) Contractor's Responsibilities

Subject to the indemnity obligations contained in Sub-sections 14(a)-(d), and notwithstanding anything to the contrary in the other provisions of this Agreement, CONTRACTOR AGREES TO BE RESPONSIBLE FOR AND ASSUME ALL LIABILITY FOR AND HEREBY AGREES TO DEFEND, RELEASE, INDEMNIFY AND HOLD HARMLESS COMPANY INDEMNITEES AGAINST CLAIMS ARISING IN CONNECTION WITH DAMAGE TO PROPERTY ARISING OUT OF OR RESULTING FROM POLLUTION OR CONTAMINATION (INCLUDING BUT NOT LIMITED TO CONTROL, REMOVAL, RESTORATION AND CLEANUP OF ALL POLLUTION OR CONTAMINATION) WHICH ORIGINATES FROM CONTRACTOR INDEMNITEES' PROPERTY, INCLUDING BUT NOT LIMITED TO SPILLS OR LEAKS OF FUEL, LUBRICANTS, MOTOR OILS, PIPE DOPE, PAINTS, SOLVENTS, BALLASTS, BILGE, GARBAGE, SEWERAGE, REGARDLESS OF FAULT AND ALTHOUGH THEIR USE OR DISPOSITION MAY BE AT COMPANY'S DIRECTION.

(2) Company's Responsibilities

Subject to the indemnity obligations contained in Sub-sections 14(a)-(d), and notwithstanding anything to the contrary in the other provisions of this Agreement, COMPANY AGREES TO BE RESPONSIBLE FOR AND ASSUME ALL LIABILITY FOR AND HEREBY AGREES TO DEFEND, RELEASE, INDEMNIFY AND HOLD HARMLESS CONTRACTOR INDEMNITEES AGAINST CLAIMS ARISING IN CONNECTION WITH DAMAGE TO PROPERTY ARISING OUT OF OR RESULTING FROM POLLUTION OR CONTAMINATION (INCLUDING BUT NOT LIMITED TO CONTROL, REMOVAL, RESTORATION AND CLEANUP OF ALL POLLUTION OR CONTAMINATION) WHICH ORIGINATES FROM COMPANY INDEMNITEES' PROPERTY AND WITHIN THE WORK SITE, REGARDLESS OF FAULT.

(f) Debris and Wreck Removal - Contractor shall promptly remove all debris and/or wreckage of the property of Contractor and/or its subcontractors to the extent requested by Company. CONTRACTOR AGREES TO BE RESPONSIBLE FOR AND ASSUME ALL LIABILITY FOR AND HEREBY AGREES TO DEFEND, RELEASE, INDEMNIFY AND HOLD HARMLESS COMPANY INDEMNITEES FOR THE COSTS OF REMOVAL OF SUCH PROPERTY AND FROM AND AGAINST CLAIMS ARISING OUT OF OR RESULTING FROM CONTRACTOR'S OR COMPANY'S OBLIGATION TO REMOVE SAID DEBRIS OR WRECKAGE, REGARDLESS OF FAULT.

(g) Liability to Third Parties - Subject to Sub-sections 14(a)-(f), COMPANY AGREES TO BE RESPONSIBLE FOR AND ASSUME ALL LIABILITY FOR AND HEREBY AGREES TO DEFEND, RELEASE, INDEMNIFY AND HOLD HARMLESS CONTRACTOR INDEMNITEES, AND CONTRACTOR AGREES TO BE RESPONSIBLE FOR AND ASSUME ALL LIABILITY FOR AND HEREBY AGREES TO DEFEND, RELEASE, INDEMNIFY AND HOLD HARMLESS COMPANY INDEMNITEES FROM AND AGAINST CLAIMS BY OR IN FAVOR OF OR INCURRED BY OR SUSTAINED BY ANY THIRD PARTY TO THE EXTENT SUCH CLAIM IS CAUSED BY COMPANY (OR COMPANY INDEMNITEES) OR CONTRACTOR (OR CONTRACTOR INDEMNITEES), RESPECTIVELY.

(h) In support of the mutual indemnity obligations contained in Sub-sections 14(a)-(d) herein, Contractor and Company agree to provide, each for the benefit of the other, coverage and amounts of liability insurance which in no event shall be less than the minimum set out in Section 12 herein; PROVIDED, HOWEVER, AND NOTWITHSTANDING THE ABOVE, in the event that an injury or accident causing loss or liability occurs which is subject to jurisdiction where there is a prohibition or limitation of the Parties' ability to indemnify each other, then, if such law must be applied, both Parties' liability shall exist to the full extent allowed by the law of jurisdiction.

(i) The Parties agree to immediately notify each other of any accident or incident in which physical injury occurs and to complete an accident report for each occurrence and to provide each other with a copy of each such accident report. Each Party agrees to promptly notify the other Party after receipt of any Claim for which it may seek indemnification.

(j) In the event either Party fails to furnish a defense and indemnity as provided for herein, the other Party shall be entitled to receive from the offending Party, in addition to its attorneys' fees, costs, expenses and any amounts paid in judgment or settlement, all costs, expenses, and attorneys' fees incurred in the enforcement of this Agreement. Furthermore, the prevailing Party in any litigation relating to this Agreement, other than that involving defense and indemnity which is addressed above, shall be entitled to recover its reasonable and necessary attorneys' fees and costs of litigation from the other Party.

(k) Notwithstanding any provision in this Agreement to the contrary, the indemnities set forth above do not include indemnification by one Party for any consequential or indirect damages suffered by the other Party, and each Party hereby waives any and all Claims it may have against the other Party for such damages. Furthermore the Parties agree and understand that the indemnity obligations contained in this Agreement do not include indemnification for punitive or exemplary damages under any law or otherwise.

15. Equipment Lost While In The Hole - Notwithstanding the provisions of Section 14, if equipment or instruments of Contractor are lost in the well hole, to the extent such losses are not caused by the negligence of Contractor, and to the extent that the equipment or instruments are not insured by Contractor, Company shall, at its sole option, either recover same without cost to Contractor or pay the replacement cost for such equipment or instruments less reasonable depreciation.

16. Personal Contract - This Master Service Contract shall be deemed a personal contract of Contractor which waives all benefits of the Shipowner's Limitation of Liability Act, 46 U.S.C. § 183, et seq. or any other similar laws as to Company Indemnitees. Neither Contractor nor its underwriters shall be entitled to claim the benefits of such limitation of liability statute in respect of Claims asserted by Company Indemnitees. The purpose of this Section is to insure by specific contractual agreement that Company Indemnitees are able to enforce all indemnity obligations and insurance coverage for their benefit under this Master Service Contract to the maximum extent permitted by law. Nothing in this Section is intended to prevent Contractor or its underwriters from asserting all applicable limitation of liability defenses or Claims by persons or entities not specifically defined as Company Indemnitees under this Master Service Contract.

17. Force Majeure - Neither Company nor Contractor shall be liable for any delay due, occasioned or caused as a result of any applicable laws, orders, rules or regulations of governmental authorities or by causes beyond the control of a Party to overcome by the exercise of due diligence (herein called "Force Majeure"). If in Company's sole opinion the Force Majeure causes substantial suspension of the Work or if the Work is in connection with a well and the well explodes, blows out, catches fire or otherwise becomes unworkable or undrillable or if the platform on which the Work is to be performed becomes unusable, Company may forthwith cancel this Agreement and/or terminate immediately all Work without further obligation except payment of Work already

performed and, if so specified in the Work Order, return of Contractor's personnel and transportable equipment to shore or other agreed upon location. If Work is suspended due to a labor dispute by Contractor or its subcontractors with its or their employees, no payment shall be due Contractor for the period during which the Work is suspended.

18. Assignment - Contractor may not assign or subcontract this Agreement, or any part thereof, without the prior written consent of Company. The assignment of this Agreement or the subcontracting of any Work, if so permitted by Company, shall not relieve Contractor of its obligations hereunder. It is agreed, however, that Contractor shall retain the right to assign all or any part of the remuneration due, or which may become due, by virtue of Work performed under this Agreement provided it gives 30 days prior written notice to Company of its intention to do so.

19. Insolvency - Should Contractor become insolvent or make an assignment for the benefit of creditors or be adjudicated a bankrupt or admit in writing its inability to pay its debts generally as the same become due, or should any proceedings be instituted under any state or federal law for relief of debtors or for the appointment of a receiver, trustee or liquidator of Contractor, or should a voluntary petition in bankruptcy or a reorganization or any adjudication of Contractor as an insolvent or a bankrupt be filed, or should an attachment be levied upon Contractor's equipment and not removed within five (5) days therefrom, then upon the occurrence of any such event, Company shall thereupon have the right to cancel this Agreement and/or to terminate immediately all Work then being performed by Contractor without further obligation.

20. Equal Opportunity and Affirmative Action - Contractor agrees, in connection with the performance of Work under this Agreement relating to leases or rights-of-way agreements covering properties of the United States, to comply with the clauses thereof regarding the manner of conducting Work thereon. Unless exempt by law, Contractor agrees to comply with applicable Fair Employment practices, including but not limited to those set out in Executive Orders 11246 (Equal Employment Opportunity), 11701 (Employment of Disabled Veterans), 11758 (Employment of the Handicapped), and 11458 and 11625 (Minority Business Enterprises), and amendments thereto, or as said orders may be superseded. Contractor agrees that all provisions of said orders are made a part hereof by reference and are binding on Contractor to the same extent as if copied in full herein.

21. Policies on Drugs and Alcohol & Firearms:

(a) If Contractor is subject to the rules and regulations of the United States Department of Transportation (hereinafter called "DOT"), Contractor agrees to implement and comply with all such rules and regulations as they pertain to drug testing, education and training of Contractor's employees. Contractor further agrees, upon request of Company's drug program manager, to provide to Company a copy of Contractor's drug testing program, evidence of compliance therewith and any additional information requested pursuant to DOT rules and regulations including access to Contractor's property and records by the Administrator of the Research and Special Programs Administration of the DOT, or any person who has been delegated such authority, and if Company is subject to the jurisdiction of a state agency, a representative of the state agency.

(b) Contractor agrees that its employees and subcontractors will be subject to Company's policy prohibiting the use, possession, transportation, promotion or sale of alcohol, illegal drugs, contraband or weapons, and said persons and their vehicles may be searched, or said persons may be required to undergo drug and/or alcohol testing, including the submission of urine and/or blood samples, as determined appropriate in Company's sole discretion and to the extent legally permissible.

(c) Notwithstanding anything to the contrary in the other provisions of this Agreement, if Contractor fails to comply with this Section, Company may forthwith cancel this Agreement and/or terminate immediately all Work without further obligation except payment for Work already performed.

22. Citizenship of Contractor's Personnel - Contractor certifies that none of Contractor's personnel who perform Work pursuant to this Agreement are unauthorized aliens as defined in The Immigration Reform and Control Act of 1986 and the rules and regulations promulgated pursuant thereto, all as amended from time to time. Contractor agrees, as required, to obtain a substantially similar certification from its contractors or subcontractors performing Work related to this Agreement. Contractor further agrees, if requested, to provide proof of citizenship of Contractor's personnel who perform Work pursuant to this Agreement.

23. Term and Termination - This Agreement shall be effective as of the Effective Date and shall continue in force until terminated in accordance with the provisions hereof. As a master contract, with respect to potential future Work not then the subject of a Work Order, this Agreement may be terminated prospectively by either Party at any time without cause and without liability upon thirty (30) days' prior written notice to the other Party; provided, however, the terms and provisions of this Agreement shall continue to apply to all Work Orders then in existence, and neither Party shall by reason of such prospective termination of this Agreement be relieved of its respective obligations and liabilities theretofore or thereafter arising from or incident to Work performed under any existing Work Order. Notwithstanding the foregoing, if Contractor breaches any warranty or other material provision hereunder, Company shall have the right to immediately terminate this Agreement and/or any Work then being performed by Contractor without further obligation.

24. Proprietary Information - Contractor may acquire from Company certain information with respect to Company and its operations. Contractor agrees that it will not divulge any such information to persons not employed by Company without Company's prior written consent, and Contractor will not use any such information for any purpose except as may be specifically agreed upon in writing by Company.

25. Public Announcements - Neither Contractor nor any employee, representative, affiliate, subcontractor, or agent of Contractor shall make or issue any public announcement or statement with respect to this Agreement or any Work or Work Order without the prior written consent of Company.

26. Modifications, Amendments and Waivers - Nothing in this Agreement shall be construed as authorizing any employee of either Company or Contractor to modify, alter, amend or waive in any manner this Agreement or any of its provisions. This Agreement may be amended, modified or otherwise altered or its provisions waived only by an amendment in writing signed by an authorized representative of each Party. The waiver of any requirement or provision in this Agreement on any particular occasion shall not be deemed a waiver of such requirement or provision, or serve as a precedent, for other Work under this Agreement on other occasions.

27. Entire Agreement/Cancellation of Prior Master Service Contracts/Purchase Orders - This Agreement and any applicable Work Order(s) constitute the sole and complete agreement of the Parties and supercede all other agreements or representations of any kind, oral or otherwise, not included herein. All prior master service contracts between the Parties are cancelled, and this Agreement shall govern new Work commenced during this Agreement's term. In the event that the Parties have previously or in the future enter into a purchase order related to Company's purchase of goods from Contractor, the terms and conditions of the purchase order, to the extent they are enforceable, shall govern and control the purchase and sale of those goods.

28. Enforceability of the Agreement - If any part or provision of this Agreement is judicially declared invalid, such declaration shall not have the effect of invalidating or voiding the remainder of this Agreement, and the Parties agree that the part or parts of this Agreement so held to be invalid, void or unenforceable shall be modified to the extent to make it enforceable, or, if necessary, the Agreement shall be deemed to be amended to delete the unenforceable part or provision, and the remainder shall have the same force and effect as if such part or provision had never been included herein.

29. Notices - All notices, reports and communications required or permitted by this Agreement to be given or sent by one Party to the other shall be in writing and delivered by hand, mailed or telecopied (with a copy by mail) as follows: If to Contractor, at _____
P. O. Box 1328, Odessa, TX 79760

FAX (432)332-7532 ; ATTN: Mike Fisher _____ and if to Company, at _____
P. O. Box 1330, Houston, TX 77251, Houston, TX 77251. FAX (832)636-2691; ATTN Purchasing - Contracts _____

Either Party may by notice to the other Party change its notice address or information. Notices shall be effective upon receipt.

30. Survival of Terms - Notwithstanding the suspension or termination of this Agreement or any Force Majeure event, the Parties shall continue to be bound by the provisions of this Agreement that reasonably require some action or forbearance after such termination, including but not limited to those related to indemnities, warranties and insurance.

31. Headings - Headings or other subdivisions of this Agreement are inserted for convenience of reference and shall not limit or affect the legal construction of any provision hereof.

32. Binding Authority - Each of the persons executing this Agreement represents and warrants that he or she has full right and authority to execute this instrument on behalf of Company or Contractor, as the case may be, and to bind such Party to the fulfillment of all of the provisions hereof.

WITNESS THE SIGNATURES of the Parties hereto the day and year first above written.

CONTRACTOR FISHER CONSTRUCTION

WITNESS:

Bobby Holbrook

By: Mike Fisher
Name: Mike Fisher
Title: Owner
Date: 7-7-03

COMPANY

WITNESS:

Linda Yelby

By: [Signature]
Name: Dwight Hatfield
Title: Manager, IT'S Purchasing
Date: 7-1-03

ATTACHMENT "A"

(OPTIONAL FORM)

WORK ORDER

The following supplemental description of the Work to be performed under this Master Service Contract dated the ___ day of _____, 20__ between Company and _____ ("Contractor"), is incorporated therein by reference thereto.

(1) JOB SITE LOCATION:

(2) DESCRIPTION OF WORK TO BE PERFORMED BY CONTRACTOR:

(3) Contractor to commence work within ___ days from date of this Work Order when and as requested by Company. Work to be completed by: _____.

(4) Personnel Contractor to furnish and qualifications:

(5) Equipment, services and supplies Contractor is to furnish:

(6) Items to be furnished by Company:

(7) Compensation to be paid Contractor (day rates, mobilization and demobilization charges, reimbursables, tool rentals, other charges as applicable):

(8) Other:

CONTRACTOR: _____
(INSERT FULL ENTITY NAME)

WITNESS:

By: _____

Name: _____

Title: _____

Date: _____

COMPANY

WITNESS:

By: _____

Name: _____

Title: _____

Date: _____

4.8. Response Equipment Testing/Deployment

DATE OF LAST UPDATE:

RESPONSE EQUIPMENT TESTING AND DEPLOYMENT DRILL LOG

Last Inspection or Response Equipment Test Date:

Inspection Frequency:

Last Deployment Drill Date:

Deployment Frequency:

Oil Spill Removal Organization Certification (if applicable):

DATE OF LAST UPDATE:

RESPONSE EQUIPMENT TESTING AND DEPLOYMENT DRILL LOG

Last Inspection or Response Equipment Test Date:

Inspection Frequency:

Last Deployment Drill Date:

Deployment Frequency:

Oil Spill Removal Organization Certification (if applicable):

DATE OF LAST UPDATE:

RESPONSE EQUIPMENT TESTING AND DEPLOYMENT DRILL LOG

Last Inspection or Response Equipment Test Date:

Inspection Frequency:

Last Deployment Drill Date:

Deployment Frequency:

Oil Spill Removal Organization Certification (if applicable):

5. Response Team Structure

5.1. Response Team Levels

The key to an effective emergency response is a rapid, coordinated, tiered response by the affected facility, consistent with the magnitude of an incident.

First response to an incident at the Facility will be provided by the Emergency Response Team (ERT). The Incident Management Team (IMT) will respond, to the degree necessary, to incidents exceeding local capability. If a response exceeds the ERT's capabilities, the Local Incident Commander will activate the IMT.

These response teams will use the NIMS Incident Command System (ICS) to manage the emergency response activities. Because ICS is a management tool that is readily adaptable to incidents of varying magnitude, it will typically be used for all emergency incidents. Staffing levels will be adjusted to meet specific response team needs based on incident size, severity, and type of emergency.

5.2. Qualified Individual's Duties

The "Qualified Individual" is to be notified of a spill and is responsible for, and authorized to, initiate immediate response and commit the resources to the clean-up effort. The Qualified Individual (QI) is normally at the facility during working hours and available locally during non-working hours. When absent from the area, the Qualified Individual will designate an alternative individual, who will be delegated the same authorities and responsibilities during the Qualified Individual's absence from the area.

It is the responsibility of the QI or his/her designee to coordinate with the Federal On-Scene Coordinator (FOSC) and State On-Scene coordinator (SOSC) throughout the response.

Vital duties of the QI include:

- Activate internal alarms and hazard communication systems to notify all facility personnel.
- Notify all response personnel, as needed.
- Identify the character, exact source, amount, and extent of the release, as well as the other items needed for notification.
- Notify and provide necessary information to the appropriate Federal, State and local authorities with designated response roles, including the National Response Center (NRC), State Emergency Response Commission (SERC), and local response agencies.
- Serve as liaison with On-Scene Coordinator.
- Assess the interaction of the spilled substance with water and/or other substances stored at the Facility and notify response personnel at the scene of that assessment.
- Assess the possible hazards to human health and the environment due to the release. This assessment must consider both the direct and indirect effects of the release (i.e., the effects of any toxic, irritating, or asphyxiating gases that may be generated, or the effects of any hazardous surface water runoffs from water or chemical agents used to control fire and heat-induced explosion).
- Assess and implement prompt removal actions to contain and remove the substance released.
- Coordinate rescue and response actions as previously arranged with all response personnel.
- Use authority to immediately access Company funding to initiate cleanup activities.

Contractors will execute the bulk of the response actions. Readily available local spill contractors will be used for small and medium spills and will assist in initial response for a worst-case discharge. The Qualified Individual will conduct technical direction for these contractors and coordination with local, state and federal officials until properly relieved of this responsibility.

5.3. Emergency Response Team

The first Anadarko person on scene will function as the Incident Commander (IC) and person-in-charge until relieved by an authorized supervisor who will then assume the position of IC. Transfer of command will take place as more senior management respond to the incident.

The Onsite ERT consists of the first responders located at the facility and those emergency contractors (medical, oil spill response, well control, etc.) that arrive very shortly after. This team may be composed of personnel from Anadarko or contractor resources. The number of positions/personnel required to staff the ERT will depend on the size and complexity of the incident and/or the arrival of additional resources. The On-Scene Commander delegates response functions to subordinate personnel.

5.4. Incident Management Team

For response operations outside the capabilities of the ERT, the QI/AQI or IC will determine the need for the activation and mobilization of the Incident Management Team (IMT). The members of the ERT will typically become members of the IMT.

The IMT, once fully staffed is designed to cover all aspects of a comprehensive and prolonged incident response. The number of positions/personnel required to staff the IMT and its location will depend on the size and complexity of the incident. During a prolonged response, additional personnel may be cascaded in to sustain 24-hour operations.

If the incident is expected to reach beyond the IMT capabilities, the Incident Support Team (IST) based in Houston will be called in for support.

5.5. Incident Support Team

The Incident Support Team (IST) provides response support that may take place away from the scene and is not available locally, supports the IMT, facilitates planning and provides additional media and HR coordination, and additional support to address the concerns of the public and government agencies.

The IST's role is secondary and supportive. The IST will not duplicate functions that the on-scene emergency response or incident management teams effectively have in place, but will provide first line assistance if the incident location is unable to effectively manage the incident.

Each incident will be unique in terms of the response roles in the IST that is activated to successfully mitigate the event. The specific composition of the team will depend on the demands of the location and the type of incident. The involvement of the IST may be different for Anadarko-operated, partner-operated or joint-operated projects.

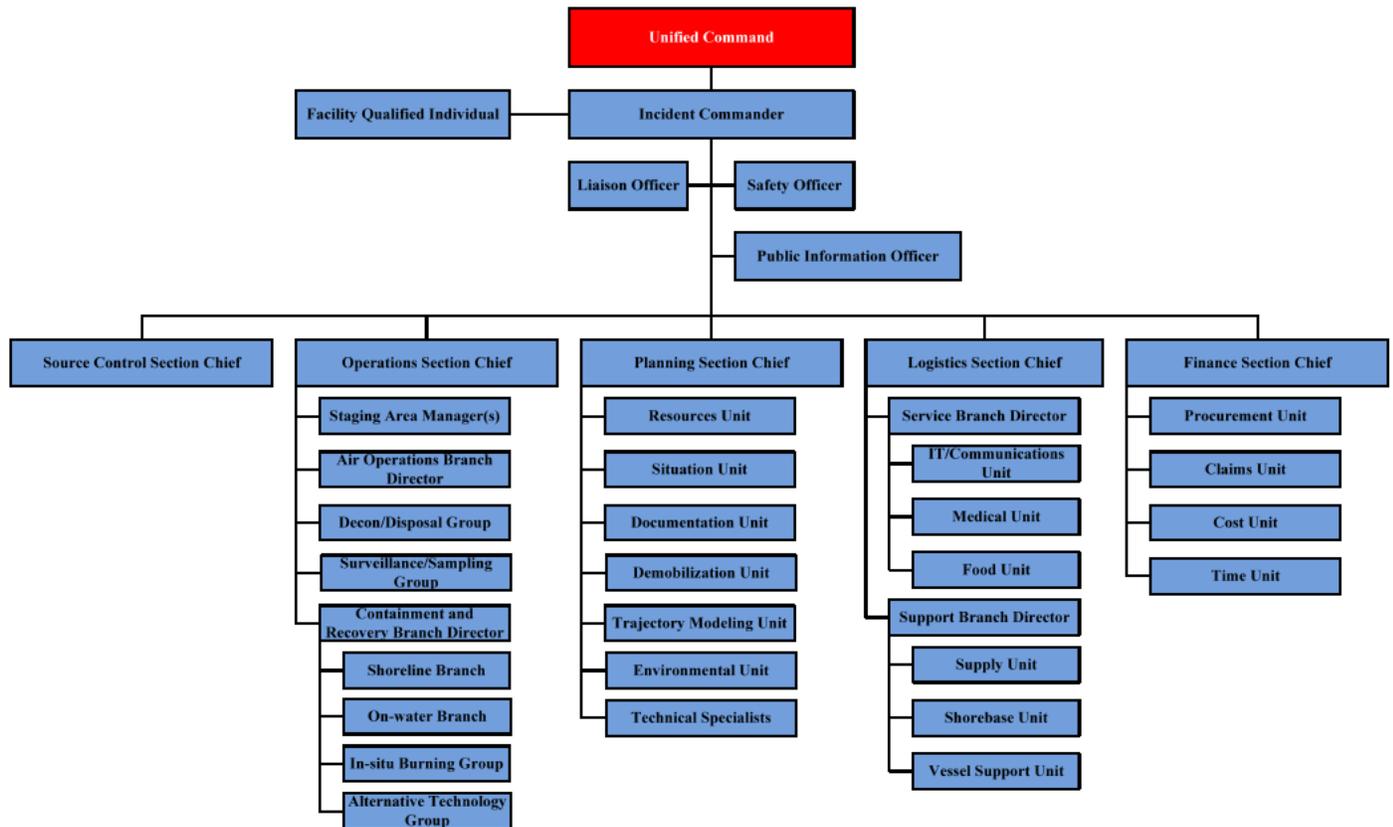
The IST has also identified experts (Support Specialists) in their respective fields, which can be activated by the Incident Support Manager, based on the incident circumstances, to support response activities.

5.6. Crisis Management Team

The Crisis Management Team manages crisis-related issues at the Anadarko Executive level. The Team provides guidance on issues that have the potential to significantly impact the Company's reputation or operations or pose a significant legal, regulatory or financial liability.

5.7. ICS Team Organization

The typical ICS organization consists of the Incident Commander, a Command Staff (officers), and a General Staff (Section Chiefs) as shown below. The organization is modular, any position can be added or removed as needed. Only positions that are required to perform needed response functions are activated.



5.8. ICS Roles and Responsibilities

Common Responsibilities

The following is a checklist applicable to all personnel in an Incident Commander System organization:

- Receive assignment, including:
 - Job assignment
 - Resource order number and request number
 - Reporting location
 - Reporting time
 - Travel instructions
 - Special communications instructions
- Upon arrival, check-in at designated check-in location.
- Receive briefing from immediate supervisor.
- Acquire work materials.
- Supervisors maintain accountability for assigned personnel.
- Organize and brief subordinates.
- Know your assigned radio frequency(s) and ensure communications equipment is operating properly.
- Use clear text and Incident Commander System terminology (no codes) in all communications.
- Complete forms and reports required of the assigned position and send to Documentation Unit.
- Maintain unit records, including Unit Log (ICS Form 214).
- Respond to demobilization orders and brief subordinates regarding demobilization.

Unit Leader Responsibilities

In Incident Command System, a Unit Leader's responsibilities are common to all units in all parts of the organization. Common responsibilities of Unit Leaders are listed below.

- Review common responsibilities.
- Receive briefing from Incident Commander, Section Chief or Branch Director, as appropriate.
- Participate in incident planning meetings, as required.
- Determine current status of unit activities.
- Order additional unit staff, as appropriate.
- Determine resource needs.
- Confirm dispatch and estimated time of arrival of staff and supplies.
- Assign specific duties to staff; supervise staff.
- Develop and implement accountability, safety and security measures for personnel and resources.
- Supervise demobilization of unit, including storage of supplies.
- Provide Supply Unit Leader with a list of supplies to be replenished.
- Maintain unit records, including Unit Log (ICS Form 214).

Incident Commander

- Assess the situation and/or obtain a briefing from the prior Incident Commander.
- Determine Incident Objectives and strategy.
- Establish the immediate priorities.
- Establish an Incident Command Post.
- Brief Command Staff and Section Chiefs.
- Schedule team meetings and briefings.
- Establish an appropriate organization.
- Ensure planning meetings are scheduled as required.
- Approve and authorize the implementation of an Incident Action Plan.
- Ensure that adequate safety measures are in place.
- Form a Unified Command with responding public officials, as required.
- Coordinate activity for all Command and General Staff.
- Coordinate with key people and officials.
- Approve requests for additional resources or for the release of resources.
- Keep agency administrator informed of incident status.
- Approve the use of trainees, volunteers, and auxiliary personnel.
- Authorize release of information to the news media.
- Ensure incident Status Summary (ICS Form 209-CG) is completed and forwarded to appropriate higher authority.
- Order the demobilization of the incident when appropriate.
- Assign any of the Incident Commander roles and responsibilities to a Deputy Incident Commander as needed.

Public Information Officer

- Determine from the Incident Commander if there are any limits on information release.
- Develop material for use in media briefings.
- Obtain Incident Commander approval of media releases.
- Inform media and conduct media briefings.
- Arrange for tours and other interviews or briefings that may be required.
- Obtain media information that may be useful to incident planning.
- Maintain current information summaries and/or displays on the incident and provide information on the status of the incident to assigned personnel.

Liaison Officer

- Be a contact point for Agency Representatives.
- Maintain a list of assisting and cooperating agencies and Agency Representatives.
- Monitor check-in sheets daily to ensure that all Agency Representatives are identified.
- Assist in establishing and coordinating interagency contacts.
- Keep agencies supporting the incident aware of incident status.
- Monitor incident operations to identify current or potential inter-organizational problems.
- Participate in planning meetings, providing current resource status, including limitations and capability of assisting agency resources.
- Coordinate response resource needs for Natural Resource Damage Assessment and Restoration (NRDAR) activities with the Operations during oil and HAZMAT responses.
- Coordinate response resource needs for incident investigation activities with the Operations.
- Ensure that all required agency forms, reports and documents are completed prior to demobilization.
- Coordinate activities of visiting dignitaries.

Safety Officer

- Participate in planning meetings.
- Identify hazardous situations associated with the incident.
- Review the Incident Action Plan for safety implications.
- Exercise emergency authority to stop and prevent unsafe acts.
- Investigate accidents that have occurred within the incident area.
- Review and approve the Medical Plan.
- Develop the Site Safety Plan and publish Site Safety Plan summary (ICS Form 208) as required.

Legal Officer

- Participate in planning meetings, if requested.
- Advise on legal issues relating to in-situ burning, use of dispersants, and other alternative response technologies.
- Advise on legal issues relating to differences between Natural Resource Damage Assessment Restoration (NRDAR) and response activities.
- Advise on legal issues relating to investigations.
- Advise on legal issues relating to finance and claims.
- Advise on legal issues relating to response.

Operations Section General Functions

- Responsible for managing tactical operations at the incident site directed toward reducing the immediate hazard, saving lives and property, establishing situational control, and restoring normal operations.
- Directs and coordinates all incident tactical operations.
- Executes the Incident Action Plan.

Operations Section Chief

- Develop operations portion of Incident Action Plan.
- Brief and assign Operations Section personnel in accordance with the Incident Action Plan.
- Supervise Operations Section.
- Determine need and request additional resources.
- Review suggested list of resources to be released and initiate recommendation for release of resources.
- Assemble and disassemble strike teams assigned to the Operations Section.
- Report information about special activities, events, and occurrences to the Incident Commander.
- Respond to resource requests in support of National Resource Damage Assessment and Restoration activities.

Branch Director

- Develop with subordinates, alternatives for Branch control operations.
- Attend planning meetings at the request of the Operations.
- Review Assignment List (ICS Form 204-CG) for Divisions/Groups within the Branch. Modify lists based on effectiveness of current operations.
- Assign specific work tasks to Division/Group Supervisors.
- Supervise Branch operations.
- Resolve logistic problems reported by subordinates.
- Report to Operations when: the Incident Action Plan is to be modified; additional resources are needed; surplus resources are available; or hazardous situations or significant events occur.
- Approve accident and medical reports originating within the Branch.

Division/Group Supervisor

- Implement Incident Action Plan for Division/Group.
- Provide the Incident Action Plan to Strike Team Leaders, when available.
- Identify increments assigned to the Division/Group.
- Review Division/Group assignments and incident activities with subordinates and assign tasks.
- Ensure that the Incident Commander and/or Resources Unit is advised of all change in the status of resources assigned to the Division/Group.
- Coordinate activities with adjacent Division/Group.
- Determine need for assistance on assigned tasks.
- Submit situation and resources status information to the Branch Director or the Operations.
- Report hazardous situations, special occurrences, or significant events (e.g., accidents, sickness, discovery of unanticipated sensitive resources) to the immediate supervisor.
- Ensure that assigned personnel and equipment get to and from assignments in a timely and orderly manner.
- Resolve logistics problems within the Division/Group.
- Participate in the development of Branch plans for the next operational period.

Staging Area Manager

- Establish Staging Area layout.
- Determine any support needs for equipment, feeding, sanitation and security.
- Establish check-in function as appropriate.
- Post areas for identification and traffic control.
- Request maintenance service for equipment at Staging Area as appropriate.
- Respond to request for resource assignments.
- Obtain and issue receipts for radio equipment and other supplies distributed and received at Staging Area.
- Determine required resource levels from the Operations.
- Advise the Operations when reserve levels reach minimums.
- Maintain and provide status to Resource Unit of all resources in Staging Area.
- Demobilize Staging Area in accordance with the Incident Demobilization Plan.

Air Operations Branch Director

- Organize preliminary air operations.
- Request declaration (or cancellation) of restricted air space
- Participate in preparation of the Incident Action Plan through the Operations. Insure that the air operations portion of the Incident Action Plan takes into consideration the Air Traffic Control requirements of assigned aircraft.
- Perform operational planning for air operations.
- Prepare and provide Air Operations Summary (ICS Form 220) to the Air Support Group and Fixed-Wing Bases.
- Determine coordination procedures for use by air organization with ground Branches, Divisions, or Groups.
- Coordinate with appropriate Operations Section personnel.
- Supervise all air operations activities associated with the incident.
- Evaluate helibase locations.
- Establish procedures for emergency reassignment of aircraft.
- Schedule approved flights of non-incident aircraft in the restricted air space area.
- Coordinate with the Operations Coordination Center (OCC) through normal channels on incident air operations activities.
- Inform the Air Tactical Group Supervisor of the air traffic situation external to the incident.
- Consider requests for non-tactical use of incident aircraft.
- Resolve conflicts concerning non-incident aircraft.
- Coordinate with Federal Aviation Administration.
- Update air operations plans.
- Report to the Operations on air operations activities.
- Report special incidents/accidents.
- Arrange for an accident investigation team when warranted.

Planning Section General Functions

- Responsible for gathering, evaluating, and disseminating tactical information and intelligence critical to the incident.
- Maintaining incident documentation and providing documentation services.
- Preparing and documenting Incident Action Plans.
- Conducting long-range and/or contingency planning.
- Developing alternative strategies.
- Tracking resources assigned to the incident.
- Developing plans for waste disposal.
- Developing plans for demobilization.

Planning Section Chief

- Collect and process situation information about the incident.
- Supervise preparation of the Incident Action Plan.
- Provide input to the Incident Commander and the Operations in preparing the Incident Action Plan.
- Chair planning meetings and participate in other meetings as required.
- Reassign out-of-service personnel already on-site to Incident Commander System organizational positions as appropriate.
- Establish information requirements and reporting schedules for Planning Section Units (e.g., Resource, Situation Unit).
- Determine the need for any specialized resources in support of the incident.
- If requested, assemble and disassemble Strike Teams and Task Forces not assigned to Operations.
- Establish special information collection activities as necessary (e.g., weather, environmental, toxins etc.).
- Assemble information on alternative options.
- Provide periodic predictions on incident potential.
- Report any significant changes in incident status.
- Compile and display incident status information.
- Oversee preparation and implementation of the Incident Demobilization Plan.
- Incorporate plans (e.g., Traffic, Medical, Communications, Site Safety) into the Incident Action Plan.

Resources Unit Leader

- Establish the check-in function at incident locations.
- Prepare Organization Assignment List (ICS Form 203-CG) and Incident Organization (ICS Form 207-CG).
- Prepare appropriate parts of Assignment List (ICS Form 204).
- Prepare and maintain the Incident Command Post display (to include organization chart and resource allocation and deployment).
- Maintain and post the current status and location of all resources.
- Maintain master roster of all resources checked in at the incident.

Situation Unit Leader

- Begin collection and analysis of incident data as soon as possible.
- Prepare, post, or disseminate resource and situation status information as required, including special requests.
- Prepare periodic predictions or as requested by the Planning Section Chief.
- Prepare the Incident Status Summary (ICS Form 209-CG).
- Provide photographic services and maps if required.

Documentation Unit Leader

- Set up work area; begin organization of incident files.
- Establish duplication service; respond to requests.
- File all official forms and reports.
- Review records for accuracy and completeness; inform appropriate units of errors or omissions.
- Provide incident documentation as requested.
- Store files for post-incident use.

Demobilization Unit Leader

- Participate in planning meetings as required.
- Review incident resource records to determine the likely size and extent of demobilization effort.
- Based on the above analysis, add additional personnel, workspace, and supplies as needed.
- Coordinate demobilization with Agency Representatives.
- Monitor the on-going Operations Section resource needs.
- Identify surplus resources and probable release time.
- Develop incident checkout function for all units.
- Evaluate logistics and transportation capabilities to support demobilization.
- Establish communications with off-incident facilities, as necessary.
- Develop an Incident Demobilization Plan detailing specific responsibilities and release priorities and procedures.
- Prepare appropriate directories (e.g., maps, instructions, etc.) for inclusion in the demobilization plan.
- Distribute demobilization plan (on and off-site).
- Provide status reports to appropriate requestors.
- Ensure that all Sections/Units understand their specific demobilization responsibilities.
- Supervise execution of the Incident Demobilization Plan.
- Brief the Planning Section Chief on demobilization progress.

Environmental Unit Leader

- Participate in Planning Section meetings.
- Identify sensitive areas and recommend response priorities.
- Following consultation with natural resource trustees, provide input on wildlife protection strategies (e.g., removing oiled carcasses, pre-emptive capture, hazing, and/or capture and treatment).
- Determine the extent, fate and effects of contamination.
- Acquire, distribute and provide analysis of weather forecasts.
- Monitor the environmental consequences of cleanup actions.
- Develop shoreline cleanup and assessment plans. Identify the need for, and prepare any special advisories or orders.
- Identify the need for, and obtain, permits, consultations, and other authorizations including Endangered Species Act (ESA) provisions.
- Following consultation with the Federal On Scene Commander's Historical/Cultural Resources Technical Specialist identify and develop plans for protection of affected historical/cultural resources.
- Evaluate the opportunities to use various response technologies.
- Develop disposal plans.
- Develop a plan for collecting, transporting, and analyzing samples.

Logistics Section General Functions

- Responsible for all support requirements needed to facilitate effective and efficient incident management, including ordering resources from off-incident locations.
- Ordering, obtaining, maintaining, and accounting for essential personnel, equipment, and supplies.
- Providing communication planning and resources.
- Setting up food services.
- Setting up and maintaining incident facilities.
- Providing support transportation.
- Providing medical services to incident personnel.

Logistics Section Chief

- Plan the organization of the Logistics Section.
- Assign work locations and preliminary work tasks to Section personnel.
- Notify the Resources Unit of the Logistics Section units activated including names and locations of assigned personnel.
- Assemble and brief Branch Directors and Unit Leaders.
- Participate in preparation of the Incident Action Plan.
- Identify service and support requirements for planned and expected operations.
- Provide input to and review the Communications Plan, Medical Plan and Traffic Plan.
- Coordinate and process requests for additional resources.
- Review the Incident Action Plan and estimate Section needs for the next operational period.
- Advise on current service and support capabilities.
- Prepare service and support elements of the Incident Action Plan.
- Estimate future service and support requirements.
- Receive Incident Demobilization Plan from Planning Section.
- Recommend release of Unit resources in conformity with Incident Demobilization Plan.
- Ensure the general welfare and safety of Logistics Section personnel.

Service Branch Director

- Determine the level of service required to support operations.
- Confirm dispatch of Branch personnel.
- Participate in planning meetings of Logistics Section personnel.
- Review the Incident Action Plan.
- Organize and prepare assignments for Service Branch personnel.
- Coordinate activities of Branch Units.
- Inform the Logistic Section Chief of Branch activities.
- Resolve Service Branch problems.

Communications Unit Leader

- Prepare and implement the Incident Radio Communications Plan (ICS Form 205-CG).
- Ensure the Incident Communications Center and the Message Center is established.
- Establish appropriate communications distribution/maintenance locations within the Base/Camp(s).
- Ensure communications systems are installed and tested.
- Ensure an equipment accountability system is established.
- Ensure personal portable radio equipment from cache is distributed per Incident Radio Communications Plan.
- Provide technical information as required on:
 - Adequacy of communications systems currently in operation.
 - Geographic limitation on communications systems.
 - Equipment capabilities/limitations.
 - Amount and types of equipment available.
 - Anticipated problems in the use of communications equipment.
- Supervise Communications Unit activities
- Maintain records on all communications equipment as appropriate.
- Ensure equipment is tested and repaired.
- Recover equipment from Units being demobilized.

Medical Unit Leader

- Participate in Logistics Section/Service Branch planning activities.
- Prepare the Medical Plan (ICS Form 206-CG).
- Prepare procedures for major medical emergency.
- Declare major emergency as appropriate.
- Respond to requests for medical aid, medical transportation, and medical supplies.
- Prepare and submit necessary documentation.

Food Unit Leader

- Determine food and water requirements.
- Determine the method of feeding to best fit each facility or situation.
- Obtain necessary equipment and supplies and establish cooking facilities.
- Ensure that well-balanced menus are provided.
- Order sufficient food and potable water from the Supply Unit.
- Maintain an inventory of food and water.
- Maintain food service areas, ensuring that all appropriate health and safety measures are being followed.
- Supervise caterers, cooks, and other Food Unit personnel as appropriate.

Support Branch Director

- Determine initial support operations in coordination with the Logistic Section Chief and Service Branch Director.
- Prepare initial organization and assignments for support operations.
- Assemble and brief Support Branch personnel.
- Determine if assigned Branch resources are sufficient.
- Maintain surveillance of assigned units work progress and inform the Logistic Section Chief of their activities.
- Resolve problems associated with requests from the Operations Section.

Supply Unit Leader

- Participate in Logistics Section/Support Branch planning activities.
- Determine the type and amount of supplies en route.
- Review the Incident Action Plan for information on operations of the Supply Unit.
- Develop and implement safety and security requirements.
- Order, receive, distribute, and store supplies and equipment.
- Receive and respond to requests for personnel, supplies, and equipment.
- Maintain an inventory of supplies and equipment.
- Service reusable equipment.
- Submit reports to the Support Branch Director.

Facility Unit Leader

- Review the Incident Action Plan.
- Participate in Logistics Section/Support Branch planning activities.
- Determine requirements for each facility, including the Incident Command Post
- Prepare layouts of incident facilities.
- Notify Unit Leaders of facility layout.
- Activate incident facilities.
- Provide Base and Camp Managers and personnel to operate facilities.
- Provide sleeping facilities.
- Provide security services.
- Provide facility maintenance services (e.g., sanitation, lighting, clean up).
- Demobilize Base and Camp facilities.
- Maintain facility records.

Ground Support Unit Leader

- Participate in Support Branch/Logistics Section planning activities.
- Develop and implement the Traffic Plan.
- Support out-of-service resources.
- Notify the Resources Unit of all status changes on support and transportation vehicles.
- Arrange for and activate fueling, maintenance, and repair of ground resources.
- Maintain Support Vehicle Inventory and transportation vehicles (ICS Form 218).
- Provide transportation services, In accordance with requests from the Logistic Section Chief or Support Branch Director.
- Collect information on rented equipment.
- Requisition maintenance and repair supplies (e.g., fuel, spare parts).
- Maintain incident roads.
- Submit reports to Support Branch Director as directed.

Vessel Support Unit Leader

- Participate in Support Branch/Logistics Section planning activities.
- Coordinate development of the Vessel Routing Plan.
- Coordinate vessel transportation assignments with the Protection and Recovery Branch or other sources of vessel transportation.
- Coordinate water-to-land transportation with the Ground Support Unit, as necessary.
- Maintain a prioritized list of transportation requirements that need to be scheduled with the transportation source.
- Support out-of-service vessel resources, as requested.
- Arrange for fueling, dockage, maintenance and repair of vessel resources, as requested.
- Maintain inventory of support and transportation vessels.

Finance/Administration Section General Functions

- Responsible for all financial and cost analysis aspects of an incident. (Note: Not all incidents will require a separate Finance/Administration Section. In cases that require only one specific function (e.g., cost analysis), this service may be provided by a member of the Planning Section.)
- Administering any contract negotiation.
- Providing cost analysis as it pertains to the Incident Action Plan.
- Maintaining cost associated with the incident.
- Tracking personnel and equipment time.
- Addressing compensation for injury or damage to property issues.

Finance/Administration Section Chief

- Attend planning meetings as required.
- Manage all financial aspects of an incident.
- Provide financial and cost analysis information as requested.
- Gather pertinent information from briefings with responsible agencies.
- Develop an operating plan for the Finance/Administration Section; fill supply and support needs.
- Determine the need to set up and operate an incident commissary.
- Meet with assisting and cooperating agency representatives, as needed.
- Maintain daily contact with agency(s) administrative headquarters on Finance/Administration matters.
- Ensure that all personnel time records are accurately completed and transmitted, according to policy.
- Provide financial input to demobilization planning.
- Ensure that all obligation documents initiated at the incident are properly prepared and completed.
- Brief administrative personnel on all incident-related financial issues needing attention or follow-up prior to leaving incident.

Time Unit Leader

- Determine incident requirements for time recording function.
- Determine resource needs.
- Contact appropriate agency personnel/representatives.
- Ensure that daily personnel time recording documents are prepared and in compliance with policy.
- Establish time unit objectives.
- Maintain separate logs for overtime hours.
- Establish commissary operation on larger or long-term incidents as needed.
- Submit cost estimate data forms to the Cost Unit, as required.
- Maintain records security.
- Ensure that all records are current and complete prior to demobilization.
- Release time reports from assisting agency personnel to the respective Agency Representatives prior to demobilization.
- Brief the Finance/Administration Section Chief on current problems and recommendations, outstanding issues, and follow-up requirements.

Procurement Unit Leader

- Review incident needs and any special procedures with Unit Leaders, as needed.
- Coordinate with local jurisdiction on plans and supply sources.
- Obtain the Incident Procurement Plan.
- Prepare and authorize contracts and land-use agreements.
- Draft memoranda of understanding as necessary.
- Establish contracts and agreements with supply vendors.
- Provide for coordination between the Ordering Manager, agency dispatch, and all other procurement organizations supporting the incident.
- Ensure that a system is in place that meets agency property management requirements. Ensure proper accounting for all new property.
- Interpret contracts and agreements; resolve disputes within delegated authority.
- Coordinate with the Compensation/Claims Unit for processing claims.
- Coordinate use of impress funds, as required.
- Complete final processing of contracts and send documents for payment.
- Coordinate cost data in contracts with the Cost Unit Leader.
- Brief the Finance/Administration Section Chief on current problems and recommendations, outstanding issues, and follow-up requirements.

Compensation/Claims Unit Leader

- Establish contact with the incident Security Officer and Liaison Officer (or Agency Representatives if no Liaison Officer is assigned).
- Determine the need for Compensation for Injury and Claims Specialists and order personnel as needed.
- Establish a Compensation for Injury work area within or as close as possible to the Medical Unit.
- Review Medical Plan (ICS Form 206-CG).
- Ensure that Compensation/Claims Specialists have adequate workspace and supplies.
- Review and coordinate procedures for handling claims with the Procurement Unit.
- Brief the Compensation/Claims Specialists on incident activity.
- Periodically review logs and forms produced by the Compensation/Claims Specialists to ensure that they are complete, entries are timely and accurate and that they are in compliance with agency requirements and policies.
- Ensure that all Compensation for Injury and Claims logs and forms are complete and routed appropriately for post-incident processing prior to demobilization.
- Keep the Finance/Administration Section Chief briefed on Unit status and activity.
- Demobilize unit in accordance with the Incident Demobilization Plan.

Cost Unit Leader

- Coordinate cost reporting procedures.
- Collect and record all cost data.
- Develop incident cost summaries.
- Prepare resources-use cost estimates for the Planning Section.
- Make cost-saving recommendations to the Finance/Administration Section Chief.
- Ensure all cost documents are accurately prepared.
- Maintain cumulative incident cost records.
- Complete all records prior to demobilization.
- Provide reports to the Finance/Administration Section Chief.

6. Environmental Sensitivities/Hazard Evaluation

6.1. Hazard Evaluation

The hazard evaluation closely examines the facility operations and predicts where discharges could occur and the magnitude of those discharges.

The Facility receives crude oil via non DOT-PHMSA regulated pipeline. After receipt, the crude oil is pumped to (b) (7)(F) k storage tanks. From the tanks, the crude is delivered via the Bone Springs 10" DOT regulated pipeline to the Plains Blacktip Terminal.

Truck Loading/Unloading

Loading Lanes:	4
Loading/Unloading Rate:	350 BPH per loading lane
Truck Capacity:	(b) (7)(F)
Simultaneous Operations:	N/A
Loads Per Day:	168 loads per day potential
Product:	Crude Oil

Hazard Identification Tanks (all aboveground)

Tank No.	Substance Stored	Quantity Stored (Gallons)	Tank Type / Year	Maximum Capacity (Gallons)	Failure / Cause	Secondary Containment Capacity (Gallons)
010	Crude Oil	(b) (7)(F)	Steel Welded / 2012	(b) (7)(F)	None	(b) (7)(F)
011	Crude Oil	(b) (7)(F)	Steel Welded / 2012	(b) (7)(F)	None	(b) (7)(F)
TBD	Crude Oil	(b) (7)(F)	Steel Welded / 2012	(b) (7)(F)	None	(b) (7)(F)
TBD	Crude Oil	(b) (7)(F)	Steel Welded / 2012	(b) (7)(F)	None	(b) (7)(F)
TBD	Crude Oil	(b) (7)(F)	Steel Welded / 2012	(b) (7)(F)	None	(b) (7)(F)

6.2. Vulnerability Analysis

The vulnerability analysis addresses the potential effects to human health, property, or the environment, of an oil discharge.

Water Intakes

Currently there are no water intakes within the immediate vicinity of the Facility.

Schools

Currently there are no schools within the immediate vicinity of the Facility.

Medical Facilities

Currently there are no medical facilities within the immediate vicinity of the Facility.

Residential Areas

Currently there are no residential areas within the immediate vicinity of the Facility.

Businesses

Currently there are no businesses within the immediate vicinity of the Facility.

Fish and Wildlife, Wetlands, and other Sensitive Environments

Flora and fauna are always present and are sensitive to the effects of a pollution incident. Potential impact of wetlands will not occur, as there are no wetland areas within immediate vicinity of the Facility. During a response situation, the USFWS and applicable state agencies should be contacted for information regarding sensitive environments.

Lakes, Rivers and Streams

The Facility is not in close proximity to a navigable water. The closest navigable water is the Pecos River, approximately 5 miles to the west of the Facility. There are no storm drains in the vicinity of the facility. The relatively flat topography of the surrounding area is not favorable for oil to flow from the facility to the Pecos River, or its drainage zone. Under dry conditions, soil distribution and porosity make the flow of oil for any great distance unlikely for the type of crude oil handled at the Facility. Manmade roads surround the area of the Facility would also hinder oil flow on land. A heavy rain event could increase the possibility of an oil spill flowing from the facility and eventually reaching the Pecos River.

Recreational Areas

Currently there are no recreational areas within the immediate vicinity of the Facility.

Transportation Routes

The local emergency assistance agencies (police department, fire department, etc.) would be contacted for traffic control in the area of the discharge.

Utilities

Currently there are no utilities within the immediate vicinity of the Facility.

Other Areas of Economic Importance

Currently there are no other areas of economic importance within the immediate vicinity of the Facility.

Endangered/Threatened Species

The following table is a list of threatened or endangered plants and animals in Loving County:

ANIMALS	
American Peregrine Falcon	Falco peregrinus anatum
Arctic Peregrine Falcon	Falco peregrinus tundrius
Baird's Sparrow	Ammodramus bairdii
Bald Eagle	Haliaeetus leucocephalus
Ferruginous Hawk	Buteo regalis
Interior Least Tern	Sterna antillarum athalassos
Mountain Plover	Charadrius montanus
Peregrine Falcon	Falco peregrinus
Prairie Falcon	Falco mexicanus
Snowy Plover	Charadrius alexandrines
Sprague's Pipit	Anthus spragueii
Western Burrowing Owl	Athene cunicularia hypugaea
Western Snowy Plover	Charadrius alexandrinus nivosus
Pecos pupfish	Cyprinodon pecosensis
Big free-tailed bat	Nyctinomops macrotis
Black bear	Ursus americanus
Black-footed ferret	Mustela nigripes
Black-tailed prairie dog	Cynomys ludovicianus
Gray wolf	Canis lupus
Jones' pocket gopher	Geomys knoxjonesi
Pale Townsend's big-eared bat	Corynorhinus townsendii pallescens
Pecos River muskrat	Ondatra zibethicus ripensis
False spike mussel	Quadrula mitchelli
Texas hornshell	Popenaias popeii
Spot-tailed earless lizard	Holbrookia lacerata
Texas horned lizard	Phrynosoma cornutum
PLANTS	
According to Texas Parks and Wildlife, there are currently no plants listed as threatened or endangered in Loving County.	

6.3 Planning Distance Calculation

Based upon Figure C-1 in 40 CFR 112 Appendix C, the planning distance for oil transport over land equals 5 miles. This has been determined using maps and drainage patterns, which estimate potentially spilled product would have to flow more than 5 miles in a southwesterly direction before possibly reaching the Pecos River. Currently there are no man-made barriers or storm drains, which would impact the direction or rate of product flow. Based upon soil data provided by USDA Natural Resources Conservation Service, the soil distribution surrounding the Facility is composed primarily of a Wickett-Sharvana material.

6.4 Wildlife Protection and Rehabilitation

The Company will work with Federal, State, and local agency personnel to provide labor and transportation to retrieve, clean, and rehabilitate birds and wildlife affected by an oil spill, as necessary. Oversight of the Company's wildlife preservation activities and coordination with Federal, State, and Local agencies during an oil spill is the responsibility of the Incident Commander.

Protecting fish habitat (e.g. spawning and rearing grounds) is important to both consumers and commercial fisheries. Beyond typical response strategies, other options could include moving floating facilities, temporarily sinking facilities using cages designed for this purpose, temporary suspension of water intakes, or closing sluice gates to isolate the facilities from contamination.

Special consideration should be given to the protection and rehabilitation of endangered species and other wildlife and their habitat in the event of an oil spill and subsequent response. Jurisdictional authorities should be notified and worked with closely on all response/clean-up actions related to wildlife protection and rehabilitation. Laws with significant penalties are in place to ensure appropriate protection of these species.

6.4.1 Wildlife Rescue

The Company will work with Federal, State, and Local agency personnel to provide labor and transportation to retrieve, clean, and rehabilitate wildlife affected by an oil spill, as the situation demands.

The following are items which should be considered for wildlife rescue and rehabilitation during a spill response:

- Bird relocation can be accomplished using a variety of deterrents, encouraging birds to avoid areas of spilled oil. Bird relocation can be accomplished by utilizing deterrent methods including:
 - Use of visual stimuli, such as inflatable bodies, owls, stationary figures, or helium balloons, etc.
 - Use of auditory stimuli, such as propane cannons, recorded sounds, or shell crackers.
 - Use of herding with aircraft, boats, vehicles, or people (as appropriate).
 - Use of capture and relocation.

Always check with U.S. Fish & Wildlife for authorization before using any of these measures.

6.4.2 Search and Rescue

- **The Company's involvement should be limited to offering assistance as needed or requested by the agencies.**
- Prior to initiating any organized search and rescue plan, **authorization must be obtained from the appropriate Federal/State agency.**
- **Initial search and rescue efforts, if needed, should be left up to the appropriate agencies.** They have the personnel, equipment, and training to immediately begin capturing contaminated wildlife.
- With or without authorization, it must be anticipated that volunteer citizens will aid distressed/contaminated wildlife on their own. It is important to communicate that it may be illegal to handle wildlife without express authority from appropriate agencies. Provisions should be made to support an appropriate rehabilitator; however, **no support should be given to any unauthorized volunteer rescue efforts.**
- The regulatory agencies and response personnel should be provided the name and location of a qualified rehabilitator in the event contaminated wildlife is captured.

6.5 Containment and Recovery of Spilled Product

General descriptions of various specific response techniques that may be applied during a response effort are discussed below. Company responders are free to use all or any combination of these methods as incident conditions require, provided they meet the appropriate safety standards and other requirements relative to the situation encountered. Data was obtained from reports, manuals and pamphlets prepared by the American Petroleum Institute, Environmental Protection Agency, and the United States Coast Guard. The most effective cleanup of a product spill will result from an integrated combination of clean-up methods. Each operation should complement and assist related operations and not merely transfer spillage problems to areas where they could be more difficult to handle.

The spill should be assessed as soon as possible to determine the source, extent and location of travel. Terrain and other physical conditions downgradient of the spill site will determine the methods of control at a point in advance of the moving product. Often, the bulk of a spill can be contained at a single location or a few key locations in the immediate vicinity of the source point. When possible, the execution of this type of initial containment strategy helps confine a spill to a relatively limited area.

6.5.1 Spill on Land (Soil Surfaces)

- **Confinement Methods**

Product can be trapped in ditches and gullies by earth dams. Where excavating machinery is available, dams can be bulldozed to contain lakes of product. Dams, small and large, should be effectively employed to protect priority areas such as inlets to drains, sewers, ducts and watercourses. These can be constructed of earth, sandbags, absorbents, or any other effective method. If time does not permit a large dam, many small ones can be made, each one holding a portion of the spill as it advances. The terrain will dictate the placement of the dams. If the spill is minor, natural dams or earth absorption will usually stop the product before it advances a significant distance. Cleanup is the main concern in such situations.

In situations where vapors from a spill present a clear and present danger to property or life (possible ignition because of passing automobiles, nearby houses, or work vehicles approaching the area), spraying the surface of the spill with dispersant will greatly reduce the release of additional vapors from the product. This method is especially adapted to gasoline spills on soil surfaces. Prior to the use of dispersant agents, ensure that permission has been granted by government authorities and local landowner. Local government authorities to be contacted may include city council, county board of commissioners, city or county fire chiefs, the county forestry commission or firetower, and the local environmental protection agency. In seeking permission from these authorities, be prepared to convince them that adequate safety precautions have been and will be taken during the operation.

- **Removal Methods**

The recovery and removal of free product from soil surfaces is a difficult job. The best approaches at present seem to be:

- Removal with suction equipment to tank truck if concentrated in volumes large enough to be picked up. Channels can be formed to drain pools of product into storage pits. The suction equipment can then be used.
- Small pockets may have to be dipped up by hand.

6.6 Alternative Technologies

Alternative technologies such as dispersants and in-situ burning will not be used during a spill response without permission from the State On-Scene Coordinator, Federal On-Scene Coordinator and the Regional Response Team.

6.7 Analysis of the Potential for an Oil Discharge

This section evaluates the potential for a discharge and an estimate of the probable harm associated with the spill. The analysis incorporates factors such as oil discharge history, horizontal range of a potential discharge, vulnerability to natural disaster, and tank age.

The tanks at the Facility are newly constructed and the Facility has no oil discharge history. Tanks, piping, and secondary containment will be inspected on a regular basis. The Facility is not located in an area that is subject to significant natural disasters. The most likely natural disaster to occur would be lightning, which could result in a fire or explosion. However, the probability of this occurrence is low. Given these factors, the potential for an oil discharge from the tanks is also low. There is a potential for oil discharge to occur during transfer of oil between trucks and tanks due to a spill or leak. However, all loading and unloading operations are constantly attended and spill containment kits are readily available to minimize the potential for a significant release.

6.8 Facility Reportable Spill History

The Facility was constructed in 2012 and has no reportable spills.

APPENDIX A DISCHARGE SCENARIOS

A.1 INTRODUCTION

This appendix identifies potential causes for oil discharges and discusses the response efforts that are necessary for successful mitigation. Discharge calculations must be performed for each jurisdictional agency and plan for the largest Worst Case Discharge Volume pursuant to the respective regulations. The discharge volume calculations are described as follows:

DOT-PHMSA Discharge Volume Calculations

Worst Case Discharge = The largest volume (bbls) of the following:

- Pipeline's maximum release time (hrs), plus the maximum shutdown response time (hrs), multiplied by the maximum flow rate (bph), plus the largest line drainage volume after shutdown of the line section.

OR

- Largest foreseeable discharge for the line section based on the maximum historic discharge, if one exists, adjusted for any subsequent corrective action or preventative action taken.

OR

- Capacity of the single largest breakout tank or battery of tanks within a single secondary containment system, adjusted for the capacity or size of the secondary containment system.

EPA Discharge Volume Calculations

- Small Discharge – A discharge of 2,100 gallons or less provided that this amount is less than the worst case discharge amount.
- Medium Discharge – A discharge greater than 2,100 gallons and less than or equal to 36,000 gallons or 10 percent of the capacity of the largest tank at the facility, whichever is less, provided that this amount is less than the worst case discharge amount.
- Worst Case Discharge – The capacity of the single largest oil storage tank within a common secondary containment storage area or the largest oil storage tank within a single secondary containment area, whichever is greater.

A.2 EPA SMALL DISCHARGE

SMALL DISCHARGE = 2,100 GALLONS (50 BBLs)
<p>Description</p> <p>This size discharge would most likely occur due to minor equipment failures or human error. Examples may include:</p> <ul style="list-style-type: none"> Truck loading/unloading Pump seal leak Valve leak Container rupture <p>The most likely location for a discharge of this size would be leaking Facility piping and would be Crude Oil.</p> <p>Volume</p> <p>This size discharge would likely be noticed and clean up measures taken quickly. These types of small spills are typically contained on the grounds of the Facility. Adverse weather conditions would not hinder response efforts during a small discharge.</p> <p>Prevention</p> <p>The storage tanks and truck loading rack have adequate secondary containment so it is unlikely that a spill would reach any navigable waterways or cause a major impact to the surrounding environment. Therefore, the threat to sensitive areas is minimal.</p>
<p>Response Requirement</p> <p>A 50 bbl discharge typically will not escape the containment of the Facility. If a 50 bbl discharge escaped the facility, it would flow West toward the Pecos River.</p> <p>Cleanup would be accomplished using sorbent pads, absorbent and containment drums. Additional recovery and storage equipment may be secured from contract resources as the situation demands.</p> <p>Oil containment and recovery devices can be secured from contract resources and can implemented at the Facility, as the situation demands.</p>

A.3 EPA MEDIUM DISCHARGE

MEDIUM DISCHARGE = 36,000 GALLONS (857 BBLs)

Description

This size discharge would most likely occur due to a major equipment failure or during product transfer. Examples may include:

- Truck loading/unloading
- Tank overfill or failure
- Piping manifold rupture
- Valve rupture
- Line or flange rupture

The type of material that would be discharged is Crude Oil.

Immediate Action

Medium discharges resulting from tank failure would more than likely be contained by the dike. In the event of a medium discharge, a spill contractor would be notified. Qualified Facility personnel would complete internal and external notifications, as necessary.

Because of the Facility's proximity to wildlife and sensitive environments, the potential exists that these areas could be impacted by a medium discharge.

Response Requirement

If a medium size discharge escaped the facility, it would flow West toward the Pecos River; however, it is unlikely that a discharge of this size would reach the River.

Cleanup would be accomplished using oil boom for oil collection and containment and for protection of fish and wildlife and sensitive areas surrounding the Facility. Heavy earth moving equipment could also be contracted for digging trench dams and containment berms to aid in oil collection and preventing further movement offsite.

A.4 EPA WORST CASE DISCHARGE

WORST CASE DISCHARGE (b) (7)(F)
<p>Description</p> <p>This size discharge would most likely occur due to a natural disaster or catastrophic event. Examples may include:</p> <ul style="list-style-type: none"> Tank fire Catastrophic tank shell failure Tornado-induced spill Pipeline manifold rupture <p>For a discharge this size to leave the Facility property, diking and containment areas would have to be damaged or destroyed (breached). The type of material that would be discharged is Crude Oil.</p> <p>Volume</p> <p>In the event of a worst-case discharge, a crude oil spill from one of the (b) (7)(F) would be captured within the secondary containment structure. If the spill were to escape containment, it would flow in a westerly direction to the Pecos River.</p> <p>Potential Impacts</p> <p>The chances of groundwater impact due to a spill are minimal. However, if a spill moved downward through the soil and reached the groundwater table, it would be necessary to contain and recover the product.</p> <p>The priority during larger spills is to prevent oil from reaching the waterway. The initial response actions would be to deploy the oil boom kept onsite in the Facility Spill Trailer. Local companies with heavy earth moving equipment would be contracted for digging trenches and ditches in order to aid in oil collection. Earthen dams will be bulldozed creating deflection barriers directing product flow to the existing trenches/ditches, containing lakes of product. Dams will be effectively employed to protect environmentally sensitive areas.</p> <p>In the event that a spill reached the Pecos River, oil containment boom would be deployed downstream at a collection point accessible to vacuum trucks. A Damage Assessment by the state and federal trustees would more than likely follow the response.</p> <p>Response Requirement</p> <p>Oil recovery devices with an effective daily recovery capacity equal to the volume depicted on the Response Planning Volume Calculations table will be secured from a contracted OSRO.</p> <p>Temporary storage capacity equal to twice the daily recovery capacity will be secured from a contracted OSRO or made available within the Facility's storage facilities.</p> <p>Containment boom for oil collection and containment will be deployed and additional equipment secured from a contracted OSRO as needed.</p>

Response Planning Volume Calculations

Location Data			
Location Type	Nearshore/Inland		
WCD Product Type	Crude		
Product Group	2		
WCD Volume	(b) (7)(F)		
Calculation Factors			
Percent Natural Dissipation	50		
Percent Recovered Floating Oil	50		
Percent Oil Onshore	30		
Emulsification Factor	1.8		
Tier 1 – On Water Oil Recovery Resource Mobilization Factor	0.15		
Tier 2 – On Water Oil Recovery Resource Mobilization Factor	0.25		
Tier 3 – On Water Oil Recovery Resource Mobilization Factor	0.4		
Response Planning Volume Calculations			
On- Water Recovery Volume (bbls)	5,000		
Shoreline Recovery Volume (bbls)	3,000		
Shoreline Cleanup Volume (bbls)	5,400		
	Tier 1	Tier 2	Tier 3
On-Water Recovery Capacity (bbls/day)	1,350	2,250	3,600
On-Water Response Capacity by Operating Area (bbls/day)	12,500	25,000	50,000
Additional Response Required (bbls/day)	0	0	0
Response Time (hrs)	12	36	60

A.5 DOT-PHMSA WORST CASE DISCHARGE**WORST CASE DISCHARGE = (b) (7)(F)****Description**

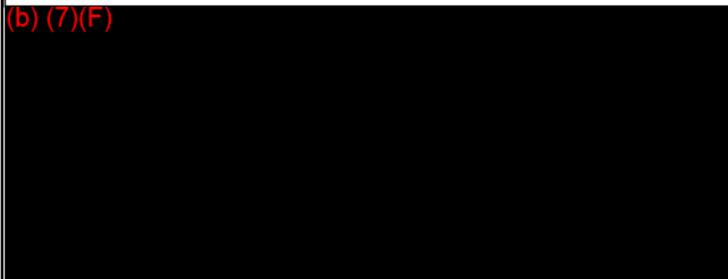
This size discharge would originate from a leak anywhere along the pipeline between the Oil Storage Facility and the Plains Petroleum Storage and Pipeline Facility.

The type of material that would be discharged is Crude Oil.

Volume

The worst-case discharge volume is calculated by multiplying the time to detect a release and shut down the pipeline by the flow rate during a transfer and then adding the volume of the pipeline. The following values were used:

(b) (7)(F)



This WCD scenario does not involve breakout tankage, therefore single largest volume breakout tank adjustments/calculations are not considered in this WCD volume.

APPENDIX B DISCHARGE DETECTION/SECURITY

B.1 DISCHARGE DETECTION SYSTEMS

Detection by Personnel

Informal visual inspections of the facility are performed on a daily basis. All above ground tanks, piping, and oil transfer areas are formally inspected on a regular basis and any deficiencies are promptly corrected.

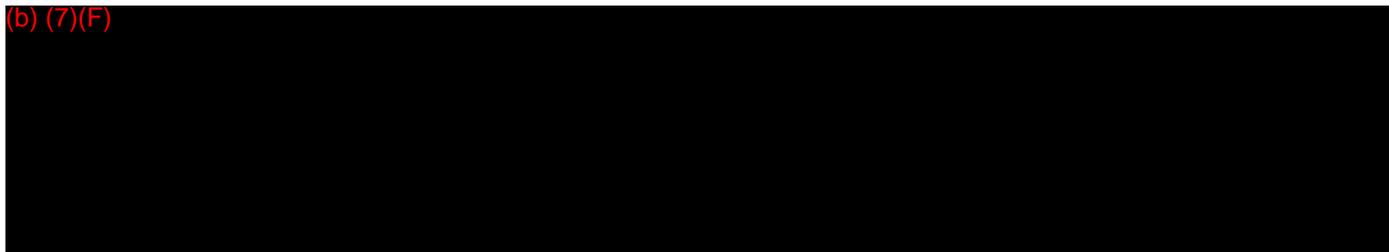
In the event of a spill or release at a facility, prompt response and reporting is required. Failure to immediately report and respond to a spill or release can increase the environmental damage. The notification list and forms in Section 2 will be used in the event of a reportable release.

(b) (7)(F)



A drop in pipeline pressure would be detected by remote sensors on the system. This would shut-in the pumps at the Oil Storage Facility feeding crude oil into the Bone Spring Pipeline. The Control Room Operators would be alerted of the pressure drop.

(b) (7)(F)



APPENDIX C DISPOSAL PLAN

C.1 OVERVIEW

This section describes how and where the facility intends to recover, reuse, decontaminate, and/or dispose of materials after a discharge has taken place. The appropriate permits required to transport or dispose of recovered materials according to local, State, and Federal requirements are addressed.

A major oil spill response would generate significant quantities of waste materials ranging from oily debris and sorbent materials to sanitation water and used batteries. All these wastes need to be classified and segregated (i.e., oily, liquid, etc.), transported from the site, and treated and/or disposed of at approved disposal sites. Each of these activities demands that certain health and safety precautions be taken, which are strictly controlled by federal and state laws and regulations. This section provides an overview of the applicable state regulations governing waste disposal, and a discussion of various waste classification, handling, transfer, storage, and disposal techniques. It is the responsibility of the Environmental Unit to manage waste disposal needs during an oil spill cleanup.

C.2 WASTE CLASSIFICATION

Oily - Liquid Wastes

Oily liquid wastes (i.e., oily water and emulsions) that would be handled, stored, and disposed of during response operations are very similar to those handled during routine storage and transfer operations. The largest volume of oily liquid wastes would be produced by recovery operations (e.g., through the use of vacuum devices or skimmers). In addition, oily water and emulsions would be generated by vehicle operations (e.g., spent motor oils, lubricants, etc.), and equipment cleaning operations.

Non-Oily - Liquid Wastes

Response operations would also produce considerable quantities of non-oily liquid wastes. Water and other non-oily liquid wastes would be generated by the storage area and storm water collection systems equipment cleaning (i.e., water contaminated with cleaning agents), and office and field operations (i.e., sewage, construction activities).

Solid Wastes

A solid waste is defined as any discarded material provided that it is not specifically excluded under the regulations. These exclusions cover materials such as domestic sewage and mixtures of sewage discharged through a sewer system or industrial wastewater point source discharges. A discarded material is any material which is abandoned (disposed of, burned or incinerated) or accumulated, stored or treated prior to being abandoned. A discarded material is also any material recycled or any material considered inherently waste like. Recycled material is considered solid waste when used in a manner constituting disposal, placed on land or burned for energy recovery.

A solid waste may be considered a hazardous waste. A solid waste, as defined above, may be a hazardous waste if it is not excluded from regulation and is either a listed hazardous waste or exhibits the characteristics of a hazardous waste. A solid waste exhibits the characteristics of a hazardous waste if it exceeds the thresholds established in determining the following:

1. ignitability
2. corrosivity
3. reactivity
4. toxicity

A solid waste may also become a hazardous waste if it is mixed with a listed hazardous waste or, in the case of any other waste (including mixtures), when the waste exhibits any of the characteristics identified above.

Oily - Solid/Semi-Solid Wastes

Oily solid/semi-solid wastes that would be generated by containment and recovery operations include damaged or worn-out booms, disposable/soiled equipment, used sorbent materials, saturated soils, contaminated beach sediments, driftwood, and other debris.

Non-Oily - Solid/Semi-Solid Wastes

Non-oily solid/semi-solid wastes would be generated by emergency construction operations (e.g., scrap, wood, pipe, and wiring) and office and field operations (i.e., refuse). Vessel, vehicle, and aircraft operations also produce solid wastes.

C.3 WASTE HANDLING

A primary concern in the handling of recovered oil and oily debris is contaminating unaffected areas or recontaminating already cleaned areas. Oily wastes generated during the response operations would need to be separated by type and transferred to temporary storage areas and/or transported to incineration or disposal sites. Proper handling of oil and oily wastes is imperative to ensure personnel health and safety.

Safety Considerations

Care shall be taken to avoid or minimize direct contact with oily wastes. All personnel handling or coming into contact with oily wastes shall wear protective clothing. A barrier cream can be applied prior to putting on gloves to further reduce the possibility of oily waste absorption. Safety goggles shall be worn by personnel involved in waste handling activities where splashing might occur. Any portion of the skin exposed to oily waste should be washed with soap and water as soon as possible. Decontamination zones should be set up during response operations to ensure personnel are treated for oil exposure.

Waste Transfer

During response operations, it may be necessary to transfer recovered oil and oily debris from one point to another several times before the oil and oily debris are ultimately recycled, incinerated or disposed of at an appropriate disposal site. Depending on the location of response operations, any or all of the following transfer operations may occur:

- From portable or vessel-mounted skimmers into flexible bladder tanks, storage tanks of the skimming vessel itself, or a barge.
- Directly into the storage tank of a vacuum device.
- From a skimming vessel or flexible bladder to a barge.
- From a vacuum device storage tank to a frac tank.
- From a frac tank to a tank truck.
- From a tank truck to a processing system (e.g., oil/water separator).
- From a processing system to a recovery system and/or incinerator.
- Directly into impermeable bags that, in turn, are placed in impermeable containers.
- From containers to trucks.

There are four general classes of transfer systems that may be employed to affect oily waste transfer operations:

Pumps: Rotary pumps, such as centrifugal pumps, may be used when transferring large volumes of oil, but they may not be appropriate for pumping mixtures of oil and water. The extreme shearing action of centrifugal pumps tends to emulsify oil and water, thereby increasing the viscosity of the mixture and causing low, inefficient transfer rates.

The resultant emulsion would also be more difficult to separate into oil and water fractions. Lobe or "positive displacement" pumps work well on heavy, viscous oils, and do not emulsify the oil/water mixture. Double-acting piston and double acting diaphragm pumps are reciprocating pumps that may also be used to pump oily wastes.

Vacuum Systems: A vacuum truck may be used to transfer viscous oils but they usually pick up a very high water/oil ratio.

Belt/Screw Conveyors: Conveyors may be used to transfer oily wastes containing a large amount of debris. These systems can transfer weathered debris laden oil either horizontally or vertically for short distances (i.e., 10 feet) but are bulky and difficult to set up and operate.

Wheeled Vehicles: Wheeled vehicles may be used to transfer liquid wastes or oily debris to storage or disposal sites. These vehicles have a limited transfer volume (i.e., 100 barrels) and require good site access. Figure E-1 provides a comparative evaluation of 16 types of transfer systems that could be available for transfer operations.

C.4 WASTE STORAGE

Interim storage of recovered oil, oily and non-oily waste would be considered to be an available means of holding the wastes until a final management method is selected. In addition, the segregation of wastes according to type would facilitate the appropriate method of disposal. The storage method used would depend upon:

- The type and volume of material to be stored.
- The duration of storage.
- Access.

During an oil spill incident, the volume of oil that can be recovered and dealt with effectively depends upon the available storage capacity.

If storage containers such as bags or drums are used, the container must be clearly marked with the proper DOT marking to indicate the type of material/waste contained and/or the ultimate disposal option.

Fuel barges may be the best option for temporary storage of oil recovered in open waters and frac tanks for inland spills. Depending on size, these vessels may be able to hold up to 6,000 barrels of oil and water and frac tanks may hold up to 500 to 550 barrels. The barge deck can be used as a platform for operating oil spill clean-up equipment and storing containment boom.

Steel or rubber tanks can be used to store oil recovered near the shoreline. To facilitate offloading, demulsifiers may be used to break emulsions prior to placing the recovered substance into the barges or storage tanks.

Use of any site for storage is dependent on the approval of the local authorities. The following elements affect the choice of a potential storage site:

- Geology.
- Ground water.
- Soil.
- Flooding.
- Surface water.
- Slope.
- Covered material.
- Capacity.
- Climate factors.
- Land use.
- Toxic air emissions.
- Security.
- Access.
- Public contact.

Temporary storage sites should use the best achievable technology to protect the environment and human health. They should be set up to prevent leakage, contact, and subsequent absorption of oil by the soil. The sites should be bermed (1 to 1.5 meters high) and double lined with plastic or visqueen sheets 6-10 millimeters or greater in thickness, without joints, prior to receiving loose and bagged debris. The edges of the sheet should be weighted with stones or earth to prevent damage by wind, and the sheet should be placed on a sand layer or an underfelt thick enough to prevent piercing. A reinforced access area for vehicles at the edge of the site should be provided. In addition, the oily debris should be covered by secured visqueen or tarps and an adequate storm water runoff collection system for the size and location of the site would be utilized. Additionally, the sites should be at least meters above mean sea level.

Debris can be hauled to approved temporary storage sites in visqueen lined trucks or other vehicles. Burnable, non-burnable, treatable and re-usable materials can be placed in well-defined separate areas at temporary storage sites.

When the last of the oily debris leaves a temporary storage site, the ground protection would be removed and disposed of with the rest of the oily debris. Any surrounding soil which has become contaminated with oil would also be removed for disposal or treatment. If the soils were removed for treatment, they may be replaced if testing proves acceptable levels have been achieved. Treatment and remediation is encouraged when feasible. The temporary storage should be returned to its original condition.

C.5 WASTE DISPOSAL

Techniques for Disposal of Recovered Oil

Recovery, reuse, and recycling are the best choices for remediation of a spill, thereby reducing the amount of oily debris to be bermed onsite or disposed of at a solid waste landfill. Treatment is the next best alternative, but incineration and burning for energy recovery have more options within the state. There are some limitations and considerations in incinerating for disposal. Environmental quality of incineration varies with the type and age of the Facility. Therefore, when incineration becomes an option during an event, local air quality authorities would be contacted for advice about efficiency and emissions of facilities within their authority. Approval of the local air authorities is a requirement for any incineration option. Landfilling is the last option. Final disposal at a solid or dangerous waste landfill is the least environmentally sound method of dealing with a waste problem such as oily debris.

During an oil spill incident, the Company would consult with the proper regulating agency to identify the acceptable disposal methods and sites appropriately authorized to receive such wastes. The Company maintains a list of approved disposal sites that satisfy local, state, and federal regulations and company requirements. This identification of suitable waste treatment and disposal sites would be prepared by the Environmental Unit in the form of an Incident Disposal Plan which must be authorized by the U.S. Coast Guard and/or the EPA. An Incident Disposal Plan would include predesignated interim storage sites, segregation strategies, methods of treatment and disposal for various types of debris, and the locations/contacts of all treatment and disposal site selections. Onsite treatment/disposal is preferred.

In order to obtain the best overall Incident Disposal Plan, a combination of methods should be used. There is no template or combination of methods that can be used in every spill situation. Each incident should be reviewed carefully to ensure that an appropriate combination of disposal methods is employed.

The different types of wastes generated during response operations would require different disposal methods. To facilitate the disposal of wastes, they should be separated by type for temporary storage, transport and disposal.

The following is a brief discussion of some disposal techniques available for recovered oil and oily debris.

Recycling

This technique entails removing water from the oil and blending the oil with uncontaminated oil. Recovered oil can be shipped to refineries provided that it is exempt from hazardous waste regulations. There it can be treated to remove water and debris, and then blended and sold as a commercial product.

Incineration

This technique entails the complete destruction of the recovered oil by high temperature thermal oxidation reactions. There are licensed incineration facilities as well as portable incinerators that may be brought to a spill site. Incineration may require the approval of the local Air Pollution Control Authority. Factors to consider when selecting an appropriate site for onsite incineration would include:

- Proximity to recovery locations.
- Access to recovery locations.
- Adequate fire control.
- Approval of the local air pollution control authorities.

In Situ Burning/Open Burning

Burning techniques entail igniting oil or oiled debris and allowing it to burn under ambient conditions. These disposal techniques are subject to restrictions and permit requirements established by federal, state and local laws. They would not be used to burn PCBs, waste oil containing more than 1,000 parts per million of halogenated solvents, or other substances regulated by the EPA. Permission for in situ burning may be difficult to obtain when the burn takes place near populated areas.

As a general rule, in situ burning would be appropriate only when atmospheric conditions will allow the smoke to rise several hundred feet and rapidly dissipate. Smoke from burning oil will normally rise until its temperature drops to equal the ambient temperature. Afterwards, it will travel in a horizontal direction under the influence of prevailing winds.

Landfill Disposal

This technique entails burying the recovered oil in an approved landfill in accordance with regulatory procedures. Landfill disposal of free liquids is prohibited by federal law in the United States.

With local health department approval, non-burnable debris which consists of oiled plastics, gravel and oiled seaweed, kelp, and other organic material may be transported to a licensed, lined, approved municipal or private landfill and disposed of in accordance with the landfill guidelines and regulations. Landfill designation would be planned only for those wastes that have been found to be unacceptable by each of the other disposal options (e.g., waste reduction, recycling, energy recovery). Wastes would be disposed of only at approved disposal facilities.

APPENDIX D CONTAINMENT AND DRAINAGE

D.1 CONTAINMENT AND DRAINAGE PLANNING

A worst-case spill scenario would occur due to a catastrophic failure of one of the four (b) (7)(F) Oil Storage Tanks located at the Facility. The Tanks have been provided with a secondary containment system with a total containment capacity of approximately (b) (7)(F). This containment volume meets both the requirements for sufficient freeboard of 10% of the largest tank volume and a 24-hour 25-year rainfall event.

The (b) (7) Divert Tanks have also been equipped with a secondary containment system with a containment capacity of approximately (b) (7)(F). This volume meets both the requirements for sufficient freeboard of 10% of the largest tank volume and a 24-hour 25-year rainfall event.

Any potential spills that could occur at the truck rack would be remediated immediately by personnel on-site or by calling contracted spill response.

APPENDIX E SELF - INSPECTIONS, DRILLS/EXERCISES, AND RESPONSE TRAINING

E.1 SELF INSPECTION, DRILLS/EXERCISES, AND RESPONSE TRAINING

Training and meeting logs are included in the response plan to aid facility owners, operators, and employees in spill prevention awareness and response requirements. Logs are kept for facility drills/exercises, personnel response training, and spill prevention meetings.

E.1.1 Facility Self-Inspection

Self-inspections of the tanks covered by this plan are conducted on a regular basis and records of the inspections are maintained. The inspections/records include the tanks and secondary containment. Response contractors are required to inspect the Facility response equipment using the checklist in this section, and maintain inspection records.

Facility self-inspection requires two steps: (1) a checklist of items to inspect; and (2) a method of recording the actual inspection and its findings. The date of each inspection is noted. These records are required to be maintained for five years. Inspections will be performed on a regular basis.

E.1.2 Tank Inspection

Formal tank inspections occur on a regular basis and the results of these inspections are recorded. If maintenance or repairs are required, the foreman is responsible for ensuring the repairs are made and documented on the inspection form.

E.1.3 Secondary Containment Inspection

Formal inspections of secondary containment structures occur on a regular basis and the results of these inspections are documented. If maintenance or repairs are required, the foreman is responsible for ensuring the repairs are made and documented on the inspection form.

E.2 FACILITY DRILLS/EXERCISES

Internal and external drills and exercises have been developed in accordance with the National Preparedness for Response Exercise Program (PREP) guidance developed by the U.S. Coast Guard (USCG). Internal exercises include Qualified Individual Notification Drills, Spill Management Team Tabletop Exercises, Equipment Deployment Exercises, and Unannounced Exercises. External exercises include Area Exercises. Credit for an Area or Facility-specific Exercise will be given to the Facility for an actual response to a discharge in the area if the plan was utilized for response to the discharge and the objectives of the exercise were met and were properly evaluated, documented, and self-certified. The following is a brief discussion of each of these drills and how and where they are to be conducted, evaluated and documented.

A. Qualified Individual Notification Drills

Once per calendar quarter, an individual in the corporate office will attempt to contact the Qualified Individual using the phone notification procedure developed in this plan. The contact attempt will be made during the normal course of business operations and the successful/unsuccessful contact will be documented at the Facility in this plan on the accompanying Qualified Individual Notification Drill Log. No notification of local authorities or the NRC is to be performed as part of this exercise (see attached PREP Qualified Individual Notification Drill Guidelines for more detail).

B. Spill Management Team Tabletop Exercise

Once per calendar year, a Spill Management Team Tabletop Exercise (SMTTE) will be conducted in order for the major participants in spill response to become familiar with the details of the plan, the facility, the other participants, and the proper notification and response actions required. Participants in the SMTTE will be the Qualified Individual, the Fire Department representative, and the local contractors supporting the implementation of the plan.

C. OSRO-Owned Equipment Deployment Exercises

Once per calendar year, the contracted Oil Spill Removal Organization (OSRO) will conduct an Equipment Deployment Exercise in order to demonstrate the ability of OSRO personnel's ability to deploy and operate response equipment and ensure the equipment is in working order. Documentation of the exercise should be provided by the OSRO and kept at the Facility.

D. Unannounced Exercises

An unannounced exercise is one in which the exercise participants have no prior knowledge of the exercise, as would be the situation in an actual spill incident. APC will participate in all government-initiated unannounced exercises. Internal APC unannounced exercises are not performed as separate exercises. Response to an actual spill is taken as credit for an unannounced exercise requirement on an annual basis, at a minimum. APC evaluates the response to the exercise in order for credit to be taken.

QUALIFIED INDIVIDUAL NOTIFICATION DRILLS***EPA REGULATED FACILITIES**

Applicability:	Facility.
Frequency:	Quarterly, or routine communication if it occurs on at least a quarterly basis.
Initiating Authority:	Company Policy.
Participation:	Facility Personnel, Qualified Individual.
Scope:	Exercise communications between facility personnel and Qualified Individual.
Objectives:	Contact must be made with a Qualified Individual or designee, as designated in the plan.
Certification:	Self Certification.
Verification:	EPA.
Records Retention:	3 years (USCG). 5 years (EPA).
Records Location:	Records to be kept at the facility.
Evaluation:	Self Evaluation.
Credit:	Plan holder should take credit for this exercise when conducted in conjunction with other exercises as long as all objectives are met, the exercise is evaluated, and a proper record is generated. Credit should be taken for an actual spill response when these objectives are met, the response is evaluated, and a proper record is generated.

* *National Preparedness for Response Exercise Program (PREP) Guidelines – August 2002*

SPILL MANAGEMENT TEAM TABLETOP EXERCISE***EPA REGULATED FACILITIES**

Applicability:	Facility Spill Management Team.
Frequency:	Annually.
Initiating Authority:	Company Policy.
Participation:	Spill Management Team as established in response plans.
Scope:	Exercise the Spill Management Team's organization, communication and decision-making in managing a spill response.
Objectives:	Exercise the Spill Management Team in a review of: <ul style="list-style-type: none"> • Knowledge of the response plan. • Proper notifications. • Communications system. • Ability to access emergency response contractor. • Coordination of organization/agency personnel with responsibility for spill response. • An annual review of the transition from a local team to a regional, national, and international team, as appropriate. • Ability to effectively coordinate spill response activity with National Response System infrastructure. • Ability to access information in Area Contingency Plan for location of sensitive areas, resources available within the Area, unique conditions of Area, etc.
Certification:	Self Certification
Verification:	EPA.
Records Retention:	5 years
Records Location:	At each facility
Evaluation:	Self evaluation
Credit:	Plan holder should take credit for this exercise when conducted in conjunction with other exercises as long as all objectives are met, the exercise is evaluated, and a proper record is generated. Credit should be taken for an actual spill response when these objectives are met, the response is evaluated, and a proper record is generated.

* *National Preparedness for Response Exercise Program (PREP) Guidelines – August 2002*

OSRO EQUIPMENT DEPLOYMENT DRILLS*
EPA REGULATED FACILITIES

- Applicability: Facilities with OSRO response equipment cited in their plan
- Frequency: Annually.
- Initiating Authority: Company Policy.
- Participation: Facility owner or operator and OSRO.
- Scope: Deploy and operate response equipment identified in the response plan. The equipment to be employed would be the minimum amount of equipment for deployment as described in “Guiding Principles”.
- All of the OSRO personnel involved in equipment deployment operations must be included in a comprehensive training program. All of the OSRO equipment must be included in a comprehensive maintenance program. Credit should be taken for deployment conducted during training. The maintenance program must ensure that the equipment is periodically inspected and maintained in good operating condition in accordance with the manufacturer's recommendations and best commercial practices. The facility owner or operator must ensure that inspection and maintenance by the OSRO is documented. The OSRO must provide inspection and maintenance information to the owner or operator.
- Plan holders must ensure that when a regional OSRO is identified, the OSRO conducts annual deployment exercises in each operating environment for each contingency planning area, or EPA sub-area (where identified).
- Objectives: Demonstrate ability of personnel to deploy and operate equipment. Ensure equipment is in proper working order.
- Certification: The facility owner or operator should ensure that the OSRO provides adequate documentation that the requirements for this exercise have been met.
- Verification: EPA.
- Records Retention: 5 years, kept at the facility
- Evaluation: Self Evaluation
- Credit: Plan holder should take credit for this exercise when conducted in conjunction with other exercises as long as all objectives are met, the exercise is evaluated, and a proper record is generated. Credit should be taken for an actual spill response when these objectives are met, the response is evaluated, and a proper record is generated.

* *National Preparedness for Response Exercise Program (PREP) Guidelines – August 2002*

TRIENNIAL CYCLE OF EXERCISING THE ENTIRE RESPONSE PLAN*

Every three years all components of the entire response plan must be exercised. Rather than requiring each plan holder to conduct a major exercise every three years, the PREP allows for the individual components to be exercised in portions through the required exercises.

The following are the types of plan components that must be exercised at least once every three years:

Organizational Design

- 1) Notifications
- 2) Staff mobilization
- 3) Ability to operate within the risk management system described in the plan

Operational Response

- 4) Discharge control
- 5) Assessment of discharge
- 6) Containment of discharge
- 7) Recovery of spilled material
- 8) Protection of sensitive areas
- 9) Disposal of recovered material and contaminated debris

Response Support

- 10) Communications
- 11) Transportation
- 12) Personnel support
- 13) Equipment maintenance and support
- 14) Procurement
- 15) Documentation

While not all of these components will necessarily be contained in each plan, the plan holder should identify those that are applicable from the list above, and add or delete other components as appropriate. The plan holder will then be responsible for ensuring all components of their plan are exercised within each three-year exercise cycle.

To meet the triennial cycle of exercising the entire response plan, it is not necessary to exercise the entire plan all at one time. The plan may be exercised in segments over a period of three years, as long as each component of the plan is exercised at least once within the three-year period. The required exercises should be developed to ensure that each component is addressed and exercised in the triennial cycle.

- In the triennial cycle, the following internal exercises must be conducted:
- Twelve Qualified Individual Notification Drills
- Three Spill Management Team Tabletop Exercises; one must involve a Worst Case Discharge Scenario
- Three Unannounced Exercises (Any of the exercises, with the exception of the Qualified Individual Notification Drill, if conducted unannounced, will satisfy this requirement)
- Three OSROs Equipment Deployment Exercises

* *National Preparedness for Response Exercise Program (PREP) Guidelines – August 2002*

E.3 RESPONSE TRAINING

Anadarko provides training related to discharge prevention, testing and response including measures to repair tank and/or pipeline ruptures and mitigate discharges.

Through the various training methods described below, Anadarko's training program is intended to ensure the following results:

That all personnel know:

- Their responsibilities under the Plan.
- The name, address and procedures for contacting the operator on a 24-hour basis.
- The name of and procedures for contacting the Qualified Individual and Alternate Qualified Individual on a 24-hour basis.

That all reporting personnel know:

- The terminal, pipeline and response zone details for the affected area.
- The telephone number of the National Response Center and other required notifications.
- The notification process.

That all response personnel know:

- The characteristics and hazards of the oil discharged.
- The conditions that are likely to worsen emergencies, including the consequences of facility malfunctions, and the appropriate corrective actions.
- The steps necessary to control any accidental discharge of oil and to minimize the potential for fire, explosion, toxicity or environmental damage.

Anadarko requires that all response personnel, including contractors and casual labor, have the appropriate training necessary to serve on a response team during an emergency. Team members will receive training in the following:

Facility Response Plan Review

All Emergency Response Team (ERT) members should review their Facility Response Plan whenever their job position or responsibilities change under the Plan. A copy of the Plan will be available at all times to Team Members.

HAZWOPER (29 CFR 1910.120)

Federal and state regulations require that response team members, maintain up-to-date HAZWOPER training necessary to function in their assigned positions. All personnel responding to an incident must satisfy the applicable HAZWOPER training requirements of 29 CFR 1910.120.

OSHA HAZWOPER TRAINING REQUIREMENTS		
Responder Classification	Required Training Hours	Refresher
29 CFR 1910.120(q) Emergency Response		
First Responder – Awareness Level	2-4 hrs demonstration of competency	Same
First Responder – Operations Level	8 hrs	8 hrs
Hazardous Materials Technician	24 hrs plus competency	8 hrs
Hazardous Materials Specialist	24 hrs plus competency in specialized areas	8 hrs
Incident Commander	24 hrs plus competency	8 hrs

Incident Command System

Response team members will receive ICS training and may also receive supplemental training in other related general topics.

Volunteers

The decision to use volunteers during an emergency response action will be made by the Incident Command/Unified Command on a case-by-case basis, understanding that human health and safety is the first priority in decisions regarding use of volunteers. Volunteers should generally only be used in those areas that have been pre-identified in the ACP, which should only be in very low risk activities and only after having received appropriate safety training. If the decision is made by the IC/UC to use volunteers, Anadarko, will not directly employ volunteers, but rather will only coordinate Affiliated volunteers if they have a pre-existing contract or memorandum of understanding (MOU) with either a governmental agency, a non-governmental agency (NGO) or Community Based Organization (CBO) and have been trained for a specific role or function in incident response or disaster relief. Any volunteers used during an emergency response will fall under the authority of the FOSC or SOSC and not Anadarko.

Contractor Training

Anadarko also recognizes that contract personnel must also have sufficient training to respond to emergency response situations. Training needs and requirements are communicated to contractors during contract negotiations.

Training Records Maintenance

Personnel training records are maintained at the Anadarko area office in Kermit, TX. Training records will be maintained for as long as personnel have duties in this response plan.

E.4 REVIEW AND EVALUATION

This Section provides procedures and information useful to responders for post incident/exercise review and evaluation. Post incident/exercise reviews should be conducted in a timely manner following an incident/exercise. The Plan should be evaluated to determine its usefulness during the incident/exercise and appropriate revisions should be made. All incident/exercise documentation should be included in the Plan evaluation process.

Outline of Review

Given below are items a team composed of outside people knowledgeable in spill response and key members of the response teams should examine. These questions are intended as guidelines only; many other questions are likely to be appropriate at each stage of a critique.

Detection

- Was the spill detected promptly?
- How was it detected? By whom?
- Could it have been detected earlier? How?
- Are any instruments or procedures available to consider which might aid in spill detection?

Notification

- Were proper procedures followed in notifying government agencies? Were notifications prompt?
- Was management notified promptly/response appropriate?
- Was the Pipeline owner/operator notified promptly? If so, why, how, and who? If not, why not?

Assessment/Evaluation

- Was the magnitude of the problem assessed correctly at the start?
- What means were used for this assessment?
- Are any guides or aids needed to assist spill evaluation?
- What sources of information were available on winds and on water currents?
- Is our information adequate?
- Was this information useful (and used) for spill trajectory forecasts? Were such forecasts realistic?
- Do we have adequate information on product properties?
- Do we need additional information on changes of product properties with time, i.e., as a result of weathering and other processes?

Mobilization

- What steps were taken to mobilize spill countermeasures?
- What resources were used?
- Was mobilization prompt?
- Could it have been speeded up or should it have been?
- What about mobilization of manpower resources?
- Was the local spill cooperative used appropriately?
- How could this be improved?
- Was it appropriate to mobilize the Pipeline owner/operator resources and was this promptly initiated?
- What other resources are available and have they been identified and used adequately?

Response - Strategy

- Is there an adequate Spill Response Plan for the location?
- Is it flexible enough to cope with unexpected spill events?
- Does the Plan include clear understanding of local environmental sensitivities?
- What was the initial strategy for response to this spill?
- Is this strategy defined in the Spill Plan?
- How did the strategy evolve and change during this spill and how were these changes implemented?
- What caused such changes?
- Are there improvements needed? More training?

Response - Resources Used

- What resources were mobilized?
- How were they mobilized?
- How did resource utilization change with time? Why?
- Were resources used effectively?
 - Contractors
 - Government agencies
 - Company resources
 - Cooperatives
 - Volunteers
 - Consultants
 - Other (e.g., bird rescue centers)
- What changes would have been useful?
- Do we have adequate knowledge of resource availability?
- Do we have adequate knowledge of waste disposal capabilities?

Response - Effectiveness

- Was containment effective and prompt?
- How could it have been improved?
- Should the location or the local cooperative have additional resources for containment?
- Was recovery effective and prompt?
- How could it have been improved?
- Should the location or the local cooperative have additional resources for recovery of spilled product?
- Was contaminated equipment disposed promptly and safely?
- Was there adequate in-house product separation, recovery, and disposal?
- How could it have been improved?
- Was there adequate outside disposal resources available?

Command Structure

- Who was initially in charge of spill response?
- What sort of organization was initially set up?
- How did this change with time? Why?
- What changes would have been useful?
- Was there adequate surveillance?
- Should there be any changes?
- Were communications adequate?
- What improvements are needed? Hardware, procedures, etc.
- Was support from financial services adequate? Prompt?
- Should there be any changes?
- Is more planning needed?
- Should financial procedures be developed to handle such incidents?

Measurement

- Was there adequate measurement or estimation of the volume of product spilled?
- Was there adequate measurement or estimation of the volume of product recovered?
- Was there adequate measurement or estimation of the volume of product disposed?
- Should better measurement procedures be developed for either phase of operations?
- If so, what would be appropriate and acceptable?

Government Relations

- What are the roles and effects of the various government agencies which were involved?
- Was there a single focal point among the government agencies for contact?
- Should there have been better focus of communications to the agencies?
- Were government agencies adequately informed at all stages?
- Were too many agencies involved?
- Are any changes needed in procedures to manage government relations?
- Examples of affected U.S. agencies (there may be others):
 - U.S. Coast Guard
 - Environmental Protection Agency
 - National Oceanic and Atmospheric Administration
 - Dept of Fish and Wildlife
 - State Parks
 - Harbors and Marinas
 - States
 - Cities
 - Counties
- Was there adequate agreement with the government agencies on disposal methods?
- Was there adequate agreement with the government agencies on criteria for cleanup?
- How was this agreement developed?
- Were we too agreeable with the agencies in accepting their requests for specific action items (e.g., degree of cleanup)?
- Should there be advance planning of criteria for cleanup, aimed at specific local environmentally sensitive areas? (Such criteria should probably also be designed for different types of product.)

Public Relations

- How were relations with the media handled?
- What problems were encountered?
- Are improvements needed?
- How could public outcry have been reduced? Was it serious?
- Would it be useful to undertake a public information effort to "educate" reporters about product and effects to it if spilled?
- These areas should be investigated shortly after the incident to assure that actions taken are fresh in peoples' minds.

APPENDIX F – ACRONYMS

ACP:	Area Contingency Plan
AST:	Aboveground Storage Tank
CHRIS:	Chemical Hazards Response Information System
CWA:	Clean Water Act
DOT:	Department of Transportation
EPA:	Environmental Protection Agency
ERC:	Emergency Response Contractor
FEMA:	Federal Emergency Management Agency
FRP:	Facility Response Plan
HAZMAT:	Hazardous Materials
LEPC:	Local Emergency Planning Committee
NAICS:	North American Industry Classification System
NCP:	National Oil and Hazardous Substances Pollution Contingency Plan
NRC:	National Response Center
NRT:	National Response Team
OPA:	Oil Pollution Act of 1990
OSC:	On Scene Coordinator
OSRO:	Oil Spill Response Organization
PHMSA:	Pipeline and Hazardous Materials Safety Administration
PREP:	Preparedness Response Exercise Program
RA:	Regional Administrator
RCRA:	Resource Conservation and Recovery Act
RRT:	Regional Response Team
SARA:	Superfund Amendments and Reauthorization Act
SDWA:	Safe Drinking Water Act of 1986
SERC:	State Emergency Response Commission
SI:	Surface Impoundment
SIC:	Standard Industry Codes
SMTTE:	Spill Management Team Tabletop Exercise
SPCC:	Spill Prevention, Control and Countermeasures
TGLO:	Texas General Land Office
USCG:	United States Coast Guard

APPENDIX G - CROSS REFERENCE

EPA Cross Reference 40 CFR 112.20 (h)

40 CFR 112.20 (h)	Reference	Section
(1)	<i>Emergency Response Action Plan</i> - The response plan shall include an emergency response action plan in the format specified...that is maintained in the front of the response plan, or as a separate document accompanying the response plan, and that includes the following information:	ERAP
(i)	The identity and telephone number of a qualified individual having full authority, including contracting authority, to implement removal actions;	ERAP
(ii)	The identity of individuals or organizations to be contacted in the event of a discharge...;	ERAP
(iii)	A description of information to pass to response personnel in the event of a reportable discharge;	ERAP
(iv)	A description of the facility's response equipment and its location;	ERAP
(v)	A description of response personnel capabilities, including the duties of persons at the facility during a response action and their response times and qualifications;	ERAP
(vi)	Plans for evacuation of the facility and a reference to community evacuation plans, as appropriate;	ERAP
(vii)	A description of immediate measures to secure the source of the discharge, and to provide adequate containment and drainage of discharged oil; and	ERAP
(viii)	A diagram of the facility.	ERAP
(2)	<i>Facility information</i> - The response plan shall identify and discuss the location and type of the facility, the identity and tenure of the present owner and operator, and the identity of the qualified individual identified in paragraph (h)(1) of this section.	§1
(3)	<i>Information about emergency response.</i> The response plan shall include:	-----
(i)	The identity of private personnel and equipment necessary to remove to the maximum extent practicable a worst case discharge and other discharges of oil...and to mitigate or prevent a substantial threat of a worst case discharge...;	§2 & 4
(ii)	Evidence of contracts or other approved means for ensuring the availability of such personnel and equipment;	§4.7
(iii)	The identity and the telephone number of individuals or organizations to be contacted in the event of a discharge...;	§2
(iv)	A description of information to pass to response personnel in the event of a reportable discharge;	§2
(v)	A description of response personnel capabilities, including the duties of persons at the facility during a response action and their response times and qualifications;	§5
(vi)	A description of the facility's response equipment, the location of the equipment, and equipment testing;	§4
(vii)	Plans for evacuation of the facility and a reference to community evacuation plans, as appropriate;	§4.6

40 CFR 112.20 (h)	Reference	Section
(viii)	A diagram of evacuation routes; and	§1.5
(ix)	A description of the duties of the qualified individual...that include:	§5.2
(ix)(A)	Activate internal alarms and hazard communication systems to notify all facility personnel;	§5.2
(ix)(B)	Notify all response personnel, as needed;	§5.2
(ix)(C)	Identify the character, exact source, amount, and extent of the release, as well as the other items needed for notification;	§5.2
(ix)(D)	Notify and provide necessary information to the appropriate Federal, State, and local authorities..., including the National Response Center, State Emergency Response Commission, and Local Emergency Planning Committee;	§5.2
(ix)(E)	Assess the interaction of the discharged substance with water and/or other substances stored at the facility and notify response personnel at the scene of that assessment;	§5.2
(ix)(F)	Assess the possible hazards to human health and the environment due to the release. This assessment must consider both the direct and indirect effects of the release...;	§5.2
(ix)(G)	Assess and implement prompt removal actions to contain and remove the substance released;	§5.2
(ix)(H)	Coordinate rescue and response actions as previously arranged with all response personnel;	§5.2
(ix)(I)	Use authority to immediately access company funding to initiate cleanup activities; and	§5.2
(ix)(J)	Direct cleanup activities until properly relieved of this responsibility.	§5.2
(4)	<i>Hazard evaluation</i> - The response plan shall discuss the facility's known or reasonably identifiable history of discharges reportable under 40 CFR part 110 for the entire life of the facility and shall identify areas within the facility where discharges could occur and what the potential effects of the discharges would be on the affected environment...	§6
(5)	<i>Response planning levels</i> - The response plan shall include discussion of specific planning scenarios for:	-----
(i)	A worst case discharge, ...For complexes, the worst case planning quantity shall be the larger of the amounts calculated for each component of the facility;	App. A
(ii)	A discharge of 2,100 gallons or less, provided that this amount is less than the worst case discharge amount. For complexes, this planning quantity shall be the larger of the amounts calculated for each component of the facility; and	App. A
(iii)	A discharge greater than 2,100 gallons and less than or equal to 36,000 gallons or 10 percent of the capacity of the largest tank at the facility, whichever is less, provided that this amount is less than the worst case discharge amount. For complexes, this planning quantity shall be the larger of the amounts calculated for each component of the facility.	App. A
(6)	<i>Discharge detection systems</i> - The response plan shall describe the procedures and equipment used to detect discharges.	App. B
(7)	<i>Plan implementation</i> - The response plan shall describe:	-----

40 CFR 112.20 (h)	Reference	Section
(i)	Response actions to be carried out by facility personnel or contracted personnel under the response plan to ensure the safety of the facility and to mitigate or prevent discharges described in paragraph (h)(5) of this section or the substantial threat of such discharges;	§3
(ii)	A description of the equipment to be used for each scenario;	App. A
(iii)	Plans to dispose of contaminated cleanup materials; and	App. C
(iv)	Measures to provide adequate containment and drainage of discharged oil.	App. D
(8)	<i>Self-inspection, drills/exercises, and response training</i> - The response plan shall include:	App. E
(i)	A checklist and record of inspections for tanks, secondary containment, and response equipment;	App. E
(ii)	A description of the drill/exercise program to be carried out under the response plan as described in §112.21;	App. E
(iii)	A description of the training program to be carried out under the response plan as described in §112.21; and	App. E
(iv)	Logs of discharge prevention meetings, training sessions, and drills/exercises. These logs may be maintained as an annex to the response plan.	App. H
(9)	<i>Diagrams</i> - The response plan shall include site plan and drainage plan diagrams.	§1.5
(10)	<i>Security systems</i> - The response plan shall include a description of facility security systems.	App. B

DOT-PHMSA Cross Reference 49 CFR 194.107

49 CFR 194.107	Reference	Section
(a)	Each response plan must include procedures and a list of resources for responding, to the maximum extent practicable, to a worst case discharge and to a substantial threat of such a discharge...	§3 & 4 App. A
(b)	An operator must certify in the response plan that it reviewed the NCP and each applicable ACP and that its response plan is consistent with the NCP and each applicable ACP as follows:	FWD
(1)	As a minimum to be consistent with the NCP a facility response plan must:	----
(i)	Demonstrate an operator's clear understanding of the function of the Federal response structure, including procedures to notify the National Response Center reflecting the relationship between the operator's response organization's role and the Federal On Scene Coordinator's role in pollution response;	§5
(ii)	Establish provisions to ensure the protection of safety at the response site; and	§3.7
(iii)	Identify the procedures to obtain any required Federal and State permissions for using alternative response strategies such as in-situ burning and dispersants as provided for in the applicable ACPs; and	§6.6
(2)	As a minimum, to be consistent with the applicable ACP the plan must:	----
(i)	Address the removal of a worst case discharge and the mitigation or prevention of a substantial threat of a worst case discharge;	App. A
(ii)	Identify environmentally and economically sensitive areas;	§6
(iii)	Describe the responsibilities of the operator and of Federal, State and local agencies in removing a discharge and in mitigating or preventing a substantial threat of a discharge; and	§3, 5, 6 App. A App. B
(iv)	Establish the procedures for obtaining an expedited decision on use of dispersants or other chemicals.	§6.6
(c)	Each response plan must include:	----
(1)	A core plan consisting of—	§
(i)	An information summary as required in §194.113,	§1
(ii)	Immediate notification procedures,	§2
(iii)	Spill detection and mitigation procedures,	§3 App. B
(iv)	The name, address, and telephone number of the oil spill response organization, if appropriate,	§2
(v)	Response activities and response resources,	§3 & 4
(vi)	Names and telephone numbers of Federal, State and local agencies which the operator expects to have pollution control responsibilities or support,	§2

49 CFR 194.107	Reference	Section
(vii)	Training procedures,	App. E
(viii)	Equipment testing,	App. E
(ix)	Drill program	App. E
(x)	Plan review and update procedures;	§1
(2)	An appendix for each response zone that includes the information required in paragraph (c)(1)(i)–(ix) of this section and the worst case discharge calculations that are specific to that response zone...; and	-----
(3)	A description of the operator's response management system including the functional areas of finance, logistics, operations, planning, and command...	§5

APPENDIX H - FORMS

Qualified Individual Notification Drill Log

Qualified Individual Notification Drill Log	
Date: _____	Company: _____
Name of Person Initiating Drill: _____	
Name of Person (Qualified Individual) Notified: _____	
Time Initiated: _____	
Time Qualified Individual Responded: _____	
Method used to contact (Phone, Radio, Other): _____	
Description of Notification Procedure: _____	

Signature: _____	

Spill Management Team Tabletop Exercise Log

Spill Management Team Tabletop Exercise Log	
Date: _____	Location: _____
Company: _____	
Qualified Individual: _____	
Attendees: _____	_____
_____	_____
_____	_____
Emergency Scenario: _____	

Evaluation: _____	

Changes to be Implemented: _____	

Time Table for Implementation: _____	

Discharge Prevention Meetings Logs

Discharge Prevention Meeting

Date: _____

Attendees: _____

Subject/Issue Identified	Required Action	Implementation Date

