

EMERGENCY RESPONSE ACTION PLAN

Central Florida Pipeline

Prepared for:

**Kinder Morgan Energy Partners, L.P.
Central Florida Pipeline LLC
2101 GATX Drive
Tampa, FL 33605
(813) 248-2148**

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EMERGENCY RESPONSE ACTION PLAN

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FIGURE 1.1

INFORMATION SUMMARY

GENERAL INFORMATION	
Pipeline Name and Address:	Central Florida Pipeline LLC 2101 GATX Drive Tampa, FL 33605 Phone: (813) 248-2148 Fax: (813) 247-4274
PHMSA Sequence Number:	608
NAICS:	48691
Operator Name and Address:	Kinder Morgan Energy Partners, L.P. 1001 Louisiana Street, Suite 1000 Houston, TX 77002 (713) 369-9454
Qualified Individual:	Ken Brinegar Director Operations (770) 751-4142 (Office) (404) 229-8332 (Mobile) ken_brinegar@kindermorgan.com
Alternate Qualified Individual:	Clint Lonon Operations Manager (813) 241-1106 (Office) (813) 458-9341 (Mobile) clint_lonon@kindermorgan.com
Alternate Qualified Individual	John Haynes Superintendent Operations Tampa (813) 241-1128 (Office) (813) 326-1980 (Mobile) john.haynes@kindermorgan.com
Alternate Qualified Individual	Richard Semcheski Superintendent Operations Orlando (407) 855-0713 (Office) (703) 463-6457 (Mobile) richard_semcheski@kindermorgan.com
Telephone/FAX:	Additional telephone references, including 24 hour numbers, for the Facility, Owner, and QI/AQI are provided in Figure 2.2.

FIGURE 2.1

INTERNAL NOTIFICATION SEQUENCE

(Phone references are provided in Figures 2.2 and 2.4)

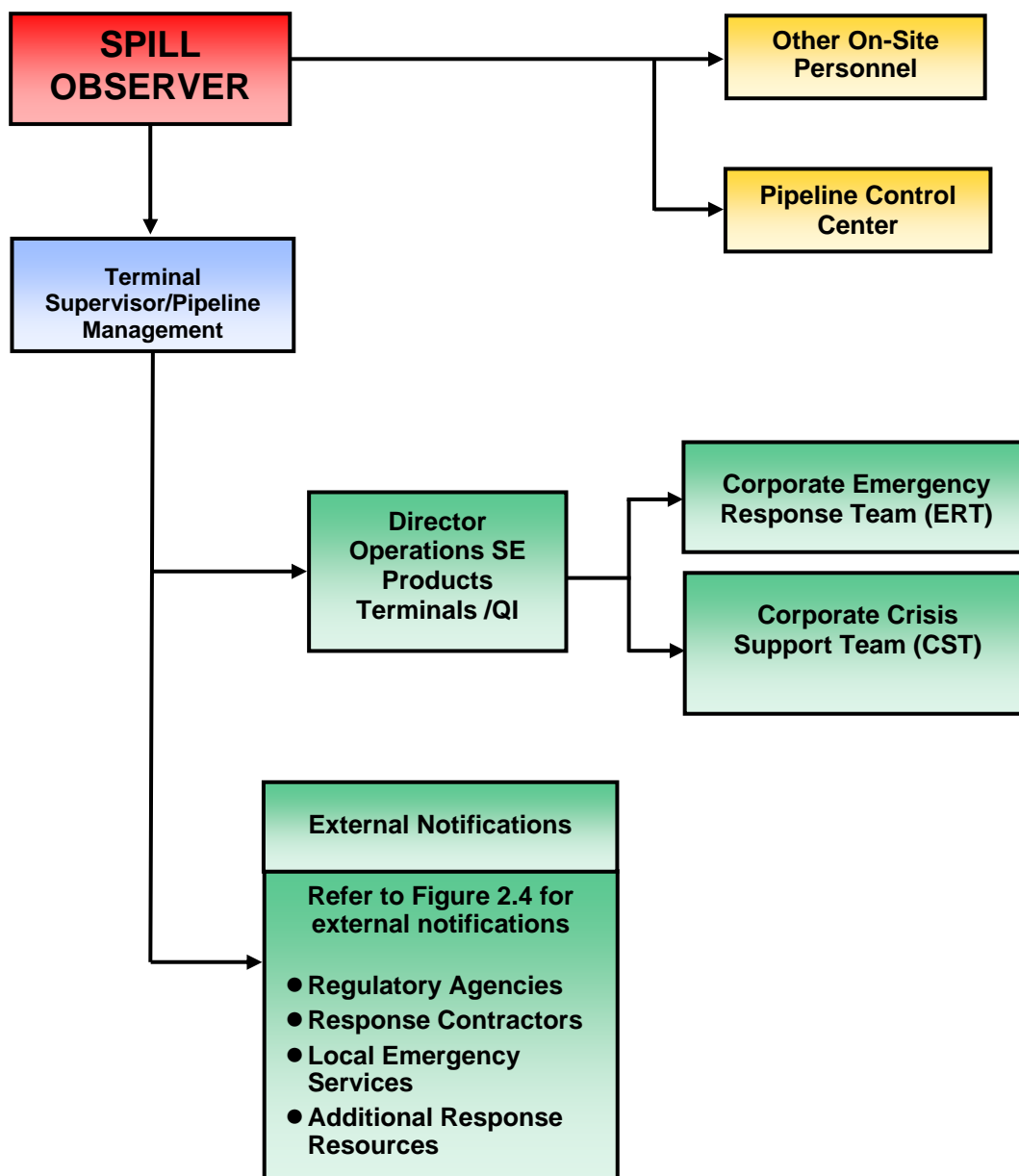


FIGURE 2.2

INTERNAL NOTIFICATION REFERENCES

INTERNAL NOTIFICATIONS - LOCAL RESPONSE TEAM				
POSITION/TITLE	NAME	LOCATION	OFFICE	OTHER
Qualified Individual / Director Operations	Ken Brinegar	Alpharetta, GA	(770) 751-4142	(404) 229-8332 Cell ken_brinegar@kindermorgan.com
Alt. Qualified Individual / Operations Manager	Clint Lonon	Tampa, FL	(813) 241-1106	(813) 458-9341 Cell clint_lonon@kindermorgan.com
Alt. Qualified Individual / Superintendent Operations Tampa	John Haynes	Tampa, FL	(813) 241-1128	(813) 326-1980 Cell john.haynes@kindermorgan.com
Alt. Qualified Individual / Superintendent Operations Orlando	Richard Semcheski	Orlando, FL	(407) 855-0713	(703) 463-6457 Cell richard_semcheski@kindermorgan.com
Houston Liquids Control Center		Houston, TX	(713) 369-9301	(800) 537-8832
Pipeline Control Room		Tampa, FL	(813) 241-1135	(813) 781-1745 Cell
Tampa Terminal Lead Operator		Tampa, FL	(813) 241-1113	(813) 781-1746 Cell

FIGURE 2.2b**INTERNAL NOTIFICATION REFERENCES
FLORIDA OPERATIONS PHONE LIST**

CENTRAL FLORIDA PIPELINE, LLC Florida Operations Phone List

TAMPA TERMINAL Phone: (813) 248-2148 Fax: (813) 247-4274

Employee	Dept	Simply 5 Ext	241-Ext	Mobile	Home
Andres, Doug	Term Ops	41116	1116		(b) (6)
Clark, Mark	Maint	41124	1124	813-781-1718	
Fleck, Chris	EHS	41144	1144	813-415-1698	
Garcia, Sue	Term Ops	41116	1116		
Haynes, John	Term Supr	41128	1128	813-326-1980	
Hughes, Lee	CSR	41122	1122	813-781-1717	
Krueger, Sandra	Admin	41142	1142		
Lockard, Bobby	Term Ops	41113	1113	813-781-1748	
Lonon, Clint	OpsMgr-FL	41106	1106	813-458-9341	
McBurney, Doreen	Sched	41108	1108	813-781-1724	
McBurney, Mike	Sched	41114	1114	813-781-1722	
Pate, Steve	Term Ops	41116	1116	813-247-4274	
Phipps, Rodney	Term Ops	41116	1116		
Ryerson, Rich	Maint	41126	1126	813-299-1650	
Scharp, Bradley	IT	41110	1110	813-781-1741	
Schofield, Rob	Term Ops	41116	1116		
Siegel, Dean	Term Ops	41116	1116	813-787-6417	
Stewart, Darren	Maint	41119	1119	813-326-2794	
Strade, Joey	Term Ops	41116	1116	813-248-9761	
Thorn, Dave	Term Ops	41116	1116		
Tillman, Bill	Term Ops	41116	1116		
Westwood, Earl	Term Ops	41116	1116		
Willyard, Teresa	Admin	41138	1138		
Winchester, Del	Term Ops	41116	1116		

ORLANDO TERMINAL Phone: (407) 855-0713 Fax: (407) 826-9490

Employee	Dept	Simply 5 Ext	Mobile	Home
Anderson, Shirley	Term Ops	41216	407-832-7315	(b) (6)
Ash, Rita	CSR	41241		
Berger, Robert	Term Ops	41216		
Brisson, Scott	Term Ops	41217		
Cushingberry, Demond	Term Ops	41217		
Goberdhan, Krish	Term Ops	41217		
Hucek, Mark	Term Ops	41217		
Lewis, Ray	Term Ops	41217	813-468-7639	
Lonon, Clint	Ops Mgr-FL	41220	813-458-9341	
Mears, Fred	Maint	41242	407-832-3296	
Medrano, Manuel	Maint	41242		
Mitchell, Keith	Maint	41219	407-832-1667	
Percle, Paul	Term Ops	41217		
Semcheski, Richard	Sup Ops		703-463-6457	

PIPELINE - EMERGENCY HOT LINE - 24 HOURS 800-537-8832

All other emergencies - call 9-911

E-MAIL ADDRESS TO AUTHORIZE PORT ENTRY -- soc@tampaport.com

FIGURE 2.2c
INTERNAL NOTIFICATION REFERENCES
RESPONSE CONTRACTORS

PIPELINE - EMERGENCY HOT LINE - 24 HOURS 800-537-8832						
RESPONSE CONTRACTORS	24 Hour Emergency Number	Office	Fax	Mobile	Pager	Home
SWS Environmental Services	877-742-4215					
Tampa		813-241-0282	813-241-0733			
St Petersburg (Largo)		727-546-6193	727-546-5365			
Orlando		407-854-5733				
Diversified Environmental Services	800-786-3256					
Eugene Russel		813-248-3256	813-247-5453	813-918-3775		
Clean Harbors Env. Services	800-645-8265					
Bartow		863-533-6111	863-519-6363			
Witt O'Brien's	985-781-0804	281-320-9796				
Tampa Pipe & Welding, Inc.		813-630-4757				
Artie Michalic				813-477-0250		
American Construction Sevices		813-247-1419				
Bobby Glover				813-240-0329		(b) (6)
Carl Aldridge				813-690-9602		
OTHER CONTRACTORS						
Allied Energy						
Transportation Manager		205-278-6172	205-925-5004	205-613-8208		
		205-925-6600x1112				
Aqua Clean Environmental Co.						
Lakeland		863-644-0665	863-646-1880			
		800-644-0665				
Craig Burns				863-712-2245		
Bob Torok				863-712-6631		
CH2M Hill						
Tampa		813-874-0777	813-874-3056			
Orlando		407-423-0030	407-839-5901			
Clark Environmental, Inc. - Mulberry	800-276-2187					
Steve Hall		863-425-4884	863-425-2854	863-559-6727		
Cliff Berry Inc. (CBI)	800-899-7745					
Tampa		813-626-6533	813-626-9012			
Fort Lauderdale HQ		954-763-3390	954-763-8375			
CSR Rinker - Miami (Non-Hazardous Diesel Absorbents and Hydrocarbon Soil Materials Recycling)						
Pat Petrillo		305-225-1423	305-220-9875	305-794-3993		
FCC Environmental						
Plant City		800-235-0189	800-282-9585			
Orlando		800-235-0189	407-854-1620			
URS						
Orlando		407-422-0353	407-423-2695			
Tampa		813-443-8404				

Emergency Response Action Plan

(ERAP)

FIGURE 2.3

NOTIFICATION DATA SHEET		
Date: _____		Time: _____
INCIDENT DESCRIPTION		
Reporter's Full Name: _____		Position: _____
Day Phone Number: _____		Evening Phone Number: _____
Company: <u>Central Florida Pipeline LLC</u>		Organization Type: _____
Company Address: <u>2101 GATX Drive</u>		Owner's Address: <u>Kinder Morgan Energy Partners, L.P.</u>
<u>Tampa, FL 33605</u>		<u>500 Dallas Street</u>
_____		<u>Suite 1000</u>
_____		<u>Houston, TX 77002</u>
Incident Latitude: _____		Incident Longitude: _____
Spill Location: _____		
Responsible Party's Name: _____		Phone Number: _____
Responsible Party's Address: _____		
Source and/or cause of discharge: _____		

Present Weather Conditions: _____		
Nearest City: _____		
County: _____		State: _____
Section: _____		Zip code: _____
Township: _____		Range: _____
Distance from City: _____		Borough: _____
Container Type(if applicable): _____		Direction from City: _____
Facility Oil Storage Capacity (if applicable): _____		Container Storage Capacity (if applicable): _____
Material: _____		
Total Quantity Released	Water Impact (YES or NO)	Quantity into Water
RESPONSE ACTION(S)		
Action(s) taken to Correct, Control, or Mitigate Incident: _____		

Number of Injuries: _____		
Number of Deaths: _____		
Evacuation(s): _____		
Number Evacuated: _____		
Damage Estimate: _____		
More information about impacted medium: _____		

CALLER NOTIFICATIONS		
National Response Center (NRC): <u>1-800-424-8802 or 202-267-2675</u>		
Additional Notifications (Circle all applicable): <u>USCG</u> <u>EPA</u> <u>State</u> <u>Other</u>		
ADDITIONAL INFORMATION		
Any information about the incident not recorded elsewhere in this report: _____		

NOTE: DO NOT DELAY NOTIFICATION PENDING COLLECTION OF ALL INFORMATION.		

FIGURE 2.4

EXTERNAL NOTIFICATION FLOWCHART

(See Fig. 2.5 for more details on Agency Notification Requirements)

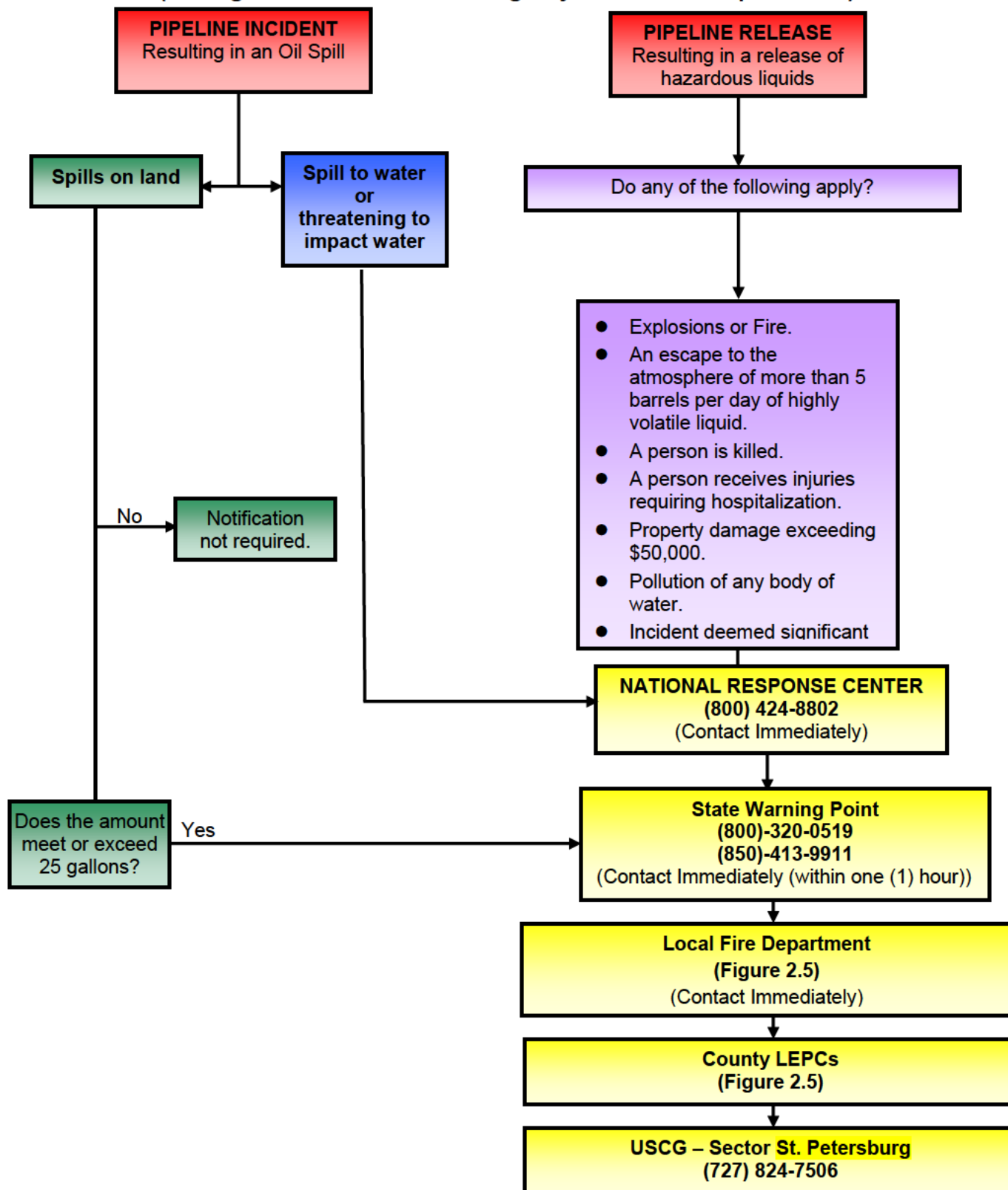


FIGURE 2.5**EXTERNAL NOTIFICATION REFERENCES**

REQUIRED NOTIFICATIONS (FOR ALL FACILITIES)	
NATIONAL RESPONSE CENTER	
National Response Center c/o United States Coast Guard (CG-3RPF) 2100 2 nd Street Southwest Room 2111-B Washington, DC 20593-0001	(800) 424-8802 * (202) 267-2180* (202) 267-2675* (202) 267-1322 (Fax)
REPORTING REQUIREMENTS	
<p>TYPE: For all spills that impact or threaten to impact navigable water or for any failure in a pipeline system that:</p> <ol style="list-style-type: none"> 1. Caused a death or a personal injury requiring hospitalization 2. Resulted in either a fire or explosion not intentionally set by the carrier. 3. Caused estimated damage to the property of the carrier or others, or both, of a total of \$50,000 or more. 4. Resulted in the pollution of any stream, river, lake, reservoir, or other similar body of water that violated applicable water or adjoining shoreline, causing a discoloration or emulsion beneath the surface of the water or upon adjoining shorelines. 5. In the judgment of the carrier, was significant even though it did not meet the criteria of any other subparagraph of this paragraph. <p>NOTE: A call to the NRC must also be made for spills or releases of hazardous substances that meet or exceed their RQ.</p> <p>VERBAL: Immediate notification required (within 2 hours).</p> <p>WRITTEN: Not required</p>	

* 24-Hour Number

FIGURE 2.5**EXTERNAL NOTIFICATION REFERENCES (Cont'd)**

REQUIRED NOTIFICATIONS (FOR DOT REGULATED FACILITIES)		
DEPARTMENT OF TRANSPORTATION		
US Dept. of Transportation		(800) 424-8802*
Information Resources Manager		(202) 267-2180*
Office of Pipeline Safety		(202) 267-2675*
Pipeline and Hazardous Materials Safety Administration		(202) 267-1322 (Fax)
1200 New Jersey Avenue SE – E – 3 – 22 - 321		(202) 366-4566 (Fax Filing)
Washington, DC 20590		
PHMSA Southern Region	Hazardous Materials Safety	(404) 832-1140
		(404) 832-1168 (Fax)
	Pipeline Safety	(404) 832-1147
		(404) 832-1169 (Fax)
REPORTING REQUIREMENTS		
<p>TYPE: In addition to the reporting of accidents to the NRC, a written accident report (Form PHMSA F7000-1) must be submitted for releases resulting in any of the following:</p> <ol style="list-style-type: none"> 1. Explosion or fire not intentionally set by the operator. 2. Release of 5 gallons or more of hazardous liquid or carbon dioxide, except that no report is required for a release of less than 5 barrels resulting from a pipeline maintenance activity if the release is: <ol style="list-style-type: none"> a. Not one described under the NRC's reporting conditions. b. Confined to Company property or pipeline right-of-way; and c. Cleaned up promptly. 3. Death of any person. 4. Personal injury necessitating hospitalization. 5. Estimated property damage, including cost of cleanup and recovery, value of lost product, and damage to the property of the operator or others, or both, exceeding \$50,000. <p>VERBAL: Call to the NRC meets the required verbal notification under DOT reporting requirement.</p> <p>WRITTEN: As soon as practicable, an accident meeting any of the above criteria must be reported on DOT Form 7000-1. The report must be sent to DOT no later than 30 days after the release. Changes or additions to the original report (DOT Form 7000-1) must file a supplemental report within 30 days.</p>		

* 24-Hour Number

FEDERAL

FIGURE 2.5**EXTERNAL NOTIFICATION REFERENCES (Cont'd)**

STATE REPORTING REQUIREMENTS	
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION - STATE WARNING POINT	
Florida Marine Patrol Bureau of Emergency Response	(800) 320-0519* (850) 413-9911* (888) 404-3922* (In state only)
Florida Department of Environmental Protection 3900 Commonwealth Blvd. M.S. 665 Tallahassee, FL 32399	(850) 245-2929 (850) 245-2857 (Fax)
Florida Department of Environmental Protection - Southwest District (Hillsborough, Polk Counties) 13051 N Telecom Parkway Temple Terrace, FL 33637-0926	(813) 632-7641 (Emergency Response) (813) 744-6462 (Fax)
Florida Department of Environmental Protection - Central District (Orange, Osceola Counties) 3319 Maguire Blvd., Ste 232 Orlando, FL 32803-3767	(407) 897-4341 (Emergency Response) (407) 897-6499 (Fax)
REPORTING REQUIREMENTS TYPE: Spills into/involving state waterway, any amount; spills greater than 25 gallons or with a potential greater than 25 gallons, spills requiring any state/federal notifications or assistance. All CERCLA releases, all spills threatening population or the environment; all spills requiring evacuation. Any discharge of oil that meets the reporting requirements of the U.S. EPA or any hazardous substance exceeding an RQ. VERBAL: Within one (1) hour. WRITTEN: As soon as practicable after the release. A written report must include: a) Name, address, and telephone number of person reporting. b) Name, address, and telephone number of person responsible for the discharge or release, if known. c) Date and time of the discharge or release. d) Type or name of substance discharged or released. e) Estimated amount of the discharge or release. f) Location or address of discharge or release. g) Source and cause of the discharge or release. h) Size and characteristics of area affected by the discharge or release. i) Containment and cleanup actions taken to date. j) Other persons or agencies contacted.	

* 24-Hour Number

FIGURE 2.5**EXTERNAL NOTIFICATION REFERENCES (Cont'd)**

REQUIRED NOTIFICATIONS	
HILLSBOROUGH COUNTY ENVIRONMENTAL PROTECTION COMMISSION	
Waste Management Division 1410 North 21 st Street Tampa, FL 33605	(813) 272-5788 (813) 276-2256 (FAX)
REPORTING REQUIREMENTS TYPE: Spills into/involving State waterway, any amount; spills greater than 25 gallons, spills requiring any state/federal notifications or assistance. All CERCLA releases, all spills threatening population or the environment; all spills requiring evacuation. Any discharge of oil that meets the reporting requirements of the U.S. EPA or any hazardous substance exceeding an RQ VERBAL: As soon as possible, but no later than 24 hours. WRITTEN: As soon as practicable after the release. A written report must include: <ol style="list-style-type: none"> 1. Name, address, and telephone number of person reporting 2. Name, address, and telephone number of person responsible for the discharge or release, if known. 3. Date and time of the discharge or release. 4. Type or name of substance discharged or released. 5. Estimated amount of the discharge or release 6. Location or address of discharge or release. 7. Source and cause of the discharge or release. 8. Size and characteristics of area affected by the discharge or release. 9. Containment and cleanup actions taken to date. 10. Other persons or agencies contacted. 	

FIGURE 2.5**EXTERNAL NOTIFICATION REFERENCES (Cont'd)**

REQUIRED NOTIFICATIONS (Cont'd)	
ORANGE COUNTY ENVIRONMENTAL PROTECTION DIVISION (OCEPD)	
800 Mercy Drive Orlando, FL 32808	(407) 836-1400 (407) 836-1499 (FAX)
REPORTING REQUIREMENTS	
<p>TYPE: Spills into/involving State waterway, any amount; spills greater than 25 gallons, spills requiring any state/federal notifications or assistance. All CERCLA releases, all spills threatening population or the environment; all spills requiring evacuation. Any discharge of oil that meets the reporting requirements of the U.S. EPA or any hazardous substance exceeding an RQ</p> <p>VERBAL: As soon as possible, but no later than 24 hours.</p> <p>WRITTEN: As soon as practicable after the release. A written report must include:</p> <ol style="list-style-type: none"> 1. Name, address, and telephone number of person reporting 2. Name, address, and telephone number of person responsible for the discharge or release, if known. 3. Date and time of the discharge or release. 4. Type or name of substance discharged or released. 5. Estimated amount of the discharge or release 6. Location or address of discharge or release. 7. Source and cause of the discharge or release. 8. Size and characteristics of area affected by the discharge or release. 9. Containment and cleanup actions taken to date. 10. Other persons or agencies contacted. 	

FIGURE 2.5**EXTERNAL NOTIFICATION REFERENCES (Cont'd)**

REQUIRED NOTIFICATIONS (Cont'd)	
LOCAL EMERGENCY PLANNING COMMITTEES (LEPC)	
East Central Florida Regional Planning Council (Orange, Osceola Counties) 631 North Wymore Road, Ste. 100 Maitland, FL 32751	(407) 623-1075 x335 (407) 623-1084 (Fax)
Central Florida Regional Planning Council (Polk County) Post Office Drawer 2089 Bartow, FL 33831	(863) 534-7130 (863) 534-7138 (Fax)
Tampa Bay Regional Planning Council (Hillsborough County) 4000 Gateway Centre Boulevard, Ste. 100 Pinellas Park, FL 33782	(727) 570-5151 (727) 570-5118 (Fax)
REPORTING REQUIREMENTS	
<p>TYPE: Spills into/involving State waterway, any amount; spills greater than 25 gallons, spills requiring any state/federal notifications or assistance. All CERCLA releases, all spills threatening population or the environment; all spills requiring evacuation. Any discharge of oil that meets the reporting requirements of the U.S. EPA or any hazardous substance exceeding an RQ</p> <p>VERBAL: As soon as possible, but no later than 24 hours.</p> <p>WRITTEN: As soon as practicable after the release. A written report must include:</p> <ol style="list-style-type: none"> 1. Name, address, and telephone number of person reporting 2. Name, address, and telephone number of person responsible for the discharge or release, if known. 3. Date and time of the discharge or release. 4. Type or name of substance discharged or released. 5. Estimated amount of the discharge or release 6. Location or address of discharge or release. 7. Source and cause of the discharge or release. 8. Size and characteristics of area affected by the discharge or release. 9. Containment and cleanup actions taken to date. 10. Other persons or agencies contacted. 	

**LOCAL EMERGENCY
PLANNING COMMITTEE**

FIGURE 2.5

EXTERNAL NOTIFICATION REFERENCES (Cont'd)

OTHER POTENTIAL REQUIRED NOTIFICATIONS		
OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)		
200 Constitution Avenue Washington, D.C. 20210		(800) 321-6742
REPORTING REQUIREMENTS		
TYPE: Fatality from a work related incident or the inpatient hospitalization of three (3) or more employees as a result of a work related incident VERBAL: Immediately WRITTEN: As requested by the Agency		
U.S. COAST GUARD - SECTOR ST PETERSBURG		
600 8 th Avenue S.E. ST. Petersburg, FL 33701	Emergency Primary Response Department	(727) 824-7506* (727) 824-7574 (727) 824-7674 (727) 824-7556 (Fax)
MSO Tampa 155 Columbia Drive Tampa, FL 33606	Prevention Department	(813) 228-2191 Ext 8121
REPORTING REQUIREMENTS		
TYPE: Immediately for all spills that impact or threaten navigable water or adjoining shoreline. VERBAL: Notification to the USCG is typically accomplished by the call to the NRC. WRITTEN: As the agency may request depending on circumstances.		
U.S. EPA REGION 4		
Sam Nunn Atlanta Federal Center 61 Forsyth Street Atlanta, GA 30303		(800) 241-1754 (404) 562-9900 (404) 562-8700* (Spill Reporting)
U.S. FISH AND WILDLIFE SERVICE		
1849 C Street NW Washington, D.C. 20240-0002		(202) 208-3100
REPORTING REQUIREMENTS		
TYPE: Wildlife Protection / Rehabilitation. VERBAL: Immediately WRITTEN: As the agency may request depending on circumstances		

* 24-Hour Number

OTHER FEDERAL

FIGURE 2.5**EXTERNAL NOTIFICATION REFERENCES (Cont'd)**

NON-REQUIRED ASSISTANCE/ADVISORY NOTIFICATIONS		
FIRE DEPARTMENTS		
Auburndale Fire Department		(863) 965-5529
Bartow Fire Department		(863) 534-5044
Davenport Fire Department		(863) 422-5975
Haines City Fire Department		(863) 421-3611
Hillsborough Co. Emergency Dispatch / Lithia Fire Station		(813) 272-5665
Riverview Fire Station		(813) 671-7750
Kissimmee Fire Department		(407) 518-2222
Lake Wales Fire Department		(863) 678-4203
Loughman Fire Dept. Station 18		(863) 421-3380
Mulberry Fire Dept. Station 380		(863) 425-2912
Orlando Fire Dept. International Airport		(407) 825-2065
Orange County Emergency Dispatch		(407) 836-2777
Osceola County Emergency Dispatch		(407) 348-7444
Polk County Emergency Management		(863) 534-0360*
Polk County Fire Dept. – Bartow		(863) 534-0380
Tampa Hazardous Incident Team		(813) 223-4211

* 24-Hour Number

FIRE DEPARTMENTS

FIGURE 2.5**EXTERNAL NOTIFICATION REFERENCES (Cont'd)**

NON REQUIRED ASSISTANCE/ADVISORY NOTIFICATIONS (Cont'd) (outside resources)		
FBI/HOMELAND SECURITY		
FBI – Orlando		(407) 875-9976
FBI – Tampa		(813) 253-1000
Homeland Security Director – Florida		(850) 410-7233
POLICE DEPARTMENTS		
Auburndale Police Department		(863)965-5555
Bartow Police Department		(863)534-5034
Lake Wales Police Department		(863)678-4223
Kissimmee Police Department		(407)847-0176
Mulberry Police Department		(863)425-1119
Orlando Police Department		(407)246-2470
Tampa Police Department		(813)276-3200
Florida Highway Patrol	Troop D 133 S Semoran Orlando, Florida 32807	(407)737-2300
SHERIFF'S DEPARTMENT		
Hillsborough County Sheriff	2008 E. 8 th Avenue Tampa, FL 33605	(813) 247-8000
Orange County Sheriff	2500 West Colonial Dr. Orlando, FL 32803	(407) 836-3700
Osceola County Sheriff	400 Simpson Rd. Kissimmee, FL 34744	(407) 348-2222
Polk County Sheriff	455 North Broadway Ave. Bartow, FL 33830	(863) 533-0344

LAW ENFORCEMENT

FIGURE 2.5**EXTERNAL NOTIFICATION REFERENCES (Cont'd)**

NON REQUIRED ASSISTANCE/ADVISORY NOTIFICATIONS (Cont'd) (outside resources)		
Public Safety Access/Answering Point (911 Center)		
Hillsborough County Sheriff's Office	Tampa, FL	(813) 247-8200*
Orange County Sheriff's Office	Winter Park, FL	(407) 836-4357*
Osceola County Sheriff's Office	Kissimmee, FL	(407) 348-2222*
Polk County Communications Center	Winter Haven, FL	(863) 401-2226*
HOSPITALS		
Orlando Regional Medical Center		(407) 841-5111
Tampa General Hospital		(813) 844-7000 (813) 844-7100 (Emergency)
Bartow Memorial Hospital	US 98 N Bartow, FL 33830	(863) 519-0305
Heart of Florida Regional Medical Center (Davenport)	40100 Highway 27 Davenport, FL 33837-5906	(863) 419-2400
Heart of Florida Regional Medical Center (Haines City)	1615 US Highway 27 N Haines City, FL 33844-2825	(863) 419-2273
Florida Hospital Centra Care – Walk In Urgent Care	4320 W Vine St Kissimmee, FL 34746-6313	(407) 390-1888
Florida Hospital Emergency Department	2450 N Orange Blossom Trl Kissimmee, FL 34741-2316	(407) 933-6632
Lake Wales Medical Center	410 S 11th Street Lake Wales, FL 33853-4203	(863) 676-1433
Tampa General Hospital	2 Columbia Dr Tampa, FL 33606-3508	(813) 251-1991
Orlando Regional Healthcare – Sand Lake Hospital	9400 Turkey Lake Rd Orlando, FL 32819	(407) 351-8500
OTHER		
Tampa Port Authority (TPA)		(813) 905-7678
Tampa Port Security Compliance Office		(813) 241-1881
City of Tampa Wastewater Treatment Plant		(813) 247-3451 (813) 248-5269 (Fax)

HOSPITALS/OTHER

Emergency Response Action Plan**(ERAP)****3.1 INITIAL RESPONSE ACTIONS (Cont'd)****FIRST COMPANY PERSON NOTIFIED/ON SCENE**

- _____ Follow the appropriate *"Specific Incident Response Checklist"* in Figure 3.1 and *"Product Specific Response Considerations"* beginning on Figure 3.2.
- _____ Notify **Management** of the incident.
- _____ Utilize local emergency services as necessary (police, fire, medical).

FACILITY MANAGEMENT

- _____ **Evaluate the Severity**, Potential Impact, Safety Concerns, and Response Requirements based on the initial data provided by the first person on scene.
- _____ Assume the role of **Incident Commander**.
- _____ **Confirm safety** aspects at site, including need for personal protective equipment, sources of ignition, and potential need for evacuation.
- _____ Activate the **Local Response Team** and **primary response contractors**, as the situation demands.
- _____ Coordinate/perform **activation of additional spill response contractors**, as the situation demands (telephone reference is provided in Figure 2.5).
- _____ Perform notifications as per Figure 2.1, including Spill Management Team activation, as necessary.
- _____ Coordinate/perform **regulatory agency notification**, as the situation demands (notification procedures and telephone references are provided in Figures 2.4 and 2.5 respectively).
- _____ Proceed to spill site and **coordinate response and clean-up operations**.
- _____ Direct containment, dispersion, and/or clean-up operations in accordance with the **"Product Specific Response Considerations"** beginning on Figures 3.2.

LOCAL RESPONSE TEAM

- _____ Assigned personnel will immediately respond to a discharge from the Pipeline, as the situation demands.
- _____ Perform response/clean-up operations as directed or coordinated by the Incident Commander.
- _____ Assist as directed at the spill site.

FIGURE 3.1

SPECIFIC INCIDENT RESPONSE CHECKLIST

Remember, Without Exception, Personnel Safety Is The First Priority. Excessive Exposure To The Vapor And Liquid Stages Of The Spilled Product Should Be Avoided.

INITIAL RESPONSE

- ____ Take appropriate personal protective measures.
- ____ Call for medical assistance if an injury has occurred.
- ____ Restrict access to the spill site and adjacent area as the situation demands. Take additional steps necessary to minimize any threat to health and safety.
- ____ Verify the type of product and quantity released.
- ____ Advise personnel in the area of any potential threat and/or initiate evacuation procedures.
- ____ Use testing and sampling equipment to determine potential safety hazards, as the situation demands.
- ____ Identify/Isolate the source and minimize the loss of product.
- ____ Take necessary fire response actions.
- ____ Eliminate possible sources of ignition in the near vicinity of the spill.
- ____ Notify Facility Management of the incident.

All personnel are reminded that outsiders other than emergency services will not be allowed in the Facility during the time of an emergency, and that no statements will be issued to the media or other interested parties except by designated Company Management. Be courteous with media representatives and direct them to the designated spokesman.

INITIAL RESPONSE

FIGURE 3.1

SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

LINE BREAK OR LEAK, SPECIFIC RESPONSE

- _____ Notify management (any level) with the following
 - Location, volume, source and material released
 - Note time found
 - Management to notify Incident Commander and EH&S Department personnel
 - Pull MSDS for product and have it available
 - Initiate internal and external notifications (EHS will handle agency notifications)
 - Use alternate telephone # for call-backs and out-going calls
 - Begin an incident log with timeline
- _____ Begin initial response
 - Evacuate and secure immediate area
 - Account for contractors and Company personnel
 - Approach from upwind direction
 - Eliminate any potential ignition sources
 - Initiate air monitoring (i.e., O₂, LEL, chemical, heat stress, etc.) and establish hot, warm and cold zones
 - Foam release (if significant volume of flammable) within 15 minutes
 - First responder to stop source and contain (if possible) in a safe manner
- _____ ERT assemble at Command Post for briefing
 - Fill positions in IMS (if required based on size and type of incident)
 - Determine PPE requirements indicated on MSDS or PPE matrix
 - Approach from upwind direction
 - Dispatch equipment needed to contain and start clean-up (use of portable or fixed monitors, vacuum trucks, fire truck, boat, absorbents, non-sparking shovels, etc.)

NOTE: DO NOT USE SPILL BOAT OR BOOM FOR FLAMMABLE SPILLS INTO THE WATER
- _____ Continue initial response/assess situation
 - Ensure that pumps/electrical equipment have been shut down
 - Include vessel, ships and docks if spill is at dock or on waterfront
 - Control and direct traffic flow (establish and staff staging area if required)
 - Notify any affected neighboring facilities
 - Consider fence line air monitoring if release will affect property off-site
- _____ Establish objectives and priorities based on this assessment
 - Contain to keep from impacting additional areas (closing dike drains, outfalls, etc.)
 - Maintaining foam blanket will be necessary to suppress vapors if material is flammable and posing a threat of a fire or high LEL levels
 - Vacuum up or absorb free product (all equipment used must be grounded)
 - Stop source safely if first responder could not (due to vapor exposures or risk of fire)

FIGURE 3.1

SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

EXPLOSIONS AND/OR FIRE, SPECIFIC RESPONSE**INDIVIDUAL DISCOVERING THE FIRE - (All Employees)**

In the event that a fire response is required by the ERT, the following actions should be taken, in order:

NOTE: If the situation warrants, and your personal safety is ensured, initial efforts to extinguish small incipient stage fires may prove to be the best action. In these situations, if you believe that your personal safety is not at risk, and you can take interim measures to mitigate a situation while the ERT is deploying - do so.

- _____ Notify Management (any level)
 - Acknowledge information and switch all emergency communications to an alternate channel
 - Have the ERT members secure all operations on which they are working before responding
 - Note time of call
 - Sound the emergency siren, contact the local fire department
 - Have staff member check weather for any changes in wind direction
- _____ Account for contractors and Company personnel.
- _____ IC mobilize to scene
 - Check wind direction- **approach from upwind**
 - Confirm and conduct a preliminary assessment of the situation upon arrival at the scene
 - Evaluate scene for potential hazards (i.e., overhead power lines, obstacles wind direction)
 - Determine what product is involved and have MSDS pulled and reviewed for PPE and firefighting instructions
- _____ Assemble the ERT at the Command Post
 - Fill positions (as required) in the Incident Management System
 - If not already present, notify IC, Safety Officer, and Operations Chief
 - Have truck dispatched immediately to area
 - Have fire pumps started and on standby (if applicable)
 - Initiate internal and external notifications in accordance with the fire and other emergency response plans
 - Have ERT members bunker up and bring IC gear to scene

FIRE/EXPLOSION

FIGURE 3.1**SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)****EXPLOSIONS AND/OR FIRE, SPECIFIC RESPONSE (Cont'd)**

- _____ Eliminate any sources of ignition in the immediate area
 - Shut down pumps and any movement into / out of area
 - Shut down contractor activity
 - Stop traffic flow into and out of area
 - Adjacent tank pumps and motors
 - Be aware of static electricity
- _____ Establish objectives and priorities based on this assessment
 - Get water on the fire
 - Be aware of overhead power lines, DO NOT flow water near them
 - Find a way to get water to the fire quickly and safely (i.e., monitors, hydrants, truck)
 - Water will quickly fill the dike area
 - Evaluate the water usage and determine whether or not to open / close the internal and external dike drains

FIRE/EXPLOSION

FIGURE 3.1**SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)****BOMB THREATS, SPECIFIC RESPONSE**

(b) (7)(F)

FIGURE 3.1**SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)****BOMB THREATS, SPECIFIC RESPONSE (Cont'd)**

(b) (7)(F)

FIGURE 3.1**SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)****NATURAL DISASTER (Tornado and Severe Storms), SPECIFIC RESPONSE**

Although many disasters cannot be prevented or predicted, preparation can significantly reduce losses. In the event of a severe weather condition or a natural disaster, the Facility Manager or a Facility Operator will be the Emergency Coordinator.

- **Be Aware of Changing Weather Conditions**
 1. Tornado watch - conditions are right for the formation of a tornado.
 2. Tornado warning - a tornado has been sighted but is not in the area at this time.
 3. Tornado alert - a tornado has been sighted in the immediate area - take cover immediately.
- **If Severe Weather Conditions Threaten**
 1. Announce over P.A. system for the office and petroleum loading rack. The Motorola two-way radios and Nextel radios will be used to broadcast to other areas.
 2. Alert Facility personnel of condition.
 3. If time permits, all personnel should assemble at an inside room in the Facility for shelter.
 4. If time does not permit, seek shelter in low level area away from glass.
 5. Make certain that Facility personnel are aware of the condition.
 6. Stay in shelter until "all clear" has been issued.
- **Immediately After the Storm**
 1. Account for all personnel.
 2. Survey for damages to the Facility.
 3. Initiate team for any repairs if needed (i.e. high tank alarms, lighting, etc.).
 4. Refer to this Plan for additional response guidance regarding fires, spills, etc., as needed.

FIGURE 3.1

SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)

MEDICAL EMERGENCY, SPECIFIC RESPONSE

- _____ Apply appropriate first aid for both injury and shock, exercising care not to cause further injury.
- _____ Notify local emergency medical services.
- _____ If victim is unconscious and not breathing, immediately apply artificial respiration (if trained in CPR) and continue without interruption until natural breathing is restored or relieved by trained CPR personnel or other qualified medical personnel.
- _____ Notify hospital of patient arrival and extent of injury.
- _____ Complete follow-up and written reporting, as the situation demands. Refer to the Company's Injury Procedures detailed in the appropriate Terminal ICP.

MEDICAL EMERGENCY

FIGURE 3.2

FLAMMABLE LIQUIDS (Polar/Water-Miscible)

The following information is intended to provide the initial responder(s) with data that may be useful in making quick decisions and executing prompt response actions. The information is intended for guideline purposes only.

PRODUCTS: Ethanol

HAZARD IDENTIFICATION / RECOGNITION

**GUIDE NO.
127**

DANGERS

- HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames.
- Vapors may form explosive mixtures with air.
- Vapors may travel to source of ignition and flash back.
- Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Vapor explosion hazard indoors, outdoors or in sewers.
- Those substances designated with a "P" may polymerize explosively when heated or involved in a fire.
- Runoff to sewer may create fire or explosion hazard.
- Containers may explode when heated.
- Many liquids are lighter than water.

HEALTH

- Move victim to fresh air. Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Wash skin with soap and water.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions.

PUBLIC SAFETY

- Isolate spill or leak area immediately for at least 50 meters (150 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- Ventilate closed spaces before entering.

EVACUATION

Large Spill

- Consider initial downwind evacuation for at least 300 meters (1,000 feet).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

Information provided by the Emergency Response Guidebook 2008.

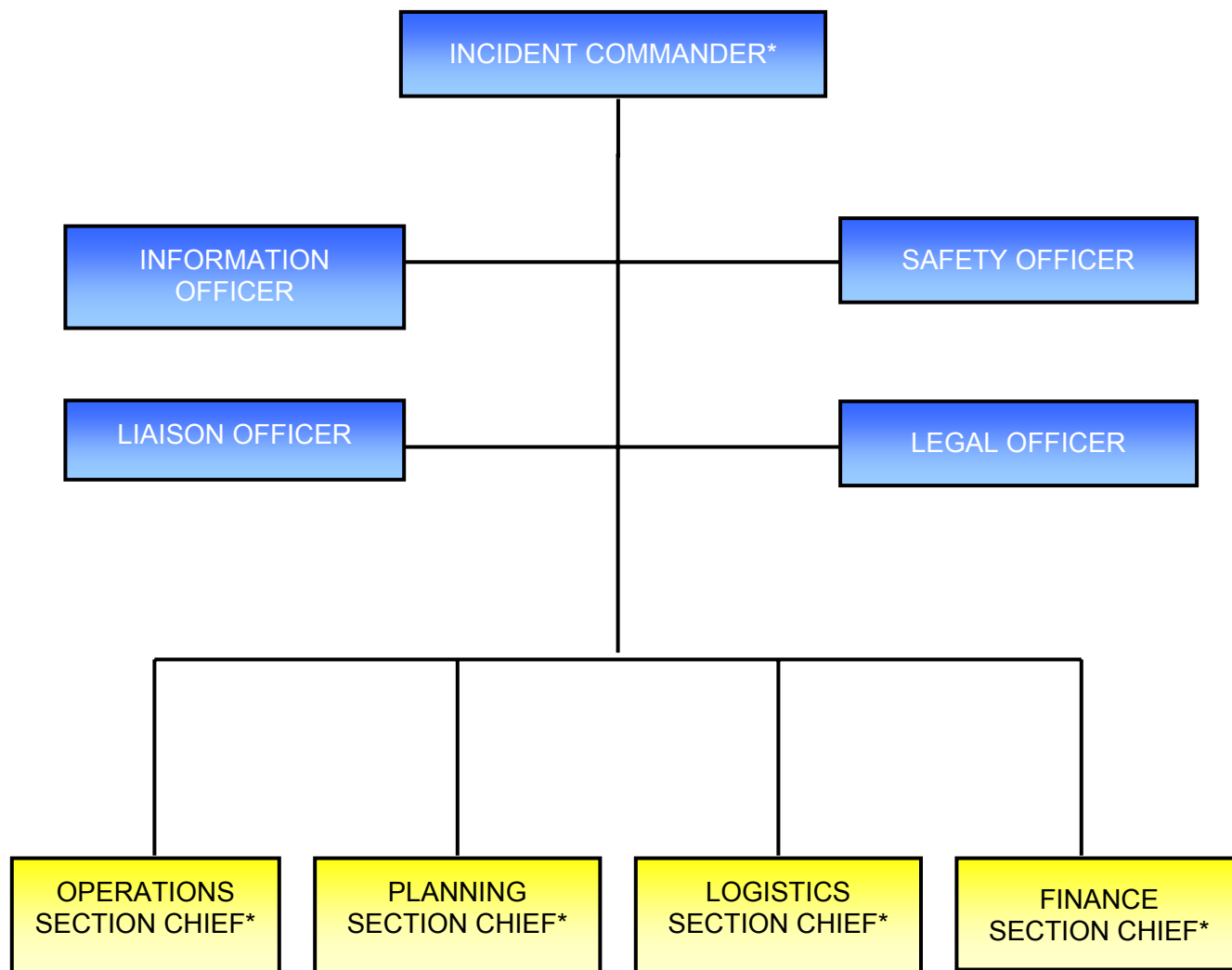
FIGURE 3.3

FLAMMABLE LIQUIDS (Non-Polar/Water-Immiscible)	
The following information is intended to provide the initial responder(s) with data that may be useful in making quick decisions and executing prompt response actions. <u>The information is intended for guideline purposes only.</u>	
PRODUCTS #2 Fuel Oil (Diesel) Gasoline Kerosene Jet A	
HAZARD IDENTIFICATION / RECOGNITION	
GUIDE NO. 128	DANGERS <ul style="list-style-type: none"> ● HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames. ● Vapors may form explosive mixtures with air. ● Vapors may travel to source of ignition and flash back. ● Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). ● Vapor explosion hazard indoors, outdoors or in sewers. ● Those substances designated with a "P" may polymerize explosively when heated or involved in a fire. ● Runoff to sewer may create fire or explosion hazard. ● Containers may explode when heated. ● Many liquids are lighter than water. ● Substance may be transported hot.
HEALTH	
<ul style="list-style-type: none"> ● Move victim to fresh air. Call 911 or emergency medical service. ● Apply artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult. ● Remove and isolate contaminated clothing and shoes. ● In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes. ● Wash skin with soap and water. ● Keep victim warm and quiet. ● Ensure that medical personnel are aware of the material(s) involved, and take precautions. 	
PUBLIC SAFETY	
<ul style="list-style-type: none"> ● Isolate spill or leak area immediately for at least 50 meters (150 feet) in all directions. ● Keep unauthorized personnel away. ● Stay upwind. ● Keep out of low areas. ● Ventilate closed spaces before entering. 	
EVACUATION	Large Spill <ul style="list-style-type: none"> ● Consider initial downwind evacuation for at least 300 meters (1,000 feet). Fire <ul style="list-style-type: none"> ● If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.
Information provided by the Emergency Response Guidebook 2008.	

FIGURE 4.1

LOCAL RESPONSE TEAM

(For Initial Response and Tier I & II Incidents)

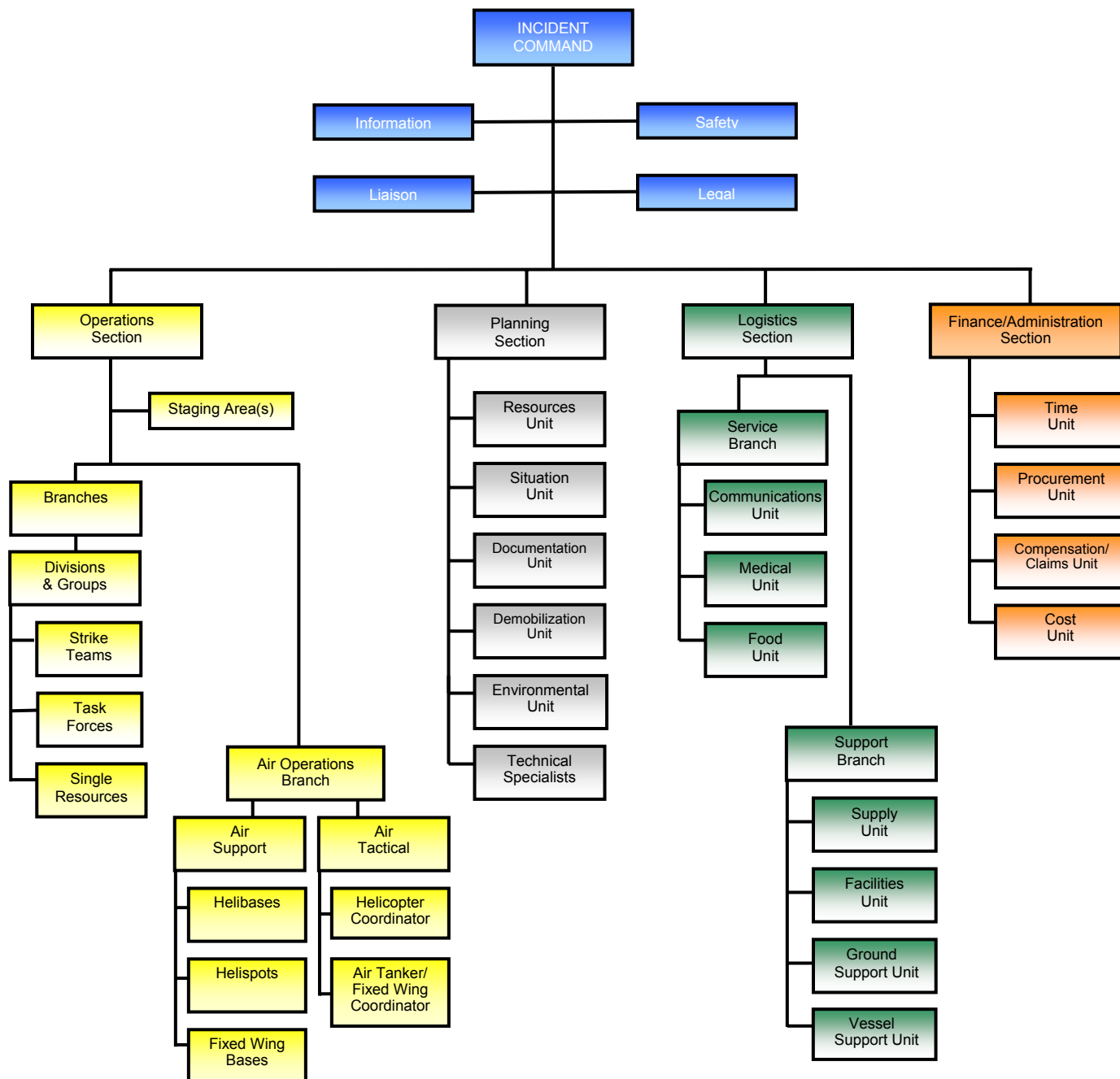


* NOTE: Emergency Response Team (ERT) personnel can assume any of these positions as necessary.

FIGURE 4.2

EMERGENCY RESPONSE TEAM

(For incidents beyond the response capability of the Local Response Team)



E.1 EMERGENCY EVACUATION PROCEDURES

Minimizing employee and public exposure to hazardous substances is the highest priority activity at a Pipeline emergency site. Often this must be done by notifying and/or evacuating employees and nearby residents (or assisting local officials with this activity) and/or by halting or diverting traffic on roads and railroads from the emergency area.

This Appendix is a general procedure for response to a vapor cloud or other hazardous vapor release situation and is intended for use in conjunction with Fire Plans, Site Specific Plans, Site Safety and Health Plans, and other plans and procedures applicable to the work area.

In the event that a hazardous vapor situation is detected, evacuation of all people in the affected area may be the highest priority course of action depending on the circumstances. Large-scale evacuations may require the efforts of entire Response Team and/or assistance from local emergency responders, again depending on site conditions. Phone numbers for local emergency responders are located in Section 2.0.

E.1.A Isolation of Potential Emergency Site

For all potential emergency situations, isolation of the area affected by employees will always be an immediate priority. Since each emergency is different, the size of the area to be isolated and the method of isolation will vary on a case by case basis.

In general, fenced pipeline installations such as tank farms, delivery terminals and pump stations can be isolated by controlling traffic at the installation's main gate. For situations on the Pipeline right-of-way, the Response Team must quickly determine the size of the area potentially affected and work closely with local responders to make every effort to control all access to the area by road, rail or footpath.

In general, a potential emergency situation will be most easily isolated through the prompt enlistment of help from local responders (police, fire, etc.) to help control an area other than a fenced pipeline facility. Section 2.0 contains listings of how to contact these personnel.

E.1.B Pipeline Facility Evacuations

It is often difficult to determine when the quantity of vapors present constitute a hazard severe enough to warrant shutdown of operations and maintenance and the evacuation of the work site or pipeline, even when hazardous atmosphere detectors are in use.

Employees must ultimately use their own judgment based on the available information, in addition to previous experience and training, in making this decision. In all cases these judgments should be conservative, i.e., they should err on the side of safety and caution.

The protection of human life must always take precedence over the protection of physical property or equipment.

E.1 EMERGENCY EVACUATION PROCEDURES (Cont'd)

E.1.C Remote System Locations; Right-of-Way Locations

- The Controller or appropriate supervisor responsible for the remote location or line section will immediately shut down the appropriate lines and isolate the location to the extent possible by closing the appropriate remotely controlled block valves.
- The Controller or appropriate supervisor will notify the QI to start the response to the event. Dependent on the situation, the QI will send the appropriate personnel to the affected location to investigate. If an event is reported from the right-of-way, the QI will contact the appropriate pipeline operator who will be responsible for closing manual line block valves.
- Personnel responding to the affected location should always make an initial assessment of the site at a safe distance from the likely source point of the release. If the source point cannot be isolated without entering a vapor cloud or other hazardous situation, investigating personnel should stay out of the hazardous area. A call for immediate assistance should be made to the Controller and to the QI to begin notification of the appropriate members of the Response Team, who are properly equipped to approach and isolate a release of this nature.
- The QI has responsibility for contacting the appropriate local officials for assistance in evacuating and isolating all persons from the affected area and controlling traffic and spectators if needed.

E.2 EVACUATIONS INVOLVING THE GENERAL PUBLIC

E.2.A Specific Procedure

- The Company's Incident Commander first assesses the incident and determines it is necessary to evacuate the public from the immediate affected area (local officials should be included in this decision making if time permits).
- Coordination of evacuation efforts is the responsibility of the Incident Commander, or the person assigned as the Emergency Response Team's Liaison Officer.
- If the incident involves injured persons, refer to "Medical Emergencies" of Section 3.0.
- Local authorities such as the police, highway patrol and fire departments should be pressed into service assisting an evacuation, with the Company's Incident Commander or Liaison Officer acting as direct liaison to these officials.

E.2 EVACUATIONS INVOLVING THE GENERAL PUBLIC (Cont'd)

E.2.A Specific Procedure (Cont'd)

- All nearby occupied dwellings should then be visited and the inhabitants informed of the dangers as soon as possible. Evacuation instructions to residents must insist that all open flames including pilot lights and gas burners be extinguished if possible.
- Conduct evacuation on foot if necessary.
- Warn all evacuees against activities such as smoking, operating motor vehicles, using spark-producing appliances, etc. The Company should attempt to render whatever assistance is necessary to the evacuees.
- Keep the QI and/or Safety Officer informed of any evacuation efforts so they may pass along the latest information regarding such actions to other support personnel.
- In the interest of safety, the media and other members of the general public may need to be utilized to quickly inform people in the immediate area of an ongoing evacuation effort.
- Members of the press should be advised that electronic equipment such as camera lights and flashes can be potential sources of ignition when explosive vapors are present.

E.2.B Traffic Control

If an incident occurs near a road or railroad, local traffic may need to be halted or diverted from the immediate area. The assistance of local authorities should be solicited to enforce any necessary detours of local traffic until the hazardous situation can be stabilized. Railroads should be notified so they can halt rail traffic.

E.2.C Notification of Public Officials

The Company must be prepared to coordinate the Company's response to emergencies with public officials as appropriate. The QI or other appointee will interface with public officials on the appropriate seniority levels who are concerned about an emergency response in progress. The QI will meet directly with On-Scene Coordinators from other agencies in order to best coordinate response efforts. The Liaison Officer will act as Company liaison with various local emergency responders during the incident. The Environmental Situation Chief will act as liaison with Federal and state-level environmental responders if necessary. The Safety Officer shall act as liaison with OSHA representatives if necessary.

INTEGRATED CONTINGENCY PLAN

Central Florida Pipeline

Prepared for:

Kinder Morgan Energy Partners, L.P.

Central Florida Pipeline LLC

2101 GATX Drive
Tampa, FL 33605
(813) 248-2148

Prepared by:

Response Management Associates, Inc.

6620 Cypresswood Drive, Suite 200

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Phone: (281) 320-9796

Fax: (281) 320-9700

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Foreword

Management Certification

CERTIFICATION OF THE APPLICABILITY OF THE SIGNIFICANT AND SUBSTANTIAL HARM CRITERIA

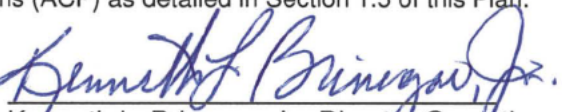
Facility Name and Address: Central Florida Pipeline LLC 2101 GATX Drive Tampa, FL 33605			
1.	Is the pipeline more than 6 5/8" (168mm) in outside nominal diameter and greater than 10 miles (16km) in length? and	Yes: <input checked="" type="checkbox"/>	No: <input type="checkbox"/>
2.	Has any line section experienced a release greater than 1,000 barrels within the previous five years? or	Yes: <input checked="" type="checkbox"/>	No: <input type="checkbox"/>
3.	Has any line section experienced two or more reportable releases as defined by 49 CFR 195.50, previous five years? or	Yes: <input type="checkbox"/>	No: <input checked="" type="checkbox"/>
4.	Does any line section have any electrical resistance welded pipe, manufactured prior to 1970 and operates at a maximum operating pressure established under 49 CFR 195.406 that corresponds to a stress level greater than 50 percent of the specified yield strength of the pipe? or	Yes: <input type="checkbox"/>	No: <input checked="" type="checkbox"/>
5.	Is any line section located within a 5-mile (8km) radius of potentially affected public drinking water intakes and could be reasonably be expected to reach public drinking water intakes? or	Yes: <input checked="" type="checkbox"/>	No: <input type="checkbox"/>
6.	Is any line section located within a 1-mile (1.6km) radius of potentially affected environmentally sensitive areas and could reasonably be expected to reach those areas?	Yes: <input checked="" type="checkbox"/>	No: <input type="checkbox"/>

CERTIFICATION

I hereby certify the following:

- 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 this information, I believe the submitted information is true, accurate and complete.
- The information and procedures contained herein are considered to be accurate as of this date and are consistent with the National Contingency Plan (NCP) and applicable Area Contingency Plans (ACP) as detailed in Section 1.5 of this Plan.

Signature:


 Kenneth L. Brinegar, Jr., Director-Operations

Date:

5/1/2013

Foreword

Revision Record

REVISION RECORD			
CHANGE DATE	REMOVE	INSERT	DESCRIPTION OF CHANGE(S)
	PAGE NUMBER(S)		
February 2005	ALL	ALL	New Plan distribution by RMA
May 2006	ERAP-13, ERAP-15 thru ERAP-19, ERAP-21 thru ERAP-22, FWD-iv, FWD-v 1-6, 2-13, 2-16 thru 2-20, 2-22, 2-23	ERAP-13, ERAP-15 thru ERAP-19, ERAP-21 thru ERAP-22, FWD-iv, FWD-v 1-6, 2-13, 2-16 thru 2-20, 2-22, 2-23	DOT/PHMSA review and notification reference update
July 2008	ERAP-2, ERAP-4, ERAP-14, ERAP-15, ERAP-35 thru ERAP-39, FWD-iv, FWD-vi, TOC-I, 1-5, 1-6, 2-4, 2-15, 2-16, 3-12 thru 3-17, Section 6.0 (all except ESMs)	ERAP-2, ERAP-4, ERAP-14, ERAP-15, ERAP-35 thru ERAP-40, FWD-iv, FWD-vi, TOC-I, 1-5, 1-6, 2-4, 2-15, 2-16, 3-12 thru 3-18, Section 6.0 (all except ESMs)	QI change and Ethanol product added
February 2009	ERAP all, Title Page, FWD-ii thru FWD-vi, TOC-I, TOC-ii, 1-1 thru 1-7, 2-1 thru 2-4, 2-8, 2-11, 2-12, 2-18, 3-1, 4-1, 6-8, 6-27, 6-33, B-4 thru B-6, C-3, D-2, D-4, D-5, D-7, Glossary/Acronyms-14	ERAP all, Title Page, FWD-ii thru FWD-v, TOC-I, TOC-ii, 1-1 thru 1-7, 2-1 thru 2-4, 2-8, 2-11, 2-12, 2-18, 3-1, 4-1, 6-8, 6-27, 6-33, B-4 thru B-6, C-3, D-2, D-4, D-5, D-7, Glossary/Acronyms-14	QI change, WCD reevaluation, ACP updates, notification updates, distribution updates.
March 2009	Corresp-1	Corresp-1 and DOT/PHMSA email	DOT/PHMSA approval.
July 2010	ERAP-2, ERAP-4, ERAP-5, ERAP-7, FWD-iii, 1-5, 1-7, 2-3, 2-4, 2-6, 6-30 through 6-32, B-5, B-6	ERAP-2, ERAP-4, ERAP-5, ERAP-7, FWD-iii, 1-5, 2-3, 2-4, 2-6, 6-30 through 6-32, B-5, B-6	Annual Review. PHMSA Advisory Worst Case Discharge Review. Personnel changes and Threatened/Endangered Species updates.
July 2011	FWD-iii, FWD-iv, TOC-ii, ERAP (all), 1-5, 1-6, Section 2 (all), Section 5 (all), G-1, G-3 through G-30	FWD-iii, FWD-iv, TOC-ii, ERAP (all), 1-5, 1-6, Section 2 (all), Section 5 (all), G-1, G-3 through G-24	Annual Review. Update Distribution and contact information.
October 2012	FWD-iii, ERAP-4 thru ERAP-6, ERAP-11, ERAP-15, ERAP-18, 2-3, 2-4 and Florida Operations Phone List, 2-5 and Response Contractor Phone List, 2-11, 2-15, 2-18, A-2, A-7 through A-15, G-1, G-8, G-9, G-20 thru 24	FWD-iii, ERAP-4 thru ERAP-6, ERAP-11, ERAP-15, ERAP-18, 2-3, 2-4 and Florida Operations Phone List, 2-5 and Response Contractor Phone List, 2-11, 2-15, 2-18, A-2, A-7 through A-13, G-1, G-8, G-9 G-20, G-21	Annual Review (June 2012). Update personnel, contact and response equipment information.
November 2012	FWD-iii, ERAP-18, 2-18	FWD-iii, ERAP-18, 2-18	Incorporate Public Safety Access/Answering Point (PSAP) contact information.
May 2013	FWD-ii, FWD-iii, ERAP-2, ERAP-4, ERAP-5 and CFPL Florida Operations Phone List, ERAP-6 and Response Contractors, ERAP-7, 1-5, 2-3, 2-4 and CFPL Florida Operations Phone List, 2-5 and Response Contractors,2-6	FWD-ii, FWD-iii, ERAP-2, ERAP-4, ERAP-5 and CFPL Florida Operations Phone List, ERAP-6 and Response Contractors, ERAP-7, 1-5, 2-3, 2-4 and CFPL Florida Operations Phone List, 2-5 and Response Contractors, 2-6	Update Qualified individual and internal contact information.

NOTE: It is the responsibility of the holder of this Plan to insure that all changes and updates are made. The Plan Holder must:

- Remove and discard obsolete pages.
- Replace obsolete pages with the updated pages.

Foreword

Revision Record

REVISION RECORD			
CHANGE DATE	REMOVE	INSERT	DESCRIPTION OF CHANGE(S)
	PAGE NUMBER(S)		
June 2013	FWD-iv and FWD-v, FWD-iii, ERAP-2, ERAP-4, ERAP-5 and CFPL Florida Operations Phone List, 1-5, 2-3, 2-4 and CFPL Florida Operations Phone List, A-3, A-7.	FWD-iv through FWD-v1, ERAP-2, ERAP-4, ERAP-5 and CFPL Florida Operations Phone List, 1-5, 2-3, 2-4 and CFPL Florida Operations Phone List, A-3, A-7.	New Alternate Qualified Individual and update Company owned response equipment.

NOTE: It is the responsibility of the holder of this Plan to insure that all changes and updates are made. The Plan Holder must:

- Remove and discard obsolete pages.
- Replace obsolete pages with the updated pages.

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3	Central Florida Pipeline LLC Tampa Terminal Supervisor - Office 2101 GATX Drive Tampa, FL 33605
4	Kinder Morgan Energy Partners, L.P. Director Operations SE Products Terminals 1100 Alderman Drive, Suite 200 Alpharetta, GA 30005
5	Kinder Morgan Energy Partners, L.P. Director of Environmental Affairs 1100 Alderman Drive, Suite 200 Alpharetta, GA 30005
6	Central Florida Pipeline LLC Orlando Terminal, Supervisor's Office 9919 S. Orange Ave. Orlando, FL 32824
7	Central Florida Pipeline LLC Response Trailer #1 - Tampa 2101 GATX Drive Tampa, FL 33605
8	Central Florida Pipeline LLC Response Trailer #2 - Tampa 2101 GATX Drive Tampa, FL 33605
9	Central Florida Pipeline LLC Response Trailer - Orlando 9919 S. Orange Ave. Orlando, FL 32824
10	Central Florida Pipeline LLC Tampa Control Room 2101 GATX Drive Tampa, FL 33605
11	SWS - Office 6409 123 rd Avenue North Largo, FL 33773

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13	Witt O'Brien's 818 Town & Country Blvd., Suite 200 Houston, TX 77024
(2 CDs Only)	Office of Pipeline Safety Pipeline and Hazardous Material Safety Administration U.S. Department of Transportation 1200 New Jersey Avenue SE – E- 22 - 321 Washington, DC 20590
Electronic Master	Kinder Morgan Energy Partners, L.P. Manager – Emergency Response Programs 1001 Louisiana Street, Suite 1000 Houston, TX 77002

NOTE: Distribution of this Plan is controlled by the Copy Number located on the front cover. The Plan Distribution Procedures provided in Section 1.3 and the Plan Review and Update Procedures provided in Section 1.4 should be followed when making any and all changes.

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1.0 INTRODUCTION AND PLAN CONTENT

1.1 PLAN PURPOSE/OBJECTIVES

The purpose of this Integrated Contingency Plan (Plan) is to assist Central Florida Pipeline LLC (Company) personnel to prepare for and respond quickly and safely to a discharge originating from the pipelines and associated facilities. The Plan provides techniques and guidelines for achieving an efficient, coordinated, and effective response to a discharge incident which may occur **along** the pipeline.

The specific objectives of the Plan are to:

- Establish Response Teams, assign individuals to fill the positions on the teams, and define the roles and responsibilities of team members.
- Define notification, activation, and mobilization procedures to be followed when a discharge occurs.
- Define organizational lines of responsibility to be adhered to during a response operation.
- Document equipment, manpower, and other resources available to assist with the response.
- Ensure compliance with the Federal, state, and local oil pollution regulations.
- Ensure consistency with the National Contingency Plan and Area Contingency Plan(s) for the area of operation.

1.2 SCOPE OF PLAN

This Plan has been developed in accordance with the regulation published in 49 CFR Part 194.

This Plan contains prioritized procedures for Company personnel to mitigate or prevent any discharge resulting from the operation of the pipeline. A description of the pipeline's details is detailed in Figure 1.1 with additional information provided in Sections 1 through 6 and the Appendices.

1.3 PLAN DISTRIBUTION PROCEDURES

The **Manager – Emergency Response Programs** is responsible for maintenance and distribution of the Plan. Distribution will be handled in the following manner:

- Distribution of the Plan is controlled by the number on the front cover. A Distribution List is included in the Foreword to facilitate control.
- Company personnel who may be called upon to provide assistance during discharge response activities will have access to a copy of the plan for their use and training.

1.3 PLAN DISTRIBUTION PROCEDURES (Cont'd)

- Any person holding a copy of the Plan shall ensure that the copy is transferred to their replacement in the event of reassignment or change in responsibility.
- Various regulatory agencies will also be distributed a copy of the Plan. The list of agencies is detailed in the Distribution List located in the Foreword.

1.4 PLAN REVIEW AND UPDATE PROCEDURES

Annual Review/Update

The **Manager – Emergency Response Programs** will coordinate the following plan review and update procedures:

- At least once each year, review and make appropriate revisions as required by operational or organizational changes.
- At least once each year, review and make appropriate revisions as required by changes in the names and telephone numbers detailed in Section 2.0.
- Review and make appropriate revisions as required by improved procedures or deficiencies identified during response team tabletop exercises or actual emergency responses.
- Coordinate the word processing, publication, and distribution efforts to complete the revisions and maintain the Plan.

Incorporation of Plan Revisions

Upon receipt of any revisions, the **Plan Holder** shall:

- Review and insert the revised pages into the Plan.
- Discard the obsolete pages.
- Record this action on the "Revision Record" page in the Foreword.

Agency Revision Requirements

The Company shall revise and resubmit changes to the DOT/PHMSA Pipeline Response Plans Officer within 30 days of each change that would substantially affect the implementation of the Plan. Examples of changes in operating conditions that would cause a significant change to the Plan include:

Conditions Requiring Changes

- An extension of the existing pipeline or construction of a new pipeline in a response zone not covered by the previously approved Plan.

1.4 PLAN REVIEW AND UPDATE PROCEDURES (Cont'd)

Conditions Requiring Changes (Cont'd)

- Relocation or replacement of portions of the pipeline which in any way substantially affect the information included in this Plan, such as a change in the Worst Case Discharge volume.
- A change in the type of oil handled, stored, or transferred that materially alters the required response resources.
- A change in the name of the Oil Spill Removal Organization (OSRO).
- A material change in capabilities of the OSROs that provide equipment and personnel.
- A change in emergency response procedures.
- A change in the Qualified Individual.
- A change in the NCP or an ACP that has significant impact on the equipment appropriate for response activities.
- Any other changes that materially affect the implementation of the Plan.
- As a result of post incident or drill evaluations.

DOT/PHMSA must be provided with two copies, in electronic format, of the revised Plan. The Company must submit the DOT/PHMSA issued PHMSA Sequence Number with the changes (the PHMSA Sequence Number is listed in Figure 1.1). In addition to periodic updates, when applicable, the Company will resubmit the Plan to DOT/PHMSA every five years from the last approval date of the Plan.

Except as provided above, amendments to the following do not require approval by DOT/PHMSA:

- Personnel and telephone number lists included in the Plan.
- OSRO(s) change which does not result in a material change in support capabilities.

1.5 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).

1.5 REGULATORY COMPLIANCE (Cont'd)

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

- National Contingency Plan (NCP)
- EPA Region IV--Area Contingency Plan
- U.S. Coast Guard Sector St. Petersburg Digital Area Contingency Plan.

FIGURE 1.1
INFORMATION SUMMARY

GENERAL INFORMATION	
Pipeline Name and Address:	Central Florida Pipeline LLC 2101 GATX Drive Tampa, FL 33605 Phone: (813) 248-2148 Fax: (813) 247-4274
PHMSA Sequence Number:	608
NAICS:	48691
Operator Name and Address:	Kinder Morgan Energy Partners, L.P. 1001 Louisiana Street, Suite 1000 Houston, TX 77002 (713) 369-9454
Qualified Individual:	Ken Brinegar Director Operations (770) 751-4142 (Office) (404) 229-8332 (Mobile) ken_brinegar@kindermorgan.com
Alternate Qualified Individual:	Clint Lonon Operations Manager (813) 241-1106 (Office) (813) 458-9341 (Mobile) clint_lonon@kindermorgan.com
Alternate Qualified Individual	John Haynes Superintendent Operations Tampa (813) 241-1128 (Office) (813) 326-1980 (Mobile) john.haynes@kindermorgan.com
Alternate Qualified Individual	Richard Semcheski Superintendent Operations Orlando (407) 855-0713 (Office) (703) 463-6457 (Mobile) richard_semcheski@kindermorgan.com
Telephone/FAX:	Additional telephone references, including 24 hour numbers, for the Facility, Owner, and QI/AQI are provided in Figure 2.2.

FIGURE 1.1**INFORMATION SUMMARY (Cont'd)**

GENERAL INFORMATION (Cont'd)	
<i>Operator Statement of "Significant and Substantial Harm":</i>	As per 49 CFR 194.103, the significant and substantial harm criteria applies to both the 10 and 16 inch pipelines because the line sections are greater than 10 miles in length and are located within one (1) mile of potentially affected environmentally sensitive areas.
PIPELINE LOCATION	
<i>Counties Traversed:</i>	Hillsborough, Polk, Osceola, and Orange, Florida
<i>Response Zone:</i>	See Figure 1.2
PHYSICAL DESCRIPTION - PIPELINE	
<p><i>General:</i></p> <ul style="list-style-type: none"> The 16" pipeline originates at the Company's Tampa Pump Station and transports products to the Orlando Terminal. The 10" pipeline originates at the Company's Hemlock Pump Station and transports products to the Orlando Terminal. The Company operates under the oil pipeline regulations of the Department of Transportation (49 CFR Parts 194 & 195). This Plan is written in English and understood by personnel responsible for carrying out the Plan. <p><i>Pipeline Specifications:</i></p> <p>The basic specifications of the pipeline is as follows:</p> <ul style="list-style-type: none"> Product Types: Diesel fuels and Jet A (10"), Ethanol and Gasoline (16") Pipe Detail: 10" / 16" <p><i>Response Resources:</i></p> <p>Facility spill mitigation procedures and response guidelines are provided in Section 3.0 for discharges that could result from any of the following scenarios:</p> <ul style="list-style-type: none"> Pipeline rupture/leak Explosion and/or fire Equipment failure (e.g. pumping system failure, relief valve failure, etc.) 	

FIGURE 1.1**INFORMATION SUMMARY (Cont'd)****PHYSICAL DESCRIPTION - PIPELINE (Cont'd)****Response Resources (Cont'd):**

These scenarios could result in the following discharge volume:

Response Zone	Discharge Scenario	Potential Oil Group	DOT/PHMSA Planning Volume
Central Florida Response Zone 16" Line	WCD	1	(b) (7)(F)

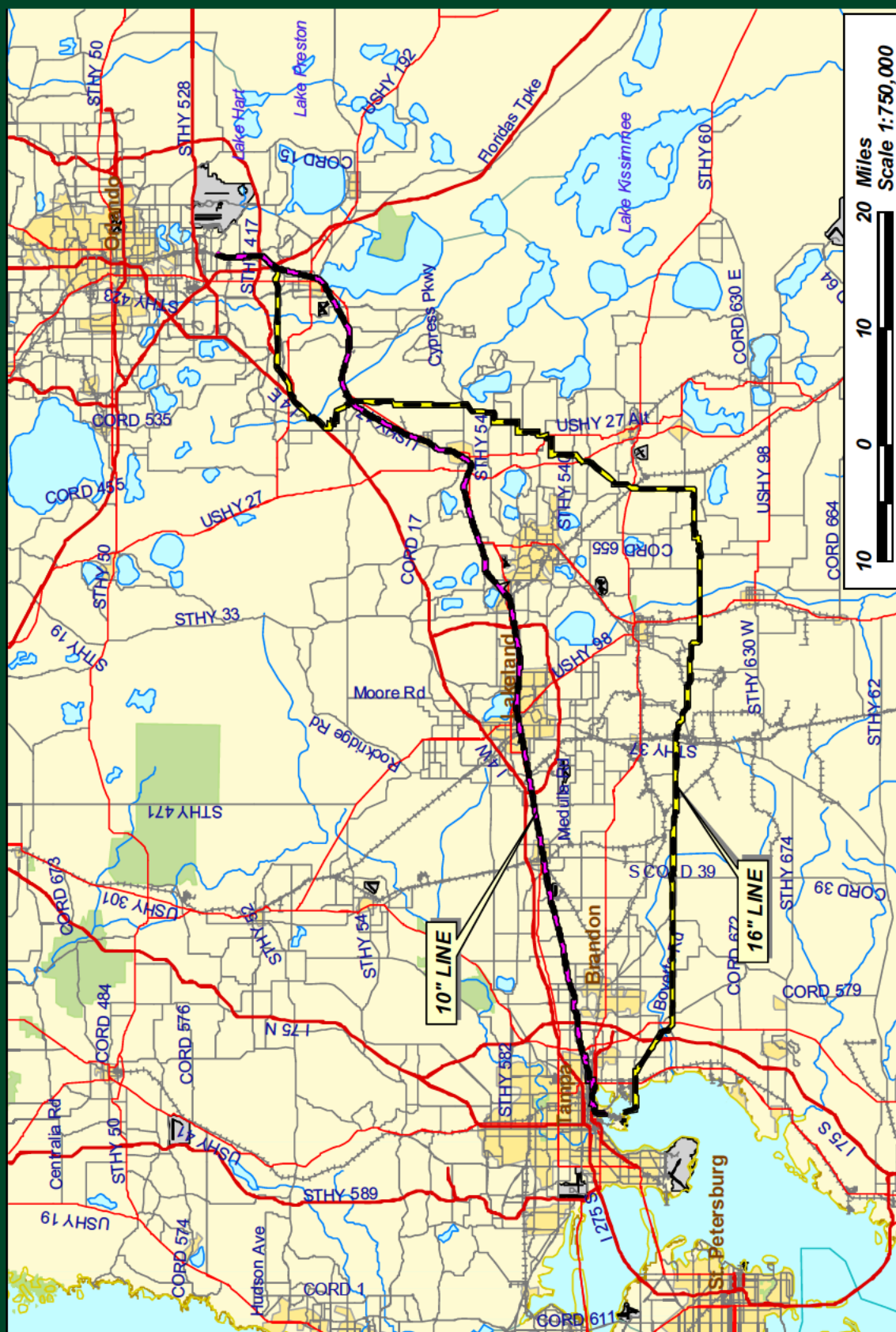
This Worst Case Discharge volume is used in calculating the planning volume for response resources. The planning volume is used to determine the necessary on-water recovery capacity to respond within the three (3) tiered response times. The identified oil spill recovery devices should be capable of arriving at the scene of a discharge within the time specified for the applicable response tier. The tier requirements for high volume areas are for response in six (6) hours (Tier 1), 30 hours (Tier 2), and 54 hours (Tier 3). High volume areas are listed in 49 CFR 194. The tier requirements for all other areas are for response in 12 hours (Tier 1), 36 hours (Tier 2), and 60 hours (Tier 3). Appendix C of this Plan demonstrates a series of calculations and planning volume determinations based on guidance provided by the U. S. Environmental Protection Agency (EPA) in 40 CFR Part 112 *Final Rule* dated July 1, 1994 and the Department of Transportation (DOT) PHMSA regulations in 49 CFR 194.105 dated February 23, 2005. The inclusion of these calculations is for demonstration of the response planning volumes and response capability necessary for on-water and on-shore recovery requirements as the result of the discharge scenarios outlined in the table above.

RESPONSE ZONE INFORMATION**General:**

- The Response Zone includes the following:

RESPONSE ZONE					
Name of Pipeline	Type of Oil	Start Point	End Point	Counties	State
Central Florida Pipeline	Ethanol and Refined Petroleum Products	CFPL Tampa Terminal	CFPL Orlando Terminal	Hillsborough, Polk, Osceola, Orange	FL

**Map Developed By
Response Management Associates, Inc.
(281) 320-9796**



2.0 NOTIFICATION PROCEDURES

This Section is a guide for notification procedures that should be implemented immediately after discovering a discharge incident and if possible, securing the source. Internal and external notifications are described separately for clarification purposes only. All notifications are of extreme importance and must be completed in a timely manner. Internal Notification References are included in Figure 2.2.

Use visual observations and the appropriate method described in L O&M 159 Attachment 5 to compute an initial volume estimate. When reporting initial volume, use the word “approximately” when describing the volume, unless the exact volume is known.

2.1 INTERNAL NOTIFICATION

The following internal notifications should be made for each emergency incident to the extent that the incident demands (telephone reference is provided in Figure 2.2). In no event shall notification be delayed because the immediate supervisor is inaccessible. Authorization is given to bypass management levels if necessary to provide timely notification to appropriate management. The typical internal notification responsibilities for each person potentially involved in the initial response are as follows:

The Emergency Response Line (ERL) will be used in the internal notification process. ERL is an automatic notification system that informs a predetermined list of people that an event has occurred and provides information regarding the event and any follow up actions, such as a conference call, if needed. This process expedites gathering those persons needed to make critical time sensitive decisions together. There are two (2) levels of the notification process, ERL and ERL Plus (an elevated level).

Person Discovering the Discharge

- ☐ Immediately notify the **Pipeline Control Room Personnel**, as the situation demands.
- ☐ Immediately notify **Terminal Supervisor**.

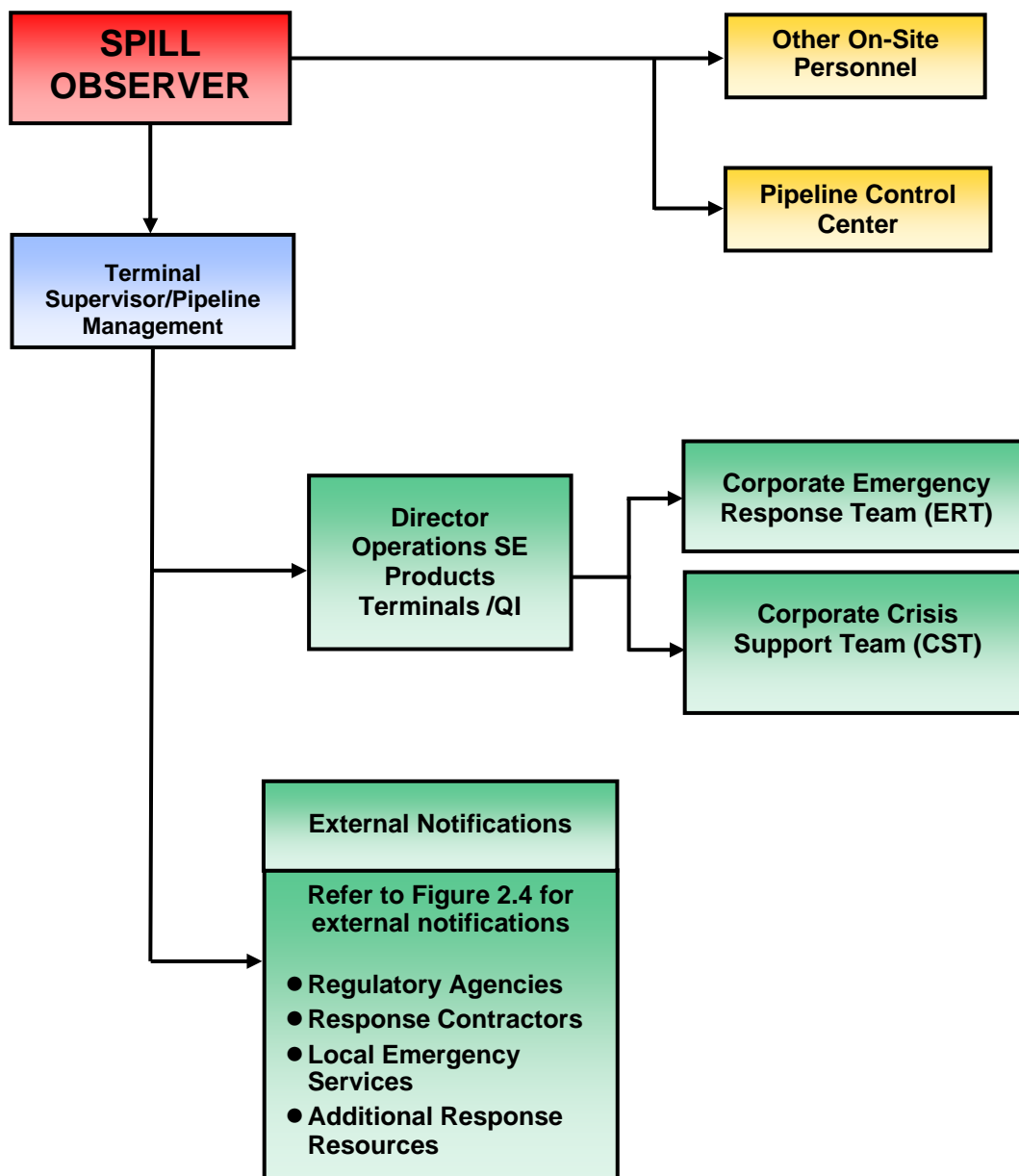
Terminal Supervisor/Pipeline Management

- ☐ If applicable, initiate Emergency Response Line (ERL) notification process.
- ☐ Activate the **Local Response Team**, as the situation demands.
- ☐ **Activate local emergency response resources (Oil Spill Removal Organizations (OSRO), fire, police, medical, etc.) as the situation warrants.**
- ☐ Notify the **Director Operations SE Products Terminals/QI**.

FIGURE 2.1

INTERNAL NOTIFICATION SEQUENCE

(Phone references are provided in Figures 2.2 and 2.4)



Section 2.0

Notification Procedures

FIGURE 2.2a

INTERNAL NOTIFICATION REFERENCES

INTERNAL NOTIFICATIONS - LOCAL RESPONSE TEAM				
POSITION/TITLE	NAME	LOCATION	OFFICE	OTHER
Qualified Individual / Director Operations	Ken Brinegar	Alpharetta, GA	(770) 751-4142	(404) 229-8332 Cell ken_brinegar@kindermorgan.com
Alt. Qualified Individual / Operations Manager	Clint Lonon	Tampa, FL	(813) 241-1106	(813) 458-9341 Cell clint_lonon@kindermorgan.com
Alt. Qualified Individual / Superintendent Operations Tampa	John Haynes	Tampa, FL	(813) 241-1128	(813) 326-1980 Cell john.haynes@kindermorgan.com
Alt. Qualified Individual / Superintendent Operations Orlando	Richard Semcheski	Orlando, FL	(407) 855-0713	(703) 463-6457 Cell richard_semcheski@kindermorgan.com
Houston Liquids Control Center		Houston, TX	(713) 369-9301	(800) 537-8832
Pipeline Control Room		Tampa, FL	(813) 241-1135	(813) 781-1745 Cell
Tampa Terminal Lead Operator		Tampa, FL	(813) 241-1113	(813) 781-1746 Cell

FIGURE 2.2b**INTERNAL NOTIFICATION REFERENCES
FLORIDA OPERATIONS PHONE LIST**

CENTRAL FLORIDA PIPELINE, LLC Florida Operations Phone List**TAMPA TERMINAL Phone: (813) 248-2148 Fax: (813) 247-4274**

Employee	Dept	Simply 5 Ext	241-Ext	Mobile	Home
Andres, Doug	Term Ops	41116	1116		(b) (6)
Clark, Mark	Maint	41124	1124	813-781-1718	
Fleck, Chris	EHS	41144	1144	813-415-1698	
Garcia, Sue	Term Ops	41116	1116		
Haynes, John	Term Supr	41128	1128	813-326-1980	
Hughes, Lee	CSR	41122	1122	813-781-1717	
Krueger, Sandra	Admin	41142	1142		
Lockard, Bobby	Term Ops	41113	1113	813-781-1748	
Lonon, Clint	OpsMgr-FL	41106	1106	813-458-9341	
McBurney, Doreen	Sched	41108	1108	813-781-1724	
McBurney, Mike	Sched	41114	1114	813-781-1722	
Pate, Steve	Term Ops	41116	1116	813-247-4274	
Phipps, Rodney	Term Ops	41116	1116		
Ryerson, Rich	Maint	41126	1126	813-299-1650	
Scharp, Bradley	IT	41110	1110	813-781-1741	
Schofield, Rob	Term Ops	41116	1116		
Siegel, Dean	Term Ops	41116	1116	813-787-6417	
Stewart, Darren	Maint	41119	1119	813-326-2794	
Strade, Joey	Term Ops	41116	1116	813-248-9761	
Thorn, Dave	Term Ops	41116	1116		
Tillman, Bill	Term Ops	41116	1116		
Westwood, Earl	Term Ops	41116	1116		
Willyard, Teresa	Admin	41138	1138		
Winchester, Del	Term Ops	41116	1116		

ORLANDO TERMINAL Phone: (407) 855-0713 Fax: (407) 826-9490

Employee	Dept	Simply 5 Ext	Mobile	Home
Anderson, Shirley	Term Ops	41216	407-832-7315	(b) (6)
Ash, Rita	CSR	41241		
Berger, Robert	Term Ops	41216		
Brisson, Scott	Term Ops	41217		
Cushingberry, Demond	Term Ops	41217		
Goberdhan, Krish	Term Ops	41217		
Hucek, Mark	Term Ops	41217		
Lewis, Ray	Term Ops	41217	813-468-7639	
Lonon, Clint	Ops Mgr-FL	41220	813-458-9341	
Mears, Fred	Maint	41242	407-832-3296	
Medrano, Manuel	Maint	41242		
Mitchell, Keith	Maint	41219	407-832-1667	
Percle, Paul	Term Ops	41217		
Semcheski, Richard	Sup Ops		703-463-6457	

PIPELINE - EMERGENCY HOT LINE - 24 HOURS 800-537-8832**All other emergencies - call 9-911****E-MAIL ADDRESS TO AUTHORIZE PORT ENTRY -- soc@tampaport.com**

FIGURE 2.2c

INTERNAL NOTIFICATION REFERENCES
RESPONSE CONTRACTORS

PIPELINE - EMERGENCY HOT LINE - 24 HOURS 800-537-8832						
RESPONSE CONTRACTORS	24 Hour Emergency Number	Office	Fax	Mobile	Pager	Home
SWS Environmental Services	877-742-4215					
Tampa		813-241-0282	813-241-0733			
St Petersburg (Largo)		727-546-6193	727-546-5365			
Orlando		407-854-5733				
Diversified Environmental Services	800-786-3256					
Eugene Russel		813-248-3256	813-247-5453	813-918-3775		
Clean Harbors Env. Services	800-645-8265					
Bartow		863-533-6111	863-519-6363			
Witt O'Brien's	985-781-0804	281-320-9796				
Tampa Pipe & Welding, Inc.		813-630-4757				
Artie Michalic				813-477-0250		
American Construction Sevices		813-247-1419				
Bobby Glover				813-240-0329		(b) (6)
Carl Aldridge				813-690-9602		
OTHER CONTRACTORS						
Allied Energy						
Transportation Manager		205-278-6172	205-925-5004	205-613-8208		
		205-925-6600x1112				
Aqua Clean Environmental Co.						
Lakeland		863-644-0665	863-646-1880			
		800-644-0665				
Craig Burns				863-712-2245		
Bob Torok				863-712-6631		
CH2M Hill						
Tampa		813-874-0777	813-874-3056			
Orlando		407-423-0030	407-839-5901			
Clark Environmental, Inc. - Mulberry	800-276-2187					
Steve Hall		863-425-4884	863-425-2854	863-559-6727		
Cliff Berry Inc. (CBI)	800-899-7745					
Tampa		813-626-6533	813-626-9012			
Fort Lauderdale HQ		954-763-3390	954-763-8375			
CSR Rinker - Miami (Non-Hazardous Diesel Absorbents and Hydrocarbon Soil Materials Recycling)						
Pat Petrillo		305-225-1423	305-220-9875	305-794-3993		
FCC Environmental						
Plant City		800-235-0189	800-282-9585			
Orlando		800-235-0189	407-854-1620			
URS						
Orlando		407-422-0353	407-423-2695			
Tampa		813-443-8404				

Section 2.0

Notification Procedures

FIGURE 2.3

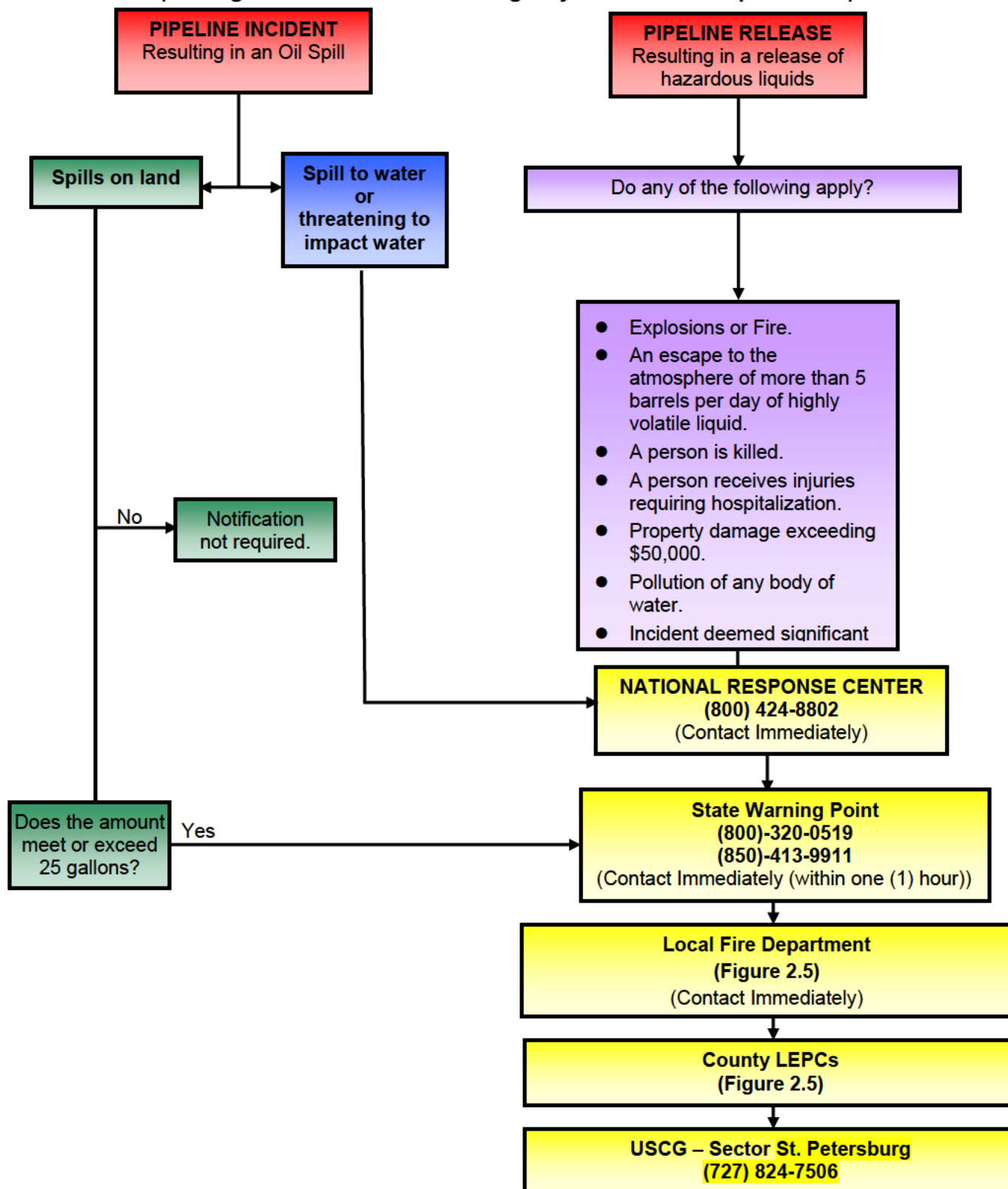
NOTIFICATION DATA SHEET		
Date: _____		Time: _____
INCIDENT DESCRIPTION		
Reporter's Full Name: _____		Position: _____
Day Phone Number: _____		Evening Phone Number: _____
Company: <u>Central Florida Pipeline LLC</u>		Organization Type: _____
Company Address: <u>2101 GATX Drive</u>		Owner's Address: <u>Kinder Morgan Energy Partners, L.P.</u>
<u>Tampa, FL 33605</u>		<u>1001 Louisiana Street</u>
		<u>Suite 1000</u>
		<u>Houston, TX 77002</u>
Incident Latitude: _____		Incident Longitude: _____
Spill Location: _____		
Responsible Party's Name: _____		Phone Number: _____
Responsible Party's Address: _____		
Source and/or cause of discharge: _____		
Present Weather Conditions: _____		
Nearest City: _____		
County: _____		State: _____
Section: _____		Zip code: _____
Township: _____		Range: _____
Distance from City: _____		Borough: _____
Container Type(if applicable): _____		Direction from City: _____
Facility Oil Storage Capacity (if applicable): _____		Container Storage Capacity (if applicable): _____
Material: _____		
Total Quantity Released	Water Impact (YES or NO)	Quantity into Water
RESPONSE ACTION(S)		
Action(s) taken to Correct, Control, or Mitigate Incident: _____		
Number of Injuries: _____		
Number of Deaths: _____		
Evacuation(s): _____		
Number Evacuated: _____		
Damage Estimate: _____		
More information about impacted medium: _____		
CALLER NOTIFICATIONS		
National Response Center (NRC): <u>1-800-424-8802 or 202-267-2675</u>		
Additional Notifications (Circle all applicable): <u>USCG</u> <u>EPA</u> <u>State</u> <u>Other</u>		
ADDITIONAL INFORMATION		
Any information about the incident not recorded elsewhere in this report: _____		

NOTE: DO NOT DELAY NOTIFICATION PENDING COLLECTION OF ALL INFORMATION.		

FIGURE 2.4

EXTERNAL NOTIFICATION FLOWCHART

(See Fig. 2.5 for more details on Agency Notification Requirements)



2.2 EXTERNAL NOTIFICATIONS

External notifications are those made to entities outside of the Company including Federal, state and local regulatory agencies, as well as, railroad and utility companies. These notifications will be made as follows:

- ***Environmental Coordinator***
 - National Response Center (NRC)
 - State Warning Point
 - Local agencies
 - All releases reported to any agency due to special agreement; and
 - USCG (as necessary).

The Notification Data Sheet (see Figure 2.3) should be used to begin the external notification process, keeping in mind that there are some strict time limits for making certain calls.

The following are guidelines to be considered when initiating external notifications:

- Receive faxed copy of Notification Data Sheet from Company employee or, at a minimum, gather pertinent incident information from the third party reporting the release.
- Do not report information that has not been verified or confirmed, usually by field personnel.
- Do not speculate as to the cause on an incident or make any statements about liability.
- Do not delay notifications because of incomplete information.
- When making notifications, document:
 - Agency notified, including telephone number
 - Date and time of notification
 - Person notified
 - Content of message
 - Incident number, if applicable

External required agency notifications contact numbers are provided in Figure 2.4.

Periodic Follow-up Notification during Emergency Response

Periodic follow-up notification must be made within the Company as well as to Federal, state, and local agencies. Responsibility for periodic follow-up notifications remains with each individual as initially assigned within the notification process flowcharts provided in Figure 2.1, unless that responsibility has been transferred based on the magnitude of the response.

FIGURE 2.5**EXTERNAL NOTIFICATION REFERENCES**

REQUIRED NOTIFICATIONS (FOR ALL FACILITIES)	
NATIONAL RESPONSE CENTER	
National Response Center c/o United States Coast Guard (CG-3RPF) 2100 2 nd Street Southwest Room 2111-B Washington, DC 20593-0001	(800) 424-8802 * (202) 267-2180* (202) 267-2675* (202) 267-1322 (Fax)
REPORTING REQUIREMENTS	
<p>TYPE: For all spills that impact or threaten to impact navigable water or for any failure in a pipeline system that:</p> <ol style="list-style-type: none"> 1. Caused a death or a personal injury requiring hospitalization 2. Resulted in either a fire or explosion not intentionally set by the carrier. 3. Caused estimated damage to the property of the carrier or others, or both, of a total of \$50,000 or more. 4. Resulted in the pollution of any stream, river, lake, reservoir, or other similar body of water that violated applicable water or adjoining shoreline, causing a discoloration or emulsion beneath the surface of the water or upon adjoining shorelines. 5. In the judgment of the carrier, was significant even though it did not meet the criteria of any other subparagraph of this paragraph. <p>NOTE: A call to the NRC must also be made for spills or releases of hazardous substances that meet or exceed their RQ.</p> <p>VERBAL: Immediate notification required (within 2 hours).</p> <p>WRITTEN: Not required</p>	

* 24-Hour Number

FIGURE 2.5**EXTERNAL NOTIFICATION REFERENCES (Cont'd)**

REQUIRED NOTIFICATIONS (FOR DOT REGULATED FACILITIES)		
DEPARTMENT OF TRANSPORTATION		
US Dept. of Transportation		(800) 424-8802*
Information Resources Manager		(202) 267-2180*
Office of Pipeline Safety		(202) 267-2675*
Pipeline and Hazardous Materials Safety Administration		(202) 267-1322 (Fax)
1200 New Jersey Avenue SE – E – 3 – 22 - 321		(202) 366-4566 (Fax Filing)
Washington, DC 20590		
PHMSA Southern Region	Hazardous Materials Safety	(404) 832-1140
		(404) 832-1168 (Fax)
	Pipeline Safety	(404) 832-1147
		(404) 832-1169 (Fax)
REPORTING REQUIREMENTS		
<p>TYPE: In addition to the reporting of accidents to the NRC, a written accident report (Form PHMSA F7000-1) must be submitted for releases resulting in any of the following:</p> <ol style="list-style-type: none"> 1. Explosion or fire not intentionally set by the operator. 2. Release of 5 gallons or more of hazardous liquid or carbon dioxide, except that no report is required for a release of less than 5 barrels resulting from a pipeline maintenance activity if the release is: <ol style="list-style-type: none"> a. Not one described under the NRC's reporting conditions. b. Confined to Company property or pipeline right-of-way; and c. Cleaned up promptly. 3. Death of any person. 4. Personal injury necessitating hospitalization. 5. Estimated property damage, including cost of cleanup and recovery, value of lost product, and damage to the property of the operator or others, or both, exceeding \$50,000. <p>VERBAL: Call to the NRC meets the required verbal notification under DOT reporting requirement.</p> <p>WRITTEN: As soon as practicable, an accident meeting any of the above criteria must be reported on DOT Form 7000-1. The report must be sent to DOT no later than 30 days after the release. Changes or additions to the original report (DOT Form 7000-1) must file a supplemental report within 30 days.</p>		

* 24-Hour Number

FEDERAL

FIGURE 2.5**EXTERNAL NOTIFICATION REFERENCES (Cont'd)**

STATE REPORTING REQUIREMENTS	
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION - STATE WARNING POINT	
Florida Marine Patrol Bureau of Emergency Response	(800) 320-0519* (850) 413-9911* (888) 404-3922* (In state only)
Florida Department of Environmental Protection 3900 Commonwealth Blvd. M.S. 665 Tallahassee, FL 32399	(850) 245-2929 (850) 245-2857 (Fax)
Florida Department of Environmental Protection - Southwest District (Hillsborough, Polk Counties) 13051 N Telecom Parkway Temple Terrace, FL 33637-0926	(813) 632-7641 (Emergency Response) (813) 744-6462 (Fax)
Florida Department of Environmental Protection - Central District (Orange, Osceola Counties) 3319 Maguire Blvd., Ste 232 Orlando, FL 32803-3767	(407) 897-4341 (Emergency Response) (407) 897-6499 (Fax)
REPORTING REQUIREMENTS TYPE: Spills into/involving state waterway, any amount; spills greater than 25 gallons or with a potential greater than 25 gallons, spills requiring any state/federal notifications or assistance. All CERCLA releases, all spills threatening population or the environment; all spills requiring evacuation. Any discharge of oil that meets the reporting requirements of the U.S. EPA or any hazardous substance exceeding an RQ. VERBAL: Within one (1) hour. WRITTEN: As soon as practicable after the release. A written report must include: <ol style="list-style-type: none"> Name, address, and telephone number of person reporting. Name, address, and telephone number of person responsible for the discharge or release, if known. Date and time of the discharge or release. Type or name of substance discharged or released. Estimated amount of the discharge or release. Location or address of discharge or release. Source and cause of the discharge or release. Size and characteristics of area affected by the discharge or release. Containment and cleanup actions taken to date. Other persons or agencies contacted. 	

* 24-Hour Number

**FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION**

FIGURE 2.5**EXTERNAL NOTIFICATION REFERENCES (Cont'd)**

REQUIRED NOTIFICATIONS	
HILLSBOROUGH COUNTY ENVIRONMENTAL PROTECTION COMMISSION	
Waste Management Division 1410 North 21 st Street Tampa, FL 33605	(813) 272-5788 (813) 276-2256 (FAX)
REPORTING REQUIREMENTS TYPE: Spills into/involving State waterway, any amount; spills greater than 25 gallons, spills requiring any state/federal notifications or assistance. All CERCLA releases, all spills threatening population or the environment; all spills requiring evacuation. Any discharge of oil that meets the reporting requirements of the U.S. EPA or any hazardous substance exceeding an RQ VERBAL: As soon as possible, but no later than 24 hours. WRITTEN: As soon as practicable after the release. A written report must include: <ol style="list-style-type: none"> 1. Name, address, and telephone number of person reporting 2. Name, address, and telephone number of person responsible for the discharge or release, if known. 3. Date and time of the discharge or release. 4. Type or name of substance discharged or released. 5. Estimated amount of the discharge or release 6. Location or address of discharge or release. 7. Source and cause of the discharge or release. 8. Size and characteristics of area affected by the discharge or release. 9. Containment and cleanup actions taken to date. 10. Other persons or agencies contacted. 	

FIGURE 2.5**EXTERNAL NOTIFICATION REFERENCES (Cont'd)**

REQUIRED NOTIFICATIONS (Cont'd)	
ORANGE COUNTY ENVIRONMENTAL PROTECTION DIVISION (OCEPD)	
800 Mercy Drive Orlando, FL 32808	(407) 836-1400 (407) 836-1499 (FAX)
REPORTING REQUIREMENTS <p>TYPE: Spills into/involving State waterway, any amount; spills greater than 25 gallons, spills requiring any state/federal notifications or assistance. All CERCLA releases, all spills threatening population or the environment; all spills requiring evacuation. Any discharge of oil that meets the reporting requirements of the U.S. EPA or any hazardous substance exceeding an RQ</p> <p>VERBAL: As soon as possible, but no later than 24 hours.</p> <p>WRITTEN: As soon as practicable after the release. A written report must include:</p> <ol style="list-style-type: none"> 1. Name, address, and telephone number of person reporting 2. Name, address, and telephone number of person responsible for the discharge or release, if known. 3. Date and time of the discharge or release. 4. Type or name of substance discharged or released. 5. Estimated amount of the discharge or release 6. Location or address of discharge or release. 7. Source and cause of the discharge or release. 8. Size and characteristics of area affected by the discharge or release. 9. Containment and cleanup actions taken to date. 10. Other persons or agencies contacted. 	

FIGURE 2.5**EXTERNAL NOTIFICATION REFERENCES (Cont'd)**

REQUIRED NOTIFICATIONS (Cont'd)	
LOCAL EMERGENCY PLANNING COMMITTEES (LEPC)	
East Central Florida Regional Planning Council (Orange, Osceola Counties) 631 North Wymore Road, Ste. 100 Maitland, FL 32751	(407) 623-1075 x335 (407) 623-1084 (Fax)
Central Florida Regional Planning Council (Polk County) Post Office Drawer 2089 Bartow, FL 33831	(863) 534-7130 (863) 534-7138 (Fax)
Tampa Bay Regional Planning Council (Hillsborough County) 4000 Gateway Centre Boulevard, Ste. 100 Pinellas Park, FL 33782	(727) 570-5151 (727) 570-5118 (Fax)
REPORTING REQUIREMENTS TYPE: Spills into/involving State waterway, any amount; spills greater than 25 gallons, spills requiring any state/federal notifications or assistance. All CERCLA releases, all spills threatening population or the environment; all spills requiring evacuation. Any discharge of oil that meets the reporting requirements of the U.S. EPA or any hazardous substance exceeding an RQ VERBAL: As soon as possible, but no later than 24 hours. WRITTEN: As soon as practicable after the release. A written report must include: <ol style="list-style-type: none"> 1. Name, address, and telephone number of person reporting 2. Name, address, and telephone number of person responsible for the discharge or release, if known. 3. Date and time of the discharge or release. 4. Type or name of substance discharged or released. 5. Estimated amount of the discharge or release 6. Location or address of discharge or release. 7. Source and cause of the discharge or release. 8. Size and characteristics of area affected by the discharge or release. 9. Containment and cleanup actions taken to date. 10. Other persons or agencies contacted. 	

**LOCAL EMERGENCY
PLANNING COMMITTEES**

FIGURE 2.5

EXTERNAL NOTIFICATION REFERENCES (Cont'd)

OTHER POTENTIAL REQUIRED NOTIFICATIONS	
OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)	
200 Constitution Avenue Washington, D.C. 20210	(800) 321-6742
REPORTING REQUIREMENTS TYPE: Fatality from a work related incident or the inpatient hospitalization of three (3) or more employees as a result of a work related incident VERBAL: Immediately WRITTEN: As requested by the Agency	
U.S. COAST GUARD - SECTOR ST PETERSBURG	
600 8 th Avenue S.E. ST. Petersburg, FL 33701	Emergency Primary Response Department (727) 824-7506* (727) 824-7574 (727) 824-7674 (727) 824-7556 (Fax)
MSO Tampa 155 Columbia Drive Tampa, FL 33606	Prevention Department (813) 228-2191 Ext 8121
REPORTING REQUIREMENTS TYPE: Immediately for all spills that impact or threaten navigable water or adjoining shoreline. VERBAL: Notification to the USCG is typically accomplished by the call to the NRC. WRITTEN: As the agency may request depending on circumstances.	
U.S. EPA REGION 4	
Sam Nunn Atlanta Federal Center 61 Forsyth Street Atlanta, GA 30303	(800) 241-1754 (404) 562-9900 (404) 562-8700* (Spill Reporting)
U.S. FISH AND WILDLIFE SERVICE	
1849 C Street NW Washington, D.C. 20240-0002	(202) 208-3100
REPORTING REQUIREMENTS TYPE: Wildlife Protection / Rehabilitation. VERBAL: Immediately WRITTEN: As the agency may request depending on circumstances	

* 24-Hour Number

OTHER FEDERAL

FIGURE 2.5**EXTERNAL NOTIFICATION REFERENCES (Cont'd)**

NON-REQUIRED ASSISTANCE/ADVISORY NOTIFICATIONS	
FIRE DEPARTMENTS	
Auburndale Fire Department	(863) 965-5529
Bartow Fire Department	(863) 534-5044
Davenport Fire Department	(863) 422-5975
Haines City Fire Department	(863) 421-3611
Hillsborough County Emergency Dispatch / Lithia Fire Station	(813) 272-5665
Riverview Fire Station	(813) 671-7750
Kissimmee Fire Department	(407) 518-2222
Lake Wales Fire Department	(863) 678-4203
Loughman Fire Dept. Station 18	(863) 421-3380
Mulberry Fire Dept. Station 380	(863) 425-2912
Orlando Fire Dept. International Airport	(407) 825-2065
Orange County Emergency Dispatch	(407) 836-2777
Osceola County Emergency Dispatch	(407) 348-7444
Polk County Emergency Dispatch	(863) 534-0360*
Polk County Fire Dept. – Bartow	(863) 534-0380
Tampa Hazardous Incident Team	(813) 223-4211

FIRE DEPARTMENTS

Section 2.0

Notification Procedures

NON REQUIRED ASSISTANCE/ADVISORY NOTIFICATIONS (Cont'd) (outside resources)		
FBI/HOMELAND SECURITY		
FBI – Orlando		(407) 875-9976
FBI – Tampa		(813) 253-1000
Homeland Security Director – Florida		(850) 410-7233
POLICE DEPARTMENTS		
Auburndale Police Department		(863)965-5555
Bartow Police Department		(863)534-5034
Lake Wales Police Department		(863)678-4223
Kissimmee Police Department		(407)847-0176
Mulberry Police Department		(863)425-1119
Orlando Police Department		(407)246-2470
Tampa Police Department		(813)276-3200
Florida Highway Patrol	Troop D 133 S Semoran Orlando, Florida 32807	(407)737-2300
SHERIFF'S DEPARTMENT		
Hillsborough County Sheriff	2008 E. 8 th Avenue Tampa, FL 33605	(813) 247-8000
Orange County Sheriff	2500 West Colonial Dr. Orlando, FL 32803	(407) 836-3700
Osceola County Sheriff	400 Simpson Rd. Kissimmee, FL 34744	(407) 348-2222
Polk County Sheriff	455 North Broadway Ave. Bartow, FL 33830	(863) 533-0344

LAW ENFORCEMENT

FIGURE 2.5**EXTERNAL NOTIFICATION REFERENCES (Cont'd)**

NON REQUIRED ASSISTANCE/ADVISORY NOTIFICATIONS (Cont'd) (outside resources)		
Public Safety Access/Answering Point (911 Center)		
Hillsborough County Sheriff's Office	Tampa, FL	(813) 247-8200*
Orange County Sheriff's Office	Winter Park, FL	(407) 836-4357*
Osceola County Sheriff's Office	Kissimmee, FL	(407) 348-2222*
Polk County Communications Center	Winter Haven, FL	(863) 401-2226*
HOSPITALS		
Orlando Regional Medical Center		(407) 841-5111
Tampa General Hospital		(813) 844-7000 (813) 844-7100 (Emergency)
Bartow Memorial Hospital	US 98 N Bartow, FL 33830	(863) 519-0305
Heart of Florida Regional Medical Center (Davenport)	40100 Highway 27 Davenport, FL 33837-5906	(863) 419-2400
Heart of Florida Regional Medical Center (Haines City)	1615 US Highway 27 N Haines City, FL 33844-2825	(863) 419-2273
Florida Hospital Centra Care – Walk In Urgent Care	4320 W Vine St Kissimmee, FL 34746-6313	(407) 390-1888
Florida Hospital Emergency Department	2450 N Orange Blossom Trl Kissimmee, FL 34741-2316	(407) 933-6632
Lake Wales Medical Center	410 S 11th Street Lake Wales, FL 33853-4203	(863) 676-1433
Tampa General Hospital	2 Columbia Dr Tampa, FL 33606-3508	(813) 251-1991
Orlando Regional Healthcare – Sand Lake Hospital	9400 Turkey Lake Rd Orlando, FL 32819	(407) 351-8500
OTHER		
Tampa Port Authority (TPA)		(813) 905-7678
Tampa Port Security Compliance Office		(813) 241-1881
City of Tampa Wastewater Treatment Plant		(813) 247-3451 (813) 248-5269 (Fax)

* 24-Hour Number

HOSPITALS/OTHER

3.0 RESPONSE ACTIONS

3.1 INITIAL RESPONSE ACTIONS

Emergencies and spills shall be reported immediately to the **Operations Control Center** at (813) 241-1135 or (800) 537-8832.

Initial response actions are those taken by local personnel immediately upon becoming aware of a discharge or emergency incident, before the Local Response Team (described in Section 4.0) is formed and functioning. Timely implementation of these initial steps is of the utmost importance because they can greatly affect the overall response operation.

The pages that follow discuss initial response actions for a variety of emergencies that have the possibility of occurring. These emergencies are discussed in the order listed below:

- Leaks/Spills
- Fire/Explosions
- Bomb Threat
- Natural Disasters (including non-emergencies and near misses)
- Medical Emergencies

It is important to note that **these actions are intended only as guidelines**. The appropriate response to a particular incident may vary depending on the nature and severity of the incident and on other factors that are not readily addressed. Note that, **without exception, personnel and public safety is first priority**.

The first Company person on scene will function as the person-in-charge until relieved by an authorized supervisor who will assume the position of Incident Commander (IC). Transfer of command will take place as more senior management respond to the incident. For response operations within the control of the Local Response Team, the role of IC will typically be assumed and retained by Facility Management.

The person functioning as **Incident Commander** during the initial response period **has the authority to take the steps necessary to control the situation and must not be constrained by these general guidelines**.

INITIAL RESPONSE ACTIONS - SUMMARY

- Personnel and Public Safety is first priority
- Eliminate sources of ignition
- Isolate the source of the discharge, minimize further flow
- Activate the Local Response Team as necessary
- Make internal notifications
- Make external notifications
- Activate response contractors and other external resources as necessary
- Monitor and control the containment and clean-up effort

Section 3.0

Response Actions

3.1 INITIAL RESPONSE ACTIONS (Cont'd)

FIRST COMPANY PERSON NOTIFIED/ON SCENE

- _____ Follow the appropriate "*Specific Incident Response Checklist*" in Figure 3.1 and "*Product Specific Response Considerations*" beginning on Figure 3.2.
- _____ Notify **Management** of the incident.
- _____ Utilize local emergency services as necessary (police, fire, medical).

FACILITY MANAGEMENT

- _____ **Evaluate the Severity**, Potential Impact, Safety Concerns, and Response Requirements based on the initial data provided by the first person on scene.
- _____ Assume the role of **Incident Commander**.
- _____ **Confirm safety** aspects at site, including need for personal protective equipment, sources of ignition, and potential need for evacuation.
- _____ Activate the **Local Response Team** and **primary response contractors**, as the situation demands.
- _____ Coordinate/perform **activation of additional spill response contractors**, as the situation demands (telephone reference is provided in Figure 2.5).
- _____ Perform notifications as per Figure 2.1, including Spill Management Team activation, as necessary.
- _____ Coordinate/perform **regulatory agency notification**, as the situation demands (notification procedures and telephone references are provided in Figures 2.4 and 2.5 respectively).
- _____ Proceed to spill site and **coordinate response and clean-up operations**.
- _____ Direct containment, dispersion, and/or clean-up operations in accordance with the "**Product Specific Response Considerations**" beginning on Figures 3.2.

LOCAL RESPONSE TEAM

- _____ Assigned personnel will immediately respond to a discharge from the Pipeline, as the situation demands.
- _____ Perform response/clean-up operations as directed or coordinated by the Incident Commander.
- _____ Assist as directed at the spill site.

FIGURE 3.1**SPECIFIC INCIDENT RESPONSE CHECKLIST**

Remember, Without Exception, Personnel Safety Is The First Priority. Excessive Exposure To The Vapor And Liquid Stages Of The Spilled Product Should Be Avoided.

INITIAL RESPONSE

- ____ Take appropriate personal protective measures.
- ____ Call for medical assistance if an injury has occurred.
- ____ Restrict access to the spill site and adjacent area as the situation demands. Take additional steps necessary to minimize any threat to health and safety.
- ____ Verify the type of product and quantity released.
- ____ Advise personnel in the area of any potential threat and/or initiate evacuation procedures.
- ____ Use testing and sampling equipment to determine potential safety hazards, as the situation demands.
- ____ Identify/Isolate the source and minimize the loss of product.
- ____ Take necessary fire response actions.
- ____ Eliminate possible sources of ignition in the near vicinity of the spill.
- ____ Notify Facility Management of the incident.

All personnel are reminded that outsiders other than emergency services will not be allowed in the Facility during the time of an emergency, and that no statements will be issued to the media or other interested parties except by designated Company Management. Be courteous with media representatives and direct them to the designated spokesman.

FIGURE 3.1**SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)****LINE BREAK OR LEAK, SPECIFIC RESPONSE**

- _____ Notify management (any level) with the following
 - Location, volume, source and material released
 - Note time found
 - Management to notify Incident Commander and EH&S Department personnel
 - Pull MSDS for product and have it available
 - Initiate internal and external notifications (EHS will handle agency notifications)
 - Use alternate telephone # for call-backs and out-going calls
 - Begin an incident log with timeline
- _____ Begin initial response
 - Evacuate and secure immediate area
 - Account for contractors and Company personnel
 - Approach from upwind direction
 - Eliminate any potential ignition sources
 - Initiate air monitoring (i.e., O₂, LEL, chemical, heat stress, etc.) and establish hot, warm and cold zones
 - Foam release (if significant volume of flammable) within 15 minutes
 - First responder to stop source and contain (if possible) in a safe manner
- _____ ERT assemble at Command Post for briefing
 - Fill positions in IMS (if required based on size and type of incident)
 - Determine PPE requirements indicated on MSDS or PPE matrix
 - Approach from upwind direction
 - Dispatch equipment needed to contain and start clean-up (use of portable or fixed monitors, vacuum trucks, fire truck, boat, absorbents, non-sparking shovels, etc.)

NOTE: DO NOT USE SPILL BOAT OR BOOM FOR FLAMMABLE SPILLS INTO THE WATER
- _____ Continue initial response/assess situation
 - Ensure that pumps/electrical equipment have been shut down
 - Include vessel, ships and docks if spill is at dock or on waterfront
 - Control and direct traffic flow (establish and staff staging area if required)
 - Notify any affected neighboring facilities
 - Consider fence line air monitoring if release will affect property off-site
- _____ Establish objectives and priorities based on this assessment
 - Contain to keep from impacting additional areas (closing dike drains, outfalls, etc.)
 - Maintaining foam blanket will be necessary to suppress vapors if material is flammable and posing a threat of a fire or high LEL levels
 - Vacuum up or absorb free product (all equipment used must be grounded)
 - Stop source safely if first responder could not (due to vapor exposures or risk of fire)

LEAKS/SPILLS

FIGURE 3.1**SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)****EXPLOSIONS AND/OR FIRE, SPECIFIC RESPONSE****INDIVIDUAL DISCOVERING THE FIRE - (All Employees)**

In the event that a fire response is required by the ERT, the following actions should be taken, in order:

NOTE: If the situation warrants, and your personal safety is ensured, initial efforts to extinguish small incipient stage fires may prove to be the best action. In these situations, if you believe that your personal safety is not at risk, and you can take interim measures to mitigate a situation while the ERT is deploying - do so.

- _____ Notify Management (any level)
 - Acknowledge information and switch all emergency communications to an alternate channel
 - Have the ERT members secure all operations on which they are working before responding
 - Note time of call
 - Sound the emergency siren, contact the local fire department
 - Have staff member check weather for any changes in wind direction
- _____ Account for contractors and Company personnel.
- _____ IC mobilize to scene
 - Check wind direction- **approach from upwind**
 - Confirm and conduct a preliminary assessment of the situation upon arrival at the scene
 - Evaluate scene for potential hazards (i.e., overhead power lines, obstacles wind direction)
 - Determine what product is involved and have MSDS pulled and reviewed for PPE and firefighting instructions
- _____ Assemble the ERT at the Command Post
 - Fill positions (as required) in the Incident Management System
 - If not already present, notify IC, Safety Officer, and Operations Chief
 - Have truck dispatched immediately to area
 - Have fire pumps started and on standby (if applicable)
 - Initiate internal and external notifications in accordance with the fire and other emergency response plans
 - Have ERT members bunker up and bring IC gear to scene

FIRE/EXPLOSION

FIGURE 3.1**SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)****EXPLOSIONS AND/OR FIRE, SPECIFIC RESPONSE (Cont'd)**

- _____ Eliminate any sources of ignition in the immediate area
 - Shut down pumps and any movement into / out of area
 - Shut down contractor activity
 - Stop traffic flow into and out of area
 - Adjacent tank pumps and motors
 - Be aware of static electricity

- _____ Establish objectives and priorities based on this assessment in conjunction with qualified emergency response personnel.
 - Get AFFF or AR-AFFF on the fire; dependent on whether the fire is an Ethanol fire.
 - Be aware of overhead power lines, DO NOT flow foam near them
 - Find a way to get foam to the fire quickly and safely (i.e., monitors, hydrants, truck)
 - Foam will quickly fill the dike area
 - Evaluate the foam usage and determine whether or not to open / close the internal and external dike drains

FIGURE 3.1**SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)****BOMB THREATS, SPECIFIC RESPONSE**

(b) (7)(F)



FIGURE 3.1**SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)****BOMB THREATS, SPECIFIC RESPONSE (Cont'd)**

(b) (7)(F)



FIGURE 3.1**SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)****NATURAL DISASTER (Tornado and Severe Storms), SPECIFIC RESPONSE**

Although many disasters cannot be prevented or predicted, preparation can significantly reduce losses. In the event of a severe weather condition or a natural disaster, the Facility Manager or a Facility Operator will be the Emergency Coordinator.

- **Be Aware of Changing Weather Conditions**
 1. Tornado watch - conditions are right for the formation of a tornado.
 2. Tornado warning - a tornado has been sighted but is not in the area at this time.
 3. Tornado alert - a tornado has been sighted in the immediate area - take cover immediately.
- **If Severe Weather Conditions Threaten**
 1. Announce over P.A. system for the office and petroleum loading rack. The Motorola two-way radios and Nextel radios will be used to broadcast to other areas.
 2. Alert Facility personnel of condition.
 3. If time permits, all personnel should assemble at an inside room in the Facility for shelter.
 4. If time does not permit, seek shelter in low level area away from glass.
 5. Make certain that Facility personnel are aware of the condition.
 6. Stay in shelter until "all clear" has been issued.
- **Immediately After the Storm**
 1. Account for all personnel.
 2. Survey for damages to the Facility.
 3. Initiate team for any repairs if needed (i.e. high tank alarms, lighting, etc.).
 4. Refer to this Plan for additional response guidance regarding fires, spills, etc., as needed.

FIGURE 3.1**SPECIFIC INCIDENT RESPONSE CHECKLIST (Cont'd)****MEDICAL EMERGENCY, SPECIFIC RESPONSE**

- _____ Apply appropriate first aid for both injury and shock, exercising care not to cause further injury.
- _____ Notify local emergency medical services.
- _____ If victim is unconscious and not breathing, immediately apply artificial respiration (if trained in CPR) and continue without interruption until natural breathing is restored or relieved by trained CPR personnel or other qualified medical personnel.
- _____ Notify hospital of patient arrival and extent of injury.
- _____ Complete follow-up and written reporting, as the situation demands. Refer to the Company's Injury Procedures detailed in the appropriate Terminal ICP.

MEDICAL EMERGENCY

FIGURE 3.2

FLAMMABLE LIQUIDS (Polar/Water-Miscible)

The following information is intended to provide the initial responder(s) with data that may be useful in making quick decisions and executing prompt response actions. The information is intended for guideline purposes only.

PRODUCTS: Ethanol

HAZARD IDENTIFICATION / RECOGNITION

GUIDE NO.
127

DANGERS

- HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames.
- Vapors may form explosive mixtures with air.
- Vapors may travel to source of ignition and flash back.
- Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Vapor explosion hazard indoors, outdoors or in sewers.
- Those substances designated with a "P" may polymerize explosively when heated or involved in a fire.
- Runoff to sewer may create fire or explosion hazard.
- Containers may explode when heated.
- Many liquids are lighter than water.

HEALTH

- Move victim to fresh air. Call 911 or emergency medical service.
- Apply artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Wash skin with soap and water.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions.

PUBLIC SAFETY

- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- Ventilate closed spaces before entering.

EVACUATION

Large Spill

- Consider initial downwind evacuation for at least 300 meters (1,000 feet).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

Information provided by the Emergency Response Guidebook 2008.

FIGURE 3.3

FLAMMABLE LIQUIDS (Non-Polar/Water-Immiscible)	
The following information is intended to provide the initial responder(s) with data that may be useful in making quick decisions and executing prompt response actions. <u>The information is intended for guideline purposes only.</u>	
PRODUCTS #2 Fuel Oil (Diesel) Gasoline Kerosene Jet A	
HAZARD IDENTIFICATION / RECOGNITION	
GUIDE NO. 128	DANGERS <ul style="list-style-type: none"> ● HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames. ● Vapors may form explosive mixtures with air. ● Vapors may travel to source of ignition and flash back. ● Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). ● Vapor explosion hazard indoors, outdoors or in sewers. ● Those substances designated with a "P" may polymerize explosively when heated or involved in a fire. ● Runoff to sewer may create fire or explosion hazard. ● Containers may explode when heated. ● Many liquids are lighter than water. ● Substance may be transported hot.
HEALTH	
<ul style="list-style-type: none"> ● Move victim to fresh air. Call 911 or emergency medical service. ● Apply artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult. ● Remove and isolate contaminated clothing and shoes. ● In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes. ● Wash skin with soap and water. ● Keep victim warm and quiet. ● Ensure that medical personnel are aware of the material(s) involved, and take precautions. 	
PUBLIC SAFETY	
<ul style="list-style-type: none"> ● Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions. ● Keep unauthorized personnel away. ● Stay upwind. ● Keep out of low areas. ● Ventilate closed spaces before entering. 	
EVACUATION	Large Spill <ul style="list-style-type: none"> ● Consider initial downwind evacuation for at least 300 meters (1,000 feet). Fire <ul style="list-style-type: none"> ● If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.
Information provided by the Emergency Response Guidebook 2008.	

3.2 DOCUMENTATION OF INITIAL RESPONSE ACTIONS

It is difficult, particularly during the first few minutes of an initial response operation to think about the importance of documentation. A log should be maintained which documents the history of the events and communications that occur during the response. When recording this information, it is important to remember that the log may become instrumental in legal proceedings, therefore:

- Record only facts, do not speculate.
- Do not criticize the efforts and/or methods of other people/operations.
- Do not speculate on the cause of the spill.
- Do not skip lines between entries or make erasures. If an error is made, draw a line through it, add the correct entry above or below it, and initial the change.
- Record the recommendations, instructions, and actions taken by government/regulatory officials.
- Document conversations (telephone or in person) with government/regulatory officials.
- **Request that government/regulatory officials document and sign their recommendations or orders (especially if Company personnel do not agree with the suggestions, instructions, or actions).**

3.3 OIL CONTAINMENT, RECOVERY AND DISPOSAL

After initial response has been taken to stop further spillage and notifications made to the required agencies, The Company will begin spill containment, recovery, and disposal operations.

The Incident Commander will assess the size and hazards of the spill. The type of product, the location of the spill, and the predicted movement of the spill will be considered.

Based on this assessment, additional clean-up personnel and equipment will be dispatched to the site and deployed to control and contain the spill. Boom may be deployed in waterways to contain the spill and to protect socio-economic and environmentally sensitive areas. Booms may also be used in waterways to deflect or guide the spill to locations where it can more effectively be cleaned up using skimmers, vacuum trucks, or sorbent material. Clean-up equipment and material will be used in the manner most effective for rapid and complete clean-up of all spilled product.

Response and cleanup will continue until all recoverable product is removed, the environment is returned to its pre-spill state, and the unified command of the Company Incident Commander and the Federal and/or State On-Scene Coordinators determine that further response and cleanup is no longer necessary.

3.4 STORAGE/DISPOSAL

Strict rules designed to ensure safe and secure handling of waste materials govern the Company waste disposal activities. To ensure proper disposal of recovered oil and associated debris, the following guidelines should be considered:

- In the event of a product spill, the Facility has limited capacity to store recovered product and water. Separated product is pumped to trucks to be carried to a facility for processing.
- Oily debris will be segregated on site and containerized for temporary storage prior to disposal in accordance with RCRA/CERCLA regulations.
- Transportation of waste material will be performed in accordance with all applicable federal and state guidelines.
- Waste associated with the spill will be disposed of at Company pre-approved sites which have the necessary permits to accept the type of waste to be discharged.

The Company's designated Environmental Coordinator will coordinate activities and secure the necessary permits to ensure proper disposal or recycling of recovered product and debris.

3.5 SAMPLING AND WASTE ANALYSIS PROCEDURES

The Company's sampling and waste analysis practices are governed by the regulations for the applicable state and the United States Environmental Protection Agency (EPA). These regulations outline methods and procedures for determining the chemical and physical characteristics of wastes generated by the Facility, including waste associated with spills, so that they may be properly stored, treated, or disposed.

3.6 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 at the Facility 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 as outlined in Section 4.0.
- No employee/contractor shall engage in activities which place them at risk without the appropriate protective equipment and training.

3.6 SAFETY AWARENESS (Cont'd)

3.6.1 General Response Safety

All Company and contractor personnel are expected to comply with the Site Safety and Health Plan for each spill incident.

- Any concern regarding health or safety issues should be immediately addressed.
- The First Responder must consider the spill site as 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 Facility Management in a timely manner.
- Prior to entering a spill area, a qualified person must perform an initial safety and health evaluation of the site.

3.6.2 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.
- Air monitoring measurements which are to be made prior to entry into the spill area include:
 - Lower Explosive Limit (LEL)
 - Oxygen content
 - 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 shall dictate the appropriate respiratory devices to be used by persons entering the area as follows:

Section 3.0**Response Actions**

3.6 SAFETY AWARENESS (Cont'd)**3.6.2 Air Monitoring (Cont'd)**

- The Incident Commander is responsible for industrial hygiene monitoring in the post discovery period.

3.6.3 Decontamination

Through training programs, Pipeline 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. Hard copies can be found in a binder located in the Main Office Control Room. Electronic copies are available on-line to all Company personnel.
- 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.

3.6 SAFETY AWARENESS (Cont'd)

3.6.4 Personal Protective Equipment (PPE)

The following represents OSHA/EPA designated PPE levels for responding to emergencies, post emergency cleanup sites, and/or Temporary Storage and Disposal (TSD) sites. The responder's PPE should be chosen based on his/her level of training and assigned job duties.

Personal Protective Equipment (PPE)	
<u>LEVEL A</u> <ul style="list-style-type: none"> Self Contained Breathing Apparatus (SCBA) (worn inside suit) Encapsulated Chemical Protective Suit Chemical Protective Gloves Chemical Protective Boots Hard Hat 	<u>LEVEL B</u> <ul style="list-style-type: none"> SCBA (worn outside suit) Chemical Protective Suit w/Hood Chemical Protective Boots Chemical Protective Gloves Hard Hat
<u>LEVEL C</u> <ul style="list-style-type: none"> Air Purifying Respirator (APR) Half or Full Face APR Hard Hat Glasses (worn with Half Face APR) Chemical Protective Boots Chemical Protective Gloves Chemical Protective Suit/Tyvek 	<u>LEVEL D</u> <ul style="list-style-type: none"> Hard Hat Safety Glasses Work Uniform / Clothes Leather Gloves Safety Boots Nomex
<u>MODIFIED LEVEL D</u> Same as Level C except no APR requirements.	

3.7 EMERGENCY MEDICAL TREATMENT AND FIRST AID

On-site emergency medical response 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. These 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 and Health 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 "life saving" treatment, rapid decontamination of the injured/ill party should be started. Refer to the Site Safety and Health Plan for steps to be taken in a decontamination for medical treatment.
- The need for full decontamination should be carefully weighed against the need for prompt medical treatment.

3.7 EMERGENCY MEDICAL TREATMENT AND FIRST AID (Cont'd)

- 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. Telephone reference is provided in Figure 2.5.
- 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.

4.0 RESPONSE TEAMS

4.1 INTRODUCTION

This Section describes organizational features and duties of the Local Response Team and the broader Company Emergency Response Team.

The key to an effective emergency response is a rapid, coordinated, tiered response by the affected facility, and the Emergency Response Team (ERT), consistent with the magnitude of an incident.

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

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.

An explanation of ICS and the roles and responsibilities for primary members of the response teams are provided in Section 4.8. The USCG Incident Management Handbook (IMH) contains an in-depth description of all ICS positions, ICS development, response objectives and strategies, command responsibilities, ICS specific glossary/acronyms, resource typing, the IAP process, and meetings.

The IMH can be located at:

<http://www.uscg.mil/hq/nswfweb/docs/FinalIMH18AUG2006.pdf>

4.2 QUALIFIED INDIVIDUAL

It is the responsibility of the Qualified Individual (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.

4.2 QUALIFIED INDIVIDUAL (Cont'd)

- 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.
- Activate and engage in contracting with Oil Spill Removal Organizations.
- Use authority to immediately access Company funding to initiate cleanup activities.
- Direct cleanup activities until properly relieved of this responsibility.
- Arrangements will be made to ensure that the QI or the AQI is available on a 24-hour basis and is able to arrive at the Facility in a reasonable time.
- The AQI shall replace the QI in the event of his/her absence and have the same responsibilities and authority.

4.3 LOCAL RESPONSE TEAM

The first Company 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. For response operations within the control of the LRT, the role of IC will typically be assumed and retained by local management.

The number of positions/personnel required to staff the LRT will depend on the size and complexity of the incident. The duties of each position may be performed by the IC directly or delegated as the situation demands. The IC is always responsible for directing the response activities and will assume the duties of all the primary positions until the duties can be delegated to other qualified personnel.

A complete functional ICS organization is shown in Figure 4.1. The LRT should try to fill the necessary positions and request additional support from the ERT to fill/back up all the positions as the incident may dictate. Detailed job descriptions of the primary response team positions are provided in Section 4.8.

4.4 EMERGENCY RESPONSE TEAM

For spill response operations outside the capabilities of the LRT, the QI/AQI or IC will determine the need for mobilization of the ERT. The members of the LRT will typically become members of the ERT.

The ERT, 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 ERT will depend on the size and complexity of the incident. During a prolonged response, additional personnel may be cascaded in, and more than one level within the ERT may be involved to sustain 24-hour operations.

The ERT is basically organized according to the NIIMS Incident Command System principles (Figure 4.2). Led by the Incident Commander, the team is composed of the following principal components:

- Command
- Operations
- Planning
- Logistics
- Finance

The ERT is staffed by specially trained personnel from various Facility/Company locations, and by various contract resources as the situation requires. (ERT organization chart is provided in Figure 4.2; telephone reference is provided in Figure 2.2.) Command and Unit Leader responsibilities are described in Section 4.8.

4.5 INCIDENT COMMAND SYSTEM

The Incident Command System is intended to be used as an emergency management tool to aid in mitigating all types of emergency incidents. This system is readily adaptable to very small emergency incidents as well as more significant or complex emergencies. The Incident Command System utilizes the following criteria as key operational factors:

- Assigns overall authority to one individual
- Provides structured authority, roles and responsibilities during emergencies
- The system is simple and familiar, and is used routinely at all incidents
- Communications are structured
- There is a structured system for response and assignment of resources
- The system provides for expansion, escalation, and transfer/transition of roles and responsibilities
- The system allows for "Unified Command" where agency involvement at the command level is required

Effective establishment and utilization of the Incident Command System during response to all types of emergencies can:

- Provide for increased safety

4.5 INCIDENT COMMAND SYSTEM (Cont'd)

- Shorten emergency mitigation time by providing more effective and organized mitigation
- Cause increased confidence and support from local, state, and Federal public sector emergency response personnel
- Provide a solid cornerstone for emergency planning efforts

Section 4.8 provides a comprehensive list of every response team member's duty assignment.

4.6 UNIFIED COMMAND

As a component of an ICS, the Unified Command (UC) is a structure that brings together the Incident Commanders of all major organizations involved in the incident to coordinate an effective response while still meeting their own responsibilities. The UC links the organizations responding to the incident and provides a forum for the Responsible Party and responding agencies to make consensus decisions. Under the UC, the various jurisdictions and/or agencies and responders may blend together throughout the organization to create an integrated response team. The ICS process requires the UC to set clear objectives to guide the on-scene response resources.

Multiple jurisdictions may be involved in a response effort utilizing Unified Command. These jurisdictions could be represented by any combination of:

- Geographic boundaries
- Government levels
- Functional responsibilities
- Statutory responsibilities

The participants of Unified Command for a specific incident will be determined taking into account the specifics of the incident and existing response plans and/or decisions reached during the initial meeting of the UC. The UC may change as an incident progresses, in order to account for changes in the situation.

The UC is responsible for overall management of an incident. The UC directs incident activities and approves and releases resources. The UC structure is a vehicle for coordination, cooperation and communication which is essential to an effective response.

UC representatives must be able to:

- Agree on common incident objectives and priorities
- Have the capability to sustain a 24-hour-7-day-a-week commitment to the incident
- Have the authority to commit agency or company resources to the incident

4.6 UNIFIED COMMAND (Cont'd)

- Have the authority to spend agency or Company funds
- Agree on an incident response organization
- Agree on the appropriate Command and General Staff assignments
- Commit to speak with “one voice” through the Information Officer or Joint Information Center
- Agree on logistical support procedures
- Agree on cost-sharing procedures

4.7 DISCHARGE CLASSIFICATION

The severity of a discharge will have a bearing on the level of management involvement necessary and the extent of resource mobilization. The following definitions provide guidance in the early classification of discharges:

TIER I EVENT
Incident Command will normally be assumed by Terminal Management. Regional and Corporate support will be utilized on an as needed basis.
Exposure
The potential public and environmental exposure is moderate. The type and quantity of material released, while considering the overall nature of the incident (e.g. fire, proximity to private dwellings, etc.), will have moderate impact on the public and/or the environment.
Degree of Control
The incident can be controlled in a short period of time through implementation of the local resources available to the Facility (including contract resources).
Governmental Involvement
Government involvement will be moderate and generally restricted to State and local levels.
Media Involvement
Media interest will be moderate and generally restricted to State and local levels.

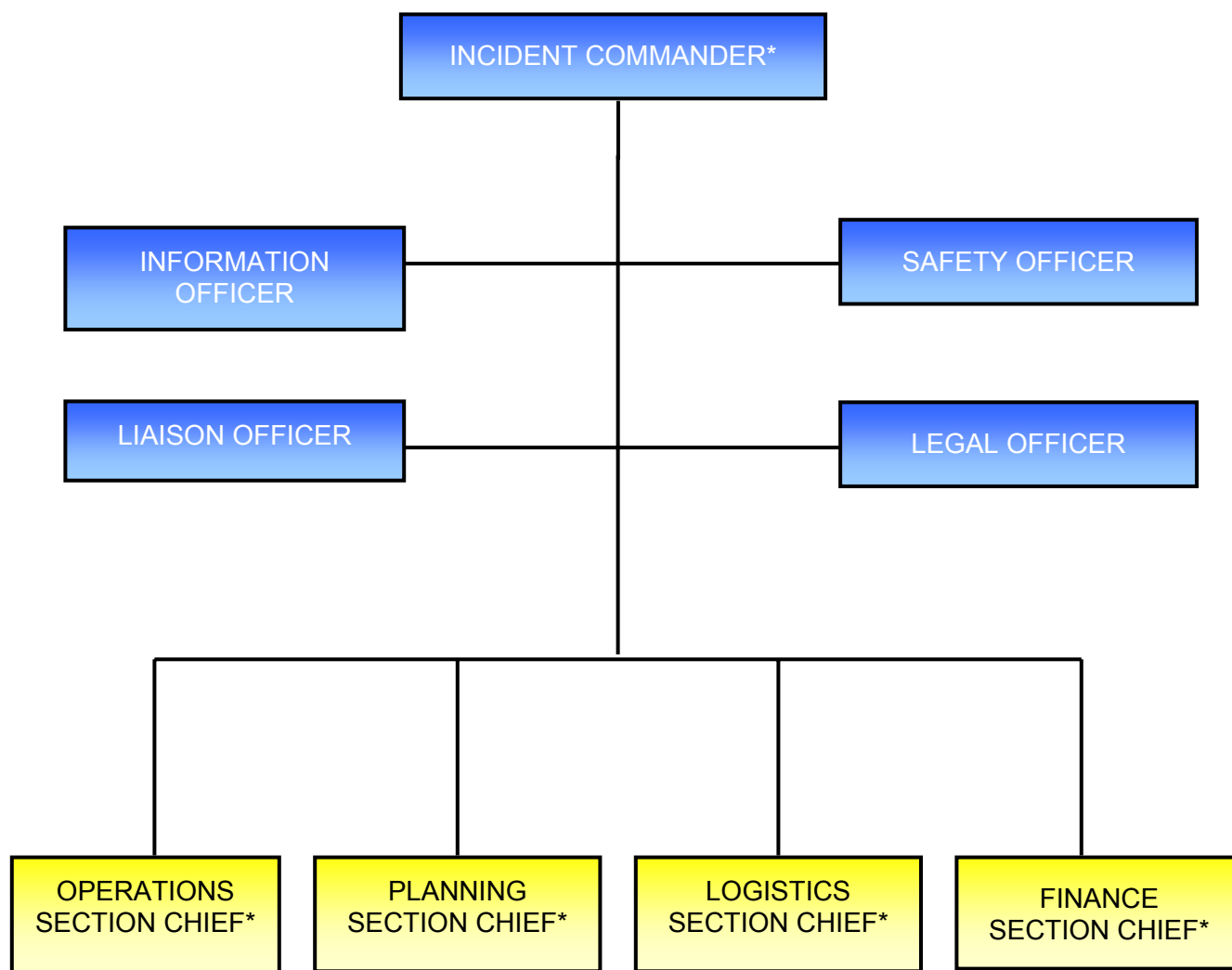
4.7 DISCHARGE CLASSIFICATION (Cont'd)

TIER II EVENT
Local Company resources may have to be supplemented with Regional, Corporate and/or external resources to manage the spill incident.
Exposure
The potential public and environmental exposure is moderately high. The type and quantity of material released, while considering the overall nature of the incident (e.g. fire, proximity to private dwellings, etc.), will have moderately high impact on the public and/or the environment.
Degree of Control
The incident can be brought under control in a moderate period of time through implementation of local resources available to the Facility (including contract resources) with possible implementation of regional resources.
Governmental Involvement
Government involvement will be moderately high and generally restricted to Regional levels.
Media Involvement
Media interest will be moderately high and generally restricted to Regional levels.

TIER III EVENT
Maximum Company and external resources must be implemented to respond to the spill incident. Activation of the Crisis Management Team would be anticipated during a Tier III incident.
Exposure
The potential public and environmental exposure is significant. The type and quantity of material released, while considering the overall nature of the incident (e.g. fire, proximity to private dwellings, etc.), will have significant impact on the public and/or the environment.
Degree of Control
Maximum Company and third party resources must be implemented in order to gain control of the incident.
Governmental Involvement
Government involvement will be high.
Media Involvement
Media interest will be high.

FIGURE 4.1**LOCAL RESPONSE TEAM**

(For Initial Response and Tier I & II Incidents)

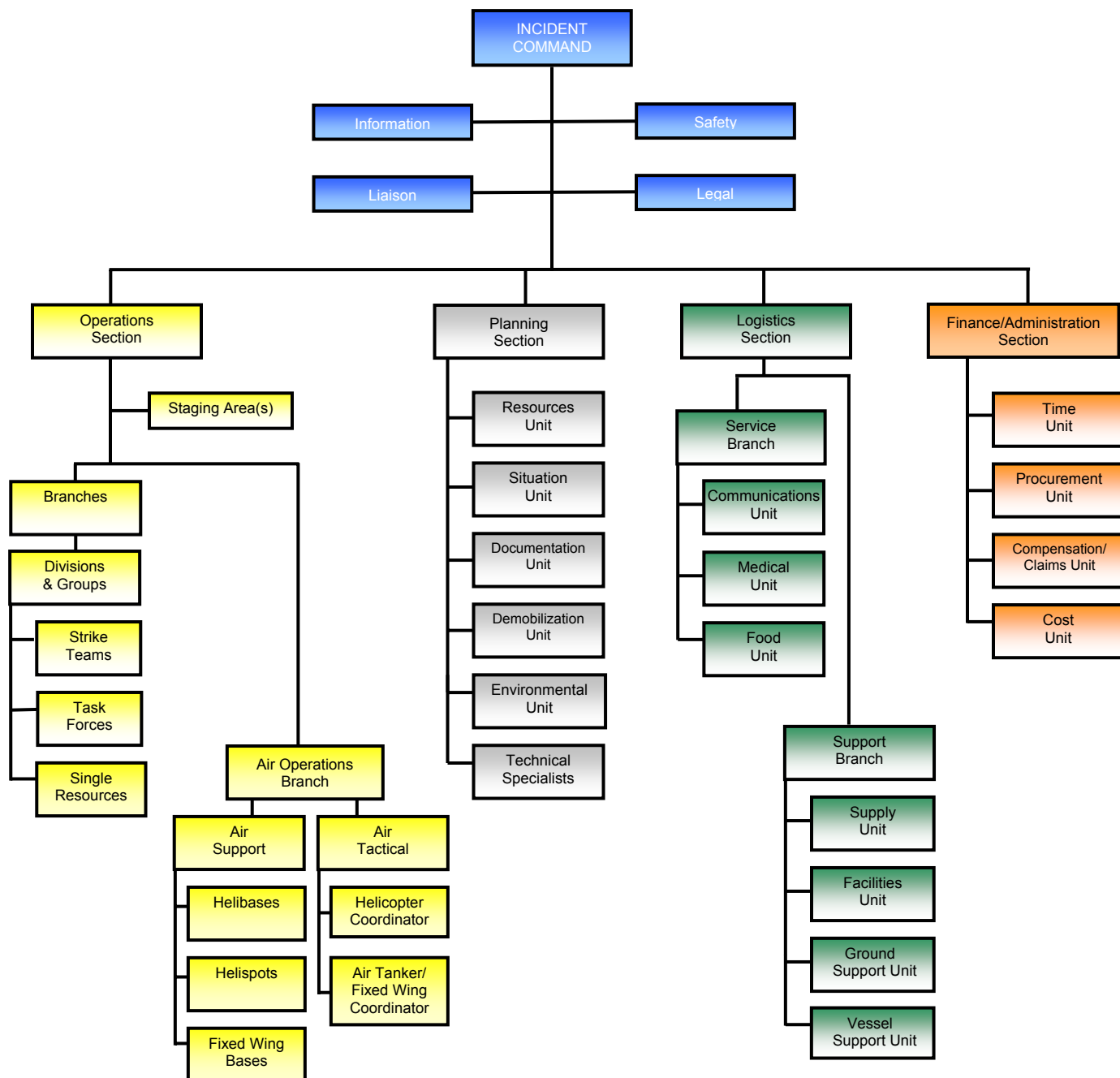


* NOTE: Emergency Response Team (ERT) personnel can assume any of these positions as necessary.

FIGURE 4.2

EMERGENCY RESPONSE TEAM

(For incidents beyond the response capability of the Local Response Team)



4.8 ICS ROLES AND RESPONSIBILITIES

COMMON RESPONSIBILITIES

The following is a checklist applicable to all personnel in an ICS 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 ICS 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/Activity Log (ICS Form 214).
- Response to demobilization orders and brief subordinates regarding demobilization.

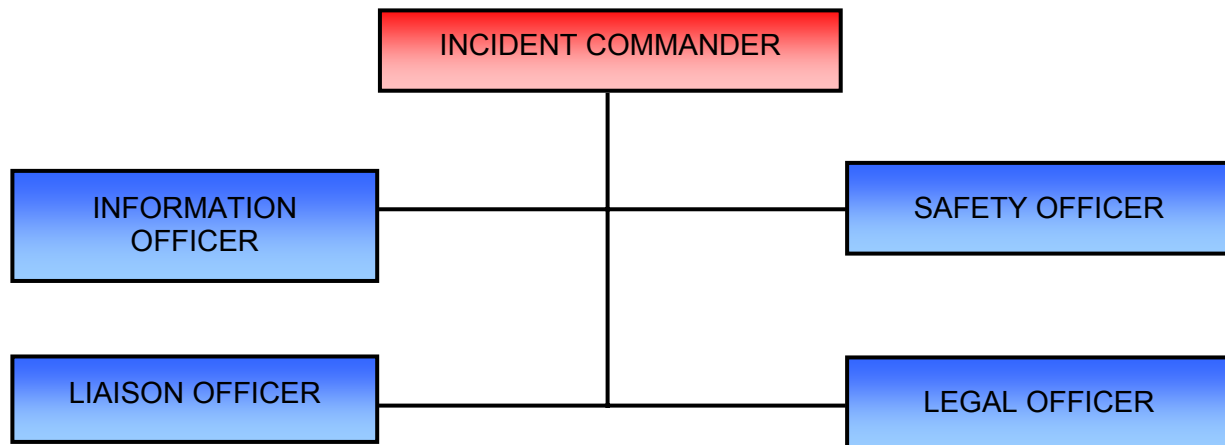
UNIT LEADER RESPONSIBILITIES

In ICS, 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/Activity Log (ICS Form 214).

COMMAND

Incident Commander.....	4-11
Information Officer	4-11
Liaison Officer	4-12
Safety Officer	4-12
Legal Officer.....	4-12



INCIDENT COMMANDER

- Assess the situation and/or obtain a briefing from the prior IC.
- Determine Incident Objectives and strategy.
- Establish the immediate priorities.
- Establish an Incident Command Post.
- Brief Command Staff and Section Chiefs.
- Review meetings and briefings.
- Establish an appropriate organization.
- Ensure planning meetings are scheduled as required.
- Approve and authorize the implementation of an IAP.
- Ensure that adequate safety measures are in place.
- 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) is completed and forwarded to appropriate higher authority.
- Order the demobilization of the incident when appropriate.

INFORMATION OFFICER

- Determine from the IC if there are any limits on information release.
- Develop material for use in media briefings.
- Obtain IC 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 OPS during oil and HAZMAT responses.
- Coordinate response resource needs for incident investigation activities with the OPS.
- Ensure that all required agency forms, reports and documents are completed prior to demobilization.
- Coordinate activities of visiting dignitaries.

SAFETY OFFICER

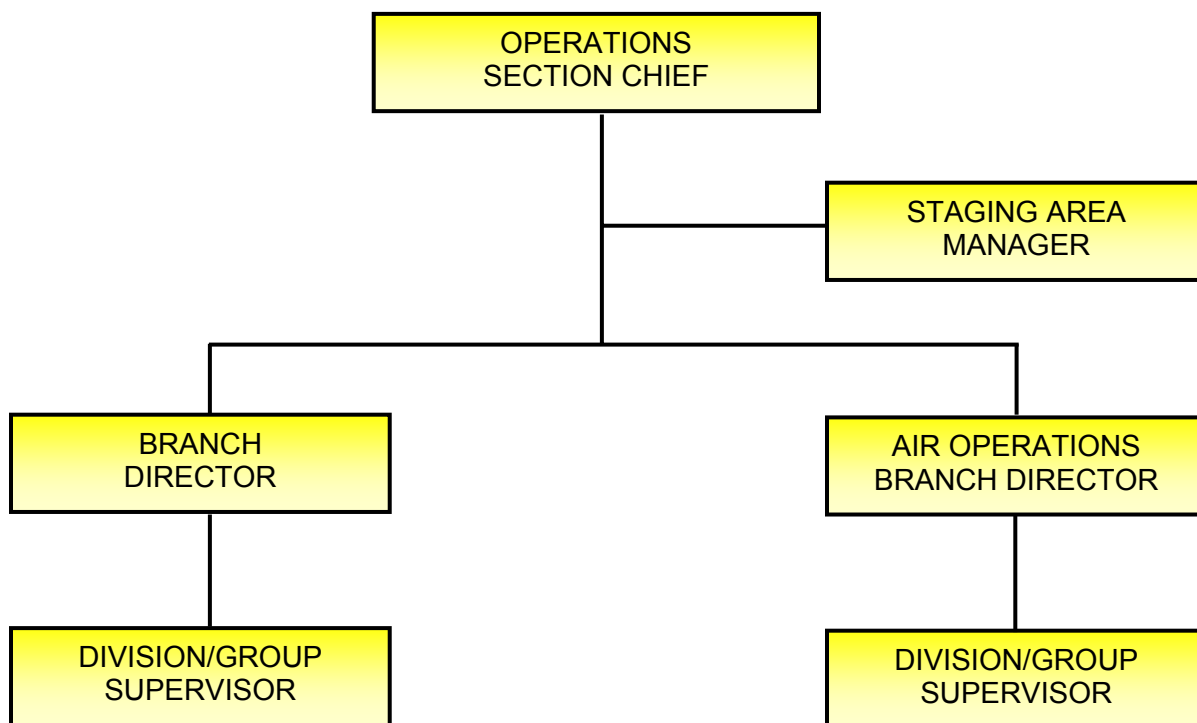
- Participate in planning meetings.
- Identify hazardous situations associated with the incident.
- Review the IAP for safety implications.
- Exercise emergency authority to stop and prevent unsafe acts.
- Investigate accidents that have occurred within the incident area.
- Review and approve the medical 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 (NRADR) 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

Operations Section Chief	4-14
Branch Director	4-14
Division/Group Supervisor	4-14
Staging Area Manager	4-15
Air Operations Branch Director	4-15



OPERATIONS SECTION CHIEF

- Develop operations portion of the Incident Action Plan (IAP).
- Brief and assign Operations Section personnel in accordance with the IAP.
- 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 IC.
- Respond to resource requests in support of NRDAR activities.

BRANCH DIRECTOR

- Develop with subordinates alternatives for Branch control operations.
- Attend planning meetings at the request of the OPS.
- Review Division/Group Assignment Lists (ICS Form 204) 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 OPS when: the IAP is to be modified; additional resources are needed; surplus resources are available; or hazardous situations or significant events occur.
- Approve accident and medial reports originating within the Branch.

DIVISION/GROUP SUPERVISOR

- Implement IAP for Division/Group.
- Provide the IAP 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 IC and/or Resources Unit is advised of all changes 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 OPS.
- 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

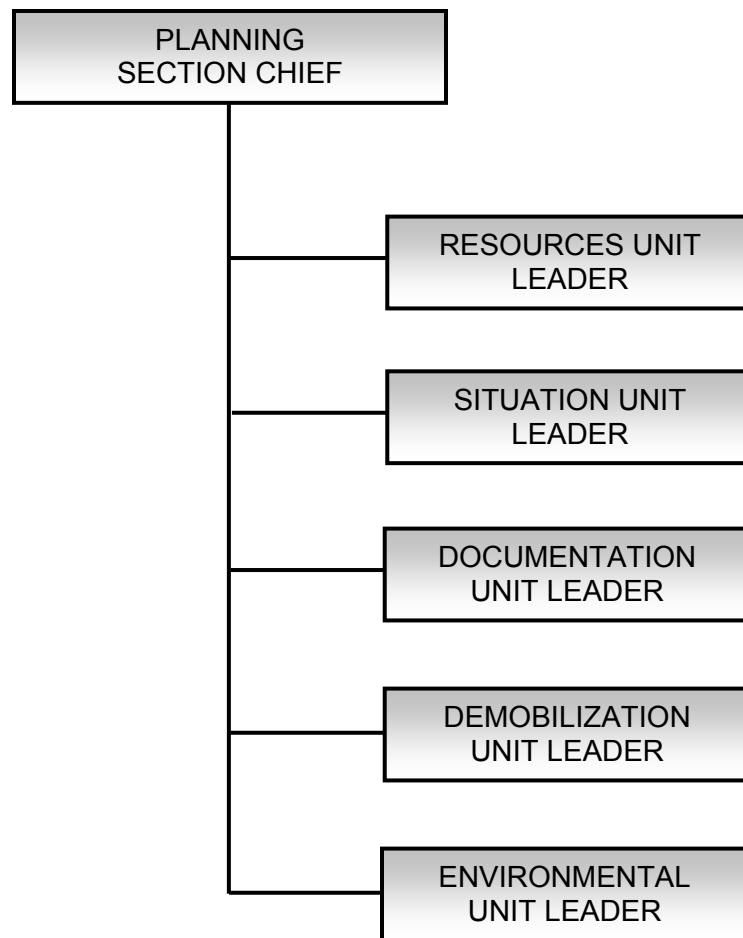
- Establish Staging Area layout.
- Determine any support needs for equipment, feeding, sanitation and security.
- Establish check-in function as appropriate.
- Post areas for identification and traffic control.
- Request maintenance service for equipment at Staging Area as appropriate.
- Respond to request 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 OPS.
- Advise the OPS 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 IAP through the OPS. Insure that the air operations portion of the IAP takes into consideration the Air Traffic Control requirements of assigned aircraft.
- Perform operational planning for air operations.
- Prepare and provide Air Operations Summary Worksheet (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 FAA.
- Update air operations plans.
- Report to the OPS on air operations activities.
- Report special incidents/accidents.
- Arrange for an accident investigation team when warranted.

PLANNING

Planning Section Chief.....	4-17
Resources Unit Leader	4-17
Situation Unit Leader	4-17
Documentation Unit Leader	4-18
Demobilization Unit Leader.....	4-18
Environmental Unit Leader	4-19



PLANNING SECTION CHIEF

- Collect and process situation information about the incident.
- Supervise preparation of the IAP.
- Provide input to the IC and the OPS in preparing the IAP.
- Chair planning meetings and participate in other meetings as required.
- Reassign out-of-service personnel already on-site to ICS organizational positions as appropriate.
- Establish information requirements and reporting schedules for Planning Section Units (e.g., Resources, Situation Units).
- 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, toxics, etc.).
- Assemble information on alternative strategies.
- 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 IAP.

RESOURCES UNIT LEADER

- Establish the check-in function at incident locations.
- Prepare Organization Assignment List (ICS Form 203) and Organization Chart (ICS Form 207).
- Prepare appropriate parts of Division Assignment Lists (ICS Form 204).
- Prepare and maintain the ICP 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 PSC.
- Prepare the Incident Status Summary Form (ICS Form 209).
- 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

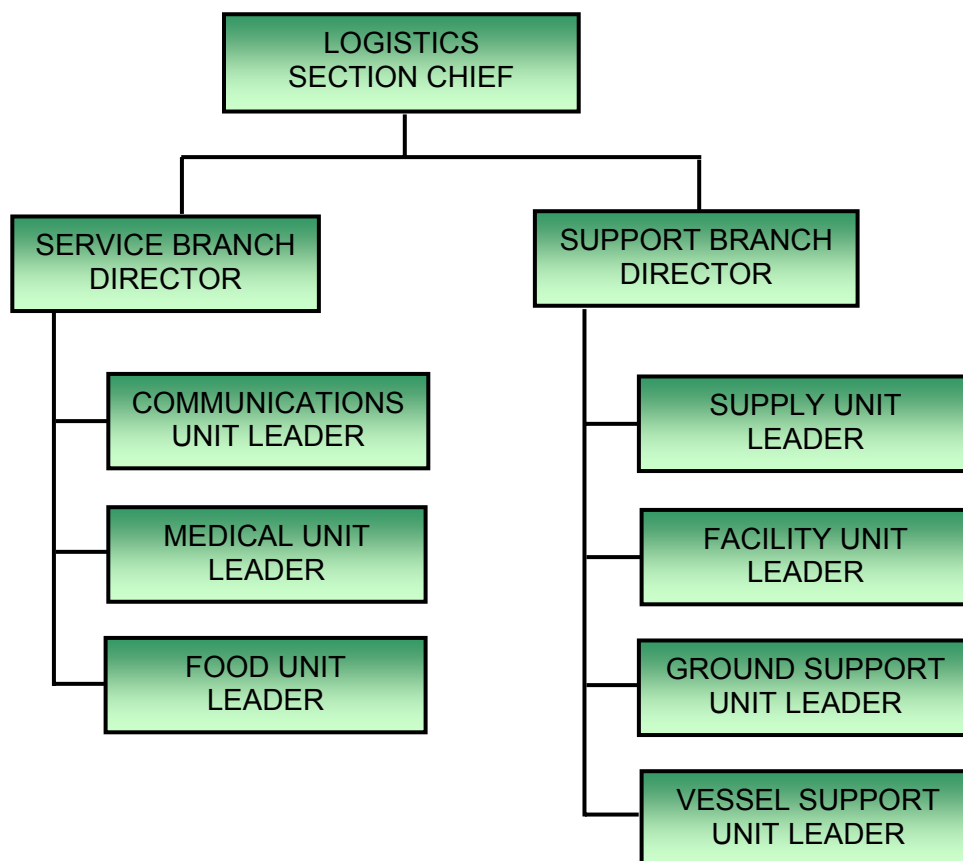
- Participate in planning meetings as required.
- Review incident resource records to determine the likely size and extent of demobilization effort.
- Based on the above analysis, add additional personnel, workspace, and supplies as needed.
- Coordinate demobilization with Agency Representatives.
- Monitor the on-going Operations Section resource needs.
- Identify surplus resources and probable release time.
- Develop incident check-out 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 PSC 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 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 FOSC'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

Logistics Section Chief.....	4-21
Service Branch Director	4-21
Communications Unit Leader.....	4-22
Medical Unit Leader	4-22
Food Unit Leader	4-22
Support Branch Director	4-23
Supply Unit Leader	4-23
Facility Unit Leader	4-23
Ground Support Unit Leader	4-24
Vessel Support Unit Leader	4-24



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 IAP.
- 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 IAP and estimate Section needs for the next operational period.
- Advise on current service and support capabilities.
- Prepare service and support elements of the IAP.
- 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 IAP.
- Organize and prepare assignments for Service Branch personnel.
- Coordinate activities of Branch Units.
- Inform the LSC of Branch activities.
- Resolve Service Branch problems.

COMMUNICATIONS UNIT LEADER

- Prepare and implement the Incident Radio Communications Plan (ICS Form 205).
- 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).
- 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 LSC 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 LSC 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 IAP 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 IAP.
- Participate in Logistics Section/Support Branch planning activities.
- Determine requirements for each facility, including the ICP.
- 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

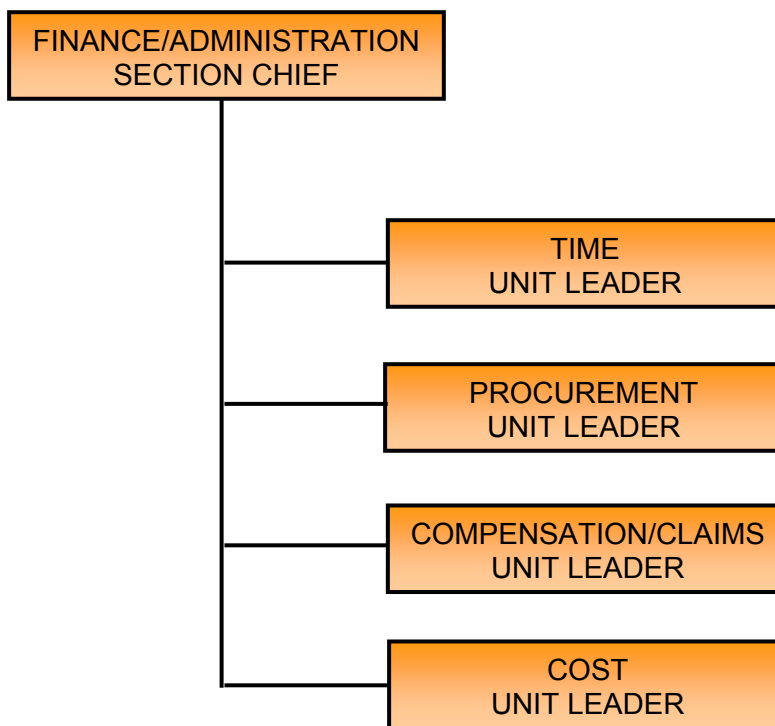
- Participate in Support Branch/Logistics Section planning activities.
- Develop and implement the Traffic Plan.
- Support out-of-service resources.
- Notify the Resources Unit of all status changes on support and transportation vehicles.
- Arrange for and activate fueling, maintenance, and repair of ground resources.
- Maintain Support Vehicle Inventory and transportation vehicles (ICS Form 218).
- Provide transportation services, IAW requests from the LSC 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

Finance/Administration Section Chief	4-26
Time Unit Leader	4-26
Procurement Unit Leader	4-27
Compensation/Claims Unit Leader	4-27
Cost Unit Leader	4-28



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 SO and LO (or Agency Representatives if no LO 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 Incident Medical Plan (ICS Form 206).
- 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.

5.0 RESPONSE PLANNING

5.1 INCIDENT ACTION PLAN

Emergency response activities are planned and coordinated through the use of an Incident Action Plan (IAP) which is developed for each Operational Period of a response by the Incident Management Team. For small responses, an ICS 201 - Incident Briefing may be used in lieu of an IAP and, for all incidents; the ICS 201 will serve as the initial IAP.

For larger or more complex incidents a more complete IAP will be necessary. These IAP's are generally created through the completion and compilation of several standard ICS forms. These forms are included in the Kinder Morgan ICS Forms Workbook (Figure 5.1).

5.1 INCIDENT ACTION PLAN (Cont'd)

Depending on the nature and severity of the emergency, additional documents may be included in the IAP. These may include:

- Sensitivity Maps (Provided in Section 6)
- Waste Management & Disposal Plans (Provided in Appendix F)
- Plans for use of Alternative Technologies (Dispersant/In-situ Burning/Bioremediation)
- Security Plans
- Decontamination Plans
- Traffic Plans

5.2 SITE SAFETY PLAN

Site Safety Plans (SSP) are required by OSHA (29CFR1910.120(b)(4)) for all hazardous waste operations. The SSP should address all on-site operations and hazards as well as on-site emergency procedures. Templates for use in producing an SSP are provided in Figures 5.1 and 5.2.

The SSP is typically prepared by the Safety Officer and approved by the Incident Commander. All personnel must be familiar with the contents of the SSP and the SSP must be updated as conditions, operations and hazards associated with the response change.

FIGURE 5.1
KINDER MORGAN ICS FORMS WORKBOOK

KINDER MORGAN ICS FORMS WORKBOOK

ICS Form #:	Form Title:	Prepared By:
Initial Incident Response and Assessment/Incident Brief		
ICS 201	Incident Briefing	Initial Incident Commander
	KM Site Health and Safety Plan	Safety Officer
ICS 214	Activity Log	All Sections and Units
ICS 211/211p	Incident Check-In List (Equip/Pers)	Planning Section - Resource Unit
Initial Unified Command Meeting/Objectives Meeting		
ICS 230	Daily Meeting Schedule	Planning Section
ICS 202*	Incident Objectives	Planning Section
Command and General Staff Meeting		
ICS 202*	Incident Objectives	Planning Section (From previous meeting)
ICS 203/207*	Organization Assignment List/Chart	Planning Section - Resource Unit
ICS 233	Open Actions Tracker	Planning Section & Operations Section (2 nd Operational Period)
Preparing for Tactics Meeting/Tactics Meeting		
ICS 202*	Incident Objectives	Planning Section (From previous meeting)
ICS 233	Open Actions Tracker	Planning Section & Operations Section (From previous meeting)
ICS 234	Work Analysis Matrix	Planning Section & Operations Section
ICS 215	Operational Planning Worksheet	Operations Section
ICS 215a	Hazard Risk Analysis Worksheet	Safety Officer
ICS 232	Resources at Risk Summary	Planning Section – Environmental Unit
ICS 232a	ACP Site Index	Planning Section – Environmental Unit
Preparing for Planning Meeting/Planning Meeting		
ICS 233	Open Actions Tracker	Planning Section & Operations Section (From previous meeting)
ICS 215	Operational Planning Worksheet	Operations Section

KINDER MORGAN ICS FORMS WORKBOOK

ICS Form #:	Form Title:	Prepared By:
IAP Preparation and Approval		
	Incident Action Plan	Planning Section
ICS 202*	Incident Objectives	Planning Section (From previous meeting)
ICS 204*	Assignment List	Planning Section - Resource Unit & Operations Section
ICS 203/207*	Organization Assignment List/Chart	Planning Section - Resource Unit
ICS 205*/205a*	Incident Radio Communications Plan/ Communications List	Logistics Section - Communications Unit
ICS 206*	Medical Plan	Logistics Section - Medical Unit (Reviewed by Safety Officer)
ICS 208*	Site Safety Plan or KM Site Health and Safety Plan	Safety Officer
As Needed Forms		
ICS 213RR	Resource Request Message	Section submitting request
ICS 209	Incident Status Summary	Planning Section - Situation Unit
ICS 216	Radio Requirements Worksheet	Logistics Section – Communications Unit
ICS 217	Radio Frequency Assignment Worksheet	Logistics Section – Communications Unit
ICS 218	Support Vehicle Inventory	Logistics Section – Ground Support Unit
ICS 220	Air Operations Summary	Operations Section - Air Operations Branch
ICS 221	Demobilization Check-Out	Planning Section - Demobilization Unit
ICS 231	Meeting Summary	Planning Section
	Executive Summary	Planning Section – Situation Unit
	General Plan	Planning Section – Situation Unit

* - A component of the Incident Action Plan

1. Incident Name	2. Operational Period to be covered by IAP (Date/Time) From: _____ To: _____	CG IAP COVER SHEET												
3. Approved by Incident Commander(s): <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 20%;"><u>ORG</u></th> <th style="text-align: left;"><u>NAME</u></th> </tr> </thead> <tbody> <tr><td>_____</td><td>_____</td></tr> <tr><td>_____</td><td>_____</td></tr> <tr><td>_____</td><td>_____</td></tr> <tr><td>_____</td><td>_____</td></tr> <tr><td>_____</td><td>_____</td></tr> </tbody> </table>			<u>ORG</u>	<u>NAME</u>	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
<u>ORG</u>	<u>NAME</u>													
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<h2 style="margin: 0;">INCIDENT ACTION PLAN</h2> <p style="margin: 5px 0;">The items checked below are included in this Incident Action Plan:</p> <div style="margin-top: 10px;"> <input type="checkbox"/> ICS 202-CG (Response Objectives) _____ </div> <div style="margin-top: 10px;"> <input type="checkbox"/> ICS 203-CG (Organization List) – OR – ICS 207-CG (Organization Chart) _____ </div> <div style="margin-top: 10px;"> <input type="checkbox"/> ICS 204-CGs (Assignment Lists) One Copy each of any ICS 204-CG attachments: _____ </div> <div style="margin-top: 10px;"> <input type="checkbox"/> ICS 205-CG (Communications Plan) _____ </div> <div style="margin-top: 10px;"> <input type="checkbox"/> ICS 206-CG (Medical Plan) </div> <div style="margin-top: 10px;"> <input type="checkbox"/> ICS 208-CG (Site Safety Plan) or Note SSP Location _____ </div> <div style="margin-top: 10px;"> <input type="checkbox"/> Map/Chart </div> <div style="margin-top: 10px;"> <input type="checkbox"/> Weather forecast / Tides/Currents </div> <div style="margin-top: 10px;"> <u>Other Attachments</u> </div> <div style="margin-top: 10px;"> <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____ </div>														
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">4. Prepared by:</td> <td style="width: 50%;">Date/Time</td> </tr> </table>			4. Prepared by:	Date/Time										
4. Prepared by:	Date/Time													

1. Incident Name	2. Prepared by: (name) Date: _____ Time: _____	INCIDENT BRIEFING ICS 201-CG
3. Map/Sketch (include sketch, showing the total area of operations, the incident site/area, overflight results, trajectories, impacted shorelines, or other graphics depicting situational and response status)		
4. Current Situation: <div style="border: 1px solid black; height: 100px; width: 100%;"></div>		

1. Incident Name	2. Prepared by: (name) Date: _____ Time: _____	INCIDENT BRIEFING ICS 201-CG
5. Initial Response Objectives, Current Actions, Planned Actions		

1. Incident Name	2. Prepared by: (name) Date: _____ Time: _____	INCIDENT BRIEFING ICS 201-CG
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6. Current Organization (fill in additional appropriate organization)

Safety Officer

Liaison Officer

Public Information Officer

Operations Section

Planning Section

Logistics Section

Finance Section

INCIDENT BRIEFING

ICS 201-CG (pg 3 of 4) (Rev 4/04)

Date / Time: _____/_____/_____

INCIDENT COMMANDER PRIORITIES - SAFETY of ☐ **KMEP PERSONNEL** ☐ **SURROUNDING COMMUNITY** ☐ **ENVIRONMENT**

Table 1. Chemical & Physical Properties								
Chemical Hazards	Flammability Range		Toxicity	Chemical / Physical Properties				NFPA 704 Health/Flammable/Reactive
	LEL	UEL	PEL ^(a) /TLV ^(b)	Flash Pt.	Vapor Pressure	Vapor Density	Specific Gravity	
<input type="checkbox"/> Gasoline	1.3%	7.6%	300 ppm ^(a)	-45°F	~300 mmHg	5	0.74	1 / 3 / 0
<input type="checkbox"/> Diesel	0.9%	7.0%	NA	~150°F	~1 mmHg	>5	0.86	1 / 2 / 0
<input type="checkbox"/> Jet Fuel	~0.8%	~6.0%	500 ppm ^(a)	~110°F	5	>5	0.81	1 / 2 / 0
<input type="checkbox"/> Ethanol	3.3%	19.0%	1,000 ppm ^(b)	48°F	44 mmHg	>1	0.79	0 / 3 / 0
<input type="checkbox"/> Fuel Additive*								
<input type="checkbox"/> Drag Reducing Agent (DRA)*								2 / 2 / 0
<input type="checkbox"/> MCC Lubricity	Not Available	Not Available		>140°F	1.37 mmHg	>1	.93 - .94	2 / 2 / 0
<input type="checkbox"/> Natural Gasoline	1.4%	7.6%	--	-50°F	12-26 psi	2.7	0.66-0.75	1 / 3 / 0
<input type="checkbox"/> Butane	1.6%	8.4%	800 ppm ^(a)	-101°F	43 psi	2.05	.58	1 / 4 / 0
<input type="checkbox"/> Ethane	2.9%	13.0%	not established	-275°F	800 psi	1.1	0.36	
<input type="checkbox"/> Isobutane	1.8%	8.4%	800 ppm ^(a)	-126°F	62 psi	2.0	0.563	1 / 4 / 0
<input type="checkbox"/> Propane	2.1%	9.5%	1000 ppm ^(a)	-156°F	288 psi	1.53	0.51	1 / 4 / 0
<input type="checkbox"/> Crude Oil								
<input type="checkbox"/> Methanol	6.0%	36%	200 ppm	52°F	96 mm Hg	1.1	.792	1 / 3 / 0
<input type="checkbox"/> Ethyl Mercaptan	2.8%	18%	10 ppm ^(a) / .5 ppm ^(b)	-55 °F	16.2 psi	2.1	.845	2 / 4 / 0
<input type="checkbox"/> Other*								
* Describe								
1 atm = 760 mmHg = 14.7 psi								

Table 2. PPE Levels			
LEVEL A	LEVEL B	LEVEL C	LEVEL D
<u>Respiratory Protection</u> <input type="checkbox"/> SCBA or Air Line <input type="checkbox"/> Positive pressure full face piece supplied air w/ escape SCBA <u>Required Equipment</u> <input type="checkbox"/> Totally encapsulating, gas tight chemical resistant suit <input type="checkbox"/> Inner chemical resistant gloves <input type="checkbox"/> Chemical resistant safety boots <u>Optional Equipment</u> <input type="checkbox"/> Hearing protection <input type="checkbox"/> Hard Hat <input type="checkbox"/> Disposable glove & boot covers	<u>Respiratory Protection</u> <input type="checkbox"/> SCBA or Air Line <input type="checkbox"/> Positive pressure full face piece supplied air w/ escape SCBA <u>Required Equipment</u> <input type="checkbox"/> Non-encapsulating chemical resistant suit (Tyvek/Nomex) <input type="checkbox"/> Inner & outer chemical resistant gloves <input type="checkbox"/> Chemical resistant safety boots <input type="checkbox"/> Hard Hat <u>Optional Equipment</u> <input type="checkbox"/> Hearing protection <input type="checkbox"/> Coveralls <input type="checkbox"/> Disposable boot covers <input type="checkbox"/> Face shield/safety glasses	<u>Respiratory Protection</u> <input type="checkbox"/> Full / Half Face respirator w/ <input type="checkbox"/> cartridge (gas/vapor): _____ <input type="checkbox"/> filter (particulate): _____ <u>Required Equipment</u> <input type="checkbox"/> Non-encapsulating chemical resistant suit <input type="checkbox"/> Tyvek <input type="checkbox"/> Nomex <input type="checkbox"/> Inner & outer chemical resistant gloves <input type="checkbox"/> Chemical resistant safety boots <input type="checkbox"/> Hard Hat <u>Optional Equipment</u> <input type="checkbox"/> Hearing protection <input type="checkbox"/> Coveralls <input type="checkbox"/> Disposable boot covers <input type="checkbox"/> Face shield/safety glasses	<u>Respiratory Protection</u> <input type="checkbox"/> None <u>Required Equipment</u> <input type="checkbox"/> Coveralls <input type="checkbox"/> Safety Boots <input type="checkbox"/> Safety Glasses <input type="checkbox"/> Hard Hat <u>Optional Equipment</u> <input type="checkbox"/> Hearing protection <input type="checkbox"/> Gloves <input type="checkbox"/> Face shield/safety glasses

Table 3. Secondary Hazards	
Hazards	Recommended Precaution(s)
<input type="checkbox"/> Fire (potential)	• Remain safe distance away • Eliminate ignition sources • Keep upwind of vapor/smoke • Provide vapor suppression (if safe) • Do not impede Fire Dept. efforts
<input type="checkbox"/> Heavy Equipment	• Qualified operators only • Hardhats and safety boots needed around heavy equip. • Minimum 10ft. clearance from power lines • Make “one call” if excavating • Proper machine guarding in place
<input type="checkbox"/> Excavations	• Trenches/excavations equal to or greater than 5ft. deep must meet OSHA requirements • No one allowed to enter excavation > 5ft. unless shored, sloped or protected • Excavations < 5ft. and judged by competent person as cave-in hazard must also follow OSHA requirements
<input type="checkbox"/> Noise	• Portable generators & heavy equip. can generate potentially high noise levels • Hearing protection available to workers • Hearing protection must be worn in area with noise levels above 85dBA.
<input type="checkbox"/> Confined Spaces	• Site Safety Officer will determine whether confined space will be entered • All confined space entries must meet OSHA requirements (permits, atmospheric monitoring, attendants, etc.)
<input type="checkbox"/> Heat Stress	• Potential hazard when temp >80°F • Workers should take more breaks and drink plenty of appropriate liquids • More PPE = higher risk • Be aware of heat cramps (stomach cramps), heat exhaustion (excessive sweating, flushed/clammy skin) – treat with rest and liquids. Heat stroke (dry, hot, pale skin; no sweating) can be deadly – get medical help immediately, reduce core body temp by applying cold water to body & fanning.
<input type="checkbox"/> Cold Stress	• Skin takes on gray-glossy look • Appendages become non-responsive • Blisters or sores may appear • Do not rub • Submerge affected areas in <u>warm</u> water or wrap in <u>warm</u> cloth.
<input type="checkbox"/> Rain / Lightning	• Stop excavation activities during excessive rainfall • Avoid shock hazards by stopping work during thunderstorm or lightening • Prevent & control erosion & transport of soils out of incident area.
<input type="checkbox"/> General	• Slip, trip & fall hazards • Keep work area clear of debris • Smoking not permitted in work areas • Use hand tools safely
<input type="checkbox"/> Other:	

INCIDENT OBJECTIVES (ICS 202-CG)

Purpose. The Incident Objectives form describes the basic incident strategy, control objectives, command emphasis/priorities, and safety considerations for use during the next operational period.

Preparation. The Incident Objectives form is completed by the Planning Section following each Command and General Staff Meeting conducted in preparing the Incident Action Plan.

Distribution. The Incident Objectives form will be reproduced with the IAP and given to all supervisory personnel at the Section, Branch, Division/Group, and Unit levels. All completed original forms MUST be given to the Documentation Unit.

<u>Item #</u>	<u>Item Title</u>	<u>Instructions</u>
1.	Incident Name	Enter the name assigned to the incident.
2.	Operational Period	Enter the time interval for which the form applies. Record the start and end date and time.
3.	Objective(s)	Enter clear, concise statements of the objectives for managing the response. These objectives are for the incident response for this operational period and for the duration of the incident. Include alternatives.
4.	Operational Period Command Emphasis	Enter clear, concise statements for safety message, priorities, and key command emphasis/decisions/directions. Enter information such as known safety hazards and specific precautions to be observed during this operational period. If available, a safety message should be referenced and attached. At the bottom of this box, enter the location where approved Site Safety Plan is available for review.
5.	Site Safety Plan Prepared By Date/Time	Note location of the approved Site Safety Plan. Enter the name of the Planning Section Chief completing the form. Enter date (month, day, year) and time prepared (24-hour clock).

NOTE: ICS 202-CG, Incident Objectives, serves as part of the Incident Action Plan (IAP)

1. Incident Name		2. Operational Period (Date/Time) From: _____ To: _____		ORGANIZATION ASSIGNMENT LIST ICS 203-CG																																																																																					
3. Incident Commander(s) and Staff <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Agency</td> <td style="width: 35%;">IC</td> <td style="width: 50%;">Deputy</td> </tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> </table> Safety Officer: _____ Information Officer: _____ Liaison Officer: _____		Agency	IC	Deputy																7. OPERATION SECTION <table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 60%;">Chief</td><td style="width: 40%;"></td></tr> <tr><td>Deputy</td><td></td></tr> <tr><td>Deputy</td><td></td></tr> <tr><td>Staging Area Manager</td><td></td></tr> <tr><td>Staging Area Manager</td><td></td></tr> <tr><td>Staging Area Manager</td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table> a. Branch – Division Groups <table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 60%;">Branch Director</td><td style="width: 40%;"></td></tr> <tr><td>Deputy</td><td></td></tr> <tr><td>Division Group</td><td></td></tr> <tr><td>Division Group</td><td></td></tr> <tr><td>Division Group</td><td></td></tr> <tr><td>Division/Group</td><td></td></tr> <tr><td>Division/Group</td><td></td></tr> </table> b. Branch – Division/Groups <table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 60%;">Branch Director</td><td style="width: 40%;"></td></tr> <tr><td>Deputy</td><td></td></tr> <tr><td>Division/Group</td><td></td></tr> <tr><td>Division/Group</td><td></td></tr> <tr><td>Division/Group</td><td></td></tr> <tr><td>Division/Group</td><td></td></tr> <tr><td>Division/Group</td><td></td></tr> </table> c. Branch – Division/Groups <table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 60%;">Branch Director</td><td style="width: 40%;"></td></tr> <tr><td>Deputy</td><td></td></tr> <tr><td>Division/Group</td><td></td></tr> <tr><td>Division/Group</td><td></td></tr> <tr><td>Division/Group</td><td></td></tr> <tr><td>Division/Group</td><td></td></tr> <tr><td>Division/Group</td><td></td></tr> </table> d. Air Operations Branch <table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 60%;">Air Operations Br. Dir</td><td style="width: 40%;"></td></tr> <tr><td>Helicopter Coordinator</td><td></td></tr> <tr><td></td><td></td></tr> </table>				Chief		Deputy		Deputy		Staging Area Manager		Staging Area Manager		Staging Area Manager								Branch Director		Deputy		Division Group		Division Group		Division Group		Division/Group		Division/Group		Branch Director		Deputy		Division/Group		Division/Group		Division/Group		Division/Group		Division/Group		Branch Director		Deputy		Division/Group		Division/Group		Division/Group		Division/Group		Division/Group		Air Operations Br. Dir		Helicopter Coordinator			
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ORGANIZATION ASSIGNMENT LIST (ICS 203-CG) Instructions for filling out the form

Purpose. The Organization Assignment List provides ICS personnel with information on the units that are currently activated and the names of personnel staffing each position/unit. It is used to complete the Incident Organization Chart (ICS form 207-CG) which is posted on the Incident Command Post display. An actual organization will be event-specific. **Not all positions need to be filled.** The size of the organization is dependent on the magnitude of the incident and can be expanded or contracted as necessary.

Preparation. The Resources Unit prepares and maintains this list under the direction of the Planning Section Chief.

Note: Depending on the incident, the Intelligence and Information function may be organized in several ways: 1) within the Command Staff as the Intelligence Officer; 2) As an Intelligence Unit in Planning Section; 3) As an Intelligence Branch or Group in the Operations Section; 4) as a separate General Staff Intelligence Section; and 5) as an Intelligence Technical Specialist. The incident will drive the need for the Intelligence and Information function and where it is located in the ICS organization structure. The Intelligence and information function is described in significant detail in NIMS and in the Coast Guard Incident Management Handbook (IMH).

Distribution. The Organization Assignment List is duplicated and attached to the Incident Objectives form (ICS 202-CG) and given to all recipients of the Incident Action Plan. All completed original forms MUST be given to the Documentation Unit.

<u>Item #</u>	<u>Item Title</u>	<u>Instructions</u>
1.	Incident Name	Enter the name assigned to the incident.
2.	Operational Period	Enter the time interval for which the form applies. Record the start and end date and time.
3.	Incident Commander and Staff	Enter the names of the Incident Commander and Staff. Use at least the first initial and last name.
4.	Agency Representative	Enter the agency names and the names of their representatives. Use at least the first initial and last name.
5. thru 8.	Section	Enter the name of personnel staffing each of the listed positions. Use at least the first initial and last name. For Units, indicate Unit Leader and for Divisions/ Groups indicate Division/Group Supervisor. Use an additional page if more than three branches are activated. If there is a shift change during the specified operational period, list both names, separated by a slash.
9.	Prepared By Date/Time	Enter the name and position of the person completing the form Enter date (month, day, year) and time prepared (24-hour clock).

1. Incident Name		2. Operational Period (Date/Time) From: _____ To: _____		Assignment List ICS 204-CG																																																																															
3. Branch		4. Division/Group/Staging																																																																																	
5. Operations Personnel <div style="display: flex; justify-content: space-between; margin-top: 5px;"> Name Affiliation Contact # (s) </div> <div style="margin-top: 5px;"> Operations Section Chief: _____ Branch Director: _____ Division/Group Supervisor/STAM: _____ </div>																																																																																			
6. Resources Assigned <div style="float: right; font-size: small;">"X" indicates 204a attachment with additional instructions</div> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <thead> <tr> <th style="width: 25%;">Strike Team/Task Force/Resource Identifier</th> <th style="width: 15%;">Leader</th> <th style="width: 15%;">Contact Info. #</th> <th style="width: 10%;"># Of Persons</th> <th style="width: 35%;">Reporting Info/Notes/Remarks</th> <th style="width: 5%; text-align: center;">↓</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td style="text-align: center;"><input type="checkbox"/></td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td style="text-align: center;"><input type="checkbox"/></td></tr> </tbody> </table>						Strike Team/Task Force/Resource Identifier	Leader	Contact Info. #	# Of Persons	Reporting Info/Notes/Remarks	↓						<input type="checkbox"/>						<input type="checkbox"/>						<input type="checkbox"/>						<input type="checkbox"/>						<input type="checkbox"/>						<input type="checkbox"/>						<input type="checkbox"/>						<input type="checkbox"/>						<input type="checkbox"/>						<input type="checkbox"/>						<input type="checkbox"/>						<input type="checkbox"/>
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7. Work Assignments																																																																																			
8. Special Instructions																																																																																			
9. Communications (radio and/or phone contact numbers needed for this assignment) <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <u>Name/Function</u> <u>Radio: Freq./System/Channel</u> <u>Phone</u> <u>Cell/Pager</u> _____ </div> <div style="margin-top: 5px;"> _____ _____ _____ </div> <div style="margin-top: 10px;"> Emergency Communications Medical _____ Evacuation _____ Other _____ </div>																																																																																			
10. Prepared by:		11. Reviewed by (PSC):		12. Reviewed by (OSC):																																																																															
Date/Time		Date/Time		Date/Time																																																																															

ASSIGNMENT LIST (ICS 204-CG)

Purpose. The Assignment List(s) informs Division and Group supervisors of incident assignments. Once the Unified Command and General Staff agree to the assignments, the assignment information is given to the appropriate Divisions and Groups.

Preparation. The Assignment List is normally prepared by the Resources Unit, using guidance from the Incident Objectives (ICS 202-CG), Operational Planning Worksheet (ICS 215-CG), and the Operations Section Chief. The Assignment List must be approved by the Planning Section Chief and Operations Section Chief. When approved, it is included as part of the Incident Action Plan (IAP). Specific instructions for specific resources may be entered on an ICS 204a-CG for dissemination to the field. A separate sheet is used for each Division or Group. The identification letter of the Division is entered in the form title. Also enter the number (roman numeral) assigned to the Branch.

Special Note. The Assignment List, ICS 204-CG submits assignments at the level of Divisions and Groups. The Assignment List Attachment, ICS 204a-CG shows more specific assignment information, if needed. The need for an ICS 204a-CG is determined by the Planning and Operations Section Chiefs during the Operational Planning Worksheet (ICS 215-CG) development.

Distribution. The Assignment List is duplicated and attached to the Incident Objectives and given to all recipients of the Incident Action Plan. In some cases, assignments may be communicated via radio/telephone/fax. All completed original forms MUST be given to the Documentation Unit.

<u>Item #</u>	<u>Item Title</u>	<u>Instructions</u>
1.	Incident Name	Enter the name assigned to the incident.
2.	Operational Period	Enter the time interval for which the form applies.
3.	Branch	Enter the Branch designator.
4.	Division/Group/Staging	Enter the Division/Group/Staging designator.
5.	Operations Personnel	Enter the name of the Operations Chief, applicable Branch Director, and Division Supervisor.
6.	Resources Assigned	Each line in this field may have a separate Assignment List Attachment (ICS 204a-CG). Enter the following information about the resources assigned to Division or Group for this period:
	Identifier	List identifier
	Leader	Leader name
	Contact Information	Primary means of contacting this person (e.g., radio, phone, pager, etc.). Be sure to include area code when listing a phone number.
	# Of Persons	Total number of personnel for the strike team, task force, or single resource assigned.
	Reporting Info/Notes/Remarks	Special notes or directions, specific to this strike team, task force, or single resource. Enter an "X" check if an Assignment List Attachment (ICS 204a-CG) will be prepared and attached. The Planning and Operations Section Chiefs determine the need for an ICS 204a-CG during the Operational Planning Worksheet (ICS 215-CG) development.
7.	Work Assignment	Provide a statement of the tactical objectives to be achieved within the operational period by personnel assigned to this Division or Group.
8.	Special Instructions	Enter a statement noting any safety problems, specific precautions to be exercised, or other important information.
9.	Communications	Enter specific communications information (including emergency numbers) for this division /group. If radios are being used, enter function (command, tactical, support, etc.), frequency, system, and channel from the Incident Radio Communications Plan (ICS 205-CG). Note: Phone numbers should include area code.
10.	Prepared By	Enter the name of the person completing the form, normally the Resources Unit Leader.
	Date/Time	Enter date (month, day, year) and time prepared (24-hour clock).
11.	Reviewed by (PSC)	Enter date (month, day, year) and time prepared (24-hour clock).
	Date/Time	Enter date (month, day, year) and time prepared (24-hour clock).
12.	Reviewed by (OSC)	Enter the name of the operations person reviewing the form, normally the Operations Section Chief.
	Date/Time	Enter date (month, day, year) and time prepared (24-hour clock).

1. Incident Name		2. Operational Period (Date/Time)		ASSIGNMENT LIST ATTACHMENT	
		From: _____ To: _____		ICS 204a-CG	
3. Branch			4. Division/Group		
5. Strike Team/Task Force/Resource (Identifier)		6. Leader		7. Assignment Location	
8. Work Assignment Special Instructions, Special Equipment/Supplies Needed for Assignment, Special Environmental Considerations, Special Site Specific Safety Considerations					
Approved Site Safety Plan Located at: _____					
9. Other Attachments (as needed)					
<input type="checkbox"/> Map/Chart		<input type="checkbox"/> Weather Forecast/Tides/Currents		<input type="checkbox"/> _____	
<input type="checkbox"/> _____		<input type="checkbox"/> _____		<input type="checkbox"/> _____	
10. Prepared by: _____ Date/Time _____		11. Reviewed by (PSC): _____ Date/Time _____		12. Reviewed by (OSC): _____ Date/Time _____	

1. Incident Name		2. Operational Period (Date / Time) From: _____ To: _____		INCIDENT RADIO COMMUNICATIONS PLAN ICS 205-CG	
3. BASIC RADIO CHANNEL USE					
SYSTEM / CACHE	CHANNEL	FUNCTION	FREQUENCY	ASSIGNMENT	REMARKS
4. Prepared by: (Communications Unit)				Date / Time	
INCIDENT RADIO COMMUNICATIONS PLAN				ICS 205-CG (Rev.07/04)	

INCIDENT RADIO COMMUNICATIONS PLAN (ICS 205-CG)

Special Note. This form, ICS 205-CG, is used to provide, in one location, information on all radio frequency assignments down to the Division/Group level for each operational period; whereas, the Communications List, ICS 205a-CG is used to list methods of contact for personnel assigned to the incident (radio frequencies, phone numbers, pager numbers, etc.).

Purpose. The Incident Radio Communications Plan is a summary of information obtained from the Radio Requirements Worksheet (ICS 216) and the Radio Frequency Assignment Worksheet (ICS 217). Information from the Radio Communications Plan on frequency assignments is normally noted on the appropriate Assignment List (ICS 204-CG).

Preparation. The Incident Radio Communications Plan is prepared by the Communications Unit Leader and given to the Planning Section Chief. Detailed instructions on the preparation of this form may be found in ICS Publication 223-5, Communications Unit Position Manual.

Distribution. The Incident Radio Communications Plan is duplicated and given to all recipients of the Incident Objectives form, including the Incident Communications Center. Information from the plan is placed on Assignment Lists. All completed original forms MUST be given to the Documentation Unit.

<u>Item #</u>	<u>Item Title</u>	<u>Instructions</u>
1.	Incident Name	Enter the name assigned to the incident.
2.	Operational Period	Enter the time interval for which the form applies.
3.	Basic Radio Channel System Channel Function Frequency Assignment Remarks	Enter the following information about radio channel use: Radio cache system(s) assigned and used on the incident. Radio channel numbers assigned. Function each channel is assigned (e.g., command, support, division tactical, and ground-to-air). Radio frequency tone number assigned to each specified function (e.g., 153.400) ICS organization assigned to each of the designated frequencies (e.g., Branch I, Division A). This section should include narrative information regarding special situations.
4.	Prepared By	Enter the name of the Communications Unit Leader preparing the form.
	Date/Time	Enter date (month, day, year) and time prepared (24-hour clock).

COMMUNICATIONS LIST (ICS 205a-CG)

Special Note. This optional form is used in conjunction with the Incident Radio Communications Plan, ICS 205-CG. Whereas the ICS 205-CG is used to provide information on all radio frequencies down to the Division/Group level, the Communications List, ICS 205a-CG, lists methods of contact for personnel assigned to the incident (radio frequencies, phone numbers, pager numbers, etc.), and functions as an incident directory.

Purpose. The Communications List records methods of contact for personnel on scene.

Preparation. The Communications List can be filled out during check-in and is maintained and distributed by Communications Unit personnel.

Distribution. The Communications List is distributed within the ICS and posted, as necessary. All completed original forms **MUST** be given to the Documentation Unit.

<u>Item #</u>	<u>Item Title</u>	<u>Instructions</u>
1.	Incident Name	Enter the name assigned to the incident.
2.	Operational Period	Enter the time interval for which the form applies.
3.	Basic Local Comms Information Assignment Name Method(s) of contact	Enter the communications methods assigned and used for each assignment. Enter the ICS Organizational assignment. Enter the name of the contact person for the assignment. Enter the radio frequency, telephone number(s), etc. for each assignment.
4.	Prepared By Date/Time	Enter the name of the Communications Unit Leader preparing the form. Enter date (month, day, year) and time prepared (24-hour clock).

1. Incident Name		2. Operational Period (Date / Time) From: _____ To: _____		MEDICAL PLAN ICS 206-CG		
3. Medical Aid Stations						
Name	Location	Contact #	Paramedics On site (Y/N)			
4. Transportation						
Ambulance Service	Address	Contact #	Paramedics On board (Y/N)			
5. Hospitals						
Hospital Name	Address	Contact #	Travel Time		Burn Ctr?	Heli-Pad?
			Air	Ground		
6. Special Medical Emergency Procedures						
7. Prepared by: (Medical Unit Leader)			Date/Time		8. Reviewed by: (Safety Officer)	
MEDICAL PLAN			ICS 206-CG (Rev.07/04)			

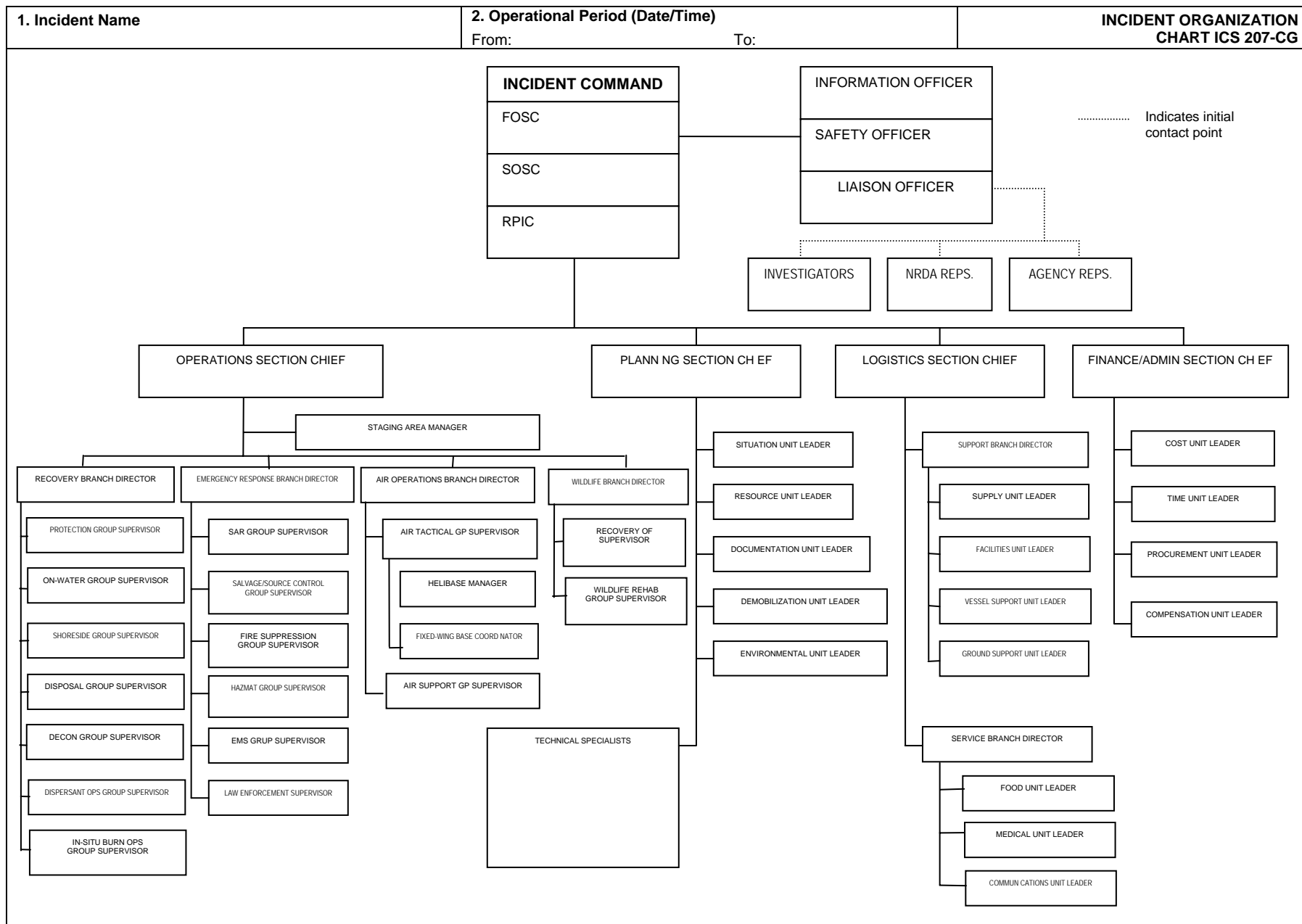
MEDICAL PLAN (ICS 206-CG)

Purpose. The Medical Plan provides information on incident medical aid stations, transportation services, hospitals, and medical emergency procedures.

Preparation. The Medical Plan is prepared by the Medical Unit Leader and reviewed by the Safety Officer.

Distribution. The Medical Plan may be attached to the Incident Objectives (ICS 202-CG), or information from the plan pertaining to incident medical aid stations and medical emergency procedures may be taken from the plan and noted on the Assignment List (ICS 204-CG) or on the Assignment List Attachment (ICS 204a-CG). All completed original forms MUST be given to the Documentation Unit.

<u>Item #</u>	<u>Item Title</u>	<u>Instructions</u>
1.	Incident Name	Enter the name assigned to the incident.
2.	Operational Period	Enter the time interval for which the form applies.
3.	Medical Aid Stations	Enter name, location, and telephone number of the medical aid station(s) (e.g., Cajon Staging Area, Cajon Camp Ground) and indicate if paramedics are located at the site.
4.	Transportation	List name and address of ambulance services. Provide phone number and indicate if ambulance company has paramedics.
5.	Hospitals	List hospitals that could serve this incident. Enter hospital name, address, phone number, the travel time by air and ground from the incident to the hospital, and indicate if the hospital has a burn center and/or a helipad.
6.	Medical Emergency Procedures	Note any special emergency instructions for use by incident personnel.
7.	Prepared By Date/Time	Enter the name of the Medical Unit Leader preparing the form. Enter date (month, day, year) and time prepared (24-hour clock).
8.	Reviewed By Date/Time	Enter the name of the Safety Officer who must review the plan. Enter date (month, day, year) and time reviewed (24-hour clock).



INCIDENT STATUS SUMMARY (ICS FORM 209-OS)

Purpose. The Status Summary:

1. Is used by Situation Unit personnel for posting information on Status Boards.
2. Is duplicated and provided to Command Staff members, giving them basic information for planning for the next operational period.
3. Provides information to the Information Officer for preparing news media releases.
4. Summarizes incident information for local and off-site coordination centers.

Preparation. The Status Summary is prepared by the Situation Unit. Resources information should be obtained from the Resources Unit. It may be scheduled for presentation to the Planning Section Chief and other General Staff members prior to each Planning Meeting and may be required at more frequent intervals by the Unified Command or Planning Section Chief. Suggested sources of information are noted in brackets.

Note: The values on the ICS form 209-OS are the best available estimates at the Time of Report (Item # 2 on form). This form is usually in high demand and should be filled out early and often. A suggested source within the ICS organization is noted in brackets [] at the top right of each section of the form. All fields need not be completed in order to distribute the form.

Distribution. When completed, the form is duplicated and copies are distributed to the Unified Command and staff, and all Section Chiefs, Planning Section Unit Leaders, and the Joint Information Center. It is also posted on a status board located at the ICP. All completed original forms MUST be given to the Documentation Unit.

Item #	Item Title	Instructions
1.	Incident Name	Enter the name assigned to the incident.
2.	Period Covered by Report	Enter the date and time interval for which the report applies. Use 24-hour clock for all times. Enter time for which this information applies.
	Time of Report	Enter the Time (24-hour clock) the form was prepared.
3.	Spill Status [Ops & EUL/SSC]	Indicate whether the spill source is secured or unsecured and estimate the remaining potential and the rate of spillage discharge or release. Enter the estimated amounts in barrels for each category. Values entered in the column labeled Since Last Report are from the start of the Period Covered by Report (Item 2) to the time entered in the Time of Report (Item 2).
4.	Mass Balance/Oil Budget	These fields are designed to account for all spilled oil whether recovered, evaporated, dispersed, burned, floating, or on shore. The total of these estimates should approximate the total volume spilled, discharged, or released. Values for evaporation, dispersion, etc. can be obtained from the Environmental Unit and/or the Scientific Support Coordinator.
5.	Waste Management [Ops/Disposal]	Enter the estimated amounts in barrels or tons for each category. Oil (bbl) is the sum of the estimate of oil in oily liquids and oil in oily solids, and is the value to be entered under "Total Recovered Oil" in Item 3.
6.	Shoreline Impacts [PSC/EUL/SSC]	Enter the total miles in each category for each degree of oiling. Definitions for Light, Medium, and Heavy oiling can be obtained from the EUL/SSC and should be consistent throughout the incident.

Item #	Item Title	Instructions
7.	Wildlife Impacts [Ops/Wildlife Br.]	This information is only tracked after an animal is captured. Indicate the actual number of oiled wildlife in each category. Use numbers in parentheses to indicate the subtotal of threatened / endangered species included in the numbers given.
	Safety Status [Safety Officer]	Indicate the number of serious injuries. Values entered in the column labeled Since Last Report are from the start of the Period Covered by Report (Item 2) to the time entered in the Time of Report (Item 2).
8.	Equipment Resources [RUL]	Indicate the number of each type of resource in each status category. There are blank lines below each general type of resource for additional equipment.
	Ordered	Ordered but not yet arrived/available.
	Available/Staged	Arrived on scene, stored in staging, not assigned to any task, available for use.
	Assigned	Assigned to a specific task.
	Out of Service	Not working and not assigned to any task (e.g., skimmer being repaired, boom broken, personnel off-duty for rest).
9.	Personnel Resources [RUL]	Indicate, by agency, the numbers of personnel assigned. There are blank lines for additional personnel, as needed.
10.	Special Notes	Use this area for any special notes or other information related to this reporting period. This could include financial/cost information, specific endangered species notes, significant events that occurred, etc.
11.	Prepared By	Enter name and title of the person preparing the form, normally the Situation Unit Leader.

CHECK-IN LIST Personnel (ICS FORM 211p-OS)

Special Note. This form is used for personnel check-in only.

Purpose. Personnel arriving at the incident can be checked in at various incident locations. Check-in consists of reporting specific information that is recorded on the form.

Preparation. The Check-In List is initiated at a number of incident locations including staging areas, base, camps, helibases, and ICP. Managers at these locations record the information and give it to the Resources Unit as soon as possible.

Distribution. Check-In Lists are provided to both the Resources Unit and the Finance/Administration Section. The Resources Unit maintains a master list of all equipment and personnel that have reported to the incident. All completed original forms MUST be given to the Documentation Unit.

Item #	Item Title	Instructions
1.	Incident Name	Enter the name assigned to the incident.
2.	Operational Period	Enter the time interval for which the form applies. Record the start and end date and time.
3.	Check-in Location	Check the box for the check-in location.
4.	Name	Enter the name of the person.
5.	Company/Agency	Enter the company or agency with which the individual is associated.
6.	ICS Section / Assignment / Quals.	Enter ICS Section and assignment, if known, and note any other ICS qualifications, if needed.
7.	Contact Information	Enter the contact information for the person.
8.	Initial Incident Check-in?	Check if this is the first time a person has checked in for this incident.
9.	Time In/Out	Enter the time the person checks in and/or out (24-hour clock).
10.	Prepared By Date/Time Prepared	Enter name and title of the person preparing the form. Enter date (month, day, year) and time prepared (24-hour clock).
11.	Date/Time Sent to Resources Unit	Enter date (month, day, year) and time (24-hour clock) the form is sent to the Resources Unit.

Resource Request Message							ICS-213 RR CG (05/06)		
1. Incident Name:			2. Date/Time:		3. Resource Request No:				
4. ORDER Note: Use additional forms when requesting different resource sources of supply									
Requestor	a. Qty.	b. Kind	c. Type	d. Detailed item description (Vital characteristics, brand, specs, experience, etc. & if applicable describe purpose/use, attach diagrams, & other amplifying info)		e. Requested Reporting Location:		f. ETA (LSC):	g. Cost (FSC):
5. Suggested source(s) of Supply - POC phone no. if known & suitable substitutes:									
6. Requested by Name/Position/Phone:			7. Date/Time:		8. Section Chief Approval:		Date/Time:		
<input type="checkbox"/> 9. Check box if request is for tactical/personnel resources & Submit to RESL, otherwise submit directly to Logistics				10. RESL Review/Signature: <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <input type="checkbox"/> Resources as noted are Available <input type="checkbox"/> Resources Not Available </div>					
Logistics	11. Logistics Order No.:			12. Supplier Name/Phone/Fax/Email:					
	13. Notes:								
	14. Approval Signature of Auth Logistics Rep:					15. Date/Time:			
16. Order placed by (check box): <div style="display: inline-block; margin-left: 10px;"> <input type="checkbox"/> SPUL <input type="checkbox"/> PROC </div>									
Finance	17. Reply/Comments from Finance:								
	18. Finance Section Signature:					19. Date/Time:			

Full Instructions on back page. Requestor fills out # 1-9 & keeps yellow copy (bottom). If applicable, RESL reviews if resource available & signs # 10. Logistics fills in remainder of # 4 & # 10-15 & keeps pink copy. Finance, if needed fills out appropriate items & keeps green copy. Blue original is returned to RESL for tactical/personnel or requestor for non-tactical. White copy goes to DOCL.

Instructions for filling out the ICS-213RR CG Form (5/06)

REQUESTOR: The requestor must fill in Blocks 1 through 9:

Block # 1	Incident name: This is the same as the name stated on the ICS-201 Form and/or the Incident Action Plan (IAP).
Block # 2	Current date and time when submitting request
Block # 3	Resource Request Number: This is to be assigned by the Section submitting request (i.e. CMD, OPS, PLAN, LOG, FIN)
Block # 4	Fill in blocks 4a through 4e. <u>Items requested</u> : Must include Quantity, Kind and Type (if applicable) and detailed description of requirements. BE SPECIFIC AS POSSIBLE . The request should focus on capability rather than naming the brand or specific item (e.g. helicopter capable of carrying 4 personnel from location A to B rather than requesting a Coast Guard H-65 helicopter). This gives the logistics section the ability to find the best resource to meet the need. <u>4.e Requested Reporting Location/Date/Time</u> : This is self-explanatory and is required for ordering official. <u>Leave blocks 4.f. ETA (LSC) and 4.g. Cost (FSC) blank</u> . These will be filled in later by Logistics and Finance.
Block # 5	Suggested sources of supply and suitable substitutes: Enter applicable information if known.
Block # 6 & 7	Requestor: Print Name and Signature and date/time.
Block # 8	Approval: This must be approved by the Section Chief or Deputy Section Chief.
Block # 9	Check box if request is for tactical or personnel resource(s) and submit request to Resources Unit Leader (RESL) to review and approve since RESL tracks all tactical and personnel resources.

Request goes to RESOURCES UNIT if requesting Tactical/Personnel Resource(s):

Block # 10	Resources reviews request and checks to see if resource is available. If the resource is <u>available</u> , reassigns resource as appropriate and sends request back to requester with information noted as to reporting time, etc. The request form is then sent to Documentation Unit Leader (DOCL) for filing. If the resource is <u>not available</u> , RESL sends request to Logistics.
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LOGISTICS SECTION: The following blocks are to be filled out by the Supply Unit (SPUL).

Block # 11	Logistics Order Number: To be assigned by Supply Unit.
Block # 12	Supplier Point of Contact, Phone Number and Fax Number: This information is needed for Credit Card purchases and/or Purchase Orders.
Block # 13	Notes: Enter applicable information as need for request.
Block # 4	ETA and Cost: SPUL or PROC fills in Estimated time of arrival (ETA) when determined and cost if known.
Block # 14 & 15	Approval: This must be approved by the Logistics Section Chief or Deputy Logistics Section Chief, printed name and signature is required with Date and Time of approval. Bottom Copy (pink) is retained.

FINANCE SECTION: The following blocks are to be filled out by the Procurement Unit (PROC), if applicable.

Block # 16	Indicates who is to place order as necessary.
Block # 17	Comments concerning request from Finance Section Chief or Deputy Finance Section Chief.
Block # 18 & 19	Approval: This must be approved by the Finance Section Chief or Deputy Section Chief, printed name and signature is required with Date and Time of approval. Bottom copy (green) is retained.
FILING	Original blue copy is returned to RESL for tactical/personnel resources ordered, and the requester for non-tactical. RESL will inform requester of status of request when form received. The white copy is sent to DOCL.

Note: Cost associated requests will not be ordered without approval from the Finance Section Chief or Deputy Finance Section Chief.

Form Filing: Blue (Original) – final disposition to RESL or originator for non-tactical resources, White (copy 1) to DOCL, Green (copy 2) to FIN, Pink (copy 3) to LOG, Yellow (copy 4) to Originator

UNIT LOG (ICS FORM 214-CG)

Purpose. The Unit Log records details of unit activity, including strike team activity or individual activity. These logs provide the basic reference from which to extract information for inclusion in any after-action report.

Preparation. A Unit Log is initiated and maintained by Command Staff members, Division/Group Supervisors, Air Operations Groups, Strike Team/Task Force Leaders, and Unit Leaders. Completed logs are submitted to supervisors who forward them to the Documentation Unit.

Distribution. The Documentation Unit maintains a file of all Unit Logs. All completed original forms MUST be given to the Documentation Unit.

<u>Item #</u>	<u>Item Title</u>	<u>Instructions</u>
1.	Incident Name	Enter the name assigned to the incident.
2.	Check-In Location	Enter the time interval for which the form applies. Record the start and end date and time.
3.	Unit Name/Designators	Enter the title of the organizational unit or resource designator (e.g., Facilities Unit, Safety Officer, Strike Team).
4.	Unit Leader	Enter the name and ICS Position of the individual in charge of the Unit.
5.	Personnel Assigned	List the name, position, and home base of each member assigned to the unit during the operational period.
6.	Activity Log	Enter the time and briefly describe each significant occurrence or event (e.g., task assignments, task completions, injuries, difficulties encountered, etc.)
7.	Prepared By	Enter name and title of the person completing the log. Provide log to immediate supervisor, at the end of each operational period.
	Date/Time	Enter date (month, day, year) and time prepared (24-hour clock).

1. Incident Name											2. Operational Period (Date / Time) From:						3. Date			4. Time	
RISKS											RISK MITIGATION										
Division/Group	Weather	Biohazard	Hazardous Materials	Communications	Recreational Water Hazard	SHA	Fatigue	Diving Hazards/Bends	Dehydration	CSC											
Prepared by (Name and Position)											INCIDENT ACTION PLAN SAFETY ANALYSIS ICS 215A-OS										

INCIDENT ACTION PLAN SAFETY ANALYSIS (ICS FORM 215A-OS)

Purpose. This form communicates to the the Operations and Planning Section Chiefs safety and health issues identified by the Safety Officer. The Worksheet is used by the Planning section Chief to complete Operations briefings.

Preparation. This form is principally crafted by the Safety Officer. Use additional sheets, as needed.

Distribution. When the safety analysis is completed, the form is distributed to the Planning Section Chief to help prepare Operations briefing packages. All completed original forms MUST be given to the Documentation Unit.

Item #	Item Title	Instructions
1.	Incident Name	Enter the name assigned to the incident.
2.	Operational Period	Enter the time interval for which the form applies. Record the start and end date and time.
3.	Date	Enter date (MMDDYYYY) prepared.
4.	Time	Enter time prepared (24-hour clock).
	Division/Group	Enter Division/Group indentifiers.
	Blank Risk Header	Enter appropriate title for risk.
	Blank Risk Mitigation Header	Enter appropriate information for risk mitigation.
	Blank Risk Cells	Enter an X to indicate a risk type of concern in a division/group.
	Blank Risk Mitigation Cells	Enter an X to indicate mitigation for risk to division/group.
	Prepared By	Enter name and title of the person preparing the form.

1. Incident Name		2. Operational Period (Date / Time) From: _____ To: _____		AIR OPERATIONS SUMMARY ICS 220-CG																											
3. Distribution <input type="checkbox"/> Fixed-Wing Bases _____ <input type="checkbox"/> Helibase _____																															
4. Personnel and Communications <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 30%;"></th> <th style="width: 20%; text-align: center;">Air Operations Director</th> <th style="width: 20%; text-align: center;">Air / Air Frequency</th> <th style="width: 30%; text-align: center;">Air / Ground Frequency</th> </tr> <tr> <td>Air Operations Director</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>Air Tactical Supervisor</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>Air Support Supervisor</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>Helicopter Coordinator</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>Fixed-Wing Coordinator</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> </table>							Air Operations Director	Air / Air Frequency	Air / Ground Frequency	Air Operations Director	_____	_____	_____	Air Tactical Supervisor	_____	_____	_____	Air Support Supervisor	_____	_____	_____	Helicopter Coordinator	_____	_____	_____	Fixed-Wing Coordinator	_____	_____	_____	5. Remarks (Spec. Instructions, Safety Notes, Hazards, Priorities) <div style="height: 100px;"></div>	
	Air Operations Director	Air / Air Frequency	Air / Ground Frequency																												
Air Operations Director	_____	_____	_____																												
Air Tactical Supervisor	_____	_____	_____																												
Air Support Supervisor	_____	_____	_____																												
Helicopter Coordinator	_____	_____	_____																												
Fixed-Wing Coordinator	_____	_____	_____																												
6. Location / Function	7. Assignment	8. Fixed-Wing		9. Helicopter		10. Time		11. Aircraft Assigned	12. Operating Base																						
		NO.	TYPE	NO.	TYPE	Available	Commence																								
13. TOTALS																															
14. Air Operation Support Equipment					15. Prepared by _____ Date / Time _____																										
AIR OPERATIONS SUMMARY								ICS 220-CG (Rev.07/04)																							

AIR OPERATIONS SUMMARY (ICS 220-CG)

Purpose. The Air Operations Summary provides the Air Operations Branch with the number, type, location, and specific assignments of aircraft.

Preparation. The Operations Section Chief or the Air Operations Branch Director completes the summary during each Planning Meeting. General air resource assignment information is obtained from the Operational Planning Worksheet (ICS 215-CG). The Air and Fixed-Wing Support Groups provide specific designators of the air resources assigned to the incident.

Distribution. After the summary is completed by Air Operations personnel (except item 11), the form is given to the Air Support Group Supervisor, who completes the form by indicating the designators of the helicopters and fixed-wing aircraft assigned missions during the specified operational period. This information is provided to Air Operations personnel who, in turn, give the information to the Resources Unit. All completed original forms MUST be given to the Documentation Unit.

Item #	Item Title	Instructions
1.	Incident Name	Enter the name assigned to the incident.
2.	Operational Period	Enter the time interval for which the form applies.
3.	Distribution	Check the block and enter the time and date when ICS 220-CG and attachments were sent to all fixed-wing bases and helibases supporting the incident.
4.	Personnel and Communications	List the names of those assigned to each position, and the air-air and air-ground frequencies to be used.
5.	Remarks	Enter the special instructions or information, including safety notes, hazards, and priorities for Air Operations personnel.
6.	Location/Function	Enter the assigned location and function of the aircraft.
7.	Assignment	Enter the scope of work the aircraft is assigned to complete.
8.	Fixed Wing	Indicate the number and type of fixed-wing aircraft available for this Location / Function.
9.	Helicopters	Indicate the number and type of helicopters available for this Location / Function.
10.	Time	Indicate when aircraft will be available for use and when operations commence (use 24 hour clock).
11.	Aircraft Assigned	Enter the designators of the aircraft assigned. Gather information from Resources Unit, helibases, and fixed-wing bases.
12.	Operating Base	Enter the base (helibase, helispot, fixed-wing base) from which each air resource is expected to initiate operations.
13.	Totals	Enter the total number of fixed-wing and helicopter aircraft assigned to the incident in the Number columns. Enter the total number of each type of aircraft assigned in the Type columns.
14.	Air Operations Support Equipment	List the designators and location of other support resources assigned to Air Operations.
15.	Prepared By	Enter name and title of the person preparing the form.
	Date/Time	Enter date (month, day, year) and time prepared (24-hour clock).

1. Incident Name	2. Operational Period (Date / Time) From: _____ To: _____	DEMOB. CHECK-OUT ICS 221-CG
3. Unit / Personnel Released		4. Release Date / Time
5. Unit / Personnel You and your resources have been released, subject to signoff from the following: (Demob. Unit Leader "X" appropriate box(es)) Logistics Section <input type="checkbox"/> Supply Unit _____ <input type="checkbox"/> Communications Unit _____ <input type="checkbox"/> Facilities Unit _____ <input type="checkbox"/> Ground Unit _____ Planning Section <input type="checkbox"/> Documentation Unit _____ Finance / Admin. Section <input type="checkbox"/> Time Unit _____ Other <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____		
6. Remarks _____ _____ _____ _____		
7. Prepared by: _____		Date / Time _____
DEMOB. CHECK-OUT		ICS 221-CG (Rev.07/04)

DEMOB. CHECK-OUT (ICS 221-CG)

Purpose. This form provides the Planning Section information on resource releases from the incident.

Preparation. The Demobilization Unit Leader or the Planning Section initiates this form. The Demobilization Unit Leader completes the top portion of the form after the resource supervisor has given written notification that the resource is no longer needed.

Distribution. The individual resource will have the unit leader initial the appropriate box(es) in item 5 prior to release from the incident. After completion, the form is returned to the Demobilization Unit Leader or the Planning Section. All completed original forms MUST be given to the Documentation Unit.

<u>Item #</u>	<u>Item Title</u>	<u>Instructions</u>
1.	Incident Name	Enter the name assigned to the incident.
2.	Operational Period	Enter the time interval for which the form applies.
3.	Strike Team / Unit / Personnel Released	Enter name of Strike Team, Unit or personnel being released.
4.	Release Date/Time	Enter date (month, day, year) and time (24-hour clock) of anticipated release.
5.	Strike Team / Unit / Personnel	Demobilization Unit Leader will enter an "X" in the box to the left of those units requiring check-out. Identified Unit Leaders are to initial to the right to indicate release. NOTE: Blank boxes are provided for any additional unit requirements as needed, (e.g., Safety Officer, Agency Rep., etc.)
6.	Remarks	Enter any additional information pertaining to demobilization or release (e.g., transportation needed, destination, etc.).
7.	Prepared By	Enter name and title of the person preparing the form.
	Date/Time	Enter date (month, day, year) and time prepared (24-hour clock).

1. Incident Name		2. Operational Period (Date/Time) From: _____ To: _____		DAILY MEETING SCHEDULE ICS 230-CG	
3. Meeting Schedule (Commonly-held meetings are included)					
Date/ Time	Meeting Name	Purpose	Attendees	Location	
	Unified Command Objectives Meeting	Review/ identify objectives for the next operational period.	Unified Command members		
	Command & General Staff Meeting	IC/UC gives direction to Command & General staff including incident objectives and priorities	IC/UC, Command & General Staff		
	Tactics Meeting	Develop/Review primary and alternate Strategies to meet Incident Objectives for the next Operational Period.	PSC, OSC, LSC, RESL & SITL		
	Planning Meeting	Review status and finalize strategies and assignments to meet Incident Objectives for the next Operational Period.	Determined by the IC/UC		
	Operations Briefing	Present IAP and assignments to the Supervisors / Leaders for the next Operational Period.	IC/UC, Command & General Staff, Branch Directors, Div/Gru Sups., Task Force/Strike Team Leaders and Unit Leaders		
4. Prepared by: (Situation Unit Leader)			Date/Time		
<div style="display: flex; justify-content: space-between;"> DAILY MEETING SCHEDULE ICS 230-CG (Rev.07/04) </div>					

DAILY MEETING SCHEDULE (ICS 230-CG)

Purpose. The Daily Meeting Schedule records information about the daily scheduled meeting activities.

Preparation. This form is prepared by the Situation Unit Leader and coordinated through the Unified Command for each operational period or as needed. Commonly-held meetings are already included in the form. Additional meetings, as needed, can be entered onto the form in the spaces provided. Time and location for each meeting must be entered. If any of these standard meetings are not scheduled, they should be crossed out on the form.

Distribution. After coordination with the Unified Command, the Situation Unit Leader will duplicate the schedule and post a copy at the Situation Status Board and distribute to the Command Staff, Section Chiefs, and appropriate Unit Leaders. All completed original forms MUST be given to the Documentation Unit.

<u>Item #</u>	<u>Item Title</u>	<u>Instructions</u>
1.	Incident Name	Enter the name assigned to the incident.
2.	Operational Period	Enter the time interval for which the form applies.
3.	Meeting Schedule	For each scheduled meeting, enter the date/time, meeting name, purpose, attendees, and location. Note: Commonly-held meetings are included in the form. Additional meetings, as needed, can be entered onto the form in the spaces provided. Time and location for each meeting must be entered. If any of the standard meetings are not scheduled, they should be deleted from the form (normally the Situation Unit Leader).
4.	Prepared By	Enter name and title of the person preparing the form, normally the Situation Unit Leader.
	Date/Time	Enter date (month, day, year) and time prepared (24-hour clock).

1. Incident Name		2. Operational Period (Date/Time) From: _____ To: _____		RESOURCES AT RISK SUMMARY ICS 232-CG	
3. Environmentally-Sensitive Areas and Wildlife Issues					
Site #	Priority	Site Name and/or Physical Location	Site Issues		
Narrative					
4. Archaeo-cultural and Socio-economic Issues					
Site #	Priority	Site Name and/or Physical Location	Site Issues		
Narrative					
5. Prepared by: (Environmental Unit Leader)			Date/Time		
RESOURCES AT RISK SUMMARY			ICS 232-CG (Rev.07/04)		

RESOURCES AT RISK SUMMARY (ICS 232-CG)

Purpose. The Resources at Risk Summary provides information about sites in the incident area which are sensitive due to environmental, archaeo-cultural, or socio-economic resources at risk, and identifies incident-specific priorities and issues. The information recorded here may be transferred to ICS 232a-CG, which acts as a key to the Area Contingency Plan (ACP) or Geographic Response Plan (GRP) site numbers shown on the Situation Map.

Preparation. The Environmental Unit Leader, with input from resource trustees, will complete this form for each operational period. It should be updated prior to the Planning Meeting.

Distribution. This form must be forwarded to the Planning Section Chief for possible inclusion in the IAP. All completed original forms MUST be given to the Documentation Unit.

<u>Item #</u>	<u>Item Title</u>	<u>Instructions</u>
1.	Incident Name	Enter the name assigned to the incident.
2.	Operational Period	Enter the time interval for which the form applies.
3.	Env- Sensitive Area & Wildlife Issues	
	Site Number	Enter site number. Can come from Area Contingency Plan (ACP) or Geographic Response Plan (GRP) or can be created during an incident.
	Priority	Priority specific to this incident. Can come from an ACP/GRP or can be created during an incident.
	Site Name and/or Physical Location	Name of the site (e.g., Marsh Pt., Glacier Creek, etc.) and/or physical location (e.g., address, lat/long, landmarks, etc.).
	Site Issues	Environmental concerns associated with this site and season.
	Narrative	Use the Narrative section to clarify any issues.
4.	Archaeo-cultural and Socio-economic Issues	
	Site Number	Enter site number. Can come from an ACP/GRP or can be created during an incident.
	Priority	Priority specific to this incident. Can come from an ACP/GRP or can be created during an incident.
	Site Name and/or Physical Location	Name of the site (e.g., Marsh Pt., Glacier Creek, etc.) and/or physical location (e.g., address, lat/long, landmarks, etc.).
	Site Issues	Archaeo-cultural or socio-economic concerns associated with this site and season.
	Narrative	Use the Narrative section to clarify any issues.
5.	Prepared By	Enter name and title of the person preparing the form (normally the Environmental Unit Leader).
	Date/Time	Enter date (month, day, year) and time prepared (24-hour clock).

ACP SITE INDEX (ICS 232a-CG)

Special Note. This optional form is designed to be a key to the site numbers or site names shown on the Situation Map. The information on priorities for environmentally-sensitive areas and archaeo-cultural and socio-economic issues from the ICS 232-CG may be transferred to ICS 232a-CG, which provides more information on the Area Contingency Plan (ACP) or Geographic Response Plan (GRP) site numbers or names shown on the Situation Map.

Purpose. If used, this form is posted next to the Situation Map, providing a key to the ACP/GRP sites shown on the map.

Preparation. The Situation Unit personnel responsible for the Situation Map prepare this form, using ICS 232-CG prepared by the Environmental Unit.

Distribution. This form is posted next to the Situation Map and copies of this form should accompany any distributed copies of the Situation Map. All completed original forms **MUST** be given to the Documentation Unit.

<u>Item #</u>	<u>Item Title</u>	<u>Instructions</u>
1.	Incident Name	Enter the name assigned to the incident.
2.	Operational Period	Enter the time interval for which the form applies.
3.	Index to ACP/GRP sites	Enter site information from the Area Contingency Plan (ACP) or Geographic Response Plan (GRP) or other sources specific to this incident.
	Site Number	Can come from an Area Contingency Plan (ACP) or Geographic Response Plan (GRP) or can be created during an incident.
	Priority	Priority specific to this incident.
	Site Name and/or Physical Location	Name of the site (e.g., Marsh Pt., Glacier Creek, etc.) and/or physical location (e.g., address, lat/long, landmarks, etc.).
	Action	Actions to be taken for designated protection and collection strategies or for other sites identified specifically for this incident.
	Status	Status of site action implementation (e.g., scheduled, in progress, completed).
4.	Prepared By	Enter name and title of the person preparing the form.
	Date/Time	Enter date (month, day, year) and time prepared (24-hour clock).

1. Incident Name					INCIDENT OPEN ACTION TRACKER ICS 233-CG		
2. No.	3. Item	4. For/POC	5. POC Briefed	6. Start Date	7. Status	8. Target Date	9. Actual Date
1							
2							
3							
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5							
6							
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Open Actions Tracker (ICS 233-CG)

<u>Item #</u>	<u>Item Title</u>	<u>Instructions</u>
1.	Incident Name	Enter the name assigned to the incident.
2.	No.	Enter number of task in sequential order (1, 2, 3, ...).
3.	Item	Enter short descriptive of the task.
4.	For/POC	Enter responsible section/person.
5.	Briefed to POC	When the tasker has been briefed to the POC after initially assigned, an "X" is placed in the brief column. This was to ensure that taskers identified outside of the POC's presence (during UC Meeting for example) were assigned to the identified POC.
6.	Start Date	Enter the date the tasker was initially assigned under "Start Date."
7.	Status	Enter status of item. This includes things like: "Awaiting LE Gear", "Update needed", "Awaiting Feedback". When the item is completed, the word "completed" is entered and if working in MS Excel, the task is cut and pasted into the worksheet labeled "COMPLETED."
8.	Target Date	Target date is another way of saying deadline. When the target date is one day away, the block turns yellow. When it is overdue it turns red. When it is yellow, it serves as a reminder to the UC that the target date needs to be changed or the responsible section needs to complete the task.
9.	Actual Date	The block to the right of the Target Date (Actual Date) will always have today's date. It is merely the formula "=today()" inserted into the cell.

NOTE: In order to ensure the red and yellow reminders work for new tasks, the user simply copies a task line, inserts it into the worksheet and overtypes the new task information.

		WORK ANALYSIS MATRIX ICS 234-CG	
1. Incident Name		2. Operational Period From: To:	
3. Operation's Objectives DESIRED OUTCOME	4. Optional Strategies HOW	5. Tactics/Work Assignments WHO, WHAT, WHERE, WHEN	
6. Prepared by: (Operations Section Chief)		7. Date/Time:	

[illegible]

CHECK-IN LIST			1. INCIDENT NAME:			2. CHECK-IN LOCATION:					3. DATE/TIME:	
CHECK-IN INFORMATION												
4. LIST PERSONNEL (OVERHEAD) BY AGENCY NAME – OR LIST EQUIPMENT BY THE FOLLOWING FORMAT: S=Supplies H=Helicopter O=Overhead VL=Vessels E=Equipment C=Crew A=Aircraft VH=Vehicle			5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
AGENCY	RESOURCE IDENTIFIER	KIND	ORDER/NUMBER	DATE/TIME CHECK-IN	LEADER'S NAME	TOTAL NO. PERSONNEL	INCIDENT CONTACT INFORMATION	INCIDENT LODGING INFO/CONTACT INFO	HOME UNIT	METHOD OF TRAVEL	INCIDENT ASSIGNMENT	SENT TO RESTAT TIME/INT
15.			16. PREPARED BY (Name and Position) USE BACK FOR REMARKS OR COMMENTS									
ICS 211-CG PAGE _____ of _____												

[illegible]

[illegible]

INCIDENT ACTION PLAN SAFETY ANALYSIS (ICS-215A-CG (rev 6/06))

Instructions for filling out the form

Purpose: The purpose of this worksheet is to aid the Safety Officer in completing an operational risk assessment to prioritize hazards and develop appropriate controls.

Preparation: During the Incident Action Planning cycle where the Operations Section Chief (OSC) is preparing for the tactics meeting, the Safety Officer works alongside the OSC and completes the Incident Action Plan Safety Analysis. This sheet mirrors the ICS 215 form. Work assignments are listed along with associated hazards. A calculation is made that determines what level of risk each work assignment poses. For those assignments having significant risk, controls are developed for safeguarding responders. The net risk is evaluated against the gain. The Incident Commander should be alerted to all safety hazards that receive an amber or red GAR rating after controls have been established.

Distribution: The Operational Hazard Worksheet is attached to the Incident Site Safety Plan and is distributed according to the instruction for Site Safety Plans.

Instructions:

Item #	Item Title	Instructions
1	Incident Name	Print the name assigned to the incident.
2	Date/Time Prepared	Enter date (month, day, year) and time prepared.
3	Division/Group	Enter the Branch, Division or Group title in abbreviated form.
4	Work Assignment	List the work assignment for each Branch, Division or Group.
5	Gain	Check the gain that is achieved when the work assignment is accomplished.
6	Hazards	Using the IAP Safety Analysis Aid (page 2), list the type of hazards likely to be encountered for the work assignment. Place a check mark in the box below the hazard.
7	Controls	Using the IAP Safety Analysis Aid (page 2), list the type of controls likely to be used for addressing the hazards listed. Place a check mark in the box below the control.
8	GAR	Using the "Key", assign a number from 1 to 5 based on the level of severity, probability and exposure. Multiply all numbers together to get a total. Enter this number into the total column. Gar means Green, Amber, Red . Using the GAR scale on the bottom of the sheet, assign a color, risk level or action phrase in this block.
9	Prepared by	Enter the name of the person who completed this worksheet.

ICS-215A-CG INCIDENT ACTION PLAN SAFETY ANALYSIS AID

HAZARDS:

Physical	Chemical/Biological	Human
• Slipping	• Explosion	• Violence
• Tripping	• Flammable	• Poor Lifting
• Fall	• Air Reactive	• Repetition
• Overhead	• Water Reactive	• Excessive Force
• Heat Stress	• Chem Reactive	• Poor posture
• Cold Stress	• Alpha Rad	• Awkward motion
• Electrical	• Beta Rad	• Fatigue
• Blunt Objects	• Gamma Rad	• Poor hygiene
• Sharp Objects	• X Rad	• Illness
• Noise	• Bio-weapon	• Alcohol/Drugs
• Vehicle	• Chem-weapon	• Over crowding
• Fire	• Irritant	• Poor comms
• Sun/UV Glare	• Asphyxiant	• Noise interference
• Sun Burn	• Oxidizer	• Smoking
• Moving Pinch Points	• Carcinogen	• Driving
• Unguarded Machinery	• Corrosive	Animal/Plant
• Lightning	• Cryogenic	• Bites/Stings
• Drowning	• Toxic	• Poison
• Engulfment	• Biomed/pathogen	• Thorns/burrs
• Limited Egress/Access	• Particulates	• Swarms
	• Fumes (weld etc.)	• Disease
	• O2 Deficiency	• Feces/Coliforms

CONTROLS:

Types of Engineering Controls:

• Barriers	• Shields	• Dams
• Capping	• Covering	• Fencing
• Terminating	• Shutting	• Blocking
• Chocks	• Enclosures	• Diverters
• Flanging	• Guarding	• Substitution

• Anchoring	• Ventilation	• Blowing
• Scaffolding	• Grounding	• Substitution
• Bonding	• Insulation	• Lighting
• Locks, Tags	• Kill-switches	• Shut-off valves
• Taglines	• Circuit Breakers	• Process change
• Plugging, patching	• Sealing	• Absorbers

Types of Administrative Controls:

• Reduced work duration	• Worker rotation	• Safety plans
• Training	• Safety briefs	• Relief personnel
• Maintenance	• Drinking fluids	• Work/rest periods
• Good housekeeping	• Roving security	• Signs
• Warning lights	• Alarms	• Break areas
• Pre-inspections	• Field checks	• Buddy system
• Line of sight comms	• Comms schedule	• Equip staging
• Load shifting	• Hazard marking	• Placarding
• Labeling	• Hand signals	• Safety observers
• Fendering	• Work plans	• Replenish fluids
• Handcarts/trolleys	• Fire extinguishers	• Drum bulking
• Eye Wash Station	• Hand washers	• Showers

Types of Personal Protective Equipment Controls:

• Hard hats	• Steel-toed shoes	• Safety glasses
• Safety goggles	• Face shields	• Hearing Protection
• Life jacket	• Fall arrests	• SCBA
• APRs	• Chemical suits	• Flash suits
• Fire resistant suits	• Work gloves	• Chemical gloves
• Sun glasses	• Sun-block	• Life rings
• Eye wash stations	• Night vision	• Thermal protection
• Dry/wet suits	• Hand warmers	• Wind breaker coat
• Knee pads	• Over garments	• Coveralls
• Booties	• Cooling vests	• Chap lip protection
• Hats for warming	• Gloves (warmth)	• Clothing (warmth)

Site Safety and Health Plan ICS-208-CG (rev 9/06)

Incident Name: _____

Date/Time Prepared: _____ **Operational Period:** _____

Purpose. The ICS Compatible Site Safety and Health Plan is designed for safety and health personnel that use the Incident Command System (ICS). It is compatible with ICS and is intended to meet the requirements of the Hazardous Waste Operations and Emergency Response regulation (Title 29, Code of Federal Regulations, Part 1910.120). The plan avoids the duplication found between many other site safety plans and certain ICS forms. It is also in a format familiar to users of ICS. Although primarily designed for oil and chemical spills, the plan can be used for all hazard situations.

Questions on the document should be addressed to the Coast Guard Office of Incident Management and Preparedness (G-RPP).

Table of Forms

FORM NAME	FORM #	USE	REQUIRED	OPTIONAL	ATTACHED
Emergency Safety and Response Plan	A	Emergency response phase (uncontrolled)	X		
Site Safety Plan	B	Post-emergency phase (stabilized, cleanup)	X		
Site Map	C	Post-emergency phase map of site and hazards	X		
Emergency Response Plan	D	Part of Form B, to address emergencies	X		
Exposure Monitoring Plan	E	Exposure monitoring Plan to monitor exposure	X		
Air Monitoring Log	E-1	To log air monitoring data	X*		
Personal Protective Equipment	F	To document PPE equipment and procedures	X*		
Decontamination	G	To document decon equipment and procedures	X*		
Site Safety Enforcement Log	H	To use in enforcing safety on site		X	
Worker Acknowledgement Form	I	To document workers receiving briefings		X	
Form A Compliance Checklist	J	To assist in ensuring HAZWOPER compliance		X	
Form B Compliance Checklist	K	To assist in ensuring HAZWOPER compliance		X	
Drum Compliance Checklist	L	To assist in ensuring HAZWOPER compliance		X	
Other:					

* Required only if function or equipment is used during a response

EMERGENCY SAFETY and RESPONSE PLAN		1. Incident Name		2. Date/Time Prepared		3. Operational Period		4. Attachments: Attach MSDS for each Chemical:									
5. <u>Organization</u> IC/UC:		Safety:		Entry Team:		Backup Team:		Decon Team:									
6.a. <u>Physical Hazards and Protection</u>		6.b. Confined Space <input type="checkbox"/> Noise <input type="checkbox"/> Heat Stress <input type="checkbox"/> Cold Stress <input type="checkbox"/> Electrical <input type="checkbox"/> Animal/Plant/Insect <input type="checkbox"/> Ergonomic <input type="checkbox"/> Ionizing Rad <input type="checkbox"/> Slips/Trips/Falls <input type="checkbox"/> Struck by <input type="checkbox"/> Water <input type="checkbox"/> Violence <input type="checkbox"/> Excavation <input type="checkbox"/> Biomedical waste and/or needles <input type="checkbox"/> Fatigue <input type="checkbox"/> Other (specify)															
6.c. Tasks & Controls		6d. Entry Permit	6.e. Ventilate	6f. Hearing Protection	6g. Shoes (type)	6.h. Hard Hats	6i. Clothing (cold wx)	6j. Life Jacket	6l. Work/ Rest (hrs)	6.m. Fluids (amt/time)	6.n. Signs & Barricade	6.p. Fall Protect	6.q. Post Guards	6.r. Flash Protect	6.s. Work Gloves	6.t. Other	
7.a. Agent		7.b. Hazards			7.c. Target Organs			7.d. Exposure Routes		7.f. PPE		7.g. Type of PPE					
		Explosive <input type="checkbox"/>	Radioactive <input type="checkbox"/>	Eyes <input type="checkbox"/>	Nose <input type="checkbox"/>	Skin <input type="checkbox"/>	Ears <input type="checkbox"/>	Inhalation <input type="checkbox"/>	Face Shield <input type="checkbox"/>								
		Flammable <input type="checkbox"/>	Carcinogen <input type="checkbox"/>	Central Nervous System <input type="checkbox"/>				Absorption <input type="checkbox"/>	Eyes <input type="checkbox"/>								
		Reactive <input type="checkbox"/>	Oxidizer <input type="checkbox"/>	Respiratory <input type="checkbox"/>	Throat <input type="checkbox"/>				Ingestion <input type="checkbox"/>	Gloves <input type="checkbox"/>							
		Biomedical <input type="checkbox"/>	Corrosive <input type="checkbox"/>	Lungs <input type="checkbox"/>	Heart <input type="checkbox"/>	Liver <input type="checkbox"/>		Injection <input type="checkbox"/>	Inner Suit <input type="checkbox"/>								
		Toxic <input type="checkbox"/>	Specify Other: <input type="checkbox"/>	Kidney <input type="checkbox"/>	Blood <input type="checkbox"/>	Lungs <input type="checkbox"/>		Membrane <input type="checkbox"/>	Splash Suit <input type="checkbox"/>								
				Circulatory <input type="checkbox"/>	Gastrointestinal <input type="checkbox"/>				Level A Suit <input type="checkbox"/>								
				Bone <input type="checkbox"/>	Other Specify: <input type="checkbox"/>				SCBA <input type="checkbox"/>	APR <input type="checkbox"/>							
									SAR <input type="checkbox"/>								
									Cartridges <input type="checkbox"/>								
									Fire Resistance <input type="checkbox"/>								
8. Instruments:	8.a. Action Levels	8.b. Chemical Name(s):	8.c. LEL/UEL %	8.d. Odor Thresh Ppm	8.e. Ceiling/ IDLH	8.f. STEL/TLV	8.g. Flash Pt/ Ignition Pt (F or C)	8.h. Vapor Pressure (mm)	8.i. Vapor Density	8.j. Specific Gravity	8.l. Boiling Pt F or C						
O2 <input type="checkbox"/>																	
CGI <input type="checkbox"/>																	
Radiation <input type="checkbox"/>																	
Total HCs <input type="checkbox"/>																	
Colorimetric <input type="checkbox"/>																	
Thermal <input type="checkbox"/>																	
Other <input type="checkbox"/>																	

EMERGENCY SAFETY and RESPONSE PLAN (Cont)	1. Incident Name	2. Date/Time Prepared	3. Operational Period	4. Attachments: Attach MSDS for each Chemical
9. <u>Decontamination</u> : Instrument Drop Off <input type="checkbox"/> Outer Boots/Glove Removal <input type="checkbox"/> Suit/Gloves/Boot Disposal <input type="checkbox"/>	Suit Wash <input type="checkbox"/> Decon Agent: Water <input type="checkbox"/> Other <input type="checkbox"/> Specify:	Bottle Exchange <input type="checkbox"/> Outer Suit Removal <input type="checkbox"/> Inner Suit Removal <input type="checkbox"/> SCBA/Mask Removal <input type="checkbox"/>	SCBA/Mask Rinse <input type="checkbox"/> Inner Glove Removal <input type="checkbox"/> Work Clothes Removal <input type="checkbox"/> Body Shower <input type="checkbox"/>	Intervening Steps <input type="checkbox"/> Specify:
10. <u>Site Map</u> . Include: Work Zones, Locations of Hazards, Security Perimeter, Places of Refuge, Decontamination Line, Evacuation Routes, Assembly Point, Direction of North <input type="checkbox"/> Attached, <input type="checkbox"/> Drawn Below:				
11.a. <u>Potential Emergencies</u> : Fire <input type="checkbox"/> Explosion <input type="checkbox"/> Other <input type="checkbox"/>	11.b. Evacuation Alarms: Horn <input type="checkbox"/> # Blasts <input type="checkbox"/> Bells <input type="checkbox"/> #Rings <input type="checkbox"/> Radio Code <input type="checkbox"/> Other:	11.c Emergency Prevention and Evacuation Procedures: Safe Distance:		
12. a. <u>Communications</u> : Radio <input type="checkbox"/> Phone <input type="checkbox"/> Other <input type="checkbox"/>	12.b. Command #:	12.c. Tactical #:	12.d. Entry #:	
13.a. <u>Site Security</u> : Personnel Assigned	13.b. Procedures:		13.c. Equipment:	
14.a. <u>Emergency Medical</u> : Personnel Assigned	14.b. Procedures:		14.c Equipment:	
15. <u>Prepared by</u> :	16. <u>Date/Time Briefed</u> :		ICS-208-CG SSP-A Page 2. (rev 9/06): Page ____ of ____	

EMERGENCY SAFETY AND RESPONSE PLAN (ICS-208-CG SSP-A)

Purpose: The Emergency Safety and Response Plan provides the Safety Officer and ICS personnel a plan for safeguarding personnel during the initial emergency phase of the response. *It is only used during the emergency phase of the response, which is defined as a situation involving an uncontrolled release.* It is also intended to meet the requirements of the Hazardous Waste Operations and Emergency Response (HAZWOPER) regulation, Title 29 Code of Federal Regulations Part 1910.120.

Preparation: The Safety Officer or his/her designated staff starts the Emergency Site Safety and Response Plan. They initially address the hazards common to all operations involved in the response (initial site characterization). Outside support organizations must be contacted to ensure the plan is consistent with other plans (local, state, other federal plans). Form ICS-208-CG SSP-G need not be completed if this form is used. When the operation proceeds into the post-emergency phase (site stabilized and cleanup operations begun) forms ICS-208-CG SSP-B and ICS-208-CG SSP-G should be used. For large incidents, the Emergency Site Safety and Response Plan complements the Incident Action Plan. For smaller incidents, the Emergency Site Safety and Response Plan complements ICS-201.

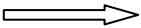
Distribution: The Emergency Safety and Response Plan completed by the Safety Officer is forwarded to the Planning Section Chief. Copies are made and attached to the Assignment List(s) (ICS Form 204). The Operations Section Chief, Directors, Supervisors or Leaders get a copy of the plan. They must ensure it is available on site for all personnel to review. The Safety Officer is responsible for ensuring that the Emergency Site Safety and Response Plan properly addresses the hazards of the operation. The Safety Officer accomplishes this through on site enforcement and feedback to the operational units.

Instructions:

Item #	Item Title	Instructions
1	Incident Name	Print the name assigned to the incident.
2	Date/Time Prepared	Enter date (month, day, year) prepared.
3	Operational Period	Enter the time interval for which the assignment applies.
4	Attachments	Enter attachments. Material Safety Data Sheets are mandatory under 1910.120. Safe Work Practices may also be attached.
5	Organization	List the personnel responsible for these positions. IC and Safety Officer are mandatory.
6	Physical Hazards & Protection	Check off the physical hazards at the site. Identify the major tasks involved in the response (skimming, lightering, overpacking, etc.). Check off the controls that would be used to safeguard workers from the physical hazards for each major task.
7	Chemical/Agent	List the chemicals involved in the response. Chemicals may be listed numerically. Check off the hazards, potential health effects, pathway of dispersion, and exposure route of the chemical. Numbers corresponding to the chemical may be entered into the check blocks to differentiate. Check off the PPE to be used. Identify the type of PPE selected (for example: gloves: butyl rubber).
8	Instruments	Indicate the instruments being used for monitoring. List the action levels adjacent to the instruments being used. Identify the chemicals being monitored (2). List the physical parameters of the chemicals. Use a separate form for additional chemicals monitored.

EMERGENCY SAFETY AND RESPONSE PLAN (FORM ICS-208-CG SSP-A) (Instructions Continued)

9	Decontamination	Check off the decontamination steps to be used. Numbers may be entered to indicate the preferred sequence. Identify any intervening steps necessary on the form or in a separate attachment.
10	Site Map	Draw a rough site map. Ensure all the information listed is identified on the map.
11	Potential Emergencies	Identify any potential emergencies that may occur. If none, so state. Check off the appropriate alarms that may be used. Identify emergency prevention and evacuation procedures in the space provided or on a separate attached sheet.
12	Communications	Indicate type of site communications (phone, radio). Indicate phone numbers or frequencies for the command, tactical and entry functions.
13	Site Security	Identify the personnel assigned. Identify security procedures in the space provided or on a separate attached sheet. Identify the equipment needed to support security operations.
14.	Emergency Medical	Identify the personnel assigned. Identify emergency medical procedures in the space provided or on a separate attached sheet. Identify the equipment needed to support security operations.
15.	Prepared by:	Enter the name and position of the person completing the worksheet.
16.	Date/time briefed:	Enter the date/time the document was briefed to the appropriate workers and by whom.

CG ICS SITE SAFETY PLAN (SSP) HAZARD ID/EVAL/CONTROL	1. Incident Name	2. Date/Time Prepared	3. Operational Period	4. Safety Officer (include method of contact)	
5. Supervisor/Leader	6. Location and Size of Site	7. Site Accessibility Land <input type="checkbox"/> Water <input type="checkbox"/> Air <input type="checkbox"/> Comments:	8. For Emergencies Contact:	9. Attachments: Attach MSDS for each Chemical	
10.a. Job Task/Activity	10.b. Hazards* 	10.c. Potential Injury & Health Effects	10.d. Exposure Routes	10.e. <u>Controls</u> : Engineering, Administrative, PPE	
			Inhalation <input type="checkbox"/> Absorption <input type="checkbox"/> Ingestion <input type="checkbox"/> Injection <input type="checkbox"/> Membrane <input type="checkbox"/> <input type="checkbox"/>		
			Inhalation <input type="checkbox"/> Absorption <input type="checkbox"/> Ingestion <input type="checkbox"/> Injection <input type="checkbox"/> Membrane <input type="checkbox"/> <input type="checkbox"/>		
			Inhalation <input type="checkbox"/> Absorption <input type="checkbox"/> Ingestion <input type="checkbox"/> Injection <input type="checkbox"/> Membrane <input type="checkbox"/> <input type="checkbox"/>		
			Inhalation <input type="checkbox"/> Absorption <input type="checkbox"/> Ingestion <input type="checkbox"/> Injection <input type="checkbox"/> Membrane <input type="checkbox"/> <input type="checkbox"/>		
			Inhalation <input type="checkbox"/> Absorption <input type="checkbox"/> Ingestion <input type="checkbox"/> Injection <input type="checkbox"/> Membrane <input type="checkbox"/> <input type="checkbox"/>		
11. Prepared By:	12. Date/Time Briefed:	* HAZARD LIST : Physical/Safety, Toxic, Explosion/Fire, Oxygen Deficiency, Ionizing Radiation, Biological, Biomedical, Electrical, Heat Stress, Cold Stress, Ergonomic, Noise, Cancer, Dermatitis, Drowning, Fatigue, Vehicle, & Diving			ICS-208-CG SSP-B (rev 9/06): Page _____ of _____

SITE SAFETY PLAN (FORM ICS-208-CG SSP-B)

Purpose: The Site Safety Plan provides the Safety Officer and ICS personnel a plan for safeguarding personnel during the post-emergency phase of an incident. The post-emergency phase is when the situation is stabilized and cleanup operations have begun. ICS-208-CG SSP-B is intended to meet the requirements of the Hazardous Waste Operations and Emergency Response (HAZWOPER) regulation, Title 29 Code of Federal Regulations Part 1910.120.

Preparation: The Safety Officer or his/her designated staff starts the Site Safety Plan. They initially address the hazards common to all operations involved in the response (initial site characterization). The plan is then reproduced and as a minimum sent to ICS Group/Division Supervisors. They amend it according to unique job or on-scene hazards with support from the Safety Officer and/or his/her staff (detailed site characterization). The plan is continuously updated to address changing conditions. During the first hours of the response, where most response functions are in the emergency phase, the Safety Officer may choose to use the Emergency Safety and Response Plan (ICS-208-CG SSP-A) in place of the Site Safety Plan. For large incidents, ICS-208-CG SSP-B compliments the Incident Action Plan (IAP). For smaller incidents, ICS-208-CG SSP-B compliments ICS Form 201. The Safety Officer is encouraged to use the HAZWOPER Compliance Checklist (Form ICS-208-CG SSP-K) to ensure the IAP and the 201 address the requirements and all other pertinent ICS forms (203, 205, 206, etc.) are completed.

Distribution: The initial Site Safety Plan completed by the Safety Officer is forwarded to the Planning Section Chief. Copies are made and attached to the Assignment List(s) (ICS Form 204). The Operations Section Chief, Directors, Supervisors or Leaders get a copy and make on site amendments specific to their operation. They must also ensure it is available on site for all personnel to review. The Safety Officer provides personnel from his/her staff to assist in the detailed site characterization. The Safety Officer is responsible for ensuring that the Site Safety Plan for each assignment properly addresses the hazards of the assignment. The Safety Officer must ensure that the safety plans on site are consistent. The Safety Officer accomplishes this through on site enforcement and feedback to the operational units.

Instructions:

Item #	Item Title	Instructions
1	Incident Name	Print the name assigned to the incident.
2	Date/Time Prepared	Enter date (month, day, year) prepared.
3	Operational Period	Enter the time interval for which the assignment applies.
4	Safety Officer	Enter the name of the Safety Officer and means of contact.
5	Group/Division Supv Strike Team/TF Leader	The Supervisor/Leader who receives this form will enter their name here.
6	Location & size of site	Enter the geographical location of the site and the approximate square area.
7	Site Accessibility	Check the block(s) if the site is accessible by land, water, air, etc.
8	For Emergencies Contact	Enter the name and way to contact the individual who handles emergencies.
9	Attachments	Enter attachments. Material Safety Data Sheets are mandatory under 1910.120. Safe Work Practices may also be attached.
10	Job/Task Activity	Enter Job/Task & Activities, list hazards, list potential injury and health effects, check exposure routes and identify controls. If more detail is needed for controls, provided attachments.
11	Prepared by	Enter the name and position of the person completing the worksheet.
12	Date/Time Briefed:	Enter the date/time the document was briefed to the appropriate workers and by whom.

CG ICS SSP: SITE MAP		1. Incident Name	2. Date/Time Prepared	3. Operational Period	4. Safety Officer (include method of contact)
5. Supervisor/Leader	6. Location and Size of Site	7. Site Accessibility Land <input type="checkbox"/> Water <input type="checkbox"/> Air <input type="checkbox"/> Comments:	8. For Emergencies Contact:	9. <u>Include</u> : - Work Zones - Security Perimeter - Decontamination Line - Locations of Hazards - Places of Refuge - Evacuation Routes	
10. Sketch of Site: <input type="checkbox"/> Attached. <input type="checkbox"/> Drawn Here					
11. Prepared By:		12. Date/Time Briefed:		HAZARD LIST: Physical/Safety, Toxic, Explosion/Fire, Oxygen Deficiency, Ionizing Radiation, Biological, Biomedical, Electrical, Heat Stress, Cold Stress, Ergonomic, Noise, Cancer, Dermatitis, Drowning, Fatigue, Vehicle, & Diving	
				ICS-208-CG SSP-C (rev 9/06): Page _____ of _____	

SITE MAP FOR SITE SAFETY PLAN (ICS-208-CG SSP-C)

Purpose: The Site Map for the Site Safety Plan is required by Title 29 Code of Federal Regulations Part 1910.120. It provides in 1 place a visual description of the site which can help ICS personnel locate hazards, identify evacuation routes and places of refuge.

Preparation: The Site Map for the Site Safety Plan can be completed by the Safety Officer, his/her staff or by ICS field personnel (Group Supervisors, Task Force/Strike Team Leaders) working at a site with unique and specific hazards. One or several maps may be developed, depending on the size of the incident and the uniqueness of the hazards. The key is to ensure that the workers using the map(s) can clearly identify the work zones, locations of hazards, evacuation routes and places of refuge.

Distribution: This form must be located with the Site Safety Plan (ICS-208-CG SSP-B). It therefore follows the same distribution route.

Instructions:

Item #	Item Title	Instructions
1	Incident Name	Print the name assigned to the incident.
2	Date/Time Prepared	Enter date (month, day, year) prepared.
3	Operational Period	Enter the time interval for which the assignment applies.
4	Safety Officer	Enter the name of the Safety Officer and means of contact.
5	Supervisor/Leader	The Supervisor/Leader who receives this form will enter their name here.
6	Location & size of site	Enter the geographical location of the site and the approximate square area.
7	Site Accessibility	Check the block(s) if the site is accessible by land, water, air, etc.
8	For Emergencies Contact	Enter the name and way to contact the individual who handles emergencies.
9	Include	Ensure the map includes the listed items provided in this block.
10	Sketch of Site	Sketch of site for work. May attach map or chart.
10	Prepared by	Enter the name and position of the person completing the worksheet.
11	Date/Time Briefed:	Enter the date/time the document was briefed to the appropriate workers and by whom.

CG ICS SSP: EMERGENCY RESPONSE PLAN	1. Incident Name	2. Date/Time Prepared	3. Operational Period	4. Safety Officer (include method of contact)
5. Supervisor/Leader	6. Location and Size of Site	7. For Emergencies Contact:		8. Attachments: INCLUDE ICS FORM 206 and EMT Medical Response Procedures
9. Emergency Alarm (sound and location)	10. Backup Alarm (sound and location)	11. Emergency Hand Signals	12. Emergency Personal Protective Equipment Required:	
13. Emergency Notification Procedures		14. Places of Refuge (also see site map form 208B)	15. Emergency Decon and Evacuation Steps	16. Site Security Measures
17. Prepared By:	18. Date/Time Briefed:	HAZARD LIST: Physical/Safety, Toxic, Explosion/Fire, Oxygen Deficiency, Ionizing Radiation, Biological, Biomedical, Electrical, Heat Stress, Cold Stress, Ergonomic, Noise, Cancer, Dermatitis, Drowning, Fatigue, Vehicle, & Diving		ICS-208-CG SSP-D (rev 9/06) Page ____ of ____

EMERGENCY RESPONSE PLAN (ICS-208-CG SSP-D)

Purpose: The Emergency Response Plan provides information on measures to be taken in the event of an emergency. It is used in conjunction with the Site Safety Plan (Form ICS-208-CG SSP-B). It is also required by Title 29 Code of Federal Regulations Part 1910.120.

Preparation: The Safety Officer, his/her staff member or the Site Supervisor/Leader prepares the Emergency Response Plan. A copy of the Medical Plan (ICS Form 206) must always be attached to this form.

Distribution: This form must be located with Site Safety Plan (ICS-208-CG SSP-B). It therefore follows the same distribution route.

Instructions:

Item #	Item Title	Instructions
1	Incident Name	Print the name assigned to the incident.
2	Date/Time Prepared	Enter date (month, day, year) prepared.
3	Operational Period	Enter the time interval for which the assignment applies.
4	Safety Officer	Enter the name of the Safety Officer and means of contact.
5	Supervisor/Leader	The Supervisor/Leader who receives this form will enter their name here.
6	Location & size of site	Enter the geographical location of the site and the approximate square area.
7	For Emergencies Contact	Enter the name and way to contact the individual who handles emergencies.
8	Attachments	Enter attachments. ICS Form 206 must be included.
9	Emergency Alarm	Enter a description of the sound of the emergency alarm and it's location.
10	Backup Alarm	Enter a description of the sound of the emergency alarm and it's location.
11	Emergency Hand Signals	Enter the emergency hand signals to be used.
12	Emergency Personal Protective Equipment Required	Enter the emergency personal protective equipment that may be needed in the event of an emergency.
13	Emergency Notification Procedures	Enter the procedures for notifying the appropriate personnel and organizations in the event of an emergency.
14	Places of Refuge	Enter by name the place of refuge personnel can go to in the event of an emergency.
15	Emergency Decon & Evacuation Steps	Enter emergency decontamination steps and evacuation procedures.
16	Site Security Measures	Enter site security measures needed for emergencies.
17	Prepared by	Enter the name and position of the person completing the worksheet.
18	Date/Time Briefed:	Enter the date/time the document was briefed to the appropriate workers and by whom.

CG ICS SSP: Exposure Monitoring Plan		1. Incident Name		2. Date/Time Prepared:		3. Operational Period:		4. Safety Officer (Method of Contact):		
5. Specific Task/Operation	6. Survey Location	7. Survey Date/Time	8. Monitoring Methodology	9. Direct-Reading Instrument	10. Air Sampling	11. Hazard(s) to Monitor	12. Monitoring Duration	13. Reasons to Monitor	14. Laboratory Support for Analysis	
			<input type="checkbox"/> Personal Breathing Zone <input type="checkbox"/> Area Air Monitoring <input type="checkbox"/> Dermal Exposure Monitoring <input type="checkbox"/> Biological Monitoring: <input type="checkbox"/> Blood <input type="checkbox"/> Urine <input type="checkbox"/> Other <input type="checkbox"/> Obtain bulk samples <input type="checkbox"/> Other:	<u>Model:</u> <u>Manufacturer:</u> Last Mfr <u>Calibration Date:</u>	<u>Sampling/Analysis Method:</u> <u>Collecting Media:</u> <input type="checkbox"/> Charcoal Tube <input type="checkbox"/> Silica Gel <input type="checkbox"/> 37 mm MCE Filter <input type="checkbox"/> 37 mm PVC Filter <input type="checkbox"/> Other: _____			<input type="checkbox"/> Regulatory Compliance <input type="checkbox"/> Assess current PPE adequacy <input type="checkbox"/> Validate engineering controls <input type="checkbox"/> Monitor IDLH Conditions <input type="checkbox"/> Other: _____		
			<input type="checkbox"/> Personal Breathing Zone <input type="checkbox"/> Area Air Monitoring <input type="checkbox"/> Dermal Exposure Monitoring <input type="checkbox"/> Biological Monitoring: <input type="checkbox"/> Blood <input type="checkbox"/> Urine <input type="checkbox"/> Other <input type="checkbox"/> Obtain bulk samples <input type="checkbox"/> Other:	<u>Model:</u> <u>Manufacturer:</u> Last Mfr <u>Calibration Date:</u>	<u>Sampling/Analysis Method:</u> <u>Collecting Media:</u> <input type="checkbox"/> Charcoal Tube <input type="checkbox"/> Silica Gel <input type="checkbox"/> 37 mm MCE Filter <input type="checkbox"/> 37 mm PVC Filter <input type="checkbox"/> Other: _____			<input type="checkbox"/> Regulatory Compliance <input type="checkbox"/> Assess current PPE adequacy <input type="checkbox"/> Validate engineering controls <input type="checkbox"/> Monitor IDLH Conditions <input type="checkbox"/> Other: _____		
			<input type="checkbox"/> Personal Breathing Zone <input type="checkbox"/> Area Air Monitoring <input type="checkbox"/> Dermal Exposure Monitoring <input type="checkbox"/> Biological Monitoring: <input type="checkbox"/> Blood <input type="checkbox"/> Urine <input type="checkbox"/> Other <input type="checkbox"/> Obtain bulk samples <input type="checkbox"/> Other:	<u>Model:</u> <u>Manufacturer:</u> Last Mfr <u>Calibration Date:</u>	<u>Sampling/Analysis Method:</u> <u>Collecting Media:</u> <input type="checkbox"/> Charcoal Tube <input type="checkbox"/> Silica Gel <input type="checkbox"/> 37 mm MCE Filter <input type="checkbox"/> 37 mm PVC Filter <input type="checkbox"/> Other: _____			<input type="checkbox"/> Regulatory Compliance <input type="checkbox"/> Assess current PPE adequacy <input type="checkbox"/> Validate engineering controls <input type="checkbox"/> Monitor IDLH Conditions <input type="checkbox"/> Other: _____		
			<input type="checkbox"/> Personal Breathing Zone <input type="checkbox"/> Area Air Monitoring <input type="checkbox"/> Dermal Exposure Monitoring <input type="checkbox"/> Biological Monitoring: <input type="checkbox"/> Blood <input type="checkbox"/> Urine <input type="checkbox"/> Other <input type="checkbox"/> Obtain bulk samples <input type="checkbox"/> Other:	<u>Model:</u> <u>Manufacturer:</u> Last Mfr <u>Calibration Date:</u>	<u>Sampling/Analysis Method:</u> <u>Collecting Media:</u> <input type="checkbox"/> Charcoal Tube <input type="checkbox"/> Silica Gel <input type="checkbox"/> 37 mm MCE Filter <input type="checkbox"/> 37 mm PVC Filter <input type="checkbox"/> Other: _____			<input type="checkbox"/> Regulatory Compliance <input type="checkbox"/> Assess current PPE adequacy <input type="checkbox"/> Validate engineering controls <input type="checkbox"/> Monitor IDLH Conditions <input type="checkbox"/> Other: _____		
15. Prepared By:			16. Date/Time Briefed:		HAZARD LIST: <u>Potential Health Effects:</u> Bruise/Lacerations, Organ Damage, Central Nervous System Effects, Cancer, Reproductive Damage, Low Back Pain, Temporary Hearing Loss, Dermatitis, Respiratory Effects, Bone Breaks, & Eye Burning					
18. Safety Officer Review:			<u>Reporting:</u> Monitoring results shall be logged in the ICS-208-CG SSP-E-1 form (Air Monitoring Log) and attached as part of a current Site Safety Plan and Incident Action Plan. Significant Exposures shall be immediately addressed to the IC and General Staff for immediate correction.						ICS-208-CG SSP-E (rev 9/06) Page ____ of ____	

EXPOSURE MONITORING PLAN (FORM ICS-208-CG SSP-E)

Purpose: The Exposure Monitoring Plan provides plan of monitoring conducted during an incident. The plan is a supplement to the Site Safety Plan (ICS-208-CG SSP-B). It is only required when performing monitoring operations.

Preparation: The Safety Officer, his/her staff member or the Site Supervisor/Leader prepares the Exposure Monitoring Plan. If there is a decision not to monitor during a response, the reasons must be stated clearly in the Site Safety Plan (ICS-208-CG SSP-B).

Distribution: This form must be located with Site Safety Plan (ICS-208-CG SSP-B). It therefore follows the same distribution route.

Instructions:

Item #	Item Title	Instructions
1	Incident Name	Print the name assigned to the incident.
2	Date/Time Prepared	Enter date (month, day, year) prepared.
3	Operational Period	Enter the time interval for which the assignment applies.
4	Safety Officer	Enter the name of the Safety Officer and means of contact.
5	Specific Task / Operation	Enter specific task or operation.
6	Survey Location	Enter the location to be monitored.
7	Survey Date/Time	Enter the date/time for the monitoring teams to survey.
8	Monitoring Methodology	Enter/Check the monitoring method to be used.
9	Direct-Reading Instrument	Enter the instrument model, manufacturer, last calibration date.
10	Air Sampling	Enter Air Sampling analysis method
11	Hazards to Monitor	Enter the hazards to monitor
12	Monitoring Duration	Enter duration of monitoring
13	Reasons to Monitor	Enter Reasons to Monitor
14	Laboratory Support for Analysis	Enter Laboratory Support needed for analysis of samples
15	Prepared by	Enter the name and position of the person completing the worksheet.
16	Date/Time Briefed	Enter the date/time the document was briefed to the appropriate workers and by whom.
17	Safety Officer Review	The Safety Officer must review and sign the form.

CG ICS SSP: AIR MONITORING LOG	1. Incident Name	2. Date/Time Prepared	3. Operational Period	4. Safety Officer (include method of contact)	
5. Site Location	6. Hazards of Concern	7. Action Levels (include references):		8. <u>Weather</u> : Temperature: Precipitation: Wind: Relative Humidity: Cloud Cover:	
9.a. Instrument, ID Number Calibrated? Indicate below.	9.b. Monitoring Person Name(s)	9.c. Results (units)	9.d. Location	9 f. Time	9.g. Interferences and Comments
10. Safety Officer Review:		<u>Potential Health Effects</u> : Bruise/Lacerations, Organ Damage, Central Nervous System Effects, Cancer, Reproductive Damage, Low Back Pain, Temporary Hearing Loss, Dermatitis, Respiratory Effects, Bone Breaks, & Eye Burning			ICS-208-CG SSP-E-1 (rev 9/06): Page ____ of ____

DAILY AIR MONITORING LOG (FORM ICS-208-CG SSP-E-1)

Purpose: The Exposure Monitoring Log provides documentation of air monitoring conducted during a spill. The log is a supplement to the Site Safety Plan (ICS-208-CG SSP-B). It is only required when performing air monitoring operations. The information used from the log can help update the Site Safety Plan.

Preparation: Persons conducting monitoring complete the Daily Air Monitoring Log. Normally these are air monitoring units under the Site Safety Officer. If there is a decision not to monitor during a spill, the reasons must be stated clearly in the Site Safety Plan (ICS-208-CG SSP-B).

Distribution: The Daily Air Monitoring Log when completed is copied and forwarded to the Site Safety Officer who must review and sign the form. The original form must be available on site, readily available and briefed to all impacted ICS personnel.

Instructions:

Item #	Item Title	Instructions
1	Incident Name	Print the name assigned to the incident.
2	Date/Time Prepared	Enter date (month, day, year) prepared.
3	Operational Period	Enter the time interval for which the assignment applies.
4	Safety Officer	Enter the name of the Safety Officer and means of contact.
5	Location & size of site	Enter the geographical location of the site and the approximate square area.
6	Hazards of Concern	Enter the hazards being monitored.
7	Action Levels	Enter the action levels/readings for the monitoring teams.
8	Weather	Enter weather information. Ensure units of measure are listed.
9	Air Monitoring Data	Enter the instrument type and number, persons monitoring, results with appropriate units, location of reading, time of reading and interferences and comments.
10	Safety Officer Review	The Safety Officer must review and sign the form.

CG ICS SSP: PERSONAL PROTECTIVE EQUIPMENT	1. Incident Name		2. Date/Time Prepared		3. Operational Period		4. Safety Officer (include method of contact)			
	5. Supervisor/Leader		6. Location and Size of Site		7. Hazards Addressed:			8. For Emergencies Contact:		
	9. Equipment:							10. References Consulted:		
11. Inspection Procedures:		12. Donning Procedures:			13. Doffing Procedures:			14. Limitations and Precautions (include maximum stay time in PPE):		
15. Prepared By:		16. Date/Time Briefed:		Potential Health Effects: Bruise/Lacerations, Organ Damage, Central Nervous System Effects, Cancer, Reproductive Damage, Low Back Pain, Temporary Hearing Loss, Dermatitis, Respiratory Effects, Bone Breaks. Eye Burning				ICS-208-CG SSP-F: (Rev 9/06) Page ____ of ____		

PERSONAL PROTECTIVE EQUIPMENT (ICS-208-CG SSP-F)

Purpose: The Personal Protective Equipment form is a list of personal protective equipment to be used in operations. The listing of personal protective equipment is required by Title 29 Code of Federal Regulations Part 1910.120.

Preparation: The Personal Protective Equipment form is completed by the Site Safety Officer, or his/her staff. Personal protective equipment common to all ICS Operations personnel is addressed first. Jobs with unique personal protective equipment requirements (fall protection) are addressed next. When the form is delivered on site, the ICS Director, Supervisor, or Leader may amend the list to ensure personnel are adequately protected from job hazards. It must be completed prior to the onset of any operations, unless addressed elsewhere by Standard Operating Procedures.

Distribution: This form must be located with Site Safety Plan (ICS-208-CG SSP-B). It therefore follows the same distribution route.

Instructions:

Item #	Item Title	Instructions
1	Incident Name	Print the name assigned to the incident.
2	Date/Time Prepared	Enter date (month, day, year) prepared.
3	Operational Period	Enter the time interval for which the assignment applies.
4	Safety Officer	Enter the name of the Safety Officer and means of contact.
5	Supervisor/Leader	The Supervisor/Leader who receives this form will enter their name here.
6	Location & size of site	Enter the geographical location of the site and the approximate square area.
7	Hazard(s) Addressed:	Enter the hazards that need to be safeguarded.
8	For Emergencies Contact	Enter the name and way to contact the individual who handles emergencies.
9	Equipment	List the equipment needed to address the hazards. If pre-designed Safe Work Practices are used, indicate here and attach to form.
10	References consulted	List the references used in making the selection for PPE.
11	Inspection Procedures	Enter the procedures for inspecting the Personal Protective Equipment prior to donning. If pre-designed Safe Work Practices are used, indicate here and attach to form.
12	Donning Procedures	Enter the procedures for putting on the PPE. If pre-designed Safe Work Practices are used, indicate here and attach to form.
13	Doffing Procedures	Enter the information for removing the PPE. If pre-designed Safe Work Practices are used, indicate here and attach to form.
14	Limitations and Precautions	List the limitations and precautions when using PPE. Include the maximum time to be inside the PPE, Heat Stress concerns, psychomotor skill detracting and other factors.
15	Prepared by	Enter the name and position of the person completing the worksheet.
16	Date/Time Briefed:	Enter the date/time the document was briefed to the appropriate workers and by whom.

CG ICS SSP: DECONTAMINATION	1. Incident Name	2. Date/Time Prepared	3. Operational Period	4. Safety Officer (include method of contact)
5. Supervisor/Leader	6. Location and Size of Site	7. For Emergencies Contact:		8. Hazard(s) Addressed:
9. Equipment:				10. References Consulted:
11. Contamination Avoidance Practices:	12. Decon Diagram: <input type="checkbox"/> Attached, <input type="checkbox"/> Drawn below			13. Decon Steps
14. Prepared By:	15. Date/Time Briefed:	Potential Health Effects: Bruise/Lacerations, Organ Damage, Central Nervous System Effects, Cancer, Reproductive Damage, Low Back Pain, Temporary Hearing Loss, Dermatitis, Respiratory Effects, Bone Breaks, Eye Burning		ICS-208-CG SSP-G (rev 9/06): Page ____ of ____

DECONTAMINATION (ICS-208-CG SSP-G)

Purpose: The Decontamination form provides information on how workers can avoid contamination and how to get decontaminated. It is a supplemental form to the Site Safety Plan.

Preparation: The Decontamination Form can be completed by the Site Safety Officer, a member of his/her staff or by the Group/Division Supervisor, Task Force/Strike Team Leader on the site

Distribution: This form must be located with Site Safety Plan (ICS-208-CG SSP-B). It therefore follows the same distribution route.

Instructions:

Item #	Item Title	Instructions
1	Incident Name	Print the name assigned to the incident.
2	Date/Time Prepared	Enter date (month, day, year) prepared.
3	Operational Period	Enter the time interval for which the assignment applies.
4	Safety Officer	Enter the name of the Safety Officer and means of contact.
5	Supervisor/Leader	The Supervisor/Leader who receives this form will enter their name here.
6	Location & size of site	Enter the geographical location of the site and the approximate square area.
7	For Emergencies Contact	Enter the name and way to contact the individual who handles emergencies.
8	Hazard(s) Addressed:	Enter the hazards that need to be safeguarded.
9	Equipment	Enter the decontamination equipment needed for the site. If pre-designed Safe Work Practices are used, indicate here and attach to this form.
10	References consulted	List the references used in making the selection for PPE.
11	Contamination Avoidance Practices	Enter procedures for personnel to avoid contamination. If pre-designed Safe Work Practices are used, indicate here and attach to form.
12	Decon Diagram	Draw a diagram for the decontamination operation. If pre-designed Safe Work Practices are used, indicate here and attach to form.
13	Decon Steps	List the decontamination steps.
14	Prepared by	Enter the name and position of the person completing the worksheet.
15	Date/Time Briefed:	Enter the date/time the document was briefed to the appropriate workers and by whom.

CG ICS SSP: ENFORCEMENT LOG	1. Incident Name	2. Date/Time Prepared	3. Operational Period	4. Safety Officer (include method of contact)	
5. Supervisor/Leader	6. For Emergencies Contact:			7. Attachments:	
8.a. Job Task/Activity	8.b. Hazards	8.c. Deficiency	8.d. Action Taken	8.e. Safety Plan Amended?	8 f. Signature of Supervisor/Leader
9. Prepared By:	10. Date/Time Briefed:	HAZARD LIST: Physical/Safety, Toxic, Explosion/Fire, Oxygen Deficiency, Ionizing Radiation, Biological, Biomedical, Electrical, Heat Stress, Cold Stress, Ergonomic, Noise, Cancer, Dermatitis, Drowning, Fatigue, Vehicle, & Diving			ICS-208-CG SSP-H (rev 9/06): Page ____ of ____

SITE SAFETY ENFORCEMENT LOG (ICS-208-CG SSP-H)

Purpose: The Site Safety Plan Enforcement Log is used to help enforce safety during an incident.

Preparation: The Safety Officer and/or his/her staff complete the Site Safety Plan Enforcement Log. The log is completed as Safety personnel are on scene reviewing the site. It should be completed at a minimum once per day. The number of enforcement logs to be completed depends on the size of the incident. Enough should be completed to ensure that site safety is being adequately enforced.

Distribution: The Site Safety Plan enforcement log when completed is delivered to the Safety Officer. The Safety Officer can use the form to amend the Site Safety Plan (ICS-208-CG SSP-A or B).

Instructions:

Item #	Item Title	Instructions
1	Incident Name	Print the name assigned to the incident.
2	Date/Time Prepared	Enter date (month, day, year) prepared.
3	Operational Period	Enter the time interval for which the assignment applies.
4	Safety Officer	Enter the name of the Safety Officer and means of contact
5	Supervisor/Leader	The Supervisor/Leader who receives this form will enter their name here.
6	For Emergencies Contact	Enter the name and way to contact the individual who handles emergencies.
7	Attachments	List any attached supporting documentation.
8 a	Job/Task Activity	Enter only those Job Task/activities for which a deficiency is noted.
8 b	Hazards	Enter the hazard not being sufficiently addressed.
8 c	Deficiency	Enter the deficiency.
8 d	Action Taken	Enter the corrective action taken to address the deficiency.
8 e	Safety Plan Amended?	Enter whether the on site safety plan was amended.
8 f	Signature of Supervisor/Leader	Ensure the Supervisor/Leader signs the form to acknowledge the deficiency.
9	Prepared by	Enter the name and position of the person completing the worksheet.
10	Date/Time Briefed:	Enter the date/time the document was briefed to the appropriate workers and by whom.

[illegible]

WORKER ACKNOWLEDGEMENT FORM (ICS-208-CG SSP-I)

Purpose: The Worker Acknowledgement form is used to document workers who have received safety briefings.

Preparation: Those personnel responsible for conducting safety briefings complete this form initially. Once the briefings are completed, workers who were briefed print their name, sign, date and indicate the time of the briefing.

Distribution: This form is returned to the Safety Officer or designated representative at the end of each operational period.

Instructions:

Item #	Item Title	Instructions
1	Incident Name	Print the name assigned to the incident.
2	Site Location	Indicate the location where the briefings are held.
3	Attachments	Indicate any attachments used as part of the briefings.
4	Type of briefing	Check the block next to the type of briefing.
5	Presented by	Enter the name of the person conducting the briefing.
6	Date Presented	Enter the date of the briefing.
7	Time Presented	Enter the time of the briefing.
8	Worker Name, Signature, Date and Time	Workers receiving the briefing print their name, sign, date and enter the time they acknowledge the briefing.

CG ICS SSP: Emergency Safety & Response Plan 1910.120 Compliance Checklist (Form A)	1. Incident Name	2. Date/Time Prepared	3. Operational Period	4. Site Supervisor/Leader	5. Location of Site
6.a. Cite: 1910.120	6.b. Requirement(sections that duplicate or explain are omitted)	6.c. ICS Form	6.d. Check	6.e. Comments	
(q)(1)	Is the plan in writing?	SSP-A	<input type="checkbox"/>		
(1)	Is the plan available for inspection by employees?	N/A	<input type="checkbox"/>	Performance based	
(q)(2)(i)	Does the plan address pre-emergency planning and coordination?	SSP-A	<input type="checkbox"/>		
(ii)	Does it address personnel roles?	SSP-A	<input type="checkbox"/>		
(ii)	Does it address lines of authority?	SSP-A	<input type="checkbox"/>		
(ii)	Does it address communications?	SSP-A	<input type="checkbox"/>		
(iii)	Does it address emergency recognition?	SSP-A	<input type="checkbox"/>		
(iii)	Does it address emergency prevention?	SSP-A	<input type="checkbox"/>		
(iv)	Does it identify safe distances?	SSP-A	<input type="checkbox"/>		
(iv)	Does it address places of refuge?	SSP-A	<input type="checkbox"/>		
(v)	Does it address site security and control?	SSP-A	<input type="checkbox"/>		
(vi)	Does it identify evacuation routes?	SSP-A	<input type="checkbox"/>		
(vi)	Does it identify evacuation procedures?	SSP-A	<input type="checkbox"/>		
(vii)	Does it address decontamination?	SSP-A	<input type="checkbox"/>		
(viii)	Does it address medical treatment and first aid?	SSP-A	<input type="checkbox"/>		
(ix)	Does it address emergency alerting procedures?	SSP-A	<input type="checkbox"/>		
(ix)	Does it address emergency response procedures	SSP-A	<input type="checkbox"/>		
(x)	Was the response critiqued?	N/A	<input type="checkbox"/>	Performance based	
(xi)	Does it identify Personal Protection Equipment?	SSP-A	<input type="checkbox"/>		
(xi)	Does it identify emergency equipment?	SSP-A	<input type="checkbox"/>		
(q)(3)(ii)	All the hazardous substances identified to the extent possible?	N/A	<input type="checkbox"/>	Performance based	
(ii)	All the hazardous conditions identified to the extent possible?	N/A	<input type="checkbox"/>	Performance based	
(ii)	Was site analysis addressed?	N/A	<input type="checkbox"/>	Performance based	
(ii)	Were engineering controls addressed?	N/A	<input type="checkbox"/>	Performance based	
(ii)	Were exposure limits addressed?	N/A	<input type="checkbox"/>	Performance based	
(ii)	Were hazardous substance handling procedures addressed?	N/A	<input type="checkbox"/>	Performance based	
(iii)	Is the PPE appropriate for the hazards identified?	N/A	<input type="checkbox"/>	Performance based	
(iv)	Is respiratory protection worn when inhalation hazards present?	N/A	<input type="checkbox"/>	Performance based	
(v)	Is the buddy system used in the hazard zone?	N/A	<input type="checkbox"/>	Performance based	
(vi)	Are backup personnel on standby?	N/A	<input type="checkbox"/>	Performance based	
(vi)	Are advanced first aid support personnel standing by?	N/A	<input type="checkbox"/>	Performance based	
(vii)	Has the ICS designated safety official been identified?	SSP-A	<input type="checkbox"/>		
(vii)	Has the Safety Official evaluated the hazards?	N/A	<input type="checkbox"/>	Performance based	
(viii)	Can the Safety Official communicate with IC immediately?	N/A	<input type="checkbox"/>	Performance based	
(ix)	Are appropriate decontamination procedures implemented?	N/A	<input type="checkbox"/>	Performance based	

Emergency Safety & Response Plan Compliance Checklist Form A (ICS-208-CG SSP-J)

Purpose: The Emergency Safety and Response Plan 1910.120 Compliance Checklist is to ensure that incident response operations are in compliance with Title 29, Code of Federal Regulations Part 1910.120, Hazardous Waste Operations and Emergency Response. It also identifies how form ICS-208-CG SSP-J can be used to satisfy the HAZWOPER requirements. This checklist is an optional form.

Preparation: The Emergency Safety and Response Plan 1910.120 Compliance Checklist is completed by the Safety Officer or his/her staff as frequently as necessary whenever the Safety Officer wants to ensure regulatory compliance. It is best used in conjunction with the Site Safety Plan Enforcement Log (ICS-208-CG SSP-H). Many of the requirements are performance based and are best evaluated on scene by the Safety Officer or his/her staff.

Distribution: The Safety Officer should maintain The Emergency Safety and Response Plan (ERP) 1910.120 Compliance Checklist.

Instructions:

Item #	Item Title	Instructions
1	Incident Name	Print the name assigned to the incident.
2	Date/Time Prepared	Enter date (month, day, year) prepared.
3	Operational Period	Enter the time interval for which the assignment applies.
4	Supervisor/Leader	The Supervisor/Leader who receives this form will enter their name here.
5	Location of Site	Enter the site location.
6 a	Cites	These are the regulatory cites within 1910.120. The major headings are highlighted in bold. Informational cites or cites that are duplicative are not included.
6 b	Requirement	This lists the requirement in a question format. Some require documentation or some form of action.
6 c	ICS Form	Lists those requirements covered by ICS-208-CG SSP-A.
6 d	Check Block	Enter the check if the site satisfies the requirement.
6 f	Comments	This provides additional information on the requirement. The user may also enter comments.
7	Prepared by	Enter the name and position of the person completing the worksheet.

CG ICS SSP: 1910.120 COMPLIANCE CHECKLIST (Form B)		1. Incident Name	2. Date/Time Prepared	3. Operational Period	4. Site Supervisor/Leader	5. Location of Site
6.a. Cite: 1910.120	6.b. Requirement(sections that duplicate or explain are omitted)	6.c. ICS Form	6.d. Check	6.e. Comments		
1910.120 (b)(1)(ii)(A)	Organizational structure?	203	<input type="checkbox"/>			
(B)	Comprehensive workplan?	IAP	<input type="checkbox"/>	Incident Action Plan		
(C)	Site Safety Plan?	SSP-B	<input type="checkbox"/>			
(D)	Safety and health training program?	N/A	<input type="checkbox"/>	Responsibility of each employer		
(E)	Medical surveillance program?	N/A	<input type="checkbox"/>	Responsibility of each employer		
(F)	Employer SOPs?	N/A	<input type="checkbox"/>	Responsibility of each employer		
(G)	Written program related to site activities?	N/A	<input type="checkbox"/>			
(b)(1)(iii)	Site excavation meets shored or slope requirements in 1926?	N/A	<input type="checkbox"/>			
(b)(2)(i)(D)	Lines of communication?	201 203 205	<input type="checkbox"/>			
(b)3(iv)	Training addressed?	N/A	<input type="checkbox"/>	Responsibility of each employer		
(v)-(vi)	Information and medical monitoring addressed?	N/A	<input type="checkbox"/>	Responsibility of each employer		
(b)4(i)	Site Safety Plan kept on site?	N/A	<input type="checkbox"/>			
(ii)(A)	Safety and health hazard analysis conducted?	N/A	<input type="checkbox"/>			
(B)	Properly trained employees assigned to right jobs?	N/A	<input type="checkbox"/>			
(C)	Personnel Protective Equipment issues addressed?	SSP-F	<input type="checkbox"/>			
(E)	Frequency and types of air monitoring addressed?	SSP-E	<input type="checkbox"/>			
(F)	Site control measures in place?	SSP-B	<input type="checkbox"/>			
(G)	Decontamination procedures in place?	SSP-G	<input type="checkbox"/>			
(H)	Emergency Response Plan in place?	SSP-D	<input type="checkbox"/>			
(I)	Confined space entry procedures?	SSP-B	<input type="checkbox"/>			
(J)	Spill containment program	SSP-B	<input type="checkbox"/>			
(iii)	Pre-entry briefings conducted?	SSP-I	<input type="checkbox"/>			
(iv)	Site Safety Plan effectiveness evaluated?	SSP-H	<input type="checkbox"/>			
(c)(1)	Site characterization done?	N/A	<input type="checkbox"/>			
(c)(2)	Preliminary evaluation done by qualified person?	N/A	<input type="checkbox"/>			
(c)(3)	Hazard identification performed?	SSP-B	<input type="checkbox"/>			
(c)(4)(i)	Location and size of site identified?	SSP-B	<input type="checkbox"/>			
(ii)	Response activities, job tasks identified?	SSP-B	<input type="checkbox"/>			
(iii)	Duration of tasks identified?	SSP-B	<input type="checkbox"/>	Operational period		
(iv)	Site topography and accessibility addressed?	SSP-C	<input type="checkbox"/>			
(v)	Health and safety hazards addressed?	SSP-B	<input type="checkbox"/>			
(vi)	Dispersion pathways addressed?	SSP-B	<input type="checkbox"/>			
(vii)	Status and capabilities of medical emergency response teams?	206	<input type="checkbox"/>			
(c)(5)(i)(iv)	Chemical protective clothing addressed and properly selected?	SSP-F	<input type="checkbox"/>			
(ii)	Respiratory protection addressed?	SSP-B and F	<input type="checkbox"/>			
(iii)	Level B used for unknowns?	N/A	<input type="checkbox"/>			

CG ICS SSP: 1910.120 COMPLIANCE CHECKLIST Form B (cont)	1. Incident Name	2. Date/Time Prepared	3. Operational Period		
6.a. Cite: 1910.120	6.b. Requirement(sections that duplicate or explain are omitted)	6.c. ICS Form	6.d. Check	6.e. Comments	
1910.120 (c)(6)(i)	Monitoring for ionization conducted?	SSP-E	<input type="checkbox"/>		
(ii)	Monitoring conducted for IDLH conditions?	SSP-E	<input type="checkbox"/>		
(iii)	Personnel looking out for dangers of IDLH environments?	N/A	<input type="checkbox"/>		
(iv)	Ongoing air monitoring program in place?	SSP-E	<input type="checkbox"/>		
(c)(7)	Employees informed of potential hazard occurrence?	SSP-B	<input type="checkbox"/>		
(c)(8)	Properties of each chemical made aware to employees?	SSP-B	<input type="checkbox"/>		
(d)(1)	Appropriate site control procedures in place?	IAP, SSP-B	<input type="checkbox"/>		
(d)(2)	Site control program developed during planning stages?	IAP, SSP-B	<input type="checkbox"/>		
(d)(3)	Site map, work zones, alarms, communications addressed?	IAP, SSP-B	<input type="checkbox"/>		
(g)(1)(i)	Engineering, admin controls considered?	SSP-B	<input type="checkbox"/>		
(iii)	Personnel not rotated to reduce exposures?	N/A	<input type="checkbox"/>		
(g)(5)(i)	PPE selection criteria part of employer's program?	N/A	<input type="checkbox"/>	Responsibility of employer	
(ii)	PPE use and limitations identified?	SSP-F	<input type="checkbox"/>		
(iii)	Work mission duration identified?	SSP-F	<input type="checkbox"/>		
(iv)	PPE properly maintained and stored?	N/A	<input type="checkbox"/>	Responsibility of employer	
(vi)	Are employees properly trained and fitted with PPE?	N/A	<input type="checkbox"/>	Responsibility of employer	
(vii)	Are donning and doffing procedures identified?	SSP-F	<input type="checkbox"/>		
(viii)	Are inspection procedures properly identified?	SSP-F	<input type="checkbox"/>		
(ix)	Is a PPE evaluation program in place?	SSP-F	<input type="checkbox"/>		
(h) (3)	Periodic monitoring conducted?	SSP-E	<input type="checkbox"/>		
(k)(2)(i)	Have decontamination procedures been established?	SSP-G	<input type="checkbox"/>		
(ii)	Are procedures in place for contamination avoidance?	SSP-G	<input type="checkbox"/>		
(iii)	Is personal clothing properly deconned prior to leaving the site?	SSP-G	<input type="checkbox"/>		
(iv)	Are decontamination deficiencies identified and corrected?	SSP-H	<input type="checkbox"/>		
(k)(3)	Are decontamination lines in the proper location?	SSP-C	<input type="checkbox"/>		
(k)(4)	Are solutions/equipment used in decon properly disposed of?	N/A	<input type="checkbox"/>		
(k)(6)	Is protective clothing and equipment properly secured?	N/A	<input type="checkbox"/>		
(k)(7)	If cleaning facilities are used, are they aware of the hazards?	N/A	<input type="checkbox"/>		
(k)(8)	Have showers and change rooms provided, if necessary?	N/A	<input type="checkbox"/>		
(l)(1)(iii)	Are provisions for reporting emergencies identified?	SSP-D	<input type="checkbox"/>		
(iv)	Are safe distances and places of refuge identified?	SSP-B and C	<input type="checkbox"/>		
(v)	Site security and control addressed in emergencies?	SSP-D	<input type="checkbox"/>		
(vi)	Evacuation routes and procedures identified?	SSP-D	<input type="checkbox"/>		
(vii)	Emergency decontamination procedures developed?	SSP-D	<input type="checkbox"/>		
(ix)	Emergency alerting and response procedures identified?	SSP-D	<input type="checkbox"/>		
(x)	Response teams critiqued and followup performed?	SSP-H	<input type="checkbox"/>		
(xi)	Emergency PPE and equipment available?	SSP-D	<input type="checkbox"/>		

CG ICS SSP: 1910.120 COMPLIANCE CHECKLIST Form B (cont)		1. Incident Name	2. Date/Time Prepared	3. Operational Period	
6.a. Cite:	6.b. Requirement(sections that duplicate or explain are omitted)	6.c. ICS Form	6.d. Check	6.e. Comments	
1910.120 (1)(3)(i)	Emergency notification procedures identified?	SSP-D	<input type="checkbox"/>		
(ii)	Emergency response plan separate from Site Safety Plan?	SSP-D	<input type="checkbox"/>		
(iii)	Emergency response plan compatible with other plans?	SSP-D	<input type="checkbox"/>		
(iv)	Emergency response plan rehearsed regularly?	SSP-D	<input type="checkbox"/>		
(v)	Emergency response plan maintained and kept current?	SSP-H	<input type="checkbox"/>		
1910.165 (b)(2)	Can alarms be seen/heard above ambient light and noise levels?	N/A	<input type="checkbox"/>		
(b)(3)	Are alarms distinct and recognizable?	N/A	<input type="checkbox"/>		
(b)(4)	Are employees aware of the alarms and are they accessible?	SSP-D	<input type="checkbox"/>		
(b)(5)	Are emergency phone numbers, radio frequencies clearly posted?	206	<input type="checkbox"/>		
(b)(6)	Signaling devices in place where there are 10 or more workers?	IAP	<input type="checkbox"/>		
(c)(1)	Are alarms like steam whistles, air horns being used?	IAP	<input type="checkbox"/>		
(d)(3)	Are backup alarms available?	IAP	<input type="checkbox"/>		
(m)	Are areas adequately illuminated?	IAP	<input type="checkbox"/>		
(n)(1)(i)	Is an adequate supply of potable water available?	IAP	<input type="checkbox"/>		
(ii)	Are drinking water containers equipped with a tap?	IAP	<input type="checkbox"/>		
(iii)	Are drinking water containers clearly marked?	IAP	<input type="checkbox"/>		
(iv)	Is a drinking cup receptacle available and clearly marked?	IAP	<input type="checkbox"/>		
(n)(2)(i)	Are non-potable water containers clearly marked?	IAP	<input type="checkbox"/>		
(n)(3)(i)	Are their sufficient toilets available?	IAP	<input type="checkbox"/>		
(n)(4)	Have food handling issues been addressed?	IAP	<input type="checkbox"/>		
(n)(6)	Have adequate wash facilities been provided outside hazard zone?	IAP	<input type="checkbox"/>		
(n)(7)	If response is greater than 6 months, have showers been provided?	IAP	<input type="checkbox"/>		
7. Prepared By:			ICS-208-CG SSP-K (rev 9/06): Page 3. Page ____ of ____		

HAZWOPER 1910.120 COMPLIANCE CHECKLIST FORM B (ICS-208-CG SSP-K)

Purpose: The HAZWOPER 1910.120 Compliance Checklist is to ensure that incident response operations are in compliance with Title 29, Code of Federal Regulations Part 1910.120, Hazardous Waste Operations and Emergency Response. It also identifies how other ICS forms can be used to satisfy the HAZWOPER requirements. This is an optional form.

Preparation: The HAZWOPER 1910.120 Compliance Checklist is completed by the Safety Officer or his/her staff as frequently as necessary whenever the Safety Officer wants to ensure regulatory compliance. It is best used in conjunction with the Site Safety Plan Enforcement Log (ICS-208-CG SSP-H). The Site Safety Plan Forms (A-G) best meet some of the requirements. The Incident Action Plan is suited to address other requirements, and the Safety Officer should ensure the IAP addresses them. Other requirements are performance based and are best evaluated on scene by the Safety Officer or his/her staff.

Distribution: The HAZWOPER 1910.120 Compliance Checklist should be maintained by the Safety Officer.

Instructions:

Item #	Item Title	Instructions
1	Incident Name	Print the name assigned to the incident.
2	Date/Time Prepared	Enter date (month, day, year) prepared.
3	Operational Period	Enter the time interval for which the assignment applies.
4	Supervisor/Leader	The Supervisor/Leader who receives this form will enter their name here.
5	Location of Site	Enter the site location.
6.a.	Cites	These are the regulatory cites within 1910.120. The major headings are highlighted in bold. Informational cites or cites that are duplicative are not included.
6.b.	Requirement	This lists the requirement in a question format. Some require documentation or some form of action.
6.c.	ICS Form	Lists those ICS Forms that cover the requirement. IAP designations means it should be covered in IAP, it does not guarantee it is covered. The Safety Officer must ensure this.
6.d.	Check Block	Enter the check if the site satisfies the requirement.
6.e.	Comments	This provides information on where else the requirement may be met. The user may also enter comments.
7	Prepared by	Enter the name and position of the person completing the worksheet.

CG ICS SSP: 1910.120 DRUM COMPLIANCE CHECKSHEET	1. Incident Name	2. Date/Time Prepared	3. Operational Period	4. Safety Officer (include method of contact)
5. Supervisor/Leader	6. Location and Size of Site	7. For Emergencies Contact:		8. Note: <u>tanks and vaults</u> should also be treated in the same manner as described below [1910.120(j)(9)]. Many can also pose confined space hazards.
9.a. Cite: 1910.120 (Cites that duplicate or explain requirements are omitted)	9.b. Requirement			9.c. Check
(j)(1)(ii)	Drums meet DOT, OSHA, EPA regs for waste they contain, including shipment?			<input type="checkbox"/>
(iii)	Drums inspected and integrity ensured prior to movement?			<input type="checkbox"/>
(iii)	Or drums moved to an accessible location (staging area) prior to movement?			<input type="checkbox"/>
(iv)	Unlabelled drums treated as unknown until properly identified and labeled?			<input type="checkbox"/>
(v)	Site activities organized to minimize drum handling?			<input type="checkbox"/>
(vi)	Employers properly warned about the hazards of moving and handling drums?			<input type="checkbox"/>
(vii)	Suitable overpack drums are available for addressing leaking and ruptured drums?			<input type="checkbox"/>
(viii)	Leaking materials from drums properly contained?			<input type="checkbox"/>
(ix)	Are drums that cannot be moved, emptied of contents with transfer equipment?			<input type="checkbox"/>
(x)	Are suspect buried drums surveyed with underground detection system?			<input type="checkbox"/>
(xi)	Are soil and covering material above buried drums removed with caution?			<input type="checkbox"/>
(xii)	Is the proper extinguishing equipment on scene to control incipient fires?			<input type="checkbox"/>
(j)(2)(i)	Are airlines on supplied air systems protected from leaking drums?			<input type="checkbox"/>
(ii)	Are employees at a safe distance, using remote equipment, when handling explosive drums?			<input type="checkbox"/>
(iii)	Are explosive shields in place to protect workers opening explosive drums?			<input type="checkbox"/>
(iv)	Is response equipment positioned behind shields when shields are used?			<input type="checkbox"/>
(v)	Are non-sparking tools used in flammable or potentially flammable atmospheres?			<input type="checkbox"/>
(vi)	Are drums under extreme pressure opened slowly & workers protected by shields/distance?			<input type="checkbox"/>
(vii)	Are workers prohibited from standing and working on drums?			<input type="checkbox"/>
(j)(3)	Is the drum handling equipment positioned and operated to minimize sources of ignition?			<input type="checkbox"/>
(j)(5)(i)	For shock sensitive drums, have all non-essential employees been evacuated?			<input type="checkbox"/>
(ii)	For shock sensitive drums: is handling equipment provided with shields to protect workers?			<input type="checkbox"/>
(iii)	Are alarms that announce start/finish of explosive drum handling actions in place?			<input type="checkbox"/>
(iv)	Are continuous communications in place between the drum handling site & command post?			<input type="checkbox"/>
(v)	Are drums under pressure properly controlled for prior to handling?			<input type="checkbox"/>
(vi)	Are drums containing packaged laboratory wastes treated as shock sensitive?			<input type="checkbox"/>
(j)(6)(i)	Are lab packs opened by trained and experienced personnel?			<input type="checkbox"/>
(ii)	Are lab packs showing crystallization treated as shock sensitive?			<input type="checkbox"/>
(j)(8)(ii-iii)	Are drum staging areas manageable with marked access and egress?			<input type="checkbox"/>
(iv)	Is bulking of drums conducted only after drum contents have been properly identified?			<input type="checkbox"/>
10. Prepared By:				Form SSP-L (rev 9/06) Page ____ of ____

HAZWOPER 1910.120 DRUM COMPLIANCE CHECKLIST (ICS-208-CG SSP-L)

Purpose: The HAZWOPER 1910.120 Drum Compliance Checklist is to ensure that incident response operations are in compliance with Title 29, Code of Federal Regulations Part 1910.120, Hazardous Waste Operations and Emergency Response whenever drums are encountered during an incident. This is an optional form.

Preparation: The HAZWOPER 1910.120 Drum Compliance Checklist is completed by the Safety Officer or his/her staff as frequently as necessary whenever the Safety Officer wants to ensure regulatory compliance. It is best used in conjunction with the Site Safety Plan Enforcement Log (ICS-208-CG SSP-H). The Site Safety Plan Forms (A-G) best meet some of the requirements. Other requirements are performance based and are best evaluated on scene by the Safety Officer or his/her staff.

Distribution: The HAZWOPER 1910.120 Drum Compliance Checklist should be maintained by the Safety Officer.

Instructions:

Item #	Item Title	Instructions
1	Incident Name	Print the name assigned to the incident.
2	Date/Time Prepared	Enter date (month, day, year) prepared.
3	Operational Period	Enter the time interval for which the assignment applies.
4	Safety Officer	Enter the name of the Safety Officer and means of contact.
5	Supervisor/Leader	The Supervisor/Leader who receives this form will enter their name here.
6	Location & size of site	Enter the geographical location of the site and the approximate square area.
7	For Emergencies Contact	Enter the name and way to contact the individual who handles emergencies.
8	Note	<u>Tanks and vaults</u> should also be treated in the same manner as described in the checklist (1910.120((j)(9))).
9.a.	Cites	These are the regulatory cites within 1910.120. The major headings are highlighted in bold. Informational cites or cites that are duplicative are not included.
9.b.	Requirement	This lists the requirement in a question format. Some require documentation or some form of action.
9.c.	Check Block	Enter the check if the site satisfies the requirement.
9.d.	Comments	This provides information on where else the requirement may be met. The user may also enter comments.
10	Prepared by	Enter the name and position of the person completing the worksheet.

1. Incident Name	2. Operational Period (Date / Time) From: To:	EXECUTIVE SUMMARY
3. Operations		
4. Environmental		
5. Planning		
6. Other		
7. Prepared by		Date / Time
EXECUTIVE SUMMARY		June 2000

EXECUTIVE SUMMARY

Purpose. The Executive Summary communicates significant response issues during the current operational period, summarizing the daily activities for all sections in a brief format to Senior Managers, Administrators, Senior Agency Staff, and Civic Leaders.

Preparation. The Situation Unit Leader prepares this form with input from Section Chiefs. Final authorization is provided by the Unified Command prior to dissemination outside the ICS organization.

Distribution. After authorization by the Unified Command, the Documentation Unit Leader will duplicate and post a copy on the Situation Status Display Board in the Command Post. Single copies may then be distributed to the Unified Command, Command Staff, Joint Information Center, and Section Chiefs. All completed original forms MUST be given to the Documentation Unit.

Item #	Item Title	Instructions
1.	Incident Name	Enter the name assigned to the incident.
2.	Operational Period	Enter the time interval for which the form applies. Record the start and end date and time.
3.	Operations	Operations Section Chief will summarize the tactical accomplishments for the previous operational period.
4.	Environmental	Environmental Unit Leader will summarize any significant impacts identified or mitigated during the previous operational period.
5.	Planning	Planning Section Chief will summarize the critical actions to be carried out during the next operational period.
6.	Other	Situation Unit Leader will indicate any anomalies to previous Executive Summaries, special meetings, community impacts, or items of special interest.
7.	Prepared By	Enter name and title of the person preparing the form, normally the Situation Unit Leader.
	Date/Time	Enter date (month, day, year) and time prepared (24-hour clock).

1. Incident Name					GENERAL PLAN														
2. Prepared By					Date / Time Prepared					3. Operational Period (Date / Time)									
										From: To:									
4. Notification (Date and time completed)					5. Response Initiation (Date and time completed)														
6. Plan Item		Timeframe ==> (Enter days or weeks)																	
Site Characterization, Forecasts, and Analysis																			
Site Safety																			
Site Security																			
Source Stabilization, Salvage, and Lightering																			
Surveillance																			
On Water Containment and Recovery																			
Sensitive Areas / Resources at Risk																			
Alternative Response Technology																			
Shoreline Protection and Recovery																			
Wildlife Protection and Rehabilitation																			
Logistics Support																			
Response Organization																			
Communications																			
Public Information																			
Financial Management and Cost Documentation																			
NRDA and Claims																			
Training																			
Information Management																			
Restoration / Mitigation																			
Waste Management																			
Demobilization																			
					June 2000					GENERAL PLAN									

GENERAL PLAN-OS

Purpose. The General Plan form displays the progress and planned start and end dates for various incident response activities. Some standard activities have been listed on the form and blank lines are provided at the bottom of the form for planning and tracking additional incident-specific activities.

Preparation. The Planning Section completes the General Plan form when requested by the Unified Command.

Distribution. The General Plan form will be given to the Unified Command and all General Staff as part of the incident summary. All completed original forms **MUST** be given to the Documentation Unit.

Item #	Item Title	Instructions
1.	Incident Name	Enter the name assigned to the incident.
2.	Prepared By	Enter the name of the Planning Section Chief completing the form.
3.	Date/Time	Enter the Date (month, day, year) and Time (24-hour clock) the form was prepared.
4.	Operational Period	Enter the time interval for which the form applies. Record the start and end date and time.
5.	Notification	Enter the date and time that required notifications were completed.
6.	Response Initiation Plan Item and Timeframe	Enter the date and time that the Response Initiation is completed. Enter specific dates, or day number or week number in the top row to indicate the timeframe being covered by this form. Then enter either descriptive text or shading to the right of each activity to indicate the beginning and estimated end for that activity during this incident response.

FIGURE 5.2**EMERGENCY RESPONSE
SITE SAFETY AND HEALTH PLAN**

EMERGENCY RESPONSE SITE SAFETY AND HEALTH PLAN

(Site Identification)

AFE #

Date

(NOTE: See end of table of contents Page 1. for instructions for onsite completion of the Site Safety Plan Summary (Exhibit "A").

EMERGENCY RESPONSE SITE SAFETY AND HEALTH PLAN

	TABLE OF CONTENTS	PAGE
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B.	FIRST ON THE SCENE	2
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D.	SITE ESTABLISHMENT	5
E.	SITE ENTRY	6
	1. Explosive Gas/Oxygen Deficiency/Vapor Survey	6
	2. Initial Entry	7
	3. Buddy System	7
	4. Hot, Warm, and Cold Zones	8
	a) Hot Zones	8
	b) Warm Zones	9
	c) Cold Zones	9
	5. Confined Space Entry	10
	6. Subsequent Entry	10
F.	SITE DESCRIPTION	11
G.	EVACUATION ROUTES	11
H.	AIR QUALITY MONITORING	11
I.	AIR MONITORING ACTION LEVELS	12
	1. Oxygen Hazard	12
	2. Combustible Vapor	12
	3. Benzene Exposure	13
	4. Hydrocarbon Exposure	13
J.	PERSONAL PROTECTIVE EQUIPMENT	13
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	a) Level A	14
	b) Level B	14
	c) Level C	15
	2. Respirator Change-Out Schedule	16
	3. Warm Zone Personal Protective Equipment	17
	Level D and Standard Protective Equipment	17
K.	SITE SECURITY	17
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**EMERGENCY RESPONSE
SITE SAFETY AND HEALTH PLAN**

	TABLE OF CONTENTS	PAGE
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O.	SITE DISCONTINUATION	20
P.	TRAINING	20
Q.	MEDICAL SURVEILLANCE PROGRAM	21
R.	PROGRAM EVALUATION	21
S.	EMPLOYEE CERTIFICATION	22
	 SITE SAFETY PLAN SUMMARY, EXHIBIT "A"	
	 CONFINED SPACE (& HOT ZONE) ENTRY PERMIT, EXHIBIT "B"	
	 TAILGATE SAFETY BRIEFING, EXHIBIT C	

This Safety and Health Plan is part of the overall Oil Spill Recovery Contingency Plan (OSRCP) for the Plantation Pipe Line system. The OSRCP contains additional information that supplements this document. The instructions for on-site completion of the Site Safety Plan Summary listed below are based upon the assumption that all authorized personnel filling an onsite role in Kinder Morgan's (KM) Emergency Response Team (ERT) (including contractor personnel) have become familiar with this Site Safety and Health Plan as part of their pre-emergency preparedness training. The Site Safety Plan Summary (Exhibit "A") is to be used to document those safety conditions, concerns, test results as part of the overall Site Safety and Health Plan. Personnel needing access to the site areas who are not already familiar with this Site Safety and Health Plan shall become familiar with the entire Plan before entering the emergency site. The site characteristics specific to this incident (including the items listed below) shall be discussed with all personnel before site entry.

Instructions for on-site completion of the Site Safety Plan Summary (Exhibit "A"):

1. Complete the incident command system listing as needed on **Page 4**.
2. Note which products and hazards exist onsite on **Page 1**.
3. Note Monitoring Results that exist on site on **Page 2**.
4. Complete the site description and evacuation route description on **Page 3**.
5. Complete the local emergency responder notification list on **Page 1** from the information provided in Appendix B, C or D-4 of the OSRCP . Ensure that local emergency fire and medical personnel have been placed on standby.
6. Conduct a "tailgate" safety meeting(s) with all individuals to review site specific safety considerations prior to their entry into potentially hazardous areas.
7. Have all authorized onsite personnel sign the Employee Certification on **Page 4**.

EMERGENCY RESPONSE SITE SAFETY AND HEALTH PLAN

A. Introduction

Employees are occasionally exposed to petroleum products by the very nature of the Company's operations. Through on-going training employees are familiarized with the characteristics of these products as they relate to safety and health. This Site Safety and Health Plan has been written to bring all elements into focus as they relate to employees and others responding to emergencies.

The Plan will be used at each emergency response operation. The portions specific to each emergency site shall be completed by the On-Scene Commander (OSC)/Site Safety Office prior to site entry. Each employee and contract employee working at the site shall become familiar with this document as part of their pre-emergency preparedness training and shall sign the "Employee Certification" (Section "S") at the emergency site. The completed Plan will remain at the site for the duration of the emergency response (see Section "O") and shall be included in the AFE file at the completion of the emergency response. Questions relative to personnel health and safety will be brought to the attention of the Site Safety Officer. Additional copies of this Site Safety and Health Plan for use at each emergency response site may be obtained from any OSRCP or the Kinder Morgan intranet.

This site specific Emergency Response Safety and Health Plan shall be in effect for the duration of the emergency response (see Section "O"). Employees and contract personnel specifically summoned to the job site for emergency response activities shall be considered "authorized" to enter the emergency site subject to the additional considerations below. All personnel, regardless of the company for which they are employed, are subject to the requirements of this plan, unless covered by a comparable plan which is in compliance with 29 CFR 1910.120 ("HAZWOPER").

Kinder Morgan's policy is that KM ERT members may only participate in cleaning up Level C or D incidents. Contract ERT's will be used to cleanup spills determined to be Level B or higher. A determination will be made by the OSC on an incident by incident basis as to whether KM or Contract ERT personnel need to respond to the spill.

B. First-On-The-Scene

The first Company ERT employee arriving at an emergency site who is a member of the ERT takes the necessary action to apprise the situation, gather information and coordinate evacuation before the arrival of the (OSC).

"First-on-the-scene" employees who do not meet the above qualification or ERT employees who do not have the proper equipment available onsite should restrict their activities to the following:

EVACUATE the area of immediate danger

GET HELP by notifying qualified KM responders for assistance: (800) 510-5678

ADVISE others to evacuate or avoid the immediate area of danger (or assist local emergency responders in this activity)

DOCUMENT events while remaining nearby (but at a safe distance from) the emergency site to provide information to responders as they arrive.

Employees who have informed the incident command structure of an emergency, who have adequate PPE and training in the procedures they are to perform, and who employ the buddy system, may take limited action in the danger area (e.g., turning a valve) before the ERT arrives. Once the ERT arrives, these employees would be restricted to the actions that their training level allows.

This limited action assumes that the ERT is on its way, their arrival is imminent, and that the action taken is necessary to prevent the incident from increasing in severity (i.e., to prevent a catastrophe). The employee is not allowed to take action beyond what they have been trained to do.

The OSC should designate a qualified employee to act as Site Safety Officer or personally assume the duties of Site Safety Officer. If the incident is small (can be handled by two ERT members with two additional backup personnel), the OSC may personally take the additional role as Site Safety Officer. If the spill is large and requires more than four responders, then the OSC will assign a Site Safety Officer.

The roles of OSC and Site Safety Officer should be transferred according to Appendix A-4 of the OSRCP. Record the Incident Command System structure on the Site Safety Plan Summary (Exhibit "A"), including relief personnel, as needed. If additional changes are needed, continue personnel listing on page 4 of the Site Safety Plan Summary.

C. Hazard Evaluation

The following hazardous materials are known or suspected to be at the emergency site (check where appropriate on the Site Safety Plan Summary (Exhibit "A")):

- ☐ Gasoline
- ☐ JP-8
- ☐ LPG
- ☐ Kerosene/Jet-A/Turbine Fuels
- ☐ Diesel Fuel
- ☐ Heating Oil
- ☐ Biodiesel
- ☐ Ethanol
- ☐ Other
- ☐ Combination of the above listed materials (Check materials above suspected to be in combination)
- ☐ Other materials at the emergency site contaminated with any of the above materials (such as soils)

The primary hazards at Plantation Pipe Line Company are; (check where appropriate):

- ☐ Explosion
- ☐ Fire
- ☐ Lack of Oxygen (Symptoms: headache, dizziness, weakness, loss of coordination)
- ☐ Inhalation (Symptoms: headache, dizziness, loss of appetite, weakness, loss of coordination)
- ☐ Ingestion or Skin Absorption (Symptoms: skin irritation)

VAPOR CLOUD -- Vapor clouds are generally considered to be the greatest potential hazard at the emergency site due to their ignitability and lack of oxygen. Vapor clouds are most common around products with lower flash points. It is important to realize that the only proper action in the presence of a vapor cloud is to immediately evacuate the area and advise others in the area of the danger. Never enter a vapor cloud under any circumstances.

Even when no visible vapor cloud is present, an explosive gas survey shall be conducted before entering any suspect emergency area. Consult Section IIIC of the OSRCP as needed for specific vapor control procedures.

FIRE -- Fire is probably the next greatest hazard at Company emergency response sites. Fire prevention and protection techniques shall be instituted on site to minimize sparks. Smoking is prohibited within the vicinity of any containment, repair and cleanup activities during emergency response operations. Utilization of tools requiring open flames shall be prohibited when combustible vapors exceed 10% of L.E.L. Emergency evacuation routes shall be selected by the OSC and the Site Safety Officer and discussed with employees prior to initiating any work.

If a fire occurs, ERT members must use their own judgement as to the proper course of action. If the fire is minor and can be safely controlled with an extinguisher, an attempt should be made to extinguish it before contacting the designated Fire Department - particularly if a delay in extinguishing the fire would enable it to become a major fire. However, employees shall at no time put their own safety or the safety of others in jeopardy attempting to extinguish a fire. If a fire occurs that does not meet the above description, employees should evacuate the area immediately and contact the designated Fire Department. Prior to entry, non-company fire fighters should be briefed by on site commander or their designee concerning site hazards.

CONFINED SPACES -- A confined space is defined by 29 CFR 1910.146 as a space that:

- 1) is large enough and so configured that an employee can enter bodily and perform assigned work;
- 2) has limited or restricted means for entry or exit (examples are tanks, valve pits, electrical pull boxes and excavations for maintenance or repair activities over four feet in depth); and
- 3) is not designed for continuous employee occupancy.

Employees must be cautious around confined spaces where the presence of vapors can reduce the amount of oxygen in the immediate atmosphere below safe levels or result in a buildup of toxic or flammable vapors. ERT members can not enter confined spaces determined to have low oxygen areas, areas of unknown oxygen levels or other atmospheric hazards. Activities which must be conducted within confined space areas must be conducted in accordance with Kinder Morgan's confined space procedures (instructions regarding confined space entry).

AROMATICS- The major aromatic constituents of gasoline (benzene, toluene, ethyl benzene and xylene) may also be expected on the site. Of these, benzene is considered to be the most toxic. One characteristic effect of gasoline and its aromatic components is the ability to irritate the skin through repeated or prolonged exposure.

Benzene can enter the body through inhalation, ingestion and skin contact. Studies have noted that chronic (prolonged) exposure to benzene vapor can produce neurotoxic and blood

system effects. Other effects can include headache, dizziness, nausea, convulsions, coma and possible death if exposure is not reversed. OSHA lists benzene as a human carcinogen. NIOSH recognizes an association between chronic exposures to benzene and the development of certain types of leukemia. Employees must be wearing the appropriate level of protective gear defined below (see Section "J") to enter a high benzene area or an area of unknown benzene levels. The OSC will follow site entry procedures (See section "E") requiring air monitoring before selecting the appropriate level of protection.

LP GAS (not currently transported on the Plantation system) - LP gas (Propane and Butane) is currently transported by the Company on the 12" PGG Line from Pascagoula Station through McLain Station to Hattiesburg Terminal and in the 8" Line between Hattiesburg Terminal and Petal Terminal in Mississippi. LPG vaporizes rapidly and completely when released into the atmosphere. These vapors are odorless, invisible, heavier than air (thus tending to remain close to the ground and collect in low areas) and are highly flammable, even over large areas. LPG is a refrigerant that may cause frostbite if spilled on skin or clothing, and will cause asphyxiation if breathed for any period of time. Refer to Part D of Section III of the OSRCP on further instructions regarding handling of an LPG spill. *The Emergency Response Guidebook, Table of Isolation and Protective Action Distances* along with air monitoring equipment will be used to assess the extent and coverage of the vapor cloud and to determine hazardous areas.

HAZARD COMMUNICATIONS PROGRAM

Hazardous substance fact sheets or Material Safety Data Sheets (MSDS) on gasoline, kerosene, fuel oil, and diesel oil will be provided on each Company emergency response trailer and be kept on site. Any person needing specific information on any of the chemicals listed above should contact the Site Safety Officer.

Proper training in the handling of all substances on site must be performed as part of pre-emergency planning (see Section "P"). The importance of proper training cannot be overstressed.

D. Site Establishment

The OSC shall ensure that an assessment of the emergency site is carried out from a safe and prudently distant location to determine the magnitude of the emergency and the type of product spilled if possible. The OSC shall develop an initial work plan to contain the emergency as described in Section IIIA of the OSRCP. No authorized personnel shall enter an emergency site without following the initial site entry procedures below (see Section "E"). Unauthorized personnel will be restricted from access within the ER area of contamination (Hot and Warm Zones).

If unauthorized personnel are already at the emergency site when Company emergency responders arrive, an attempt should be made (with the assistance of local law enforcement if necessary) to remove all unauthorized personnel from the area of potential danger. Immediately after the hazard assessment of the emergency site is performed, any pertinent safety-related concerns should be relayed to both authorized and unauthorized individuals on site.

E. Site Entry

Before approaching the source point of a product release or any other area that exposes employees to hazardous materials, the OSC shall ensure that all the procedures listed below in this section are reviewed and applied to the emergency site to be entered. *The Emergency Response Guidebook, Table of Isolation and Protective Action Distances* along with air monitoring equipment will be used to assess the extent and coverage of the release area (includes HVL vapor clouds) and to determine hazardous areas.

1. Explosive Gas/Oxygen Deficiency/Hazardous Vapor Survey

Before entry into any emergency site or before beginning of work each day at an emergency site an oxygen deficiency and explosive gas survey shall be conducted and readings logged on the Site Safety Plan Summary, Page 2 (Exhibit "A") by either a Kinder Morgan ERT member or Contract ER person.

Work may commence under the following situations:

Situation 1:

If oxygen is within normal ranges, there are no explosive vapors and hazardous vapor levels are below 10 ppm benzene and 750 ppm total hydrocarbons.

Situation 2:

If explosive levels are registered between 10% and 20% L.E.L., ERT workers shall refrain from all activities that could potentially produce a source of ignition (sparks or open flames). KM ERT members must leave the hot zone because they are only allowed to wear Level C – Air-Purifying Respirators (APR). Explosive vapors above 10% most probably would result in airborne hazardous hydrocarbon vapor levels above 1000 ppm, which is prohibited for cartridge respirators. Contract ERT must be summoned to handle the incident in Level B protection.

Situation 3:

If explosive vapors register over 20% L.E.L. then work shall halt and ERT contractors shall move out of the immediate work area. Air blowers or other methods shall be used to remove minimize the explosive vapors. Work shall not recommence until explosive levels are below safe levels.

2. Initial Entry

Initial entry is defined as:

- a) First entry into an emergency site to perform the initial site air monitoring survey
- b) Subsequent entries into designated Hot, Warm or Cold Zones (see Item 4 below) and confined spaces (see Section "C") when site conditions could reasonably be anticipated to have changed.

Before approaching the source point of a product release or any other area that exposes employees to hazardous substances, the OSC shall request that contract ERT employees conduct an initial air monitoring survey (see Section "H") using Level B personal protective equipment (PPE) (see Section "J") and the Buddy System (see item 3 below). The initial air monitoring survey should be used to establish Hot, Warm and Cold Zones at the emergency site as defined in item 4 below. Initial entry into Hot, Warm or Cold Zones is prohibited unless approved by the OSC or the Site Safety Officer.

Exception:

If an emergency incident occurs where it is known in advance (i.e. from scheduling) that the spilled product completely consists of high flash point materials (specifically: diesel fuel, heating oil or JP-5), or that the spilled product consists of kerosene, Jet-A or turbine fuel when the ambient air temperature is below 85 degrees F., then the initial site entry air monitoring requirements may be performed by KM ERT members wearing Level C protection. The OSC shall decide if KM ERT members will conduct the air testing under these special conditions. The OSC may assist in conducting the initial air monitoring survey if qualified to do so.

If the spill is known or suspected to involve any other products or to be mixed with any other products, or if the spilled product is being sprayed, misted or otherwise agitated to the point where vapors obviously exist, then the initial air monitoring survey consisting of all four tests shall be performed. **Do not rely solely on your sense of smell to determine the identity of a product.** Monitoring is required in **all** cases prior to entering a confined space (see item 5).

3. The Buddy System

For the purposes of making an Initial Entry into any area of an emergency site, or subsequent entry into a Hot Zone (see item 4 below), and for conducting all subsequent activities within a Hot Zone, the Buddy System shall be utilized. The Buddy System shall consist of at least one Observer and at least one Buddy Team. At least one extra emergency backup ERT member will be onsite in addition to the Observer to assist in any rescue attempts.

a) The Observer

Prior to entry, a properly trained Observer must be designated who shall remain outside of the Hot Zone. The Observer shall have on hand the appropriate PPE to enter the Hot Zone and shall remain in contact (either visually or by radio) with the Buddy Team the entire time that they are in the Hot Zone. It will be the Observer's primary responsibility to summon help before entering the Hot Zone to provide aid in any rescue attempts. No rescue attempts should be made until the situation which caused a need for a rescue has been identified and made safe. Rescue attempts should only be made when there is no chance of endangering the safety of additional personnel. Under no circumstances shall the Observer enter the Hot Zone unless they/ are properly trained in first aid and other suitable rescue procedures and they have / donned the appropriate equipment.

b) The Buddy Team

Prior to entry, all individuals on the Buddy Team must be properly trained in the use of the required PPE. No individual shall proceed into the Hot Zone alone. Groups of two or more Team members and a qualified Observer shall be present before any attempt at entry shall be permitted. Of this group, two or more Team members shall don the appropriate PPE and enter the area. Each Team member shall have a designated partner who shall enter the zone with him/her. Each Team Member is responsible for providing his/her partner assistance, observing his/her partner for signs and symptoms of exposure, periodically checking the integrity of his/her partner's protective clothing and equipment, and notifying the Observer if the need for emergency assistance arises. At no time during the period inside the Hot Zone should these designated partners be out of contact with one another. Team members shall always stay within sight and voice distance of one another.

4. Hot, Warm and Cold Zones

Hot, Warm and Cold Zones shall be established in order to contain the release of petroleum products within the smallest areas possible. Hot, Warm and Cold Zones shall be established based on ambient air data and proposed work to be performed. The zones will be documented on Page 3 of the Site Safety Plan Summary (Exhibit "A"). The following requirements are noted for these zones:

a) Hot Zone(s)

The Hot Zone is a specific area or several areas in which air monitoring has determined that an atmospheric hazard exists which requires Level B, C, or D PPE (see Sections "I & J"). In addition, other areas which the OSC or Site Safety Officer have determined to be unsafe for entry shall also be designated as a Hot Zone. All designated Hot Zones will include areas where a significant fire hazard exists, or areas where a significant risk of skin exposure to hazards exists at the emergency site. All uncontrolled hazardous materials at the emergency site shall be included within this zone. The zone will be extended far enough by the OSC to prevent adverse effects from the spilled product.

All Hot Zones shall be isolated by a Warm Zone. Hot Zones shall be delineated with safety ribbon, signs or barricades to the fullest extent possible. Only employees with the proper HAZWOPER training (or exceptions as defined by HAZWOPER) and after the donning of the proper PPE (see Section "J") shall be allowed entry into a Hot Zone. Entry into Hot Zones shall be permitted only in exceptional cases at the discretion of the OSC and Site Safety Officer. Entry into Hot Zones containing confined spaces is permitted only after completing a confined space entry permit (see Exhibit B). Access to Hot Zones shall be controlled to the fullest extent possible to restrict all unauthorized entry.

b) Warm Zone(s)

Warm Zones shall completely surround a the Hot Zones, where possible. The Warm Zone itself is surrounded by the Cold Zone . The Warm Zone acts as a buffer between the Hot and Cold Zones and is the point where decontamination occurs. All decontamination operations shall be conducted within Warm Zones, as close as practical to the entry /exit point of work areas where contamination is likely to occur. The size of the zone depends on the product spilled, size and location of the spill, wind speed and direction, and other variables. This zone will be determined by the OSC based on the above variables and air monitoring data. The Warm/Hot Zone border is established where the airborne levels are still at background. Decontamination shall be performed upwind of the spill.

Whenever practical, the Warm Zone should be delineated with safety ribbon, signs or barricades to help restrict access and to protect onsite personnel from accidental exposure. Only individuals with the proper HAZWOPER training (or exceptions as defined by HAZWOPER) and Standard PPE (see Section "J") shall be allowed to enter an emergency site Warm Zone. Controlled access points to enter and exit the Hot Zone are established within this zone. The OSC shall be responsible for controlling access to the Warm Zone to the fullest extent possible with the assistance of the Site Safety Officer. The Site Safety Officer is responsible for ensuring that all individuals in the Warm Zone wear Standard PPE

c) Cold Zone(s)

The Cold Zone is the area where support services are provided for the ER. It is that area outside of the Warm and Hot Zones which is considered non-hazardous.

If practical, the Cold Zone should be delineated with safety ribbon, signs or barricades to help restrict access and to protect the general public from accidental exposure. The Command Post will be established within a Cold Zone at the discretion of the OSC. The OSC is responsible for controlling access to the Cold Zone to the fullest extent possible with assistance from the Community Response Coordinator and the OSC Assistant. Personnel who do not have the proper HAZWOPER training should be accompanied whenever possible by properly HAZWOPER trained personnel when entering a Cold Zone to ensure that accidental exposure to hazards do not occur.

By definition, every Company emergency site will require establishment of all three Work Zones. To the extent possible, all Hot Zones should be completely contained within a Warm Zone, and all Warm Zones should be completely contained within a Cold Zone. However, if the emergency site hazards are not severe enough to meet any part of the Hot Zone definition above, then a Hot Zone need not be defined (for example a small diesel spill).

The following system should be used to restrict access to Hazard Zones whenever practical:

Hot Zones	=	red ribbon
Warm Zones	=	yellow ribbon
Cold Zones	=	blue ribbon

General site conditions and levels of airborne contaminants (see Section "I") should be periodically monitored within all three Zones by qualified personnel. Changes in general site conditions or levels of airborne contaminants shall be reported to the Site Safety Officer. The Zones are movable boundaries which may be expanded or contracted under supervision of the Site Safety Officer or the OSC as conditions warrant.

Smoking is not allowed within Warm or Hot Zones.

5. Confined Space Entry

Prior to entry into any confined space as defined in Section "C" of this plan, a determination must be made by the Site Safety Officer as to whether the space is a permit-required confined space (Permit Space). In accordance with Kinder Morgan's safety procedures, a Permit Space is defined as a confined space that has one or more of the following characteristics:

- a). Contains or has the potential to contain a hazardous atmosphere;
- b). Contains a material that has the potential for engulfing an entrant;
- c). Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls...; or
- d). Contains any other recognized serious safety hazard.

If a Permit Space requiring entry is present on site, entry shall conform to Kinder Morgan's permit required entry procedures. A confined space entry permit form is included as Exhibit B in this Plan. All trenching and excavation activities shall conform to Kinder Morgan's safety procedures for trenching and excavation.

6. Subsequent Entry

Subsequent entries into and exits from Hot, Warm and Cold Zones shall be made through a single established point of entry whenever possible in order to maintain security and ensure decontamination procedures are carried out as needed (See Section "N").

Emergency evacuations shall not be restricted by this policy provided that after evacuation all employees report to the predetermined location listed in Section "G" to be accounted for.

All personnel are urged to use caution in conducting any of the activities identified above, and to pre-plan their approach to operations conducted in Hot, Warm and Cold Zones.

F. Site Description

(Include hazards, area affected, surrounding population, topography on Exhibit "A" Map)

G. Evacuation Routes

Should an unsafe situation arise, immediately shut down all operations within the Hot, Warm and Cold Zone(s). The emergency alarm air horn shall be provided on each emergency trailer. The air horn should be sounded (one long blast of 15 seconds or longer), and all personnel will evacuate and assemble according to the following plan (Note: ERT members in the Hot and Warm Zones may forego decontamination in event of an emergency evacuation. Decontamination would occur after the ERT members are in a safe location).

The Site Safety Officer shall account for all site personnel immediately after the evacuation is complete. (Note: for familiarity with the air horn during initial site specific briefings, three short blasts shall be used).

Emergency Egress Site Map

Include site map or sketch of the emergency site and evacuation routes on the Site Safety Plan Summary – Exhibit "A".

H. Air Quality Monitoring

1. General

This section governs all air monitoring to be done on site prior to Initial Entry and during containment, repair and cleanup activities during an emergency response operation. Reliable measurement of airborne contaminants is necessary to select appropriate protective equipment. Air monitoring is mandatory prior to Initial Entry into an emergency site and into all Hot Zones (see Section "E", item 2) by properly trained personnel using the buddy system (see Section "E", item 3); and is required in all Confined Spaces by Kinder Morgan policy. Air Monitoring should be performed on an as-needed basis as the job progresses within all Hot, Warm and Cold Zones. Air monitoring shall be performed by a company employee trained in the use of the equipment listed below in Item 2. The OSC is ultimately responsible for ensuring the performance of air monitoring (The Site Safety Officer is empowered to direct the air-monitoring activities defined in this section).

Air monitoring results should be recorded on the Site Safety Summary Plan (see Exhibit "A"). Any changes in the levels of contaminants during periodic air monitoring should be reported to the Site Safety Officer immediately. The Site Safety Officer will then immediately report contaminant level changes to the OSC if the conditions

warrant such a report. The OSC shall determine if an inspection of site conditions to identify the cause of the elevated hazardous levels of air contaminants is necessary and may require changes to reduce or eliminate hazardous conditions. If the elevated levels persist, the OSC will stop all work and remove workers from the work area until conditions are improved (The Site Safety Officer is also empowered to stop all work and remove workers from the emergency site due to unsafe conditions).

2. Equipment

Tests are to be made using:

- ◆ Oxygen meter for determining areas deficient or overabundant in oxygen
- ◆ Explosimeter for combustible vapor hazards (sufficient oxygen must be present)
- ◆ Draeger Colorimetric Indicating Tubes (CIT) or CMS for benzene exposure
- ◆ Draeger CIT or CMS or an ATX 612 or like direct reading instrument (DRI) for total hydrocarbon exposure
- ◆ ATX 612 or like DRI for Oxygen, LEL, CO and Total Hydrocarbons

3. Records

All equipment utilized for sampling shall be maintained and calibrated as per factory specifications. Repairs and calibration records as well as test results shall be documented. Test results shall include date, time, place of sample, air temperature, weather conditions and a physical description of any hazards that may influence the results of the tests. These records should be kept by the appropriate Maintenance Supervisor in charge of the air monitoring equipment.

I. Air Monitoring Action Levels

The following equipment and actions are mandatory for the various levels of detectable vapors at an emergency site. (Detailed descriptions of each level of PPE are provided in section "J" below). KM ERT members are not allowed to enter sites requiring Level B or above PPE.

1. Oxygen Hazard Action Levels (Oxygen or ATX 612 Like DRI)

0.0% to 19.5% Oxygen:	Level B PPE, KM ERT Immediately withdraw from area
19.5% to 23.0% Oxygen:	Standard PPE
Above 23.0% Oxygen:	Level B, Immediately withdraw from area

2. Combustible Vapor Hazard Action Levels (Explosimeter or ATX 612 or like DRI)

0.0% to 10.0% LEL*:	Standard PPE
10.0% to 20.0% LEL*:	Standard PPE including NOMEX coveralls (cease all activities with spark/ignition potential), KM ERT Immediately withdraw from area
Above 20.0% LEL*:	Level B, KM ERT Immediately withdraw from area

*Lower Explosive Level

3. Benzene Exposure Action Levels (Draeger CIT or CMOS Pump)

0.0 to 0.5 ppm:	Standard PPE
0.5 to 10.0 ppm:	Level C PPE
Above 10.0 ppm:	Level B PPE, PPL ERT Immediately withdraw from area

4. Total Hydrocarbon Exposure Action Level (Draeger CIT or CMOS Pump or ATX 612 or like DRI)

0 to 300 ppm:	Standard PPE
300 to 750 ppm:	Level C PPE
750 to 10,000 ppm:	Level B PPE, KM ERT Immediately withdraw from area
Above 10,000 ppm:	Level B, Immediately withdraw from area

All tests required in Section "E" must be performed and the highest level of PPE required by the test results must be selected before work begins in a potentially hazardous area. Record all test results on the Site Safety Plan Summary (see Exhibit "A"). If clarification of any of the action levels as listed above is needed, contact the Site Safety Officer.

J. Personal Protective Equipment

PPE shall be worn by all persons in the Hot or Warm Zones as directed below. Standard Company policies for personnel protection shall be followed elsewhere at the emergency site unless additional equipment is required by the OSC and/or Site Safety Officer. It will be the responsibility of contractors to supply their personnel with the required PPE and to ensure that they are knowledgeable and proficient in its use. All contractor's personnel shall wear the level of PPE requested by Kinder Morgan's OSC and/or Site Safety Officer as a minimum. Kinder Morgan shall remove contractor personnel from the emergency site for failure to wear the proper PPE.

1. Hot Zone PPE Levels

Entry into any area designated as a Hot Zone is prohibited unless approved by the OSC or the Site Safety Officer. Prior to Initial Entry into a Hot Zone, contract personnel shall use Level B PPE (see below) and the Buddy System (see Section "E", Item 3) to conduct an air monitor survey to ensure proper PPE selection. A confined space entry permit (Exhibit B) shall be completed prior to entering Permit Spaces within the Hot Zone as required (see Section "E", Items 4 & 5). All individuals entering a Hot Zone or Permit Space shall be listed on the permit and shall be briefed on the existing hazards prior to entry. All personnel shall use the Buddy System while conducting activities in a Hot Zone.

It is KM policy not to allow KM ERT members to wear Level B or Higher. KM ERT contractors will handle all situations requiring Level B and above.

Based on the air monitoring requirements in Section "H", all personnel entering Hot Zones shall require one of the three PPE Levels listed below. Hot Zone Personnel Protective Equipment shall also be selected in order to prevent skin contact with

hazardous materials. The following levels note minimal PPE that must be worn by ERT contractor personal or KM ERT members. Record zones on the Site Safety Plan Summary (see Exhibit "A").

Level A

HAZWOPER Appendix "B" defines a Level A hazard as requiring "the highest level of protection for skin, eyes and the respiratory system" (i.e. requiring a "totally encapsulating chemical suit" and SCBA). The Company does not consider any of the products presently transported in the system to be hazardous enough to warrant Level A PPE as defined by Appendix "B" of HAZWOPER (Should a situation occur where chemical hazards severe enough to warrant this level of protection are encountered during an emergency response operation, employees shall in all cases evacuate the area immediately).

Level B

Required for Initial Entry as described in Section "E" when type of substance is known (i.e., petroleum products). Required when Total Hydrocarbons register between 750 and 10,000 ppm; or when the percentage of oxygen in the atmosphere falls below 19.5%. Entry into a Level B Hot Zone is further restricted according to Section "E" of the Plan.

Level B PPE – Prohibited for KM ERT

- ◆ Approved, positive pressure demand, self-contained breathing apparatus (SCBA).
- ◆ Fire-resistant coveralls (Nomex III or equivalent); or
- ◆ Tyvex or splash resistant coveralls, if needed

NOTES:

WEAR Nomex if the potential ignition hazard is judged to be greater than the potential splash hazard.

Wear Tyvex if the potential splash hazard is judged to be greater than the potential ignition hazard.

DO NOT WEAR BOTH SUITS SIMULTANEOUSLY

- ◆ Inner gloves and outer-chemical-resistant (nitrile) if needed
- ◆ Boots, chemical-resistant, if needed
- ◆ Hard hat
- ◆ Hearing protection, if needed

Level C

Should be selected when the type and concentration of contaminant is known and the proper cartridge for a "half-mask" is available that can remove this contaminant (i.e. benzene between 0.5 & 10 ppm or total hydrocarbons between 50 & 750 ppm). The atmospheric concentration of oxygen must be between 19.5% and 23%. Entry into a Level C Hazard Zone is further restricted according to Section "E" of this plan.

Level C PPE

- ◆ Approved, half-mask, air-purifying, cartridge-equipped respirator
- ◆ *Fire-resistant coveralls (Nomex III or equivalent); or
- ◆ Tyvex or splash resistant coveralls, if needed

NOTES:

WEAR Nomex if the potential ignition hazard is judged to be greater than the potential splash hazard.

Wear Tyvex if the potential splash hazard is judged to be greater than the potential ignition hazard.

DO NOT WEAR BOTH SUITS SIMULTANEOUSLY

- ◆ Inner gloves and outer-chemical-resistant (nitrile) if needed
- ◆ Boots, chemical-resistant, if needed
- ◆ Hard hat
- ◆ Eye protection, if needed
- ◆ Hearing protection, if needed

- * Within Level C Hot Zones, fire-resistant coveralls are required only when combustible vapor levels are above 10% LEL. Anytime the requirement for NOMEX is waived, periodic (preferably continuous) monitoring for explosive vapors and/or changes in conditions must be carried out and PPE changed as appropriate.

No person may be assigned a task requiring the use of respiratory or other personal protection equipment without first being properly trained in its use and limitations. Before wearing of any respiratory protection equipment is permitted, wearer must first complete a fit test, and must be completely aware of fitting procedures.

No person may be assigned a task requiring the use of respiratory equipment where it has been determined that said person has a physical limitation which might result in injury in conjunction with respiratory equipment use. A physician shall be consulted as to individual limitations based on information obtained in baseline physical examinations, and subsequent follow-up examinations.

All respiratory equipment shall be properly fitted to worker(s) who will be using such equipment. All equipment shall be properly cleaned and inspected for worn parts as often as necessary. All equipment shall be cleaned before being worn by different operators.

2. Respirator Change-Out Schedules

Employees wearing 3M 5000 Series Disposable APR's for protection against, hydrocarbons, petroleum products, dusts, and other particulates shall follow a change-out schedule. Based on discussions with our respirator distributor and our Respirator Program Administrator, organic vapor respirators will be scheduled to be changed out under the following situations depending on which event occurs first:

- ◆ At the end of each day as per the Benzene Standard,
- ◆ If breakthrough (odor, taste, irritation) is noted by the wearer,
- ◆ Based on 3M's Service Life Program,
- ◆ After each ER if response lasts less than one day.

Respirators shall be changed out also based on airborne concentrations of contaminants as noted below. These change-out times are based on 3M's Service Life Program. Times were based on the Octane mixture calculations. It was assumed that ERT members breathe at a heavy breathing rate (50-60 lpm), 86° F, and >65% RH.

Table 1 - Total Hydrocarbons

Concentration PPM	Change-out Schedule (Minutes)
50	30 hours
100	16 hours
200	9 hours
300	386
400	305
500	243
600	202
700	174
750	162
Greater than 750	Leave Area Immediately

3. Warm Zone PPE

The following equipment should be selected while working within the Warm Zone when the contaminants within the work area are known to be within acceptable respiratory limits. Standard protocol recommends that ERT members within this zone wear equal to or one level lower than personnel in the Hot Zone. Therefore, Level C noted above or Level D PPE should be selected in order to prevent skin contact with hazardous materials.

Level D and Standard PPE

- ◆ Standard work clothes
- ◆ Fire-resistant coveralls (Nomex III or equivalent) if needed, or
- ◆ Tyvex coveralls, if needed

NOTES:

WEAR Nomex if the potential ignition hazard is judged to be greater than the potential splash hazard.

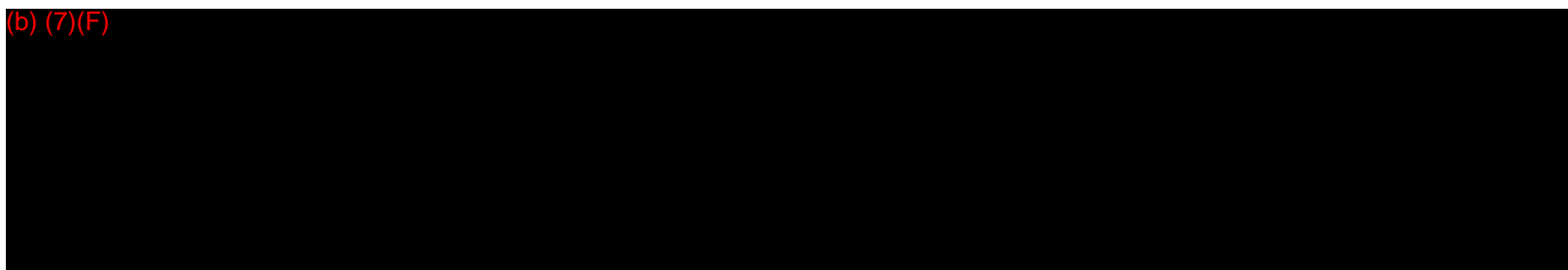
Wear Tyvex if the potential splash hazard is judged to be greater than the potential ignition hazard.

DO NOT WEAR BOTH SUITS SIMULTANEOUSLY

- ◆ Inner gloves and outer-chemical-resistant (nitrile) if needed
- ◆ Boots, chemical-resistant, if needed
- ◆ Hard hat
- ◆ Eye protection, if needed
- ◆ Hearing protection, if needed

K. Site Security

(b) (7)(F)



L. Onsite Medical Provisions

This section covers all required onsite medical services, hygiene services and information pertaining to area hospitals and clinics that are necessary for treatment of injury.

1. Accident Reporting

Should an accident or injury of any type occur on site, a report of such accident shall be made immediately to the Site Safety Officer.

2. First Aid

A complete industrial first aid kit shall be supplied by Kinder Morgan and each Contractor at the site. Generally, first aid kits are maintained on all emergency response trailers and in most Company vehicles. The Site Safety Officer shall notify all personnel as to the site specific location of first aid kits and proper use of the items in these kits.

3. Site Emergency Notification

The Local Emergency Response Facilities noted on the Site Safety Plan Summary (see Exhibit "A") are state and local police departments, ambulance, rescue units and nearby hospitals and emergency facilities, which shall be maintained by the Community Response Coordinator for use by the Site Safety Officer at the emergency site. The list must include phone numbers and the quickest routes to area emergency facilities if practical.

M. Site Safety Personnel Responsibilities

The responsibilities of company personnel involved in health and safety operations are stated below.

TITLE	SAFETY RESPONSIBILITIES
On Scene Commander	<ul style="list-style-type: none"> ◆ Provides liaison between Business Unit/ Alpharetta and site personnel ◆ Overall responsibility for ensuring that the procedures stated in the Emergency Response Site Safety and Health Plan are followed
OSC or Site Safety Officer	<ul style="list-style-type: none"> ◆ Enforces Emergency Response Site Safety and Health Plan ◆ Periodically inspects and ensures proper maintenance of safety equipment ◆ Knows emergency procedures and evacuation routes ◆ Notifies, when necessary, local public emergency officials ◆ Enforces safety procedures ◆ Dismisses personnel who, by unsafe action, endanger themselves, co-workers, or the public ◆ Manages, documents and coordinates field safety activities ◆ Stops work on site if conditions threaten the health and safety of personnel ◆ Monitors and controls access to site Hot and Warm Zones
Community Response Coordinator	<ul style="list-style-type: none"> ◆ Monitors and helps control access to Cold Zones ◆ Assists with evacuation efforts at emergency

- Other Site Personnel
- ◆ site
 - ◆ Interfaces with local emergency responders
 - ◆ Completes Local Emergency Response Facilities List
 - ◆ Complies with Emergency Response Site Safety and Health Plan
 - ◆ Safely performs assigned work
 - ◆ Notifies Site Safety Officer of unsafe working conditions

N. Decontamination Procedures

1. General

Decontamination will be required in work areas where respiratory and/or skin protection are necessary or if standard work clothing becomes saturated with petroleum products. Decontamination is performed to protect workers from exposure to dangerous materials and to eliminate the hazard of contaminated equipment and clothing. Following proper decontamination procedures (decon) is as important as donning the appropriate personnel protective gear. If proper decon is not done, many of the protective measures taken while working on site will be useless. All workers on site must always be conscious of the different ways they can be exposed to petroleum products.

Decontamination Stations shall be established as close as is practical to the established point of entry and exit between the Warm and Hot Zones. A tarpaulin should be placed on the ground to contain decontamination activities. Basins large enough to step into should be set up at the station at the beginning of the work day. A sprayer with water, soap and a brush should be available to clean boots, gloves and other personnel protective equipment. Buckets will be provided and filled with soap, water or disinfectant in order to wash gloves and respirators. A suitable drum will be provided for collection of contaminated items. Disposable PPE and clothing will be placed in plastic bags and held for proper disposal. Saturated or contaminated permanent clothing should be placed in plastic bags for vapor-free transport for proper cleaning. Launderer should be advised of the potential hazards of contaminated clothing. Other methods of decontamination may be used if approved by the Site Safety Officer.

The general sequence of steps for removing and cleaning PPE is as follows: (steps will vary depending on Level of Protection selected)

Wash and rinse outer garment

- ◆ Wash gloves and boots
- ◆ Rinse gloves and boots
- ◆ Remove boots, gloves and outer coveralls
- ◆ Wash inner gloves
- ◆ Remove respirator or mask
- ◆ Wash respirator or mask (discard disposable respirators per change out schedule)
- ◆ Remove inner gloves and dispose
- ◆ Place disposable items in plastic bags for disposal

- ◆ Place permanent items in plastic bags for transport
- ◆ Wash hands and face
- ◆ If sprayed by petroleum product, shower at earliest convenience and don emergency clothing

All personnel on site are individually responsible for following proper decontamination procedures. The Site Safety Officer or other personnel knowledgeable in decontamination procedures shall monitor designated points of entry and exit to the extent possible to ensure proper decontamination procedures are observed by all personnel exiting a Warm or Hot Zone.

If any questions arise concerning proper decontamination procedures, contact the Site Safety Officer.

2. Decontamination Water

Water for use in decontamination may be brought to the site by emergency responders or obtained locally. For larger emergency response operations, arrangements shall be made with a contractor or local fire department to supply an adequate amount of suitable water.

All water used in decontamination procedures should be stored in portable storage tanks until sufficient amounts are stockpiled to warrant disposal. Larger emergency response operations may require a skid tank in order to provide adequate storage capacity. Wash water disposal shall be coordinated with the Environmental Advisor. The containers used for storage of decon wash water and potable water for drinking purposes shall be properly identified to prevent confusion and possible use by employees for the wrong purposes.

O. Site Discontinuation/Termination

This Emergency Response Site Safety and Health Plan shall remain in effect until emergency response activities are terminated. It shall be the responsibility of the OSC to determine when emergency response activities are completed as defined in HAZWOPER, with the concurrence of the Environmental Advisor. A separate Site Safety and Health Plan shall be prepared if needed to govern any subsequent clean-up activities once emergency response activities are determined to be completed.

P. Training

All onsite workers shall be trained to a level required by their job function and responsibility before they are permitted to work in any emergency related activity which could expose them to dangerous levels of hazardous substances; or equipment, tool and material handling hazards; or fire hazards. Initial and annual refresher training for employees shall be in accordance with Section 4.5 of the Company's OSRCP and shall be documented for each employee trained.

Employers must inform employees during their training that they are to evacuate when they lack the capabilities to respond in a safe manner and in accordance with the standard operating procedures defined in the emergency response plan.

Q. Medical Surveillance Program

1. General

This Section applies to all employees performing repair and cleanup duties who may be exposed to potential health hazards requiring respirators during an emergency response operation.

2. Medical Qualification

Medical Qualification with emphasis on fitness for duty, including the ability to wear required respirators and PPE, must be conducted on all employees before being permitted to work in the hazard zone at an emergency response site. KM's Respiratory Program should be consulted for details. Medical Qualifications shall be performed to update information on employee health status. A termination physical may be performed after the KM ERT member leaves the team. The evaluations shall be free of cost to the employee.

The examining physician was provided with a copy of the OSHA Hazardous Waste Operations and Emergency Response regulations and appendices, a description of the employees' duties, the hazardous materials to which the employee may have been exposed, measured exposure levels, a description of the PPE used by the employee and their previous medical records.

A record of each medical surveillance, including the employee's name and Social Security number, the physician's written opinion and the employer's information provided to the examining physician must be maintained for duration of employment plus 30 years.

Anytime KM ERT members exhibit signs and symptoms of overexposure after working on a spill they are allowed free medical consultation. The employee shall submit to urinary testing and periodic monitoring of blood, pulmonary functions, skin contamination, etc., at a clinic equipped for such monitoring. This monitoring should be continued until the extent of the contamination can be determined. Any employee who is undergoing periodic testing cannot go back to work in a hazardous atmosphere. This restriction shall be continued until evidence can be presented that returning to work will not further endanger the employee's health. At that time, a return-to-work note will be submitted by the attending physician.

R. Program Evaluation

KM will conduct an annual critique of this ER Site Safety and Health Plan and sooner if warranted by inadequacies of specific incidents. The critique will be conducted by the incident commanders, EH&S Staff, Technical Staff, ERT members and outside consultants.

It is just as important to consider new information, experience, and incidents with the goal of enhancing the effectiveness of the ER Site Safety and Health Plan and keeping it current. Once a year the ER Site Safety and Health Plan will be reviewed in light of PPL policy changes, new OSHA standards, new equipment or supplies, etc. Additions and deletions will be discussed with or made available to the ERT members as soon as possible after revision.

A new revision date will be assigned each changed page. A sign off page stating that changes had been made in this plan will be included at the back of this manual.

It is important to consider previous emergency incidents in preparing an emergency response and follow-up evaluation. After occurrence of an incident and successful termination, the ERT members, Technical Staff and other appropriate site personnel involved in the incident will critique the incident. The evaluation team will discuss what went right and wrong in the response, what could be done better or faster and how to correct or fine tune the process. Appropriate changes will be made in the ER Site Safety and Health Plan in accordance with the results of a critique of a specific incident.

S. Employee Certification

All onsite KM & contract personnel engaged in emergency response activities are required to be familiar with this entire Emergency Response Site Safety and Health Plan and the Site Safety Plan Summary (Exhibit "A") and must sign the Site Safety Plan Summary to acknowledge this.

I am familiar with the above Plan and its provisions.

SITE SAFETY PLAN SUMMARY Exhibit "A"

I. General

☐ Tank Farm Spill ☐ Pipeline Spill ☐ Terminals ☐ Spill to Water ☐ Excavation ☐ Other: _____ AFE # _____
 Facility: _____
 Location: _____
 Work to be performed: _____

Issuing Date: _____ Time: _____
 Temperature: _____° Wind Direction: _____
 Humidity: _____

II. Hazards to be Evaluated

Y	N	Y	N	SPECIFIC HAZARDS
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Oxygen Deficient/Enriched
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Ingestion / Skin Absorption
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Gasoline
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Flammable Atmosphere
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Frostbite (LPG Spills)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> JP8
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (Explosion/Fire) %LEL
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Kerosene / Jet A
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Chemical/MSDS # _____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Aromatics
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Toxic Atmosphere: _____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (Must be attached)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Boat Operations
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Physical Hazard _____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Diesel Fuel
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Confined Space
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Traffic _____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Heating Oil
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Vapor Cloud
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Other _____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Other* (see comments) _____

III. Testing & Monitoring (Check required items)

Tests are to be performed in the order listed.

Y	N	Continuous	Frequency
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Y <input type="checkbox"/> N	_____ every _____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Y <input type="checkbox"/> N	_____ every _____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Y <input type="checkbox"/> N	_____ every _____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Y <input type="checkbox"/> N	_____ every _____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Y <input type="checkbox"/> N	_____ every _____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Y <input type="checkbox"/> N	_____ every _____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Y <input type="checkbox"/> N	_____ every _____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Y <input type="checkbox"/> N	_____ every _____

ACCEPTABLE ENTRY CONDITIONS

SPECIAL WORK PRACTICES
OR
PPE REQUIRED

KM ERT
LEAVE AREA
WORK EFFORTS SHOULD BE
DIRECTED AT REDUCING
CONCENTRATIONS

19.5 – 23.0% in air	< 19.5% or 23.0% in air	<16.0 or ≥ 23.5% in air
< 10% in air	≥ 10.0 but < 20.0% in air	≥ 20.0% in air
< 10 ppm	≥ 10 but < 100 ppm	≥ 100 ppm
< .5 ppm	≥ .5 but < 10 ppm	≥ 10 ppm
< 300 ppm	≥ 300 but < 750 ppm	≥ 750 ppm

As allowed by applicable standard(s) Acceptable for 5325 feet of elevation and below.

Hot work is not permitted when LEL is greater than 10% in air.

IV. Required Personal Protective Equipment

(Check for required use) NOTE: PPL EMPLOYEES DO NOT USE SCBA'S AIRLINE RESPIRATORS

General	Eye Prot.	Respiratory Prot.	Hearing Prot.	Gloves	Footwear	Clothing
<input type="checkbox"/> Hard Hat	<input type="checkbox"/> Safety Glasses	<input type="checkbox"/> SCBA/Air Line w/Escapes	<input type="checkbox"/> Ear Plugs	<input type="checkbox"/> Leather	<input type="checkbox"/> Steel-toes	<input type="checkbox"/> FR Coveralls
<input type="checkbox"/> Safety Harness	<input type="checkbox"/> Goggles	<input type="checkbox"/> Air Line	<input type="checkbox"/> Ear Muffs	<input type="checkbox"/> Rubber	<input type="checkbox"/> Rubber	<input type="checkbox"/> Tyvek
<input type="checkbox"/> PFD	<input type="checkbox"/> Face-shield	<input type="checkbox"/> Air Purifying (Full Mask)	<input type="checkbox"/> Combination	<input type="checkbox"/> Nitrile	<input type="checkbox"/> Hip-boots	<input type="checkbox"/> Coated Tyvek
	<input type="checkbox"/> Tinted Lens	Cartridge Type: <input type="checkbox"/> OV <input type="checkbox"/> Hepa-OV		<input type="checkbox"/> PVC	<input type="checkbox"/> _____	<input type="checkbox"/> Saranex
				<input type="checkbox"/> _____		<input type="checkbox"/> _____

Any other special PPE: _____

V. Emergency Information and Rescue Services

Emergency Contact Person: _____	Contact by: _____
Fire Department: _____	Contact by: _____
Ambulance: _____	Contact by: _____
Hospital: _____	Contact by: _____
Rescue Services: _____	Contact by: _____
(if not provided by above)	

VI. Required Safety & Rescue Equipment (on site)

☐ Lights ☐ Fall Protection ☐ First Aid Kit ☐ Drinking Water ☐ Fire Extinguisher ☐ Tripod ☐ Other: _____
☐ Ladder ☐ Retrieval Lines ☐ Resuscitator ☐ Communication Method _____

VII. Comments or Special Work Procedures

VIII. Report All Injuries Immediately to

IX. Control Measures

- Isolation & Lockout (identify items to be locked out)
- Establish Work Zones when completed
 - ☐ Hot Zone = Red Ribbon
 - ☐ Warm Zone = Yellow Ribbon
 - ☐ Cold Zone = Blue Ribbon
- Ventilation ☐ Natural ☐ Mechanical
Continuous ☐ No ☐ Yes
- Flagman / Watchman ☐
- Confined Space – Safety Watch ☐
- Evacuation Routes – (Identify on Map)
 - ☐ Air Horn – Emergency
 - ☐ Primary Route
 - ☐ Secondary Route

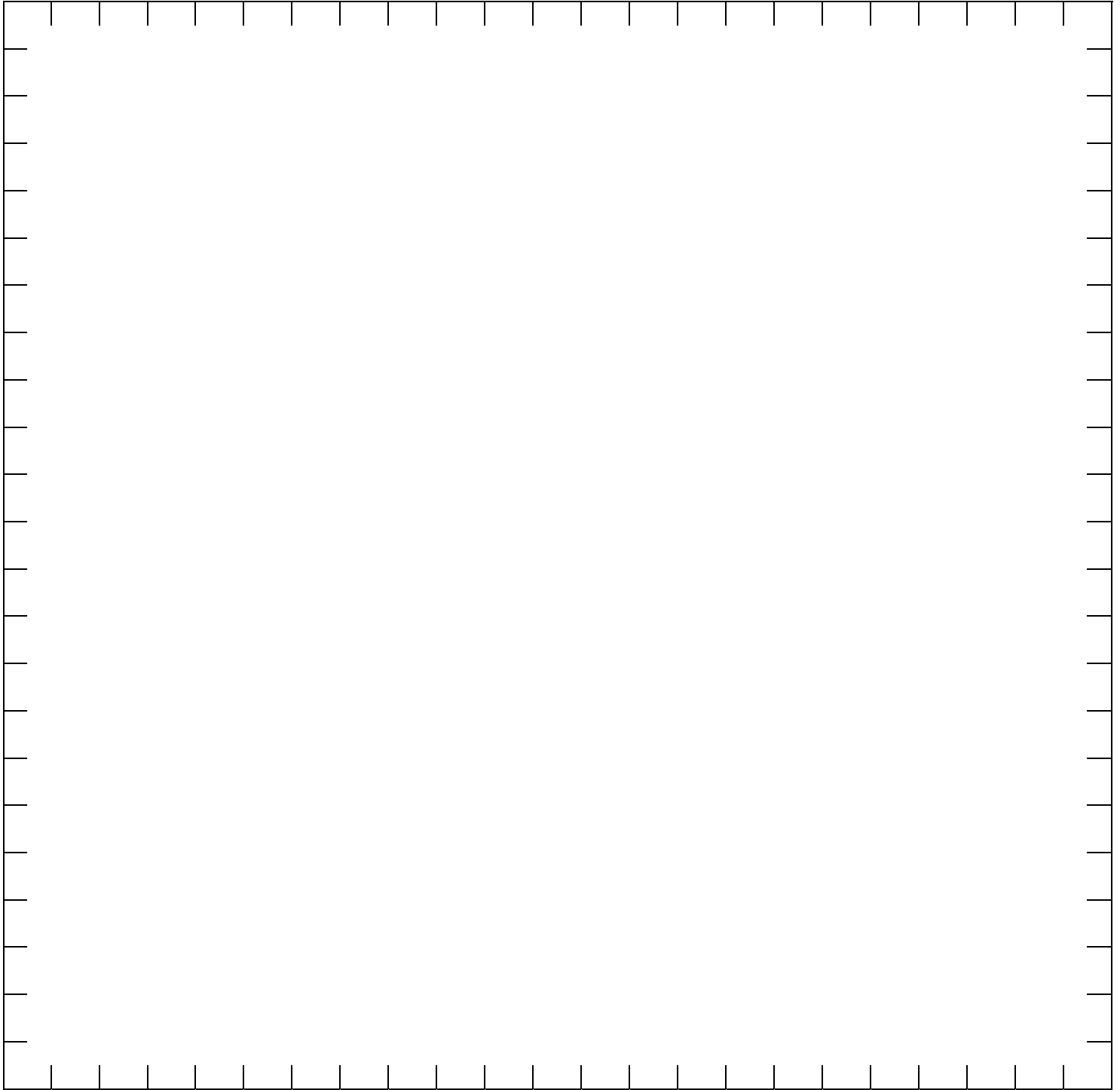
X. Monitoring Results

	Zone													
Oxygen	Time													
	Level													
	By													
LEL	Time													
	Level													
	By													
Hydrogen Sulfide	Time													
	Level													
	By													
Benzene	Time													
	Level													
	By													
VOC	Time													
	Level													
	By													
	Time													
	Level													
	By													
	Time													
	Level													
	By													
	Time													
	Level													
	By													

Equipment:	Type: _____	Mfger: _____	Calibration / Expiration: _____
	Type: _____	Mfger: _____	Calibration / Expiration: _____

XI. Work Area Diagram Map

Please include wind direction, exclusion zone, support zone, decon area, evacuation routes and significant landmarks.



XII. Work Site Signatures (Plan and Plan Summary)

Site Safety Officer: Printed Name: _____ **Signature:** _____

Exhibit B

Confined Space Entry Permit

Exhibit C

“TAILGATE” SAFETY BRIEFING SHEET		Responsibility: DESIGNATED SITE SAFETY OFFICER		Period Covered:	
				Start date/time:	Finish date/time:
LOCATION:					
1.	Wind Direction Across Incident:	<input type="checkbox"/> towards your position	<input type="checkbox"/> away from your position		
2.	Are people injured or trapped?	<input type="checkbox"/> yes	<input type="checkbox"/> no		
3.	Are people involved as unorganized observers or rescuers?	<input type="checkbox"/> yes	<input type="checkbox"/> no		
4.	Are there any immediate signs of potential hazards such as:				
	a. electrical lines down or overhead?	<input type="checkbox"/> yes	<input type="checkbox"/> no		
	b. liquid or solid products visible?	<input type="checkbox"/> yes	<input type="checkbox"/> no		
	c. vapors visible?	<input type="checkbox"/> yes	<input type="checkbox"/> no		
	d. smells which are not natural noted?	<input type="checkbox"/> yes	<input type="checkbox"/> no		
	e. fire, sparks nearby, sources of ignition present?	<input type="checkbox"/> yes	<input type="checkbox"/> no		
	f. holes, caverns, ditches, cliffs or fast moving water nearby?	<input type="checkbox"/> yes	<input type="checkbox"/> no		
	g. is local traffic a problem? (see 6 below if yes)	<input type="checkbox"/> yes	<input type="checkbox"/> no		
	h. signs, fences or other indications of potential danger?	<input type="checkbox"/> yes	<input type="checkbox"/> no		
	i. Spill Zone is: <input type="checkbox"/> icy	<input type="checkbox"/> wet	<input type="checkbox"/> dry		
5.	Approaching site from upwind, are there any changes above?		<input type="checkbox"/> yes	<input type="checkbox"/> no	
6.	Have you established control of the incident site?		<input type="checkbox"/> yes	<input type="checkbox"/> no	
	Is local responder assistance required?	<input type="checkbox"/> EMS	<input type="checkbox"/> fire	<input type="checkbox"/> police	<input type="checkbox"/> no
7.	Have you determined the necessity for any of the following?				
	a. EMS/rescue service summoned?	<input type="checkbox"/> yes	<input type="checkbox"/> standby	<input type="checkbox"/> no	
	b. Hazardous Mat’ls Tech to identify/monitor site substances?	<input type="checkbox"/> yes	<input type="checkbox"/> no		
	c. safe location selected for entry & decontamination station?	<input type="checkbox"/> yes	<input type="checkbox"/> no		
	d. safe location selected for command activities at this site?	<input type="checkbox"/> yes	<input type="checkbox"/> no		
	e. safety equipment needed to eliminate problems:				
	f. placement of warning devices (traffic, No Smoking signs, etc)?	<input type="checkbox"/> yes	<input type="checkbox"/> no		
	g. number of sufficiently trained personnel needed to fully assess location?				
	h. location to rendezvous if evacuation needed?				
8.	Hazard Data for: _____				
	a. MSDS Attached? (or available at _____)	<input type="checkbox"/> yes	<input type="checkbox"/> no		
	b. Flash point: _____ (if below 100F, do not mechanically remove material!)				
	c. TWA _____ LEL _____ IDLH?	<input type="checkbox"/> yes	<input type="checkbox"/> no		
	d. PPE level required (A,B,C,D) _____ respirator req’d?	<input type="checkbox"/> yes	<input type="checkbox"/> no		
Prepared by:		Preparation Date/Time:			

--	--	--

EMERGENCY RESPONSE SITE SAFETY AND HEALTH PLAN

(Site Identification)

AFE #

Date

(NOTE: See end of table of contents Page 1. for instructions for onsite completion of the Site Safety Plan Summary (Exhibit "A").

EMERGENCY RESPONSE SITE SAFETY AND HEALTH PLAN

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This Safety and Health Plan is part of the overall Oil Spill Recovery Contingency Plan (OSRCP) for the Plantation Pipe Line system. The OSRCP contains additional information that supplements this document. The instructions for on-site completion of the Site Safety Plan Summary listed below are based upon the assumption that all authorized personnel filling an onsite role in Kinder Morgan's (KM) Emergency Response Team (ERT) (including contractor personnel) have become familiar with this Site Safety and Health Plan as part of their pre-emergency preparedness training. The Site Safety Plan Summary (Exhibit "A") is to be used to document those safety conditions, concerns, test results as part of the overall Site Safety and Health Plan. Personnel needing access to the site areas who are not already familiar with this Site Safety and Health Plan shall become familiar with the entire Plan before entering the emergency site. The site characteristics specific to this incident (including the items listed below) shall be discussed with all personnel before site entry.

Instructions for on-site completion of the Site Safety Plan Summary (Exhibit "A"):

1. Complete the incident command system listing as needed on **Page 4**.
2. Note which products and hazards exist onsite on **Page 1**.
3. Note Monitoring Results that exist on site on **Page 2**.
4. Complete the site description and evacuation route description on **Page 3**.
5. Complete the local emergency responder notification list on **Page 1** from the information provided in Appendix B, C or D-4 of the OSRCP . Ensure that local emergency fire and medical personnel have been placed on standby.
6. Conduct a "tailgate" safety meeting(s) with all individuals to review site specific safety considerations prior to their entry into potentially hazardous areas.
7. Have all authorized onsite personnel sign the Employee Certification on **Page 4**.

EMERGENCY RESPONSE SITE SAFETY AND HEALTH PLAN

A. Introduction

Employees are occasionally exposed to petroleum products by the very nature of the Company's operations. Through on-going training employees are familiarized with the characteristics of these products as they relate to safety and health. This Site Safety and Health Plan has been written to bring all elements into focus as they relate to employees and others responding to emergencies.

The Plan will be used at each emergency response operation. The portions specific to each emergency site shall be completed by the On-Scene Commander (OSC)/Site Safety Office prior to site entry. Each employee and contract employee working at the site shall become familiar with this document as part of their pre-emergency preparedness training and shall sign the "Employee Certification" (Section "S") at the emergency site. The completed Plan will remain at the site for the duration of the emergency response (see Section "O") and shall be included in the AFE file at the completion of the emergency response. Questions relative to personnel health and safety will be brought to the attention of the Site Safety Officer. Additional copies of this Site Safety and Health Plan for use at each emergency response site may be obtained from any OSRCP or the Kinder Morgan intranet.

This site specific Emergency Response Safety and Health Plan shall be in effect for the duration of the emergency response (see Section "O"). Employees and contract personnel specifically summoned to the job site for emergency response activities shall be considered "authorized" to enter the emergency site subject to the additional considerations below. All personnel, regardless of the company for which they are employed, are subject to the requirements of this plan, unless covered by a comparable plan which is in compliance with 29 CFR 1910.120 ("HAZWOPER").

Kinder Morgan's policy is that KM ERT members may only participate in cleaning up Level C or D incidents. Contract ERT's will be used to cleanup spills determined to be Level B or higher. A determination will be made by the OSC on an incident by incident basis as to whether KM or Contract ERT personnel need to respond to the spill.

B. First-On-The-Scene

The first Company ERT employee arriving at an emergency site who is a member of the ERT takes the necessary action to apprise the situation, gather information and coordinate evacuation before the arrival of the (OSC).

"First-on-the-scene" employees who do not meet the above qualification or ERT employees who do not have the proper equipment available onsite should restrict their activities to the following:

EVACUATE the area of immediate danger

GET HELP by notifying qualified KM responders for assistance: (800) 510-5678

ADVISE others to evacuate or avoid the immediate area of danger (or assist local emergency responders in this activity)

DOCUMENT events while remaining nearby (but at a safe distance from) the emergency site to provide information to responders as they arrive.

Employees who have informed the incident command structure of an emergency, who have adequate PPE and training in the procedures they are to perform, and who employ the buddy system, may take limited action in the danger area (e.g., turning a valve) before the ERT arrives. Once the ERT arrives, these employees would be restricted to the actions that their training level allows.

This limited action assumes that the ERT is on its way, their arrival is imminent, and that the action taken is necessary to prevent the incident from increasing in severity (i.e., to prevent a catastrophe). The employee is not allowed to take action beyond what they have been trained to do.

The OSC should designate a qualified employee to act as Site Safety Officer or personally assume the duties of Site Safety Officer. If the incident is small (can be handled by two ERT members with two additional backup personnel), the OSC may personally take the additional role as Site Safety Officer. If the spill is large and requires more than four responders, then the OSC will assign a Site Safety Officer.

The roles of OSC and Site Safety Officer should be transferred according to Appendix A-4 of the OSRCP. Record the Incident Command System structure on the Site Safety Plan Summary (Exhibit "A"), including relief personnel, as needed. If additional changes are needed, continue personnel listing on page 4 of the Site Safety Plan Summary.

C. Hazard Evaluation

The following hazardous materials are known or suspected to be at the emergency site (check where appropriate on the Site Safety Plan Summary (Exhibit "A")):

- ☐ Gasoline
- ☐ JP-8
- ☐ LPG
- ☐ Kerosene/Jet-A/Turbine Fuels
- ☐ Diesel Fuel
- ☐ Heating Oil
- ☐ Biodiesel
- ☐ Ethanol
- ☐ Other
- ☐ Combination of the above listed materials (Check materials above suspected to be in combination)
- ☐ Other materials at the emergency site contaminated with any of the above materials (such as soils)

The primary hazards at Plantation Pipe Line Company are; (check where appropriate):

- ☐ Explosion
- ☐ Fire
- ☐ Lack of Oxygen (Symptoms: headache, dizziness, weakness, loss of coordination)
- ☐ Inhalation (Symptoms: headache, dizziness, loss of appetite, weakness, loss of coordination)
- ☐ Ingestion or Skin Absorption (Symptoms: skin irritation)

VAPOR CLOUD -- Vapor clouds are generally considered to be the greatest potential hazard at the emergency site due to their ignitability and lack of oxygen. Vapor clouds are most common around products with lower flash points. It is important to realize that the only proper action in the presence of a vapor cloud is to immediately evacuate the area and advise others in the area of the danger. Never enter a vapor cloud under any circumstances.

Even when no visible vapor cloud is present, an explosive gas survey shall be conducted before entering any suspect emergency area. Consult Section IIIC of the OSRCP as needed for specific vapor control procedures.

FIRE -- Fire is probably the next greatest hazard at Company emergency response sites. Fire prevention and protection techniques shall be instituted on site to minimize sparks. Smoking is prohibited within the vicinity of any containment, repair and cleanup activities during emergency response operations. Utilization of tools requiring open flames shall be prohibited when combustible vapors exceed 10% of L.E.L. Emergency evacuation routes shall be selected by the OSC and the Site Safety Officer and discussed with employees prior to initiating any work.

If a fire occurs, ERT members must use their own judgement as to the proper course of action. If the fire is minor and can be safely controlled with an extinguisher, an attempt should be made to extinguish it before contacting the designated Fire Department - particularly if a delay in extinguishing the fire would enable it to become a major fire. However, employees shall at no time put their own safety or the safety of others in jeopardy attempting to extinguish a fire. If a fire occurs that does not meet the above description, employees should evacuate the area immediately and contact the designated Fire Department. Prior to entry, non-company fire fighters should be briefed by on site commander or their designee concerning site hazards.

CONFINED SPACES -- A confined space is defined by 29 CFR 1910.146 as a space that:

- 1) is large enough and so configured that an employee can enter bodily and perform assigned work;
- 2) has limited or restricted means for entry or exit (examples are tanks, valve pits, electrical pull boxes and excavations for maintenance or repair activities over four feet in depth); and
- 3) is not designed for continuous employee occupancy.

Employees must be cautious around confined spaces where the presence of vapors can reduce the amount of oxygen in the immediate atmosphere below safe levels or result in a buildup of toxic or flammable vapors. ERT members can not enter confined spaces determined to have low oxygen areas, areas of unknown oxygen levels or other atmospheric hazards. Activities which must be conducted within confined space areas must be conducted in accordance with Kinder Morgan's confined space procedures (instructions regarding confined space entry).

AROMATICS- The major aromatic constituents of gasoline (benzene, toluene, ethyl benzene and xylene) may also be expected on the site. Of these, benzene is considered to be the most toxic. One characteristic effect of gasoline and its aromatic components is the ability to irritate the skin through repeated or prolonged exposure.

Benzene can enter the body through inhalation, ingestion and skin contact. Studies have noted that chronic (prolonged) exposure to benzene vapor can produce neurotoxic and blood

system effects. Other effects can include headache, dizziness, nausea, convulsions, coma and possible death if exposure is not reversed. OSHA lists benzene as a human carcinogen. NIOSH recognizes an association between chronic exposures to benzene and the development of certain types of leukemia. Employees must be wearing the appropriate level of protective gear defined below (see Section "J") to enter a high benzene area or an area of unknown benzene levels. The OSC will follow site entry procedures (See section "E") requiring air monitoring before selecting the appropriate level of protection.

LP GAS (not currently transported on the Plantation system) - LP gas (Propane and Butane) is currently transported by the Company on the 12" PGG Line from Pascagoula Station through McLain Station to Hattiesburg Terminal and in the 8" Line between Hattiesburg Terminal and Petal Terminal in Mississippi. LPG vaporizes rapidly and completely when released into the atmosphere. These vapors are odorless, invisible, heavier than air (thus tending to remain close to the ground and collect in low areas) and are highly flammable, even over large areas. LPG is a refrigerant that may cause frostbite if spilled on skin or clothing, and will cause asphyxiation if breathed for any period of time. Refer to Part D of Section III of the OSRCP on further instructions regarding handling of an LPG spill. *The Emergency Response Guidebook, Table of Isolation and Protective Action Distances* along with air monitoring equipment will be used to assess the extent and coverage of the vapor cloud and to determine hazardous areas.

HAZARD COMMUNICATIONS PROGRAM

Hazardous substance fact sheets or Material Safety Data Sheets (MSDS) on gasoline, kerosene, fuel oil, and diesel oil will be provided on each Company emergency response trailer and be kept on site. Any person needing specific information on any of the chemicals listed above should contact the Site Safety Officer.

Proper training in the handling of all substances on site must be performed as part of pre-emergency planning (see Section "P"). The importance of proper training cannot be overstressed.

D. Site Establishment

The OSC shall ensure that an assessment of the emergency site is carried out from a safe and prudently distant location to determine the magnitude of the emergency and the type of product spilled if possible. The OSC shall develop an initial work plan to contain the emergency as described in Section IIIA of the OSRCP. No authorized personnel shall enter an emergency site without following the initial site entry procedures below (see Section "E"). Unauthorized personnel will be restricted from access within the ER area of contamination (Hot and Warm Zones).

If unauthorized personnel are already at the emergency site when Company emergency responders arrive, an attempt should be made (with the assistance of local law enforcement if necessary) to remove all unauthorized personnel from the area of potential danger. Immediately after the hazard assessment of the emergency site is performed, any pertinent safety-related concerns should be relayed to both authorized and unauthorized individuals on site.

E. Site Entry

Before approaching the source point of a product release or any other area that exposes employees to hazardous materials, the OSC shall ensure that all the procedures listed below in this section are reviewed and applied to the emergency site to be entered. *The Emergency Response Guidebook, Table of Isolation and Protective Action Distances* along with air monitoring equipment will be used to assess the extent and coverage of the release area (includes HVL vapor clouds) and to determine hazardous areas.

1. Explosive Gas/Oxygen Deficiency/Hazardous Vapor Survey

Before entry into any emergency site or before beginning of work each day at an emergency site an oxygen deficiency and explosive gas survey shall be conducted and readings logged on the Site Safety Plan Summary, Page 2 (Exhibit "A") by either a Kinder Morgan ERT member or Contract ER person.

Work may commence under the following situations:

Situation 1:

If oxygen is within normal ranges, there are no explosive vapors and hazardous vapor levels are below 10 ppm benzene and 750 ppm total hydrocarbons.

Situation 2:

If explosive levels are registered between 10% and 20% L.E.L., ERT workers shall refrain from all activities that could potentially produce a source of ignition (sparks or open flames). KM ERT members must leave the hot zone because they are only allowed to wear Level C – Air-Purifying Respirators (APR). Explosive vapors above 10% most probably would result in airborne hazardous hydrocarbon vapor levels above 1000 ppm, which is prohibited for cartridge respirators. Contract ERT must be summoned to handle the incident in Level B protection.

Situation 3:

If explosive vapors register over 20% L.E.L. then work shall halt and ERT contractors shall move out of the immediate work area. Air blowers or other methods shall be used to remove minimize the explosive vapors. Work shall not recommence until explosive levels are below safe levels.

2. Initial Entry

Initial entry is defined as:

- a) First entry into an emergency site to perform the initial site air monitoring survey
- b) Subsequent entries into designated Hot, Warm or Cold Zones (see Item 4 below) and confined spaces (see Section "C") when site conditions could reasonably be anticipated to have changed.

Before approaching the source point of a product release or any other area that exposes employees to hazardous substances, the OSC shall request that contract ERT employees conduct an initial air monitoring survey (see Section "H") using Level B personal protective equipment (PPE) (see Section "J") and the Buddy System (see item 3 below). The initial air monitoring survey should be used to establish Hot, Warm and Cold Zones at the emergency site as defined in item 4 below. Initial entry into Hot, Warm or Cold Zones is prohibited unless approved by the OSC or the Site Safety Officer.

Exception:

If an emergency incident occurs where it is known in advance (i.e. from scheduling) that the spilled product completely consists of high flash point materials (specifically: diesel fuel, heating oil or JP-5), or that the spilled product consists of kerosene, Jet-A or turbine fuel when the ambient air temperature is below 85 degrees F., then the initial site entry air monitoring requirements may be performed by KM ERT members wearing Level C protection. The OSC shall decide if KM ERT members will conduct the air testing under these special conditions. The OSC may assist in conducting the initial air monitoring survey if qualified to do so.

If the spill is known or suspected to involve any other products or to be mixed with any other products, or if the spilled product is being sprayed, misted or otherwise agitated to the point where vapors obviously exist, then the initial air monitoring survey consisting of all four tests shall be performed. **Do not rely solely on your sense of smell to determine the identity of a product.** Monitoring is required in **all** cases prior to entering a confined space (see item 5).

3. The Buddy System

For the purposes of making an Initial Entry into any area of an emergency site, or subsequent entry into a Hot Zone (see item 4 below), and for conducting all subsequent activities within a Hot Zone, the Buddy System shall be utilized. The Buddy System shall consist of at least one Observer and at least one Buddy Team. At least one extra emergency backup ERT member will be onsite in addition to the Observer to assist in any rescue attempts.

a) The Observer

Prior to entry, a properly trained Observer must be designated who shall remain outside of the Hot Zone. The Observer shall have on hand the appropriate PPE to enter the Hot Zone and shall remain in contact (either visually or by radio) with the Buddy Team the entire time that they are in the Hot Zone. It will be the Observer's primary responsibility to summon help before entering the Hot Zone to provide aid in any rescue attempts. No rescue attempts should be made until the situation which caused a need for a rescue has been identified and made safe. Rescue attempts should only be made when there is no chance of endangering the safety of additional personnel. Under no circumstances shall the Observer enter the Hot Zone unless they/ are properly trained in first aid and other suitable rescue procedures and they have / donned the appropriate equipment.

b) The Buddy Team

Prior to entry, all individuals on the Buddy Team must be properly trained in the use of the required PPE. No individual shall proceed into the Hot Zone alone. Groups of two or more Team members and a qualified Observer shall be present before any attempt at entry shall be permitted. Of this group, two or more Team members shall don the appropriate PPE and enter the area. Each Team member shall have a designated partner who shall enter the zone with him/her. Each Team Member is responsible for providing his/her partner assistance, observing his/her partner for signs and symptoms of exposure, periodically checking the integrity of his/her partner's protective clothing and equipment, and notifying the Observer if the need for emergency assistance arises. At no time during the period inside the Hot Zone should these designated partners be out of contact with one another. Team members shall always stay within sight and voice distance of one another.

4. Hot, Warm and Cold Zones

Hot, Warm and Cold Zones shall be established in order to contain the release of petroleum products within the smallest areas possible. Hot, Warm and Cold Zones shall be established based on ambient air data and proposed work to be performed. The zones will be documented on Page 3 of the Site Safety Plan Summary (Exhibit "A"). The following requirements are noted for these zones:

a) Hot Zone(s)

The Hot Zone is a specific area or several areas in which air monitoring has determined that an atmospheric hazard exists which requires Level B, C, or D PPE (see Sections "I & J"). In addition, other areas which the OSC or Site Safety Officer have determined to be unsafe for entry shall also be designated as a Hot Zone. All designated Hot Zones will include areas where a significant fire hazard exists, or areas where a significant risk of skin exposure to hazards exists at the emergency site. All uncontrolled hazardous materials at the emergency site shall be included within this zone. The zone will be extended far enough by the OSC to prevent adverse effects from the spilled product.

All Hot Zones shall be isolated by a Warm Zone. Hot Zones shall be delineated with safety ribbon, signs or barricades to the fullest extent possible. Only employees with the proper HAZWOPER training (or exceptions as defined by HAZWOPER) and after the donning of the proper PPE (see Section "J") shall be allowed entry into a Hot Zone. Entry into Hot Zones shall be permitted only in exceptional cases at the discretion of the OSC and Site Safety Officer. Entry into Hot Zones containing confined spaces is permitted only after completing a confined space entry permit (see Exhibit B). Access to Hot Zones shall be controlled to the fullest extent possible to restrict all unauthorized entry.

b) Warm Zone(s)

Warm Zones shall completely surround a the Hot Zones, where possible. The Warm Zone itself is surrounded by the Cold Zone . The Warm Zone acts as a buffer between the Hot and Cold Zones and is the point where decontamination occurs. All decontamination operations shall be conducted within Warm Zones, as close as practical to the entry /exit point of work areas where contamination is likely to occur. The size of the zone depends on the product spilled, size and location of the spill, wind speed and direction, and other variables. This zone will be determined by the OSC based on the above variables and air monitoring data. The Warm/Hot Zone border is established where the airborne levels are still at background. Decontamination shall be performed upwind of the spill.

Whenever practical, the Warm Zone should be delineated with safety ribbon, signs or barricades to help restrict access and to protect onsite personnel from accidental exposure. Only individuals with the proper HAZWOPER training (or exceptions as defined by HAZWOPER) and Standard PPE (see Section "J") shall be allowed to enter an emergency site Warm Zone. Controlled access points to enter and exit the Hot Zone are established within this zone. The OSC shall be responsible for controlling access to the Warm Zone to the fullest extent possible with the assistance of the Site Safety Officer. The Site Safety Officer is responsible for ensuring that all individuals in the Warm Zone wear Standard PPE

c) Cold Zone(s)

The Cold Zone is the area where support services are provided for the ER. It is that area outside of the Warm and Hot Zones which is considered non-hazardous.

If practical, the Cold Zone should be delineated with safety ribbon, signs or barricades to help restrict access and to protect the general public from accidental exposure. The Command Post will be established within a Cold Zone at the discretion of the OSC. The OSC is responsible for controlling access to the Cold Zone to the fullest extent possible with assistance from the Community Response Coordinator and the OSC Assistant. Personnel who do not have the proper HAZWOPER training should be accompanied whenever possible by properly HAZWOPER trained personnel when entering a Cold Zone to ensure that accidental exposure to hazards do not occur.

By definition, every Company emergency site will require establishment of all three Work Zones. To the extent possible, all Hot Zones should be completely contained within a Warm Zone, and all Warm Zones should be completely contained within a Cold Zone. However, if the emergency site hazards are not severe enough to meet any part of the Hot Zone definition above, then a Hot Zone need not be defined (for example a small diesel spill).

The following system should be used to restrict access to Hazard Zones whenever practical:

Hot Zones	=	red ribbon
Warm Zones	=	yellow ribbon
Cold Zones	=	blue ribbon

General site conditions and levels of airborne contaminants (see Section "I") should be periodically monitored within all three Zones by qualified personnel. Changes in general site conditions or levels of airborne contaminants shall be reported to the Site Safety Officer. The Zones are movable boundaries which may be expanded or contracted under supervision of the Site Safety Officer or the OSC as conditions warrant.

Smoking is not allowed within Warm or Hot Zones.

5. Confined Space Entry

Prior to entry into any confined space as defined in Section "C" of this plan, a determination must be made by the Site Safety Officer as to whether the space is a permit-required confined space (Permit Space). In accordance with Kinder Morgan's safety procedures, a Permit Space is defined as a confined space that has one or more of the following characteristics:

- a). Contains or has the potential to contain a hazardous atmosphere;
- b). Contains a material that has the potential for engulfing an entrant;
- c). Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls...; or
- d). Contains any other recognized serious safety hazard.

If a Permit Space requiring entry is present on site, entry shall conform to Kinder Morgan's permit required entry procedures. A confined space entry permit form is included as Exhibit B in this Plan. All trenching and excavation activities shall conform to Kinder Morgan's safety procedures for trenching and excavation.

6. Subsequent Entry

Subsequent entries into and exits from Hot, Warm and Cold Zones shall be made through a single established point of entry whenever possible in order to maintain security and ensure decontamination procedures are carried out as needed (See Section "N").

Emergency evacuations shall not be restricted by this policy provided that after evacuation all employees report to the predetermined location listed in Section "G" to be accounted for.

All personnel are urged to use caution in conducting any of the activities identified above, and to pre-plan their approach to operations conducted in Hot, Warm and Cold Zones.

F. Site Description

(Include hazards, area affected, surrounding population, topography on Exhibit "A" Map)

G. Evacuation Routes

Should an unsafe situation arise, immediately shut down all operations within the Hot, Warm and Cold Zone(s). The emergency alarm air horn shall be provided on each emergency trailer. The air horn should be sounded (one long blast of 15 seconds or longer), and all personnel will evacuate and assemble according to the following plan (Note: ERT members in the Hot and Warm Zones may forego decontamination in event of an emergency evacuation. Decontamination would occur after the ERT members are in a safe location).

The Site Safety Officer shall account for all site personnel immediately after the evacuation is complete. (Note: for familiarity with the air horn during initial site specific briefings, three short blasts shall be used).

Emergency Egress Site Map

Include site map or sketch of the emergency site and evacuation routes on the Site Safety Plan Summary – Exhibit "A".

H. Air Quality Monitoring

1. General

This section governs all air monitoring to be done on site prior to Initial Entry and during containment, repair and cleanup activities during an emergency response operation. Reliable measurement of airborne contaminants is necessary to select appropriate protective equipment. Air monitoring is mandatory prior to Initial Entry into an emergency site and into all Hot Zones (see Section "E", item 2) by properly trained personnel using the buddy system (see Section "E", item 3); and is required in all Confined Spaces by Kinder Morgan policy. Air Monitoring should be performed on an as-needed basis as the job progresses within all Hot, Warm and Cold Zones. Air monitoring shall be performed by a company employee trained in the use of the equipment listed below in Item 2. The OSC is ultimately responsible for ensuring the performance of air monitoring (The Site Safety Officer is empowered to direct the air-monitoring activities defined in this section).

Air monitoring results should be recorded on the Site Safety Summary Plan (see Exhibit "A"). Any changes in the levels of contaminants during periodic air monitoring should be reported to the Site Safety Officer immediately. The Site Safety Officer will then immediately report contaminant level changes to the OSC if the conditions

warrant such a report. The OSC shall determine if an inspection of site conditions to identify the cause of the elevated hazardous levels of air contaminants is necessary and may require changes to reduce or eliminate hazardous conditions. If the elevated levels persist, the OSC will stop all work and remove workers from the work area until conditions are improved (The Site Safety Officer is also empowered to stop all work and remove workers from the emergency site due to unsafe conditions).

2. Equipment

Tests are to be made using:

- ◆ Oxygen meter for determining areas deficient or overabundant in oxygen
- ◆ Explosimeter for combustible vapor hazards (sufficient oxygen must be present)
- ◆ Draeger Colorimetric Indicating Tubes (CIT) or CMS for benzene exposure
- ◆ Draeger CIT or CMS or an ATX 612 or like direct reading instrument (DRI) for total hydrocarbon exposure
- ◆ ATX 612 or like DRI for Oxygen, LEL, CO and Total Hydrocarbons

3. Records

All equipment utilized for sampling shall be maintained and calibrated as per factory specifications. Repairs and calibration records as well as test results shall be documented. Test results shall include date, time, place of sample, air temperature, weather conditions and a physical description of any hazards that may influence the results of the tests. These records should be kept by the appropriate Maintenance Supervisor in charge of the air monitoring equipment.

I. Air Monitoring Action Levels

The following equipment and actions are mandatory for the various levels of detectable vapors at an emergency site. (Detailed descriptions of each level of PPE are provided in section "J" below). KM ERT members are not allowed to enter sites requiring Level B or above PPE.

1. Oxygen Hazard Action Levels (Oxygen or ATX 612 Like DRI)

0.0% to 19.5% Oxygen:	Level B PPE, KM ERT Immediately withdraw from area
19.5% to 23.0% Oxygen:	Standard PPE
Above 23.0% Oxygen:	Level B, Immediately withdraw from area

2. Combustible Vapor Hazard Action Levels (Explosimeter or ATX 612 or like DRI)

0.0% to 10.0% LEL*:	Standard PPE
10.0% to 20.0% LEL*:	Standard PPE including NOMEX coveralls (cease all activities with spark/ignition potential), KM ERT Immediately withdraw from area
Above 20.0% LEL*:	Level B, KM ERT Immediately withdraw from area

*Lower Explosive Level

3. Benzene Exposure Action Levels (Draeger CIT or CMOS Pump)

0.0 to 0.5 ppm:	Standard PPE
0.5 to 10.0 ppm:	Level C PPE
Above 10.0 ppm:	Level B PPE, PPL ERT Immediately withdraw from area

4. Total Hydrocarbon Exposure Action Level (Draeger CIT or CMOS Pump or ATX 612 or like DRI)

0 to 300 ppm:	Standard PPE
300 to 750 ppm:	Level C PPE
750 to 10,000 ppm:	Level B PPE, KM ERT Immediately withdraw from area
Above 10,000 ppm:	Level B, Immediately withdraw from area

All tests required in Section "E" must be performed and the highest level of PPE required by the test results must be selected before work begins in a potentially hazardous area. Record all test results on the Site Safety Plan Summary (see Exhibit "A"). If clarification of any of the action levels as listed above is needed, contact the Site Safety Officer.

J. Personal Protective Equipment

PPE shall be worn by all persons in the Hot or Warm Zones as directed below. Standard Company policies for personnel protection shall be followed elsewhere at the emergency site unless additional equipment is required by the OSC and/or Site Safety Officer. It will be the responsibility of contractors to supply their personnel with the required PPE and to ensure that they are knowledgeable and proficient in its use. All contractor's personnel shall wear the level of PPE requested by Kinder Morgan's OSC and/or Site Safety Officer as a minimum. Kinder Morgan shall remove contractor personnel from the emergency site for failure to wear the proper PPE.

1. Hot Zone PPE Levels

Entry into any area designated as a Hot Zone is prohibited unless approved by the OSC or the Site Safety Officer. Prior to Initial Entry into a Hot Zone, contract personnel shall use Level B PPE (see below) and the Buddy System (see Section "E", Item 3) to conduct an air monitor survey to ensure proper PPE selection. A confined space entry permit (Exhibit B) shall be completed prior to entering Permit Spaces within the Hot Zone as required (see Section "E", Items 4 & 5). All individuals entering a Hot Zone or Permit Space shall be listed on the permit and shall be briefed on the existing hazards prior to entry. All personnel shall use the Buddy System while conducting activities in a Hot Zone.

It is KM policy not to allow KM ERT members to wear Level B or Higher. KM ERT contractors will handle all situations requiring Level B and above.

Based on the air monitoring requirements in Section "H", all personnel entering Hot Zones shall require one of the three PPE Levels listed below. Hot Zone Personnel Protective Equipment shall also be selected in order to prevent skin contact with

hazardous materials. The following levels note minimal PPE that must be worn by ERT contractor personal or KM ERT members. Record zones on the Site Safety Plan Summary (see Exhibit "A").

Level A

HAZWOPER Appendix "B" defines a Level A hazard as requiring "the highest level of protection for skin, eyes and the respiratory system" (i.e. requiring a "totally encapsulating chemical suit" and SCBA). The Company does not consider any of the products presently transported in the system to be hazardous enough to warrant Level A PPE as defined by Appendix "B" of HAZWOPER (Should a situation occur where chemical hazards severe enough to warrant this level of protection are encountered during an emergency response operation, employees shall in all cases evacuate the area immediately).

Level B

Required for Initial Entry as described in Section "E" when type of substance is known (i.e., petroleum products). Required when Total Hydrocarbons register between 750 and 10,000 ppm; or when the percentage of oxygen in the atmosphere falls below 19.5%. Entry into a Level B Hot Zone is further restricted according to Section "E" of the Plan.

Level B PPE – Prohibited for KM ERT

- ◆ Approved, positive pressure demand, self-contained breathing apparatus (SCBA).
- ◆ Fire-resistant coveralls (Nomex III or equivalent); or
- ◆ Tyvex or splash resistant coveralls, if needed

NOTES:

WEAR Nomex if the potential ignition hazard is judged to be greater than the potential splash hazard.

Wear Tyvex if the potential splash hazard is judged to be greater than the potential ignition hazard.

DO NOT WEAR BOTH SUITS SIMULTANEOUSLY

- ◆ Inner gloves and outer-chemical-resistant (nitrile) if needed
- ◆ Boots, chemical-resistant, if needed
- ◆ Hard hat
- ◆ Hearing protection, if needed

Level C

Should be selected when the type and concentration of contaminant is known and the proper cartridge for a "half-mask" is available that can remove this contaminant (i.e. benzene between 0.5 & 10 ppm or total hydrocarbons between 50 & 750 ppm). The atmospheric concentration of oxygen must be between 19.5% and 23%. Entry into a Level C Hazard Zone is further restricted according to Section "E" of this plan.

Level C PPE

- ◆ Approved, half-mask, air-purifying, cartridge-equipped respirator
- ◆ *Fire-resistant coveralls (Nomex III or equivalent); or
- ◆ Tyvex or splash resistant coveralls, if needed

NOTES:

WEAR Nomex if the potential ignition hazard is judged to be greater than the potential splash hazard.

Wear Tyvex if the potential splash hazard is judged to be greater than the potential ignition hazard.

DO NOT WEAR BOTH SUITS SIMULTANEOUSLY

- ◆ Inner gloves and outer-chemical-resistant (nitrile) if needed
- ◆ Boots, chemical-resistant, if needed
- ◆ Hard hat
- ◆ Eye protection, if needed
- ◆ Hearing protection, if needed

- * Within Level C Hot Zones, fire-resistant coveralls are required only when combustible vapor levels are above 10% LEL. Anytime the requirement for NOMEX is waived, periodic (preferably continuous) monitoring for explosive vapors and/or changes in conditions must be carried out and PPE changed as appropriate.

No person may be assigned a task requiring the use of respiratory or other personal protection equipment without first being properly trained in its use and limitations. Before wearing of any respiratory protection equipment is permitted, wearer must first complete a fit test, and must be completely aware of fitting procedures.

No person may be assigned a task requiring the use of respiratory equipment where it has been determined that said person has a physical limitation which might result in injury in conjunction with respiratory equipment use. A physician shall be consulted as to individual limitations based on information obtained in baseline physical examinations, and subsequent follow-up examinations.

All respiratory equipment shall be properly fitted to worker(s) who will be using such equipment. All equipment shall be properly cleaned and inspected for worn parts as often as necessary. All equipment shall be cleaned before being worn by different operators.

2. Respirator Change-Out Schedules

Employees wearing 3M 5000 Series Disposable APR's for protection against, hydrocarbons, petroleum products, dusts, and other particulates shall follow a change-out schedule. Based on discussions with our respirator distributor and our Respirator Program Administrator, organic vapor respirators will be scheduled to be changed out under the following situations depending on which event occurs first:

- ◆ At the end of each day as per the Benzene Standard,
- ◆ If breakthrough (odor, taste, irritation) is noted by the wearer,
- ◆ Based on 3M's Service Life Program,
- ◆ After each ER if response lasts less than one day.

Respirators shall be changed out also based on airborne concentrations of contaminants as noted below. These change-out times are based on 3M's Service Life Program. Times were based on the Octane mixture calculations. It was assumed that ERT members breathe at a heavy breathing rate (50-60 lpm), 86° F, and >65% RH.

Table 1 - Total Hydrocarbons

Concentration PPM	Change-out Schedule (Minutes)
50	30 hours
100	16 hours
200	9 hours
300	386
400	305
500	243
600	202
700	174
750	162
Greater than 750	Leave Area Immediately

3. Warm Zone PPE

The following equipment should be selected while working within the Warm Zone when the contaminants within the work area are known to be within acceptable respiratory limits. Standard protocol recommends that ERT members within this zone wear equal to or one level lower than personnel in the Hot Zone. Therefore, Level C noted above or Level D PPE should be selected in order to prevent skin contact with hazardous materials.

Level D and Standard PPE

- ◆ Standard work clothes
- ◆ Fire-resistant coveralls (Nomex III or equivalent) if needed, or
- ◆ Tyvex coveralls, if needed

NOTES:

WEAR Nomex if the potential ignition hazard is judged to be greater than the potential splash hazard.

Wear Tyvex if the potential splash hazard is judged to be greater than the potential ignition hazard.

DO NOT WEAR BOTH SUITS SIMULTANEOUSLY

- ◆ Inner gloves and outer-chemical-resistant (nitrile) if needed
- ◆ Boots, chemical-resistant, if needed
- ◆ Hard hat
- ◆ Eye protection, if needed
- ◆ Hearing protection, if needed

K. Site Security

(b) (7)(F)



L. Onsite Medical Provisions

This section covers all required onsite medical services, hygiene services and information pertaining to area hospitals and clinics that are necessary for treatment of injury.

1. Accident Reporting

Should an accident or injury of any type occur on site, a report of such accident shall be made immediately to the Site Safety Officer.

2. First Aid

A complete industrial first aid kit shall be supplied by Kinder Morgan and each Contractor at the site. Generally, first aid kits are maintained on all emergency response trailers and in most Company vehicles. The Site Safety Officer shall notify all personnel as to the site specific location of first aid kits and proper use of the items in these kits.

3. Site Emergency Notification

The Local Emergency Response Facilities noted on the Site Safety Plan Summary (see Exhibit "A") are state and local police departments, ambulance, rescue units and nearby hospitals and emergency facilities, which shall be maintained by the Community Response Coordinator for use by the Site Safety Officer at the emergency site. The list must include phone numbers and the quickest routes to area emergency facilities if practical.

M. Site Safety Personnel Responsibilities

The responsibilities of company personnel involved in health and safety operations are stated below.

TITLE	SAFETY RESPONSIBILITIES
On Scene Commander	<ul style="list-style-type: none"> ◆ Provides liaison between Business Unit/ Alpharetta and site personnel ◆ Overall responsibility for ensuring that the procedures stated in the Emergency Response Site Safety and Health Plan are followed
OSC or Site Safety Officer	<ul style="list-style-type: none"> ◆ Enforces Emergency Response Site Safety and Health Plan ◆ Periodically inspects and ensures proper maintenance of safety equipment ◆ Knows emergency procedures and evacuation routes ◆ Notifies, when necessary, local public emergency officials ◆ Enforces safety procedures ◆ Dismisses personnel who, by unsafe action, endanger themselves, co-workers, or the public ◆ Manages, documents and coordinates field safety activities ◆ Stops work on site if conditions threaten the health and safety of personnel ◆ Monitors and controls access to site Hot and Warm Zones
Community Response Coordinator	<ul style="list-style-type: none"> ◆ Monitors and helps control access to Cold Zones ◆ Assists with evacuation efforts at emergency

- Other Site Personnel
- ◆ site
 - ◆ Interfaces with local emergency responders
 - ◆ Completes Local Emergency Response Facilities List
 - ◆ Complies with Emergency Response Site Safety and Health Plan
 - ◆ Safely performs assigned work
 - ◆ Notifies Site Safety Officer of unsafe working conditions

N. Decontamination Procedures

1. General

Decontamination will be required in work areas where respiratory and/or skin protection are necessary or if standard work clothing becomes saturated with petroleum products. Decontamination is performed to protect workers from exposure to dangerous materials and to eliminate the hazard of contaminated equipment and clothing. Following proper decontamination procedures (decon) is as important as donning the appropriate personnel protective gear. If proper decon is not done, many of the protective measures taken while working on site will be useless. All workers on site must always be conscious of the different ways they can be exposed to petroleum products.

Decontamination Stations shall be established as close as is practical to the established point of entry and exit between the Warm and Hot Zones. A tarpaulin should be placed on the ground to contain decontamination activities. Basins large enough to step into should be set up at the station at the beginning of the work day. A sprayer with water, soap and a brush should be available to clean boots, gloves and other personnel protective equipment. Buckets will be provided and filled with soap, water or disinfectant in order to wash gloves and respirators. A suitable drum will be provided for collection of contaminated items. Disposable PPE and clothing will be placed in plastic bags and held for proper disposal. Saturated or contaminated permanent clothing should be placed in plastic bags for vapor-free transport for proper cleaning. Launderer should be advised of the potential hazards of contaminated clothing. Other methods of decontamination may be used if approved by the Site Safety Officer.

The general sequence of steps for removing and cleaning PPE is as follows: (steps will vary depending on Level of Protection selected)

Wash and rinse outer garment

- ◆ Wash gloves and boots
- ◆ Rinse gloves and boots
- ◆ Remove boots, gloves and outer coveralls
- ◆ Wash inner gloves
- ◆ Remove respirator or mask
- ◆ Wash respirator or mask (discard disposable respirators per change out schedule)
- ◆ Remove inner gloves and dispose
- ◆ Place disposable items in plastic bags for disposal

- ◆ Place permanent items in plastic bags for transport
- ◆ Wash hands and face
- ◆ If sprayed by petroleum product, shower at earliest convenience and don emergency clothing

All personnel on site are individually responsible for following proper decontamination procedures. The Site Safety Officer or other personnel knowledgeable in decontamination procedures shall monitor designated points of entry and exit to the extent possible to ensure proper decontamination procedures are observed by all personnel exiting a Warm or Hot Zone.

If any questions arise concerning proper decontamination procedures, contact the Site Safety Officer.

2. Decontamination Water

Water for use in decontamination may be brought to the site by emergency responders or obtained locally. For larger emergency response operations, arrangements shall be made with a contractor or local fire department to supply an adequate amount of suitable water.

All water used in decontamination procedures should be stored in portable storage tanks until sufficient amounts are stockpiled to warrant disposal. Larger emergency response operations may require a skid tank in order to provide adequate storage capacity. Wash water disposal shall be coordinated with the Environmental Advisor. The containers used for storage of decon wash water and potable water for drinking purposes shall be properly identified to prevent confusion and possible use by employees for the wrong purposes.

O. Site Discontinuation/Termination

This Emergency Response Site Safety and Health Plan shall remain in effect until emergency response activities are terminated. It shall be the responsibility of the OSC to determine when emergency response activities are completed as defined in HAZWOPER, with the concurrence of the Environmental Advisor. A separate Site Safety and Health Plan shall be prepared if needed to govern any subsequent clean-up activities once emergency response activities are determined to be completed.

P. Training

All onsite workers shall be trained to a level required by their job function and responsibility before they are permitted to work in any emergency related activity which could expose them to dangerous levels of hazardous substances; or equipment, tool and material handling hazards; or fire hazards. Initial and annual refresher training for employees shall be in accordance with Section 4.5 of the Company's OSRCP and shall be documented for each employee trained.

Employers must inform employees during their training that they are to evacuate when they lack the capabilities to respond in a safe manner and in accordance with the standard operating procedures defined in the emergency response plan.

Q. Medical Surveillance Program

1. General

This Section applies to all employees performing repair and cleanup duties who may be exposed to potential health hazards requiring respirators during an emergency response operation.

2. Medical Qualification

Medical Qualification with emphasis on fitness for duty, including the ability to wear required respirators and PPE, must be conducted on all employees before being permitted to work in the hazard zone at an emergency response site. KM's Respiratory Program should be consulted for details. Medical Qualifications shall be performed to update information on employee health status. A termination physical may be performed after the KM ERT member leaves the team. The evaluations shall be free of cost to the employee.

The examining physician was provided with a copy of the OSHA Hazardous Waste Operations and Emergency Response regulations and appendices, a description of the employees' duties, the hazardous materials to which the employee may have been exposed, measured exposure levels, a description of the PPE used by the employee and their previous medical records.

A record of each medical surveillance, including the employee's name and Social Security number, the physician's written opinion and the employer's information provided to the examining physician must be maintained for duration of employment plus 30 years.

Anytime KM ERT members exhibit signs and symptoms of overexposure after working on a spill they are allowed free medical consultation. The employee shall submit to urinary testing and periodic monitoring of blood, pulmonary functions, skin contamination, etc., at a clinic equipped for such monitoring. This monitoring should be continued until the extent of the contamination can be determined. Any employee who is undergoing periodic testing cannot go back to work in a hazardous atmosphere. This restriction shall be continued until evidence can be presented that returning to work will not further endanger the employee's health. At that time, a return-to-work note will be submitted by the attending physician.

R. Program Evaluation

KM will conduct an annual critique of this ER Site Safety and Health Plan and sooner if warranted by inadequacies of specific incidents. The critique will be conducted by the incident commanders, EH&S Staff, Technical Staff, ERT members and outside consultants.

It is just as important to consider new information, experience, and incidents with the goal of enhancing the effectiveness of the ER Site Safety and Health Plan and keeping it current. Once a year the ER Site Safety and Health Plan will be reviewed in light of PPL policy changes, new OSHA standards, new equipment or supplies, etc. Additions and deletions will be discussed with or made available to the ERT members as soon as possible after revision.

A new revision date will be assigned each changed page. A sign off page stating that changes had been made in this plan will be included at the back of this manual.

It is important to consider previous emergency incidents in preparing an emergency response and follow-up evaluation. After occurrence of an incident and successful termination, the ERT members, Technical Staff and other appropriate site personnel involved in the incident will critique the incident. The evaluation team will discuss what went right and wrong in the response, what could be done better or faster and how to correct or fine tune the process. Appropriate changes will be made in the ER Site Safety and Health Plan in accordance with the results of a critique of a specific incident.

S. Employee Certification

All onsite KM & contract personnel engaged in emergency response activities are required to be familiar with this entire Emergency Response Site Safety and Health Plan and the Site Safety Plan Summary (Exhibit "A") and must sign the Site Safety Plan Summary to acknowledge this.

I am familiar with the above Plan and its provisions.

SITE SAFETY PLAN SUMMARY Exhibit "A"

I. General

☐ Tank Farm Spill ☐ Pipeline Spill ☐ Terminals ☐ Spill to Water ☐ Excavation ☐ Other: _____ AFE # _____
 Facility: _____
 Location: _____
 Work to be performed: _____

Issuing Date: _____ Time: _____
 Temperature: _____° Wind Direction: _____
 Humidity: _____

II. Hazards to be Evaluated

Y	N	Y	N	SPECIFIC HAZARDS
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Oxygen Deficient/Enriched
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Ingestion / Skin Absorption
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Gasoline
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Flammable Atmosphere
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Frostbite (LPG Spills)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> JP8
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (Explosion/Fire) %LEL
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Chemical/MSDS # _____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Kerosene / Jet A
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Toxic Atmosphere: _____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Aromatics
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Boat Operations
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Diesel Fuel
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Confined Space
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Physical Hazard _____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Heating Oil
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Traffic _____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Vapor Cloud
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Other _____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Other* (see comments) _____

III. Testing & Monitoring (Check required items)

Tests are to be performed in the order listed.

Y	N	Continuous	Frequency
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Y <input type="checkbox"/> N _____	every _____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Y <input type="checkbox"/> N _____	every _____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Y <input type="checkbox"/> N _____	every _____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Y <input type="checkbox"/> N _____	every _____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Y <input type="checkbox"/> N _____	every _____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Y <input type="checkbox"/> N _____	every _____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Y <input type="checkbox"/> N _____	every _____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Y <input type="checkbox"/> N _____	every _____

ACCEPTABLE ENTRY CONDITIONS

SPECIAL WORK PRACTICES
OR
PPE REQUIRED

KM ERT
LEAVE AREA
WORK EFFORTS SHOULD BE
DIRECTED AT REDUCING
CONCENTRATIONS

19.5 – 23.0% in air	< 19.5% or 23.0% in air	<16.0 or ≥ 23.5% in air
< 10% in air	≥ 10.0 but < 20.0% in air	≥ 20.0% in air
< 10 ppm	≥ 10 but < 100 ppm	≥ 100 ppm
< .5 ppm	≥ .5 but < 10 ppm	≥ 10 ppm
< 300 ppm	≥ 300 but < 750 ppm	≥ 750 ppm

As allowed by applicable standard(s) Acceptable for 5325 feet of elevation and below.

Hot work is not permitted when LEL is greater than 10% in air.

IV. Required Personal Protective Equipment

(Check for required use) NOTE: PPL EMPLOYEES DO NOT USE SCBA'S AIRLINE RESPIRATORS

General	Eye Prot.	Respiratory Prot.	Hearing Prot.	Gloves	Footwear	Clothing
<input type="checkbox"/> Hard Hat	<input type="checkbox"/> Safety Glasses	<input type="checkbox"/> SCBA/Air Line w/Escapes	<input type="checkbox"/> Ear Plugs	<input type="checkbox"/> Leather	<input type="checkbox"/> Steel-toes	<input type="checkbox"/> FR Coveralls
<input type="checkbox"/> Safety Harness	<input type="checkbox"/> Goggles	<input type="checkbox"/> Air Line	<input type="checkbox"/> Ear Muffs	<input type="checkbox"/> Rubber	<input type="checkbox"/> Rubber	<input type="checkbox"/> Tyvek
<input type="checkbox"/> PFD	<input type="checkbox"/> Face-shield	<input type="checkbox"/> Air Purifying (Full Mask)	<input type="checkbox"/> Combination	<input type="checkbox"/> Nitrile	<input type="checkbox"/> Hip-boots	<input type="checkbox"/> Coated Tyvek
	<input type="checkbox"/> Tinted Lens	Cartridge Type: <input type="checkbox"/> OV <input type="checkbox"/> Hepa-OV		<input type="checkbox"/> PVC	<input type="checkbox"/> _____	<input type="checkbox"/> Saranex
				<input type="checkbox"/> _____		<input type="checkbox"/> _____

Any other special PPE: _____

V. Emergency Information and Rescue Services

Emergency Contact Person: _____	Contact by: _____
Fire Department: _____	Contact by: _____
Ambulance: _____	Contact by: _____
Hospital: _____	Contact by: _____
Rescue Services: _____	Contact by: _____
(if not provided by above)	

VI. Required Safety & Rescue Equipment (on site)

☐ Lights ☐ Fall Protection ☐ First Aid Kit ☐ Drinking Water ☐ Fire Extinguisher ☐ Tripod ☐ Other: _____
☐ Ladder ☐ Retrieval Lines ☐ Resuscitator ☐ Communication Method _____

VII. Comments or Special Work Procedures

VIII. Report All Injuries Immediately to

IX. Control Measures

- Isolation & Lockout (identify items to be locked out)
- Establish Work Zones when completed
 - ☐ Hot Zone = Red Ribbon
 - ☐ Warm Zone = Yellow Ribbon
 - ☐ Cold Zone = Blue Ribbon
- Ventilation ☐ Natural ☐ Mechanical
Continuous ☐ No ☐ Yes
- Flagman / Watchman ☐
- Confined Space – Safety Watch ☐
- Evacuation Routes – (Identify on Map)
 - ☐ Air Horn – Emergency
 - ☐ Primary Route
 - ☐ Secondary Route

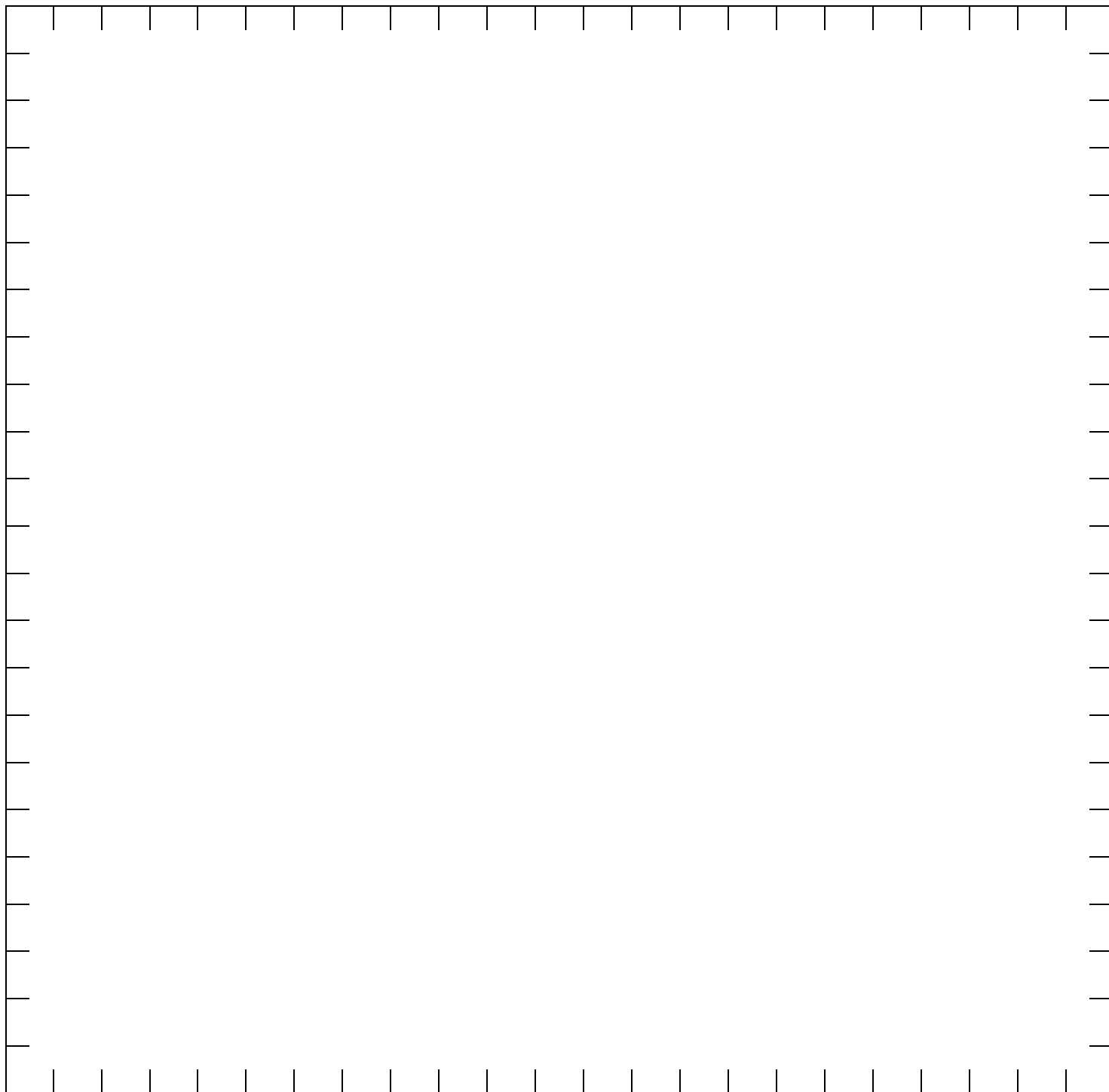
X. Monitoring Results

	Zone													
Oxygen	Time													
	Level													
	By													
LEL	Time													
	Level													
	By													
Hydrogen Sulfide	Time													
	Level													
	By													
Benzene	Time													
	Level													
	By													
VOC	Time													
	Level													
	By													
	Time													
	Level													
	By													
	Time													
	Level													
	By													
	Time													
	Level													
	By													

Equipment:	Type: _____	Mfger: _____	Calibration / Expiration: _____
	Type: _____	Mfger: _____	Calibration / Expiration: _____

XI. Work Area Diagram Map

Please include wind direction, exclusion zone, support zone, decon area, evacuation routes and significant landmarks.



XII. Work Site Signatures (Plan and Plan Summary)

Exhibit B

Confined Space Entry Permit

Exhibit C

“TAILGATE” SAFETY BRIEFING SHEET		Responsibility: DESIGNATED SITE SAFETY OFFICER	Period Covered:	
			Start date/time:	Finish date/time:
LOCATION:				
1.	Wind Direction Across Incident: <input type="checkbox"/> towards your position <input type="checkbox"/> away from your position			
2.	Are people injured or trapped?	<input type="checkbox"/> yes	<input type="checkbox"/> no	
3.	Are people involved as unorganized observers or rescuers?	<input type="checkbox"/> yes	<input type="checkbox"/> no	
4.	Are there any immediate signs of potential hazards such as:			
	a. electrical lines down or overhead?	<input type="checkbox"/> yes	<input type="checkbox"/> no	
	b. liquid or solid products visible?	<input type="checkbox"/> yes	<input type="checkbox"/> no	
	c. vapors visible?	<input type="checkbox"/> yes	<input type="checkbox"/> no	
	d. smells which are not natural noted?	<input type="checkbox"/> yes	<input type="checkbox"/> no	
	e. fire, sparks nearby, sources of ignition present?	<input type="checkbox"/> yes	<input type="checkbox"/> no	
	f. holes, caverns, ditches, cliffs or fast moving water nearby?	<input type="checkbox"/> yes	<input type="checkbox"/> no	
	g. is local traffic a problem? (see 6 below if yes)	<input type="checkbox"/> yes	<input type="checkbox"/> no	
	h. signs, fences or other indications of potential danger?	<input type="checkbox"/> yes	<input type="checkbox"/> no	
	i. Spill Zone is: <input type="checkbox"/> icy	<input type="checkbox"/> wet	<input type="checkbox"/> dry	
5.	Approaching site from upwind, are there any changes above?	<input type="checkbox"/> yes	<input type="checkbox"/> no	
6.	Have you established control of the incident site? <input type="checkbox"/> yes <input type="checkbox"/> no			
	Is local responder assistance required? <input type="checkbox"/> EMS <input type="checkbox"/> fire <input type="checkbox"/> police <input type="checkbox"/> no			
7.	Have you determined the necessity for any of the following?			
	a. EMS/rescue service summoned? <input type="checkbox"/> yes	<input type="checkbox"/> standby	<input type="checkbox"/> no	
	b. Hazardous Mat’ls Tech to identify/monitor site substances?	<input type="checkbox"/> yes	<input type="checkbox"/> no	
	c. safe location selected for entry & decontamination station?	<input type="checkbox"/> yes	<input type="checkbox"/> no	
	d. safe location selected for command activities at this site?	<input type="checkbox"/> yes	<input type="checkbox"/> no	
	e. safety equipment needed to eliminate problems: _____			
	f. placement of warning devices (traffic, No Smoking signs, etc)?	<input type="checkbox"/> yes	<input type="checkbox"/> no	
	g. number of sufficiently trained personnel needed to fully assess location?	_____		
	h. location to rendezvous if evacuation needed? _____			
8.	Hazard Data for: _____			
	a. MSDS Attached? (or available at _____)	<input type="checkbox"/> yes	<input type="checkbox"/> no	
	b. Flash point: _____ (if below 100F, do not mechanically remove material!)			
	c. TWA _____ LEL _____ IDLH?	<input type="checkbox"/> yes	<input type="checkbox"/> no	
	d. PPE level required (A,B,C,D) _____ respirator req’d?	<input type="checkbox"/> yes	<input type="checkbox"/> no	
Prepared by:		Preparation Date/Time:		

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6.0 SPILL IMPACT CONSIDERATIONS

6.1 CRITICAL AREAS TO PROTECT

The critical areas to protect are classified as high, moderate, and low sensitivity to oil for non-coastal/inland environments. The Federal, state, and local authorities will further clarify these categories at the time of the response. The categories are defined as follows:

HIGH SENSITIVITY

- Areas which are high in productivity, abundant in many species, extremely sensitive, difficult to rehabilitate, or inhabited by threatened/endangered species.
- Areas which consist of forested areas, brush/grassy areas, wooded lake areas, freshwater marshes, wildlife sanctuaries/refuges, and vegetated river/stream banks.

MODERATE SENSITIVITY

- Areas of moderate productivity, somewhat resistant to the effects of oiling.
- Areas which consist of degraded marsh habitat, clay/silt banks with vegetated margins, and gravel/cobble beaches.

LOW SENSITIVITY

- Areas of low productivity, man-made structures, and/or high energy.
- Areas which consist of gravel, sand, or clay material, barren/rocky riverbanks and lake edges, man-made structures, and concrete/compacted earthen drainage ditches.

6.2 ENVIRONMENTAL/SOCIO-ECONOMIC SENSITIVITIES

Environmental/socio-economic sensitivities are of extreme importance when planning a response effort. The health and safety of the public and the environment, as well as the protection of the various socio-economic sensitivities, must be promptly addressed in order to mitigate the extent of damage and minimize the cost of the clean-up effort.

All environmental/socio-economic sensitivities are worthy of protection, but must be prioritized during a response effort. When making decisions on which areas to designate as collection areas and which to protect, the following sources may be consulted:

- U.S. Fish and Wildlife Service and related State agencies
- Applicable Area Contingency Plans
- Other industry and private experts

6.2 ENVIRONMENTAL/SOCIO-ECONOMIC SENSITIVITIES (Cont'd)

The environmental and socio-economic sensitivities in the vicinity of the pipeline have been broken down into specific categories and identified in this Section. To further clarify the location of the sensitive areas of concern references to published Area Contingency Plans and a CD containing **High Consequence Area (HCA) Maps** are also provided in this Section.

6.3 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.

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.

6.3.1 Endangered/Threatened Species

The U.S. Fish and Wildlife Service (USFWS) and related state agencies classify the status of various wildlife species in the potentially effected states. A summary of critical birds, reptiles, mammals, and plant species status as related to the Pipeline's operating areas (area of highest oil spill potential) is presented in Figure 6.2.

6.3.2 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.

6.3 WILDLIFE PROTECTION AND REHABILITATION (Cont'd)

6.3.3 Search and Rescue - Points to Consider

- **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 of 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.
- Resources and contacts that can assist with wildlife rescue and rehabilitation are provided in Section 2.0. This list includes:
 - Outside rehabilitation organizations
 - Local regulatory agencies
 - Other resources

6.4 STAGING AREAS

When establishing personnel and equipment staging areas for a response to a Pipeline discharge, the following criteria should be evaluated:

- Access to waterborne equipment launching facilities and/or land equipment.
- Access to open space for staging/deployment of heavy equipment and personnel.
- Access to public services utilities (electricity, potable water, public phone, restroom and washroom facilities, etc.)
- Access to the environmental and socio-economically sensitive areas which are projected for impact.

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. These general strategies, coupled with the site specific considerations discussed in the Vulnerability Analysis (Section 6.7), offer guidance for protecting and mitigating spills. 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, planks 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.

WARNING: Ethanol is HIGHLY FLAMMABLE and caution is to be used when product is trapped in ditches and gullies.

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.

6.5 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT (Cont'd)

6.5.1 Spill on Land (Soil Surfaces) (Cont'd)

- **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.
- If practicable after removal of the bulk of the spill, controlled burning presents the possibility of a fast, simple, and inexpensive method of destruction of the remainder of the product. If all other options have been executed and the site is still unsafe for further activity because explosive vapors persist, the vapors may need to be intentionally ignited to prevent an accumulation sufficient to become an explosive mixture, provided the other requirements of these guidelines for controlled burning are met.

Intentional ignition to remove released product should be utilized only if all of the following conditions are met:

- Other steps and procedures have been executed and a determination has been made that this is the safest remaining method of control.
- Intentional burning will not unduly damage the pipeline, adjacent property, or the environment.
- Controlled burning is permitted by government authorities. 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.
- Controlled burning is conducted with the consent of local landowners.
- Safety must always be a prime consideration when considering controlled burning of product. Sparks and heat radiation from large fires can start secondary fires and strong winds make fire control difficult. There must be no danger of the fire spreading beyond control limits. All persons must be at a safe distance from the edge of the inflammable area. Remember that all burning must be controlled burning.

6.5 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT (Cont'd)

6.5.2 Spill on Lake or Pond (calm or slow-moving water)

- **Confinement Methods**

A lake or pond offers the best conditions for removal of product from water. Although the removal is no easy task, the lake or pond presents the favorable conditions of low or no current and low or no waves.

The movement of product on a lake or pond is influenced mainly by wind. The product will tend to concentrate on one shore, bank or inlet. Booms should be set up immediately to hold the product in the confined area in the event of a change in wind direction.

If the spill does not concentrate itself on or near a shore (no wind effect), then a sweeping action using boats and floating booms will be necessary. The essential requirement for this operation is that it be done very slowly. The booms should be moved at not more than 40 feet per minute. Once the slick is moved to a more convenient location (near shore), the normal operations of removal should begin.

If the slick is small and thin (rainbow effect) and not near the shoreline, an absorbent boom instead of a regular boom should be used to sweep the area very slowly and absorb the slick. The product may not have to be moved to the shoreline.

- **Removal Methods**

If the confined slick is thick enough, regular suction equipment may be used first; however, in most instances, a floating skimmer should be removed. If judged appropriate or useful, a surface collecting agent should be applied once the slick is isolated to facilitate the removal. The surface collecting agent will concentrate the product into a smaller area and make the floating skimmer work more efficiently. If the floating skimmer starts picking up excess water (slick becomes thin), do not stop using it if it is not removing any appreciable amount of product.

Denatured Ethanol achieves phase separation very quickly in water and the resulting 3-5% gasoline residue evaporates very quickly. Removal methods with an Ethanol spill are limited to absorbent pads in areas of high sheen.

Additions of more surface collecting agent from time to time may improve the skimming efficiency of the skimmer. It will continue to concentrate the slick into a smaller area, thus making the film thickness greater. Drawing the boom closer to the bank as product is removed will also keep film of product thicker. However, when the slick becomes too thin, the skimmer should be stopped and an absorbent applied (with a boat if necessary) to remove the final amounts.

6.5 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT (Cont'd)

6.5.2 Spill on Lake or Pond (calm or slow-moving water) (Cont'd)

The floating skimmer (if speed is a must) or hand skimmers (if water is shallow enough) or both can be used to pick up the product-soaked absorbent. Before pumping the product-soaked absorbent with a floating skimmer, insure that the absorbent in question can be pumped and will not harm the pump.

Several types are nonabrasive to pump internals. If the floating skimmer is used first, the product-soaked absorbent/water mixture should be pumped into a tank truck.

Denatured Ethanol achieves phase separation very quickly in water and the resulting 3-5% gasoline residue evaporates very quickly. Removal methods with an Ethanol spill are limited to absorbent pads in areas of high sheen.

A better method of retrieving the product-soaked absorbent is to draw it in as close to the shore as possible with the booms used to confine the product initially. The absorbent can then be hand skimmed from the water surface and placed in drums, on plastic sheets or in lined roll-off boxes. It should then be disposed of by acceptable means.

The final rainbow on the surface can be removed with additions of more absorbent.

6.5.3 Spill on Small to Medium Size Streams (relatively fast-flowing creeks)

- **Confinement Methods**

The techniques used for product containment on fast-flowing shallow streams are quite different from the ones used on lakes, ponds, or other still bodies of water. The containment and removal processes require a calm stretch of water to allow the product to separate onto the surface of the water. If a calm stretch of water does not exist naturally, a deep slow-moving area should be created by damming. The dam can be constructed by using sandbags, planks or earth. If a dam is required, it should be situated at an accessible point where the stream has high enough banks. The dam should be constructed soundly and reinforced to support the product and water pressure.

- Underflow dam - The underflow dam is one method that can be used, especially on small creeks. The water is released at the bottom, of the dam using a pipe or pipes which are laid during construction of the dam. The flow rate through the pipe must be sufficient to keep the dam from overflowing. One method is to lay the pipe at an angle through the dam (while dam is being constructed) so that the height of the downstream end of the pipe will determine the height the water will rise behind the dam.

6.5 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT (Cont'd)

6.5.3 Spill on Small to Medium Size Streams (relatively fast-flowing creeks) (Cont'd)

- Overflow dam – Another method of containment is the overflow type dam. The dam is constructed so that water flows over the dam, but a deep pool is created which slows the surface velocity of the water. Therefore, the condition of a calm stretch of water is met. The overflow dam may be used where larger flow rates (medium size creeks) of water are involved. With this type dam, a separate barrier (floating or stationary boom) must be placed across the pool created by the dam. The separate barrier arrests the surface layer of product.

At the same time, the water is flowing under the barrier and over the top of the dam. The barrier should be placed at an angle of 45° across the pool to decrease the effective water velocity beneath it. Also, it helps to concentrate the product at the bank and not all along the barrier. A second barrier should be placed approximately 10 to 15 feet downstream of the first one as a secondary back-up.

The stationary boom type barrier should be made of wood planks or other suitable material. The stationary boom should be soundly constructed and sealed against the bank. The ends of the planks can be buried in the banks of the stream and timber stakes driven into the stream bed for support as needed. The necessary length of the boom will be approximately 1-1/2 times the width of the waterway. The plank boom should extend six to eight inches deep into the water and about two inches or higher above the water level. If the increase in velocity under the stationary boom is causing release of trapped product, it should be moved upward slightly. At no time should barrier be immersed more than 20% of the depth of the pool at the barrier location; that is, if the pool created by damming is three feet deep, do not exceed an immersion depth of seven inches with the barrier at the position the barrier is installed.

Another method used with the underflow dam is having the pipe or pipes sized to carry only a portion of the flow needed. The pipe would be placed at the bottom of the dam and level with the creek bed. The remaining flow of the creek could be siphoned or preferably pumped around the dam from a point away from the dam and from the deepest portion of the pool. The pumping or siphoning can be controlled to maintain the desired water level at the dam. The key is the removal of water through or around the dam at the lowest point in the basin. This prevents the oil from escaping with the released water.

6.5 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT (Cont'd)

6.5.3 Spill on Small to Medium Size Streams (relatively fast-flowing creeks) (Cont'd)

A floating boom can be used in place of the stationary type if the created pool's size (bank to bank) and depth will permit. Since changing the depth and/or length of a standard floating boom in a small stream is difficult, the use of the separation of product and water. The advantages of using a floating boom are the speed of deployment and the fact that there is not need for additional support as with the stationary boom.

- Multiple Impoundments – Since emergency built dams (either underflow or overflow) are seldom perfect, a series of dams is usually required. The first one or two will trap the bulk and the ones that are downstream will trap the last traces of product. Precautions should be taken to ensure that the foundations of emergency dams are not washed away by the released water. If earth is used to construct an overflow dam, a layer of earth-filled bags should be placed on top of the dam so erosion will not take place.

- **Removal Methods**

Once the containment dams are constructed, the problem of removal of the product from the water surface should be the prime consideration. The removal must be continuous or else build-up of product behind the dams or booms might lead to product escaping the traps.

The type of removal procedures used depends largely on the amount of product being trapped in a given span of time, if the amount of product moving down the stream is of sufficient quantity, the first dam or fixed boom would quite possibly trap enough for the floating skimmer to work efficiently. The skimmer will pump the product and possibly some water to a tank truck or other holding tank. Separated water may be released from the bottom of the tank truck if it becomes necessary. The absorbents (straw, ground corncobs, or other stocked absorbent) could then be used at downstream dams or booms. It is inadvisable to place an absorbent in the stream prior to or at the first dam in anticipation of the arriving product. Let the product accumulate at the first dam and use the floating skimmer to recover the product.

WARNING: Ethanol is HIGHLY FLAMMABLE and caution is to be used when product is trapped in ditches and gullies.

6.5 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT (Cont'd)

6.5.3 Spill on Small to Medium Size Streams (relatively fast-flowing creeks) (Cont'd)

Disposal of gross amount of product-soaked absorbent would not then be a problem. Follow directions on use of each absorbent. Some are designed to be placed on water before product arrives (straw and other new types); others are intended only to be placed on the product after it accumulates on the water (ground corncobs and others). Plastic sheets should be used to place the product-soaked absorbent on as it is hand skimmed from the water. Alternatively, the material may be placed in drums or lined roll-off boxes.

If the amount of product in the stream is minor, a straw-bale may be constructed to filter out the product. The slowing of the water would not be necessary, but several dams might be necessary to ensure complete removal. The downstream dams would also offer protection when the upstream bales are removed, releasing traces of product. Straw-bale dams can also be used downstream from underflow and overflow dams for added protection.

Thus, the containment and removal of spilled product on small to medium fast-flowing streams might require a combination of underflow or overflow dams, fixed booms, skimmers, absorbents, and straw-bale dams to ensure a complete cleanup.

6.5.4 Spill on Large Streams and Rivers

- **Confinement Methods**

The containment techniques differ considerably on large streams and rivers versus small streams. First, the smooth calm area of water necessary for product-water separation must be found along the stream or river rather than making one as with small streams. Floating booms (rather than fixed booms or dams) must be used to trap the surfaced product.

Local conditions of current and wind must be considered when selecting the site for the boom. A point with a low water velocity near the bank, sufficient depth to operate the product removal equipment, and good access are required. The fact that wind may tend to concentrate the product against one bank must be considered. A smooth, undisturbed area of water is required immediately upstream of the boom to ensure that the product has opportunity to separate out onto the surface. The boom should be positioned where the current is at a minimum. It is more effective to boom at a wide, slow position than on a narrow, fast stretch of water.

6.5 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT (Cont'd)

6.5.4 Spill on Large Streams and Rivers (Cont'd)

If the boom are positioned straight across a river or stream, at right angles to the flow, surface water tends to dive beneath the barrier (boom) when current velocities exceed about $\frac{1}{2}$ knot (0.8 ft./sec.). However, if the current of the entire river is $\frac{1}{2}$ knot or less, then a boom can be positioned straight across the river or large stream, but angled slightly in relation of the banks. By placing the boom at an angle to the banks, product on the surface is diverted along the boom to the side of the river.

The current velocity is usually much slower near the river bank than in the center and the product will move along the boom toward the bank for removal. A water-tight seal between the bank and the boom is essential. A secondary boom should be set up immediately downstream of the first one to capture the amounts that escape the upstream boom. A boom can be employed parallel to the river flow at the bank to form the seal with the booms used to trap the product.

Where the current velocity of the chosen site exceeds $\frac{1}{2}$ knot, the boom should be positioned in two smooth curves from a point of maximum velocity (usually the center of the river) to both banks.

However, this double-boom required product to be removed from both sides of the river. To determine the appropriate angle of boom placement and support (mooring) needed to hold the booms in position, the current velocity should be measured by timing a floating object which is 80% submerged over a distance of 100 feet. A time of 60 seconds over this distance indicates a water current of approximately 1 knot. For currents from 1 to 2.5 knots (1.7 to 4.2 ft./sec.), the more the boom will have to be angled acute to the bank. The length of the boom will have to be such to reach the center of the river. For currents between $\frac{1}{2}$ and 1 knot (0.8 and 1.7 ft./sec.), the angle of employment can be enlarged.

The major load on the boom is taken by the terminal moorings, particularly the one in the center of the river. However, intermediate moorings are also required both to maintain the smooth curve of the boom to prevent breaking of the boom and to assist with preventing skirt deflection. The intermediate moorings are preferably positioned every 25 feet and must be adjusted to avoid the formation of indentations in the boom profile. These trap product in pockets, prevent its deflection to the bank, and also encourage diving currents. The moorings' ropes should be five times the water depth.

In certain situations, it might be advantageous to position booms to deflect the approaching spilled product to a slower moving area. Naturally, additional booms would have to be positioned around this slower moving area prior to deflecting the product to the area. This approach has been used along river, which have lagoons, etc., with a very low current action. The recovery would take place in the lagoons and not along the river bank.

6.5 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT (Cont'd)

6.5.4 Spill on Large Streams and Rivers (Cont'd)

- **Removal Methods**

The product collected upstream of the floating booms in a large stream or river should be removed from the water surface as it accumulates. Regular suction equipment, a floating skimmer, and/or absorbents (including absorbent booms) should be used to remove the product as appropriate to the quantity being trapped in a given span of time. If the amount moving down the stream is of sufficient quantity, the primary floating boom would possibly trap enough for the floating skimmer to work efficiently. The skimmer will pump the product and some water to a tank truck or other holing tank.

The absorbents (type that can be placed on water before product arrival straw is an example) would then be used upstream of the secondary boom to absorb the underflow from the primary boom.

An absorbent boom (Sea-Serpent) or other stocked absorbent boom can also be placed between the primary and secondary booms to help the other absorbents control the underflow from the primary boom. If the underflow from the primary boom is significant, then the type absorbent which can be placed on the water only after product is collected may be used. An example of this type of absorbent is ground corncobs. It is best to hand skim the saturated absorbents and place on plastic sheets. However, if the absorbent used can be pumped after product absorption and speed of removal is a necessity, the floating skimmer can be used to remove the product-soaked absorbent.

The disadvantage of pumping the product-soaked absorbent to a truck is the volume that will accumulate (skimmer will pump excess water) and the disposal problems associated with the large water/product-soaked absorbent mixture.

If the volume of product moving toward the boomed area is expected to be small, an absorbent (straw) should be placed in the river upstream of the primary and secondary booms. If regular booms are not necessary, a screen filter could be stretched across the river to contain the straw, or an absorbent boom could be constructed by tightly fastening hay bales together, forming a chain. Boats (either rented or furnished by contractors) would be necessary to retrieve the product-soaked absorbents.

Denatured Ethanol achieves phase separation very quickly in water and the resulting 3-5% gasoline residue evaporates very quickly. Removal methods with an Ethanol spill are limited to absorbent pads in areas of high sheen.

6.5 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT (Cont'd)

6.5.5 Spill on Stream which Flows into Lake or Pond

There are certain locations along the pipeline where streams (small and large ones) flow into lakes or ponds at relatively short distances from the pipeline. It is conceivable that a spill that reached the streams in question could reach or almost reach the lakes before containment and recovery operations could be set up. If time permits for containment operations to be set up on the stream in question, it then would be handled as described above depending upon the stream size involved.

However, if product in the stream is near the lake site or if product is flowing into the lake with a significant amount yet to arrive, a different containment should be employed.

- **Confinement Methods**

Product on a stream flowing into a lake should be boomed as close to the entrance as possible. The boom should be positioned on the lake at an angle to the residential stream current so as to direct the surface water to a slower moving area. The area where the product is being deflected should be enclosed by booms to contain it.

An additional boom for sweeping the product to the bank will be required. This area of containment should not have a current velocity of more than 1/2 knot (0.8 ft./sec.), preferably less.

- **Removal Methods**

Denatured Ethanol achieves phase separation very quickly in water and the resulting 3-5% gasoline residue evaporates very quickly. Removal methods with an Ethanol spill are limited to absorbent pads in areas of high sheen.

The removal of product from the lake or pond's surface would be handled as described earlier.

For sizable releases, collected product will usually be pumped into tank trucks and transported to a storage facility. Tank trucks are available at several locations throughout.

6.5.6 Spill in a Mud or Tidal Flat Area

- **Confinement Method**

Shoreline boom lined with absorbent boom should be placed at the surf line to prevent oil from washing up onto the flat area. If oiling has already occurred the boom is used to prevent further oiling and keep oil that has impacted the flat from spreading.

6.5 CONTAINMENT AND RECOVERY OF SPILLED PRODUCT (Cont'd)

6.5.6 Spill in a Mud or Tidal Flat Area (Cont'd)

- **Removal Methods**

Natural Recovery, Flooding and Sorbents are the three preferred methods. Any invasive type of recovery method poses a risk of driving the oil into the substrate of the flat and endangering the biologicals that live there. Invasive methods should only be used in order to protect more sensitive areas.

6.5.7 Spill in Urban Areas

Oil spills in urban areas can greatly impact recreational use, human health, wildlife habitat(s), and potential beach or park closures. Manmade structures along waterways require unique protection strategies. Manmade structures could include vertical shore protection structures such as seawalls, piers, and bulkheads, as well as riprap revetments and groins, breakwaters, and jetties. Vertical structures can be constructed of concrete, wood, and corrugated metal. They usually extend below the water surface, although seawalls can have beaches or riprap in front of them. These structures are very common along developed shores, particularly in harbors, marinas, and residential areas. The range in degree of exposure to waves and currents varies widely, from very low in dead-end canals, to very high on offshore breakwaters. Boat wakes can generate wave energy in otherwise sheltered areas.

Maintaining shipping or other kinds of vessel traffic through navigation channels or waterways during a spill response is a difficult consideration because there is usually economic and political pressure to re-establish normal operations as soon as possible. This consideration extends to vehicular traffic through urban areas. Deploying booms and skimmers or constructing recovery sites can conflict with such traffic for several days. Also, passage of deep-draft vessels through the waterway can suddenly change water level and flow or create wakes, causing booms to fail. For these reasons, recovery efforts must be coordinated through the Unified Command to ensure the cooperation of all parties involved.

6.6 SHORELINE DESCRIPTORS AND RESPONSE CONSIDERATIONS

The following is an excerpt taken from the NOAA Shoreline Assessment Manual, Third Edition, August 2000. It is intended to offer guidance on the response considerations for the various shoreline types and structures found within the response zones. The descriptors, including oil behavior and response considerations is as follows:

Exposed Rocky Cliffs

DESCRIPTION

- The intertidal zone is steep (greater than 30° slope), with very little width.
- Sediment accumulations are uncommon and usually ephemeral, because waves remove the debris that has slumped from the eroding cliffs.
- There is strong vertical zonation of intertidal biological communities.

6.6 SHORELINE DESCRIPTORS AND RESPONSE CONSIDERATIONS (Cont'd)

- Species density and diversity vary greatly, but barnacles, snails, mussels, seastars, limpets, sea anemones, shore crabs, polychaetes, and macroalgae are often very abundant.

PREDICTED OIL BEHAVIOR

- Oil is held offshore by wave reflecting off the steep cliffs.
- Any oil that is deposited is rapidly removed from exposed faces.
- The most resistant oil would remain as a patchy band at or above the high-tide line.
- Impacts to intertidal communities are expected to be short-term in duration. An exception would be where heavy concentrations of a light refined product came ashore very quickly.

RESPONSE CONSIDERATIONS

- Cleanup is usually not required.
- Access can be difficult and dangerous.

Exposed, Solid Man-Made Structures

DESCRIPTION

- This shoreline type consists of solid man-made structures such as seawalls, groins, revetments, piers, and port facilities.
- They are constructed of concrete, wood, or metal.
- Often there is no exposed substrate at low tide, but a wide range of habitats may be present.
- They are built to protect the shore from erosion by waves, boat wakes, and currents, and thus are exposed to rapid natural removal processes.
- Attached animals and plants are sparse to moderate.

PREDICTED OIL BEHAVIOR

- Oil is held offshore by waves reflecting off the steep, hard surface in exposed settings.
- Oil readily adheres to the dry, rough surfaces, but it does not adhere to wet substrates.
- The most resistant oil would remain as a patchy band at or above the high-tide line.

RESPONSE CONSIDERATIONS

- Cleanup is usually not required.
- High-pressure water spraying may be conducted to: remove persistent oil in crevices; improve aesthetics; or reduce leaching of oil.

6.6 SHORELINE DESCRIPTORS AND RESPONSE CONSIDERATIONS (Cont'd)

Wave-Cut Platforms

DESCRIPTION

- The intertidal zone consists of a flat rock bench of highly variable width.
- The shoreline may be backed by a steep scarp or low bluff.
- There may be a beach of sand- to boulder-sized sediments at the base of the scarp.
- The platform surface is irregular and tidal pools are common.
- Small amounts of gravel can be found in the tidal pools and crevices in the platform.
- These habitats can support large populations of encrusting animals and plants, with rich tidal pool communities.

PREDICTED OIL BEHAVIOR

- Oil will not adhere to the rock platform, but rather be transported across the platform and accumulate along the high-tide line.
- Oil can penetrate in beach sediments, if present.
- Persistence of oiled sediments is usually short-term, except in wave shadows or where the oil has penetrated sediments at the high-tide line.

RESPONSE CONSIDERATIONS

- Cleanup is usually not required.
- Where the high-tide area is accessible, it may be feasible to remove heavy oil accumulations and oiled debris.

Fine-Grained Sand Beaches

DESCRIPTION

- These beaches are generally flat and hard-packed.
- Though they are predominantly fine sand, there is often a small amount of shell hash.
- There can be heavy accumulations of wrack present.
- They are utilized by birds and turtles for nesting and feeding.
- Upper beach fauna are generally sparse, although amphipods can be abundant; lower beach fauna can be moderately abundant, but highly variable.

6.6 SHORELINE DESCRIPTORS AND RESPONSE CONSIDERATIONS (Cont'd)

PREDICTED OIL BEHAVIOR

- Light oil accumulations will be deposited as oily bands along the upper intertidal zone.
- Heavy oil accumulations will cover the entire beach surface; oil will be lifted off the lower beach with the rising tide.
- Maximum penetration of oil into fine-grained sand is about 10 cm.
- Burial of oiled layers by clean sand within the first week after a spill typically will be less than 30 cm along the upper beach face.
- Organisms living in the beach sediment may be killed by smothering or lethal oil concentrations in the interstitial water.
- There may be declines in infauna, which can affect important shorebird foraging areas.

RESPONSE CONSIDERATIONS

- These beaches are among the easiest shoreline types to clean.
- Cleanup should concentrate on removing oil and oily debris from the upper swash zone once oil has come ashore.
- Activity through oiled and dune areas should be limited, to prevent oiling of clean areas.
- Manual cleanup, rather than road graders and front-end loaders, is usually advised to minimize the volume of sand removed from the shore and requiring disposal.
- All efforts should focus on preventing the mixture of oil deeper into the sediments by vehicular and foot traffic.
- Mechanical reworking of lightly oiled sediments from the high-tide line to the upper intertidal zone can be effective along outer beaches.

Scarps and Steep Slopes in Sand

DESCRIPTION

- This shoreline type occurs where sandy bluffs are undercut by waves or currents and slump.
- They normally form along embankments of sandy dredge material and at cut banks in rivers; they also form where tidal creeks intercept old sandy beach ridge deposits.
- Some scarps are fronted by narrow beaches, if the erosion rates are moderate and episodic.
- Trees growing at the top of these slopes are eventually undercut and the debris can accumulate at the base of the scarp.
- Biological utilization by birds and infauna is low.

6.6 SHORELINE DESCRIPTORS AND RESPONSE CONSIDERATIONS (Cont'd)

PREDICTED OIL BEHAVIOR

- Any stranded oil will concentrate at the high-water line and may penetrate sandy sediments.
- Oil will adhere to the dry surface of any woody debris accumulated at the base of the scarp.
- There is little potential for burial except when a major slumping of the bluff occurs.
- Active erosion of the scarp will remove the oil.

RESPONSE CONSIDERATIONS

- In most cases, cleanup is not necessary because of the short residence time of the oil.
- The need for removal of oiled sediments and debris should be carefully evaluated because of the potential for increased erosion.
- Closely supervised manual labor should be used so that the minimal amount of material is removed during cleanup.

Medium- to Coarse-Grained Sand Beaches

DESCRIPTION

- These beaches have relatively steep beach faces and soft substrates.
- Coarse-sand beaches can undergo rapid erosion/deposition cycles, even within one tidal cycle.
- The amount of wrack varies considerably.
- They are utilized by birds and turtles for nesting and feeding.

PREDICTED OIL BEHAVIOR

- Light oil accumulations will be deposited as oily bands along the upper intertidal zone.
- Heavy oil accumulations will cover the entire beach surface; oil will be lifted off the lower beach with the rising tide.
- Maximum oil penetration is about 20 cm.
- Burial of oiled layers by clean sand within the first week after a spill can be up to 50 cm.
- Organisms living in the beach sediments may be killed by smothering or lethal oil concentrations in the interstitial water.
- There may be declines in infauna, which can affect important shorebird foraging areas.

RESPONSE CONSIDERATIONS

- Coarse sand sediments are less trafficable, increasing the risk of mixing oil into the substrate by foot and vehicular traffic.
- Cleanup should concentrate on removing oil and oily debris from the upper swash zone once oil has come ashore.

6.6 SHORELINE DESCRIPTORS AND RESPONSE CONSIDERATIONS (Cont'd)

- Traffic through oiled and dune areas should be limited, to prevent oiling of clean areas.
- Manual cleanup, rather than road graders and front-end loaders, is advised to minimize the volume of sand removed from the shore and requiring disposal.
- All efforts should focus on preventing the mixture of oil deeper into the sediments by vehicular and foot traffic.
- Mechanical reworking of lightly oiled sediments from the high-tide zone to the upper intertidal zone can be effective along outer beaches.

Mixed Sand and Gravel Beaches

DESCRIPTION

- These beaches are moderately sloping and composed of a mixture of sand and gravel.
- Because of the mixed sediment sizes, there may be zones of pure sand, pebbles, or cobbles.
- There can be large-scale changes in the sediment distribution patterns depending upon season, because of the transport of the sand fraction offshore during storms.
- Because of sediment desiccation and mobility on exposed beaches, there are low densities of attached animals and plants.
- The presence of attached algae and animals indicates beaches that are relatively sheltered, with the more stable substrate supporting a richer biota.

PREDICTED OIL BEHAVIOR

- During small spills, oil will be deposited along and above the high-tide swash.
- Large spills will spread across the entire intertidal area.
- Oil penetration into the beach sediments may be up to 50 cm; however, the sand fraction can be quite mobile, and oil behavior is much like on a sand beach if the sand exceeds 40 percent.
- Burial of oil may be deep at and above the high-tide line, where oil tends to persist, particularly where beaches are only intermittently exposed to waves.
- In sheltered pockets on the beach, pavements of asphalted sediments can form if there is no removal of heavy oil accumulations, because most of the oil remains on the surface.
- Once formed, these asphalt pavements can persist for many years.
- Oil can be stranded in the coarse sediments on the lower part of the beach, particularly if the oil is weathered or emulsified.

RESPONSE CONSIDERATIONS

- Remove heavy accumulations of pooled oil from the upper beach face.
- All oiled debris should be removed.
- Sediment removal should be limited as much as possible.

6.6 SHORELINE DESCRIPTORS AND RESPONSE CONSIDERATIONS (Cont'd)

- Low-pressure flushing can be used to float oil away from the sediments for recovery by skimmers or sorbents. High-pressure spraying should be avoided because of potential for transporting contaminated finer sediments (sand) to the lower intertidal or subtidal zones.
- Relocation of oiled sediments from the high-tide zone to the upper intertidal zone can be effective in areas regularly exposed to wave activity (as evidence by storm berms). However, oiled sediments should not be relocated below the mid-tide zone.
- Tilling may be used to reach deeply buried oil layers in the middle zone on exposed beaches.

Gravel Beaches

DESCRIPTION

- Gravel beaches are composed of sediments ranging in size from pebbles to boulders. The gravel-sized sediments can be made up of shell fragments.
- They can be very steep, with multiple wave-built berms forming the upper beach.
- Attached animals and plants are usually restricted to the lowest parts of the beach, where the sediments are less mobile.
- The presence of attached algae, mussels, and barnacles indicates beaches that are relatively sheltered, with the more stable substrate supporting a richer biota.

PREDICTED OIL BEHAVIOR

- Deep penetration and rapid burial of stranded oil is likely on exposed beaches.
- On exposed beaches, oil can be pushed over the high-tide and storm berms, pooling and persisting above the normal zone of wave wash.
- Long-term persistence will be controlled by the depth of penetration versus the depth of routine reworking by storm waves.
- On the more sheltered portions of beaches, formation of asphalt pavements is likely where accumulations are heavy.

RESPONSE CONSIDERATIONS

- Heavy accumulations of pooled oil should be removed quickly from the upper beach.
- All oiled debris should be removed.
- Sediment removal should be limited as much as possible.
- Low- to high-pressure flushing can be used to float oil away from the sediments for recovery by skimmers or sorbents.
- Relocation of oiled sediments from the high-tide zone to the upper intertidal zone can be effective in areas regularly exposed to wave activity (as evidenced by storm berms). However, oiled sediments should not be relocated below the mid-tide zone.
- Tilling may be used to reach deeply buried oil layers in the upper- to mid-tide zone on exposed beaches.

6.6 SHORELINE DESCRIPTORS AND RESPONSE CONSIDERATIONS (Cont'd)

Riprap

DESCRIPTION

- Riprap is composed of cobble- to boulder-sized blocks of granite, limestone, or concrete.
- Riprap structures are used for shoreline protection and channel stabilization (jetties).
- Attached biota is sparse.

PREDICTED OIL BEHAVIOR

- Oil adheres readily to the rough surfaces of the blocks.
- Deep penetration of oil between the blocks is likely.
- Uncleaned oil can cause chronic leaching until the oil solidifies.

RESPONSE CONSIDERATIONS

- When the oil is fresh and liquid, high pressure flushing and/or water flooding may be effective, making sure to recover all liberated oil.
- Heavy and weathered oils are more difficult to remove, requiring scrapping and/or hot-water flushing.
- In extreme cases, it may be necessary to remove heavily oiled blocks and replace them.

Exposed Tidal Flats

DESCRIPTION

- Exposed tidal flats are broad intertidal areas composed primarily of sand and minor amounts of shell and mud.
- The dominance of sand indicates that currents and waves are strong enough to mobilize the sediments.
- They are usually associated with another shoreline type on the landward side of the flat, though they can occur as separate shoals; they are commonly associated with tidal inlets.
- Biological utilization can be very high, with large numbers of infauna, heavy use by birds for roosting and foraging, and use by foraging fish.

PREDICTED OIL BEHAVIOR

- Oil does not usually adhere to the surface of exposed tidal flats, but rather moves across the flat and accumulates at the high-tide line.
- Deposition of oil on the flat may occur on a falling tide if concentrations are heavy.
- Oil does not penetrate water-saturated sediments.
- Biological damage may be severe, primarily to infauna, thereby reducing food sources for birds and other predators.

6.6 SHORELINE DESCRIPTORS AND RESPONSE CONSIDERATIONS (Cont'd)

RESPONSE CONSIDERATIONS

- Currents and waves can be very effective in natural removal of the oil.
- Cleanup is very difficult (and possibly only during low tides).
- The use of heavy machinery should be restricted to prevent mixing of oil into the sediments.

Sheltered Rocky Shores

DESCRIPTION

- These are bedrock shores of variable slope (from vertical cliffs to wide, rocky ledges) that are sheltered from exposure to most wave and tidal energy.
- Wide shores may have some surface sediments, but bedrock is the dominant substrate type.
- Species density and diversity vary greatly, but biota are often very abundant.

PREDICTED OIL BEHAVIOR

- Oil will adhere readily to the rough rocky surface, particularly along the high-tide line, forming a distinct oil band.
- Even on wide ledges, the lower intertidal zone usually stays wet (particularly when algae covered), preventing oil from adhering to the rock surface.
- Heavy and weathered oils can cover the upper zone with little impacts to the rich biological communities of the lower zone.
- Where surface sediments are abundant, oil will penetrate into the crevices formed by the surface rubble, forming persistent pavements.
- Where the rubble is loosely packed, oil will penetrate deeply, causing long-term contamination of the subsurface sediments.

RESPONSE CONSIDERATIONS

- Low-pressure flushing at ambient temperatures is most effective when the oil is fresh.
- Extreme care must be taken not to spray in the biologically rich lower intertidal zone or when the tidal level reaches that zone.
- Cutting of oiled, attached algae is not recommended; tidal action will eventually float this oil off, so sorbent booms should be deployed.

Sheltered, Solid Man-made Structures

DESCRIPTION

- These structures are solid man-made structures such as seawalls, groins, revetments, piers, and port facilities.
- Most structures are constructed of concrete, wood, or metal, and their composition, design and condition are highly variable.
- Often there is no exposed beach at low tide but a wide variety of habitats may be present.
- Attached animal and plant life can be moderate to high.

6.6 SHORELINE DESCRIPTORS AND RESPONSE CONSIDERATIONS (Cont'd)

PREDICTED OIL BEHAVIOR

- Oil will adhere readily to the rough surface, particularly along the high-tide line, forming a distinct oil band.
- The lower intertidal zone usually stays wet (particularly if algae covered), preventing oil from adhering to the surface.

RESPONSE CONSIDERATIONS

- Cleanup of seawalls is usually conducted for aesthetic reasons or to prevent leaching of oil.
- Low- to high-pressure flushing at ambient water temperatures is most effective when the oil is fresh. Hot water is needed for heavy or weathered oils.

Sheltered Tidal Flats

DESCRIPTION

- Sheltered tidal flats are composed primarily of mud with minor amounts of sand and shell.
- They are present in calm-water habitats, sheltered from major wave activity, and are frequently backed by marshes.
- The sediments are very soft and cannot support even light foot traffic in many areas.
- They can be sparsely to heavily covered with algae and/or seagrasses.
- They can have very heavy wrack accumulations along the high-tide line.
- There can be large concentrations of shellfish, worms, and snails on and in the sediments.
- They are heavily utilized by birds and fish for feeding.

PREDICTED OIL BEHAVIOR

- Oil does not usually adhere to the surface of sheltered tidal flats, but rather moves across the flat and accumulates at the high-tide line.
- Deposition of oil on the flat may occur on a falling tide if concentrations are heavy.
- Oil will not penetrate the water-saturated sediments, but could penetrate burrows and root cavities.
- Biological damage may be severe.

RESPONSE CONSIDERATIONS

- These are high-priority areas for protection since cleanup options are very limited.
- Cleanup is very difficult because of the soft substrate; many methods may be restricted.
- Deluge flooding and deployment of sorbents from shallow-draft boats may be helpful.

6.6 SHORELINE DESCRIPTORS AND RESPONSE CONSIDERATIONS (Cont'd)

Vegetated Low Riverine Banks

DESCRIPTION

- This shoreline type consists of either low banks with grasses or low eroding banks with trees and tree roots exposed to the water.
- The banks are flooded occasionally by high water.
- These shorelines are generally found in fresh or brackish water localities.

PREDICTED OIL BEHAVIOR

- During low water stages there could be little impact, with the oil coating a narrow band of sediment at the water level.
- During high water, the oil will cover and coat the grasses and base of the trees.
- May cause loss of the grasses, but the trees should survive unless oil penetrates and persists.

RESPONSE CONSIDERATIONS

- Low-pressure flushing of oiled areas is effective in removing moderate to heavy accumulations of oil from along the banks.
- Sorbent and containment boom should be placed on the water side of the cleanup operations to contain and collect oil outflow.
- Low- to high-pressure flushing can be used to remove oil from tree roots and trunks, if deemed necessary in high-use areas.

Salt- and Brackish-Water Marshes

DESCRIPTION

- These marshes contain vegetation which tolerates water salinity down to about 5 ppt.
- Width of the marsh can vary widely, from a narrow fringe to extensive areas.
- Sediments are composed of organic-rich muds except on the margins of barrier islands where sand is abundant.
- Exposed areas are located along waterbodies with wide fetches and along busy waterways.
- Sheltered areas are not exposed to significant wave or boat wake activity.
- Resident flora and fauna are abundant with numerous species with high utilization by birds, fish, and shellfish.

PREDICTED OIL BEHAVIOR

- Oil adheres readily to intertidal vegetation.
- The band of coating will vary widely, depending upon the water level at the time oil slicks are in the vegetation. There may be multiple bands.
- Large slicks will persist through multiple tidal cycles and coat the entire stem from the high-tide line to the base.
- If the vegetation is thick, heavy oil coating will be restricted to the outer fringe, although lighter oils can penetrate deeper, to the limit of tidal influence.

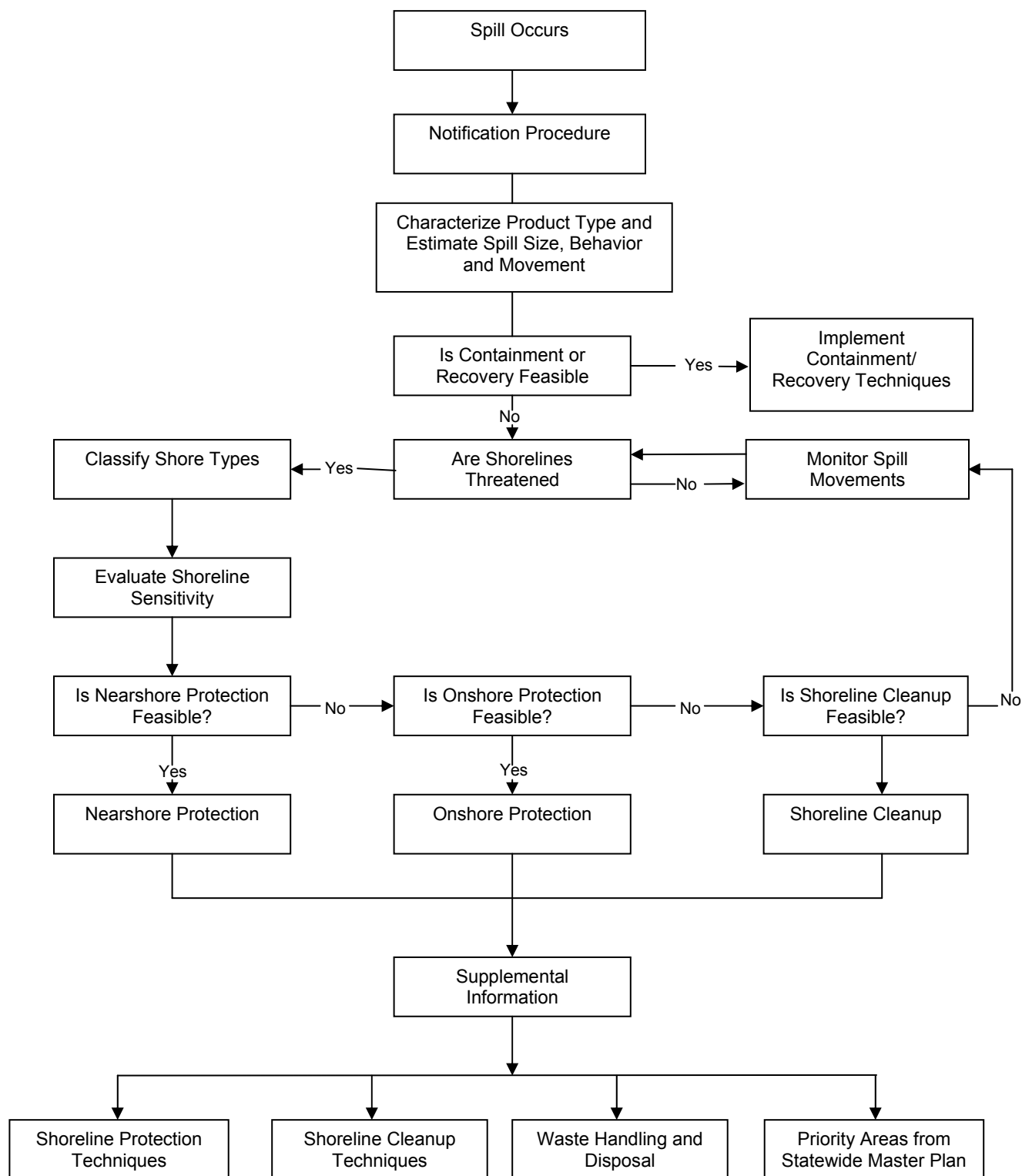
6.6 SHORELINE DESCRIPTORS AND RESPONSE CONSIDERATIONS (Cont'd)

- Medium to heavy oils do not readily adhere to or penetrate the fine sediments, but can pool on the surface of in burrows and root cavities.
- Light oils can penetrate the top few centimeters of sediment and deeply into burrows and mud cracks (up to one meter).

RESPONSE CONSIDERATIONS

- Under light oiling, the best practice is to let the area recover naturally.
- Natural removal processes and rates should be evaluated prior to conducting cleanup.
- Heavy accumulations of pooled oil can be removed by vacuum, sorbents, or low-pressure flushing. During flushing, care must be taken to prevent transporting oil to sensitive areas down slope or along shore.
- Cleanup activities should be carefully supervised to avoid vegetation damage.
- Any cleanup activity must not mix the oil deeper into the sediments. Trampling of the roots must be minimized.
- Cutting of oiled vegetation should only be considered when other resources present are at great risk from leaving the oiled vegetation in place.

FIGURE 6.1
ON WATER RESPONSE FLOWCHART



6.7 VULNERABILITY ANALYSIS

The Company has identified sensitive areas and potential response locations. Maps of these areas/locations are included in this Section as well as the following on-line resources:

- EPA Region 4 - Area Contingency Plan
- U.S. Coast Guard Sector St. Petersburg Digital Area Contingency Plan

Due to the number of maps and voluminous amount of tactical information available in the St. Petersburg Digital Area Contingency Plan, this information is referenced only. In the event of a spill, these resources can be accessed via the Internet at: <http://ocean.floridamarine.org/ACP/STPACP/StartHere.html>

This Plan contains a series of High Consequence Area (HCA) maps that identify potential areas of impact during a pipeline release. An HCA Index is included in Figure 6.3. Detailed HCA maps are included on the CD provided in each hard copy of the Plan or incorporated in Figure 6.3 in electronic copies. Additionally, HCA maps are available via the Company intranet at: <http://intranet/operations/products/manuals/IMP/HCAmaps.cfm>

A summarized list of the areas in which the pipeline facilities are located in which **require** an **immediate response** to prevent hazards to the public and major environmental impact are as follows:

Municipalities Crossed by the 10-Inch Pipeline

Tampa	Lake Alfred	Kissimmee
Mango	Haines City	Taft
Seffner	Davenport	Six Mile Creek
Dover	Loughman	Saddle Creek, Lakeland
Plant City	Intercession City	Reedy Creek, Intercession City
Lakeland	Campbell City	Shingle Creek, Kissimmee
Auburndale	Poinciana	Boggie Creek, Taft

Municipalities Crossed by the 16-Inch Pipeline

Tampa	Homeland	Walt Disney World
Riverview	Waverly	Indian Wells Sub.
Brandon Reserve Sub.	East Dundee	Hunters Creek Sub.
Fishhawk Reserve Sub.	East Lake Hamilton	Eagles Reserve Sub.
Lithia	East Haines City	Tupperware/North Kissimmee, FL
Pinecrest	East Davenport	Fairway Woods Sub.
Pinedale	Loughman	Meadow Woods Sub.
Pebble Dale	West Intercession City	Orlando/Orland Int'l Airport

6.7 VULNERABILITY ANALYSIS (Cont'd)

Sensitive Waters Crossed by the 10-Inch Pipeline

At Adamo Drive east of 28th Street near railroad tracks – Drain canal to McKay Bay

Drainage Ditch to McKay Bay – Adamo Drive east of 34th Street

Creek leading to McKay Bay – Area along Adamo Drive west of 45th Street

Canal leading to McKay Bay on Ancline Street west of 50th Street

Canal leading McKay bay at the Southwest corner of Uceta Yard

Drainage canal – 10" at north side of Uceta yard – Canal leads to McKay Bay

Six Mile Creek flood control canal – Area near CR 574 and Tampa East Blvd.

Creek/canal/drainage ditch along CR 574 west of Williams Road

Creek along SR 574 approx. 2,000' west of Valrico Road

Creek leading to Lake Thonotosassa parallel to SR 574 ~ 2,000' west of Sammonds Rd.

Creek in Plant City approx. 700 feet east of Alexander Street

Creek approx. ½ mile west of SR 532 near Loughman, FL

Reedy Creek/Reedy Creek Swamp ~ 3600' east of SR 532 near Loughman/Intercession City area

Creek east of Poinciana Boulevard, Poinciana, FL

Shingle Creek, which feeds into Lake Tohopekaliga, west of Kissimmee, FL – Approx. 1.2 mile west of Pleasant Hill Road

Drainage canal feeding lake – at Clay Street and Thacker Ave., Kissimmee, FL

Drainage storm canal, which feeds into Lake Tohopekaliga – ¼ mile west of US 92 along Clay St.

Creek/drainage which feeds East Lake Tohopekaliga – ~ ¼ north of Vine St. in Kissimmee, FL

Drainage creek north of Kissimmee - ~ ½ mile north of Garden St.

Creek just south of Florida Turnpike – south of Taft, FL

Boggy Creek ~ 1.2 mile south of Wetherbee Road – south of Taft, FL

6.7 VULNERABILITY ANALYSIS (Cont'd)

Sensitive Waters Crossed by the 16-Inch Pipeline

Hillsborough County

Tampa East Bay
Delany Creek
Alafia River
Rice Creek
Bell Creek
Bell Creek
Little Fishhawk Creek
Fishhawk Creek
McCollough Branch
McDonald Branch
South Prong – Alafia River
West Branch – Alafia River

Polk County

North Prong – Alafia River
Peace River
Peace Creek Drainage Canal
Lake Trask
Snell Creek
Horse Creek
Skip Across Creek

Osceola County

Reedy Creek Swamp
Davenport Creek
Reedy Creek
C-2 Canal
C-1 Canal – Bonnett Creek
Shingle Creek

Orange County

B-14 Canal
B-13 Canal
B-11 Canal

6.8 ALTERNATIVE RESPONSE STRATEGIES

There are no pre-approved response options for inland spills within the United States. Any plans to use dispersants or in situ burning by the Company will be submitted to the Federal On-Scene Coordinator for Regional Response Team approval prior to such action being taken.

Section 6.0

Spill Impact Considerations

FIGURE 6.2

ENDANGERED/THREATENED SPECIES LISTING

The following is a listing of the endangered and threatened animals and plants and wildlife species of special concern in the State of Florida.

ANIMALS	
Common Name	Scientific Name
Bankclimber, purple (mussel)	(<i>Elliptioideus sloatianus</i>)
Bat, gray	(<i>Myotis grisescens</i>)
Beetle, American burying	(<i>Nicrophorus americanus</i>)
Butterfly, Schaus swallowtail	(<i>Heracles aristodemus ponceanus</i>)
Caracara, Audubon's crested (FL pop.)	(<i>Polyborus plancus audubonii</i>)
Coral, elkhorn	(<i>Acropora palmate</i>)
Coral, staghorn	(<i>Acropora cervicornis</i>)
Crocodile, American	(<i>Crocodylus acutus</i>)
Curlew, Eskimo	(<i>Numenius borealis</i>)
Darter, Okaloosa	(<i>Etheostoma okaloosae</i>)
Deer, key	(<i>Odocoileus virginianus clavium</i>)
Kite, Everglade snail (FL pop.)	(<i>Rostrhamus sociabilis plumbeus</i>)
Manatee, West Indian	(<i>Trichechus manatus</i>)
Moccasinshell, Gulf	(<i>Medionidus penicillatus</i>)
Moccasinshell, Ochlockonee	(<i>Medionidus simpsonianus</i>)
Mouse, Anastasia Island beach	(<i>Peromyscus polionotus phasma</i>)
Mouse, Choctawhatchee beach	(<i>Peromyscus polionotus allophrys</i>)
Mouse, Key Largo cotton	(<i>Peromyscus gossypinus allapaticola</i>)
Mouse, Perdido Key beach	(<i>Peromyscus polionotus trissyllepsis</i>)
Mouse, southeastern beach	(<i>Peromyscus polionotus niveiventris</i>)
Mouse, St. Andrew beach	(<i>Peromyscus polionotus peninsularis</i>)
Panther, Florida	(<i>Puma (=Felis) concolor coryi</i>)
Pigtoe, oval	(<i>Pleurobema pyriforme</i>)
Plover, piping (except Great Lakes watershed)	(<i>Charadrius melodus</i>)
Pocketbook, shinyrayed	(<i>Lampsilis subangulata</i>)
Rabbit, Lower Keys marsh	(<i>Sylvilagus palustris hefneri</i>)
Rice rat (lower FL Keys)	(<i>Oryzomys palustris natator</i>)
Salamander, frosted flatwoods	(<i>Ambystoma cinquatum</i>)
Sea turtle, green (FL, Mexico nesting pops.)	(<i>Chelonia mydas</i>)
Sea turtle, green (except where endangered)	(<i>Chelonia mydas</i>)
Sea turtle, hawksbill	(<i>Eretmochelys imbricata</i>)
Sea turtle, Kemp's ridley	(<i>Lepidochelys kempi</i>)
Sea turtle, leatherback	(<i>Dermochelys coriacea</i>)
Sea turtle, loggerhead	(<i>Caretta caretta</i>)
Seal, Caribbean monk	(<i>Monachus tropicalis</i>)
Shrimp, Squirrel Chimney Cave	(<i>Palaemonetes cummingi</i>)
Skink, bluetail mole	(<i>Eumeces egregius lividus</i>)
Skink, sand	(<i>Neoseps reynoldsi</i>)
Slabshell, Chipola	(<i>Elliptio chipolaensis</i>)

Section 6.0

Spill Impact Considerations

FIGURE 6.2

ENDANGERED/THREATENED SPECIES LISTING (Cont'd)

ANIMALS (Cont'd)	
Common Name	Scientific Name
Snail, Stock Island tree	(<i>Orthalicus reses</i> (not incl. <i>nesodryas</i>))
Snake, Atlantic salt marsh	(<i>Nerodia clarkii taeniata</i>)
Snake, eastern indigo	(<i>Drymarchon corais couperi</i>)
Sparrow, Cape Sable seaside	(<i>Ammodramus maritimus mirabilis</i>)
Sparrow, Florida grasshopper	(<i>Ammodramus savannarum floridanus</i>)
Stork, wood (AL, FL, GA, SC)	(<i>Mycteria americana</i>)
Sturgeon, gulf	(<i>Acipenser oxyrinchus desotoi</i>)
Sturgeon, shortnose	(<i>Acipenser brevirostrum</i>)
Tern, roseate (Western Hemisphere except NE U.S.)	(<i>Sterna dougallii dougallii</i>)
Three-ridge, fat (mussel)	(<i>Amblema neisleri</i>)
Vole, Florida salt marsh	(<i>Microtus pennsylvanicus dukecampbelli</i>)
Whale, finback	(<i>Balaenoptera physalus</i>)
Whale, humpback	(<i>Megaptera novaeangliae</i>)
Whale, right	(<i>Balaena glacialis</i> (incl. <i>australis</i>))
Wolf, gray	(<i>Canis lupus</i>)
Woodpecker, ivory-billed	(<i>Campephilus principalis</i>)
Woodpecker, red-cockaded	(<i>Picoides borealis</i>)
Woodrat, Key Largo	(<i>Neotoma floridana smalli</i>)

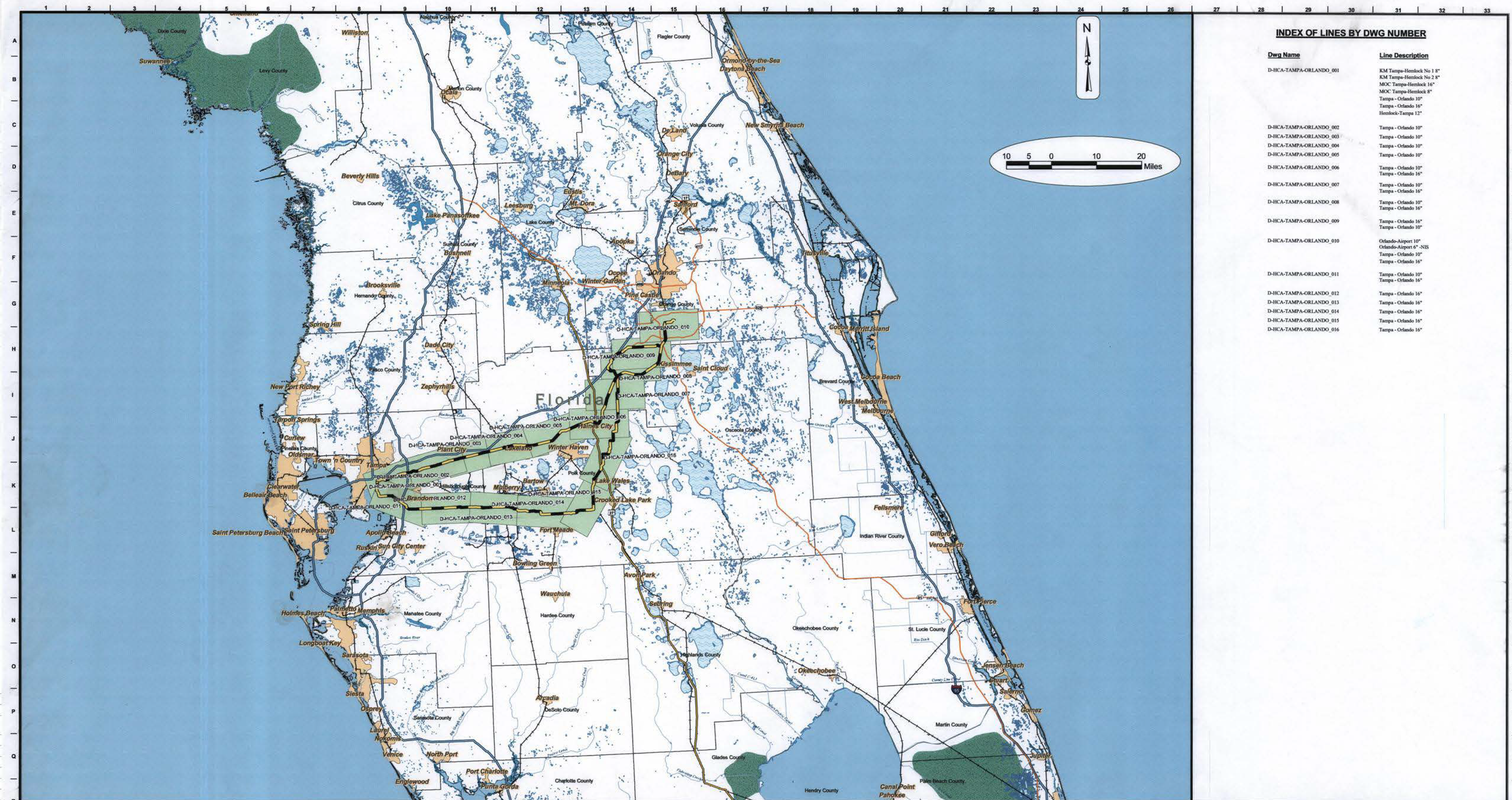
PLANTS	
Common Name	Scientific Name
Aster, Florida golden	(<i>Chrysopsis floridana</i>)
Beargrass, Britton's	(<i>Nolina brittoniana</i>)
Beauty, Harper's	(<i>Harperocallis flava</i>)
Bellflower, Brooksville	(<i>Campanula robinsiae</i>)
Birds-in-a-nest, white	(<i>Macbridea alba</i>)
Blazingstar, scrub	(<i>Liatris ohlingerae</i>)
Bonamia, Florida	(<i>Bonamia grandiflora</i>)
Buckwheat, scrub	(<i>Eriogonum longifolium</i> var. <i>gnaphalifolium</i>)
Butterwort, Godfrey's	(<i>Pinguicula ionantha</i>)
Cactus, Key tree	(<i>Pilosocereus robinii</i>)
Campion, fringed	(<i>Silene polypetala</i>)
Chaffseed, American	(<i>Schwalbea americana</i>)
Cladonia, Florida perforate	(<i>Cladonia perforata</i>)
Fringe-tree, pygmy	(<i>Chionanthus pygmaeus</i>)
Gooseberry, Miccosukee	(<i>Ribes echinellum</i>)
Gourd, Okeechobee	(<i>Cucurbita okeechobeensis</i> ssp. <i>okeechobeensis</i>)
Harebells, Avon Park	(<i>Crotalaria avonensis</i>)
Hypericum, highlands scrub	(<i>Hypericum cumulicola</i>)
Jacquemontia, beach	(<i>Jacquemontia reclinata</i>)
Lead-plant, Crenulate	(<i>Amorpha crenulata</i>)
Lupine, scrub	(<i>Lupinus aridorum</i>)

FIGURE 6.2

ENDANGERED/THREATENED SPECIES LISTING (Cont'd)

PLANTS (Cont'd)	
Common Name	Scientific Name
Meadowrue, Cooley's	(<i>Thalictrum cooleyi</i>)
Mint, Garrett's	(<i>Dicerandra christmanii</i>)
Mint, Lakela's	(<i>Dicerandra immaculata</i>)
Mint, longspurred	(<i>Dicerandra cornutissima</i>)
Mint, scrub	(<i>Dicerandra frutescens</i>)
Mustard, Carter's	(<i>Warea carteri</i>)
Pawpaw, beautiful	(<i>Deeringothamnus pulchellus</i>)
Pawpaw, four-petal	(<i>Asimina tetramera</i>)
Pawpaw, Rugel's	(<i>Deeringothamnus rugelii</i>)
Pigeon wings	(<i>Clitoria fragrans</i>)
Pinkroot, gentian	(<i>Spigelia gentianoides</i>)
Plum, scrub	(<i>Prunus geniculata</i>)
Polygala, Lewton's	(<i>Polygala lewtonii</i>)
Polygala, tiny	(<i>Polygala smallii</i>)
Pondberry	(<i>Lindera melissifolia</i>)
Prickly-apple, fragrant	(<i>Cereus eriophorus</i> var. <i>fragrans</i>)
Rhododendron, Chapman	(<i>Rhododendron chapmanii</i>)
Rosemary, Apalachicola	(<i>Conradina glabra</i>)
Rosemary, Etonia	(<i>Conradina etonia</i>)
Rosemary, short-leaved	(<i>Conradina brevifolia</i>)
Sandlace	(<i>Polygonella myriophylla</i>)
Seagrass, Johnson's	(<i>Halophila johnsonii</i>)
Skullcap, Florida	(<i>Scutellaria floridana</i>)
Snakeroot	(<i>Eryngium cuneifolium</i>)
Spurge, deltoid	(<i>Chamaesyce deltoidea</i> ssp. <i>deltoidea</i>)
Spurge, Garber's	(<i>Chamaesyce garberi</i>)
Spurge, telephus	(<i>Euphorbia telephioides</i>)
Torreya, Florida	(<i>Torreya taxifolia</i>)
Warea, wide-leaf	(<i>Warea amplexifolia</i>)
Water-willow, Cooley's	(<i>Justicia cooleyi</i>)
Whitlow-wort, papery	(<i>Paronychia chartacea</i>)
Wireweed	(<i>Polygonella basiramia</i>)
Ziziphus, Florida	(<i>Ziziphus celata</i>)

FIGURE 6.3**HCA INDEX MAP**























<u>Dwg Name</u>	<u>Line Description</u>
D-HCA-TAMPA-ORLANDO_001	KM Tampa-Hemlock No 1 S KM Tampa-Hemlock No 2 S MOC Tampa-Hemlock 16" MOC Tampa-Hemlock 8" Tampa - Orlando 10" Tampa - Orlando 16" Hemlock-Tampa 12"
D-HCA-TAMPA-ORLANDO_002	Tampa - Orlando 10"
D-HCA-TAMPA-ORLANDO_003	Tampa - Orlando 10"
D-HCA-TAMPA-ORLANDO_004	Tampa - Orlando 10"
D-HCA-TAMPA-ORLANDO_005	Tampa - Orlando 10"
D-HCA-TAMPA-ORLANDO_006	Tampa - Orlando 10" Tampa - Orlando 16"
D-HCA-TAMPA-ORLANDO_007	Tampa - Orlando 10" Tampa - Orlando 16"
D-HCA-TAMPA-ORLANDO_008	Tampa - Orlando 10" Tampa - Orlando 16"
D-HCA-TAMPA-ORLANDO_009	Tampa - Orlando 16" Tampa - Orlando 10"
D-HCA-TAMPA-ORLANDO_010	Orlando-Airport 10" Orlando-Airport 6' -NIS Tampa - Orlando 10" Tampa - Orlando 16"
D-HCA-TAMPA-ORLANDO_011	Tampa - Orlando 10" Tampa - Orlando 16"
D-HCA-TAMPA-ORLANDO_012	Tampa - Orlando 16"
D-HCA-TAMPA-ORLANDO_013	Tampa - Orlando 16"
D-HCA-TAMPA-ORLANDO_014	Tampa - Orlando 16"
D-HCA-TAMPA-ORLANDO_015	Tampa - Orlando 16"
D-HCA-TAMPA-ORLANDO_016	Tampa - Orlando 16"

<u>Dwg Name</u>	<u>Line Description</u>
D-HCA-TAMPA-ORLANDO_001	KM Tampa-Hemlock No 1 S KM Tampa-Hemlock No 2 S MOC Tampa-Hemlock 16" MOC Tampa-Hemlock 8" Tampa - Orlando 10" Tampa - Orlando 16" Hemlock-Tampa 12"
D-HCA-TAMPA-ORLANDO_002	Tampa - Orlando 10"
D-HCA-TAMPA-ORLANDO_003	Tampa - Orlando 10"
D-HCA-TAMPA-ORLANDO_004	Tampa - Orlando 10"
D-HCA-TAMPA-ORLANDO_005	Tampa - Orlando 10"
D-HCA-TAMPA-ORLANDO_006	Tampa - Orlando 10" Tampa - Orlando 16"
D-HCA-TAMPA-ORLANDO_007	Tampa - Orlando 10" Tampa - Orlando 16"
D-HCA-TAMPA-ORLANDO_008	Tampa - Orlando 10" Tampa - Orlando 16"
D-HCA-TAMPA-ORLANDO_009	Tampa - Orlando 16" Tampa - Orlando 10"
D-HCA-TAMPA-ORLANDO_010	Orlando-Airport 10" Orlando-Airport 6' -NIS Tampa - Orlando 10" Tampa - Orlando 16"
D-HCA-TAMPA-ORLANDO_011	Tampa - Orlando 10" Tampa - Orlando 16"
D-HCA-TAMPA-ORLANDO_012	Tampa - Orlando 16"
D-HCA-TAMPA-ORLANDO_013	Tampa - Orlando 16"
D-HCA-TAMPA-ORLANDO_014	Tampa - Orlando 16"
D-HCA-TAMPA-ORLANDO_015	Tampa - Orlando 16"
D-HCA-TAMPA-ORLANDO_016	Tampa - Orlando 16"

NOTES

LEGEND

PIPELINES		INDEX SHEETS		
	CaNev		CaNev	 Pipeline
	CentFla		CentFla	 D_HCA_sheet
	CO2		CO2	
	Heartland		Heartland	
	KMLT		KMLT	
	KMTP		KMTP	
	MidCon		MidCon	
	Plantation		Plantation	
	SFPF		SFPF	

INDEX SHEETS

	CalNe
	CentF
	CO2
	Heartl
	KMLT
	KMTP
	MidCo
	Plant
	SFPP

 Pipeline
 D_HCA_sheet

VICINITY MAP



AREA MAP



AREA MAP LINE LIST

REVISIONS

[illegible]**KINDER  MORGAN**

KINDER MORGAN ENERGY PARTNERS HIGH CONSEQUENCE AREA INDEX MAP SOUTHEAST REGION

DATE: 2004-JAN-22	SCALE: 1" = 10 Miles	ASSOCIATED PIPELINE NUMBER/S
	HCA ANALYSIS DATE: 03-15-03	
	NPMS HCA DATE: 04-01-03	
Checked:	Dwg Name:	
Approved:	484-D-HCA-INDEX-CFP 001	

2 SCALE: 1" = 10 Miles

ASSOCIATED PIPELINE NUMBER/S

File:

HCA ANALYSIS DATE:	03-15-0
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By:

NPMS HCA DATE: 04-01-03

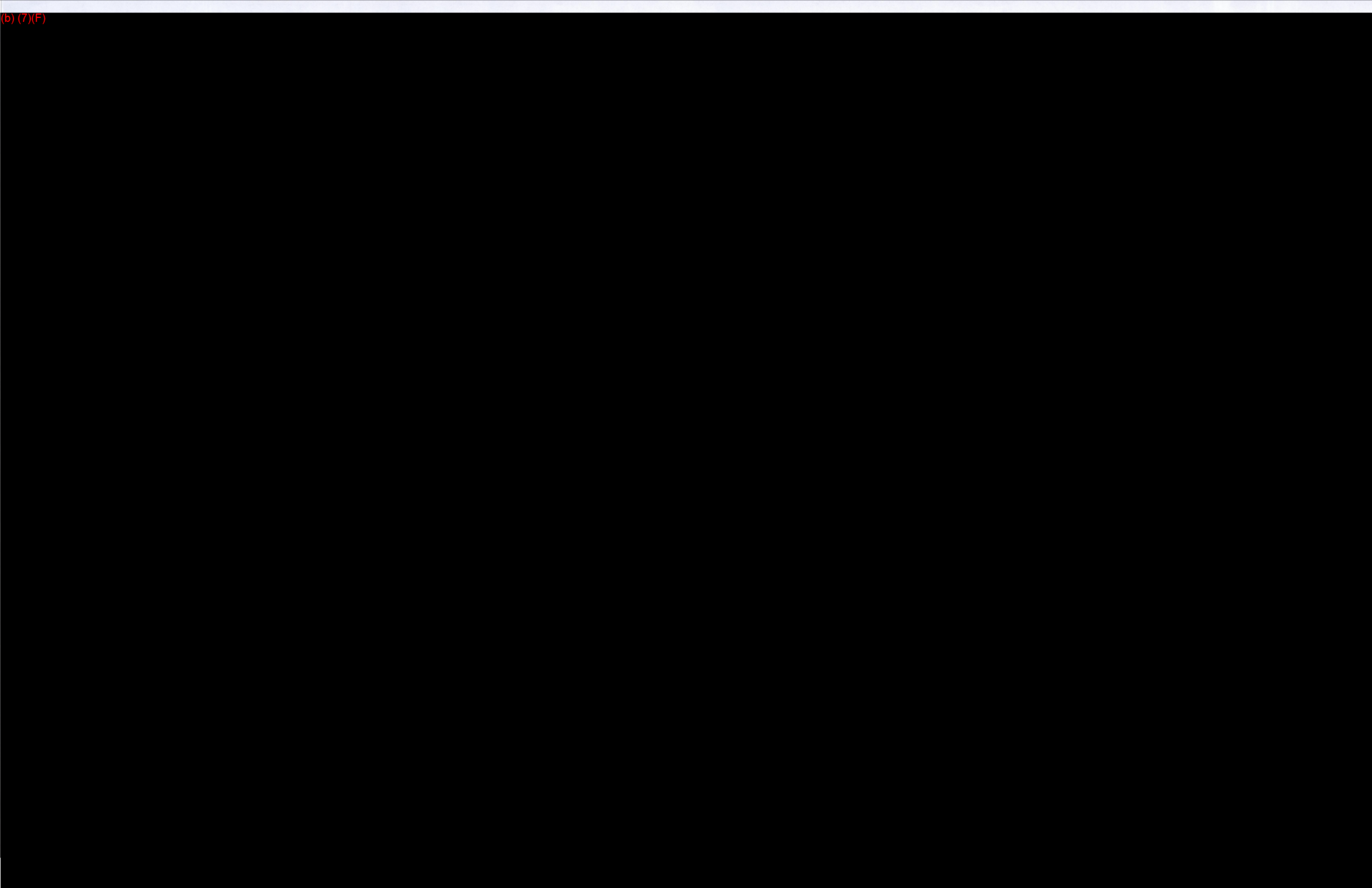
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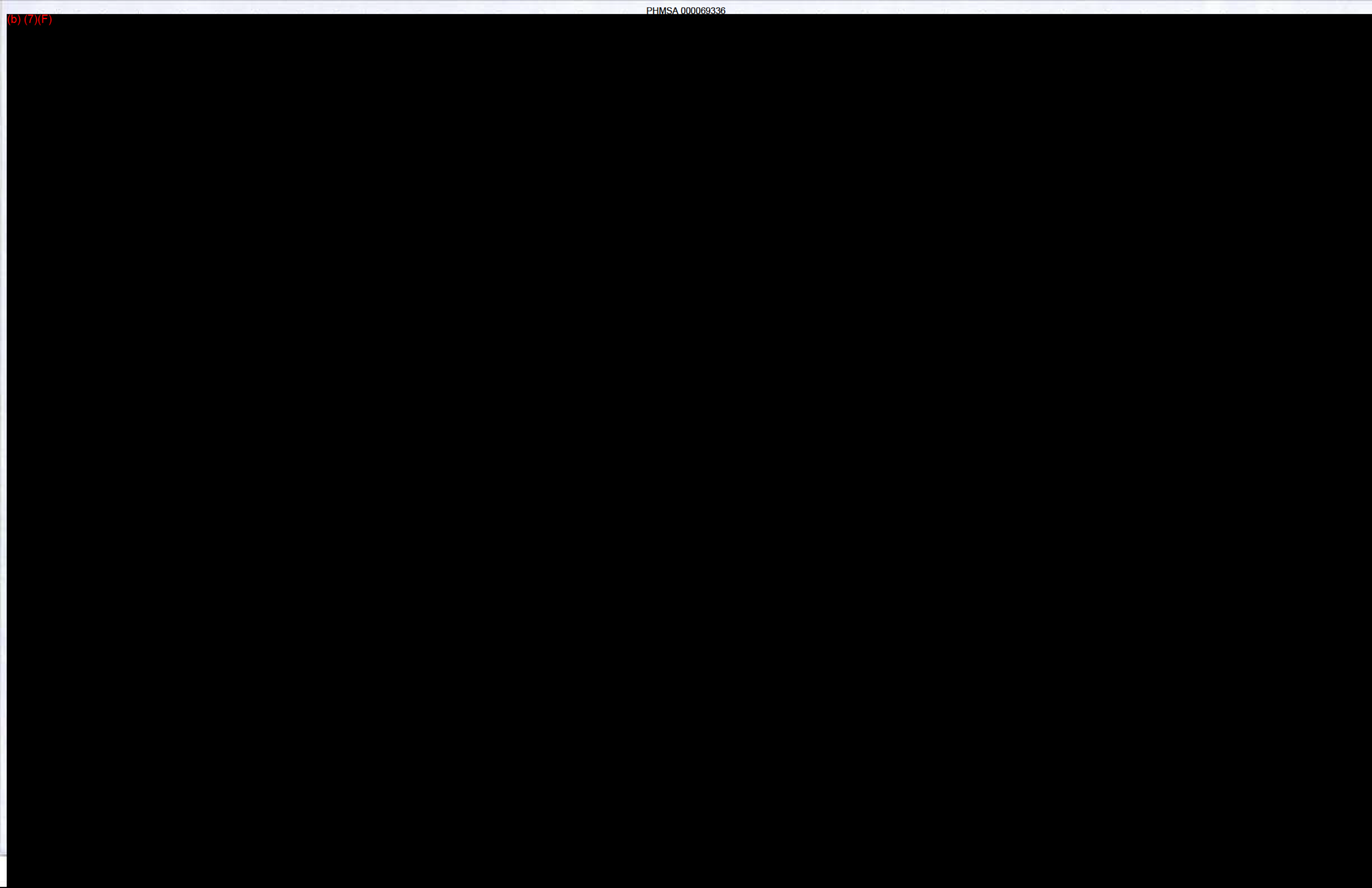


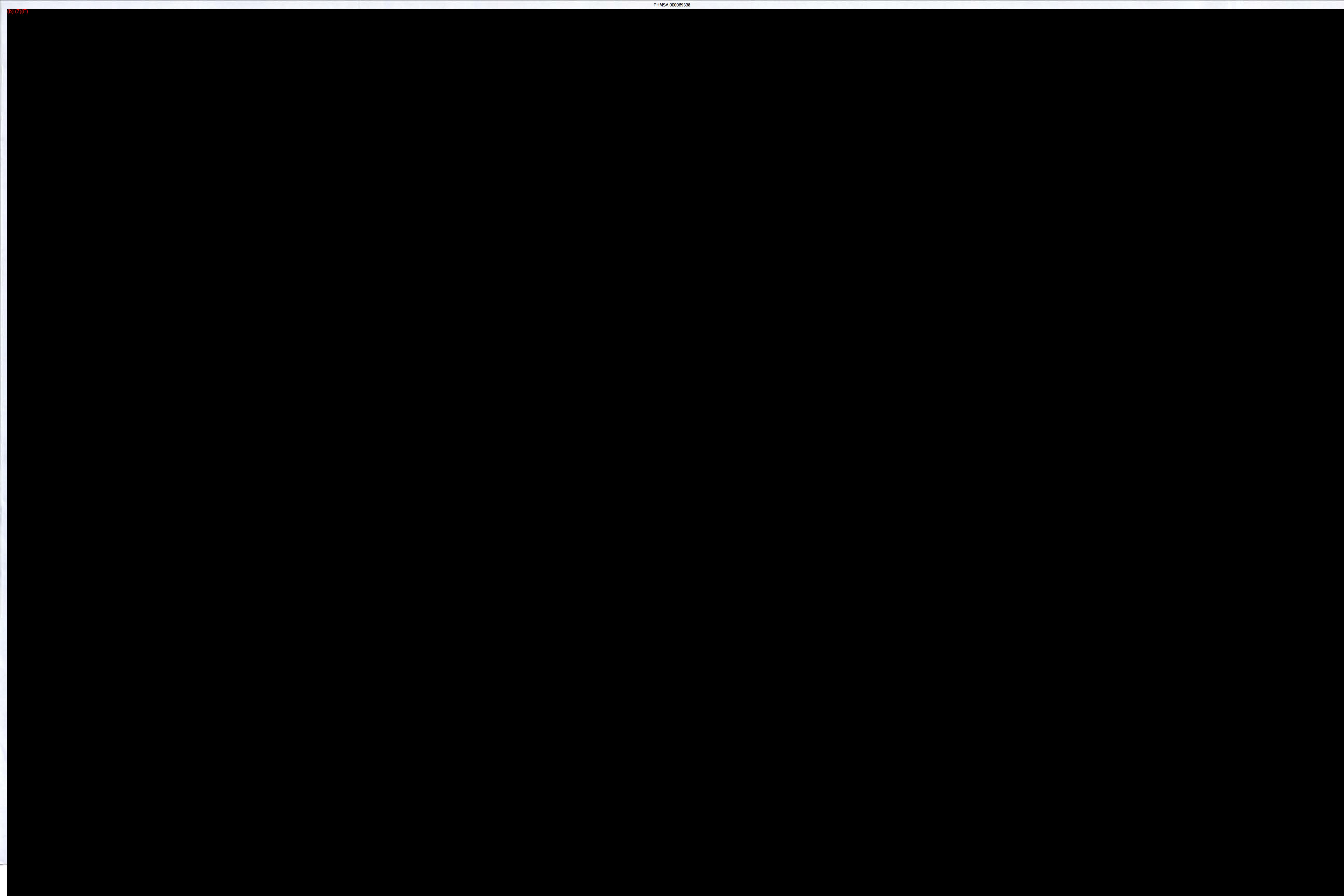


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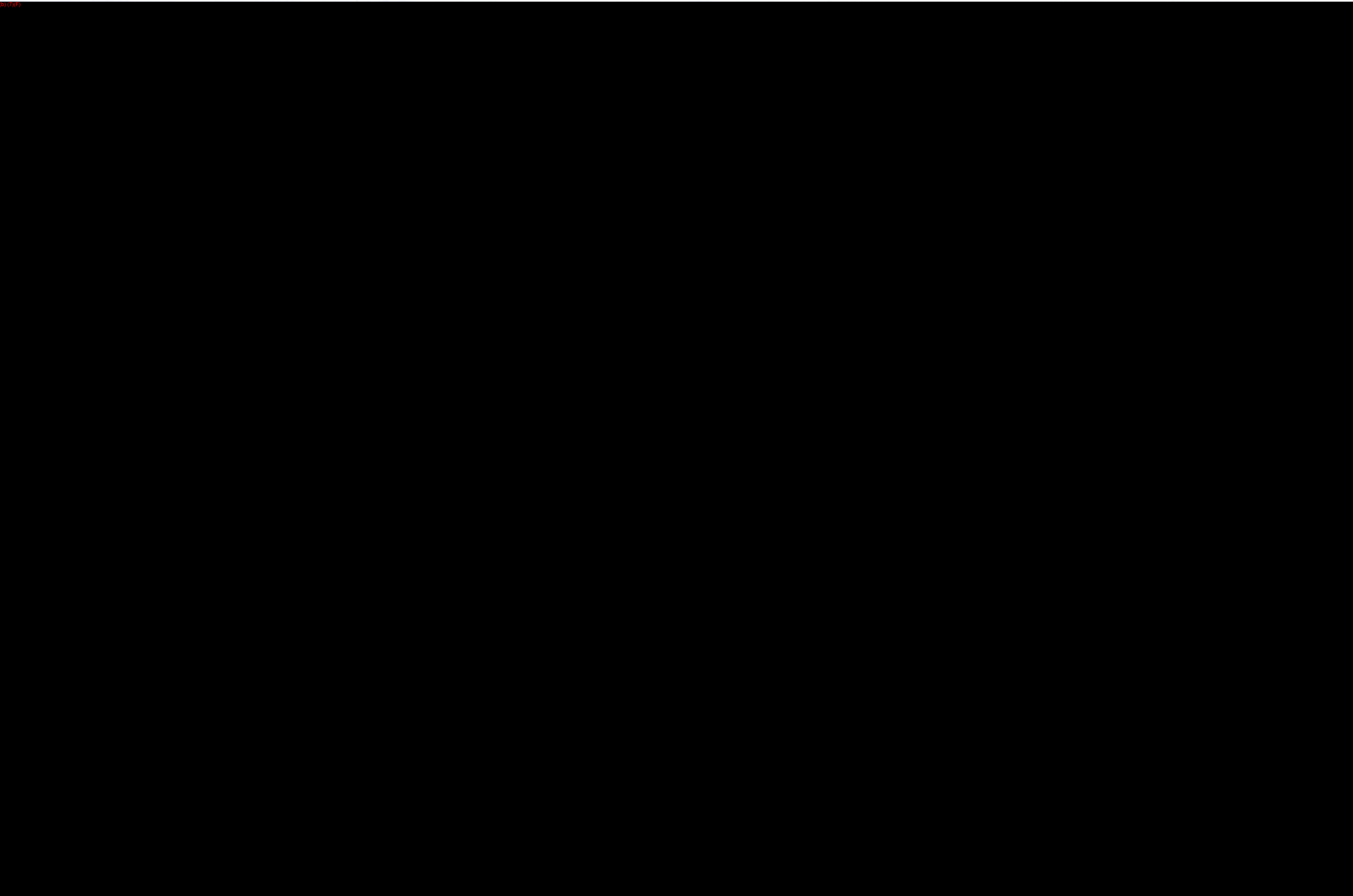
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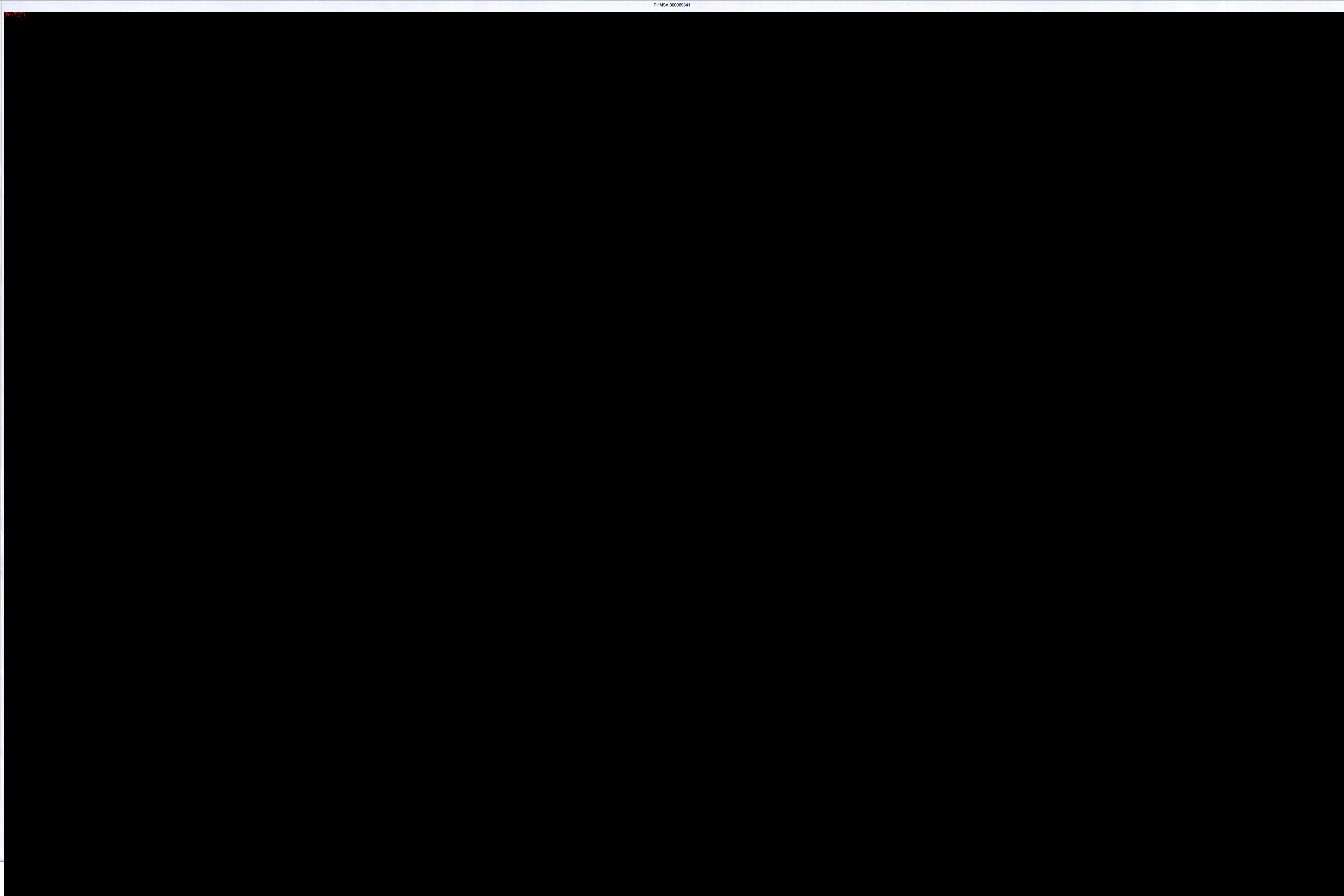
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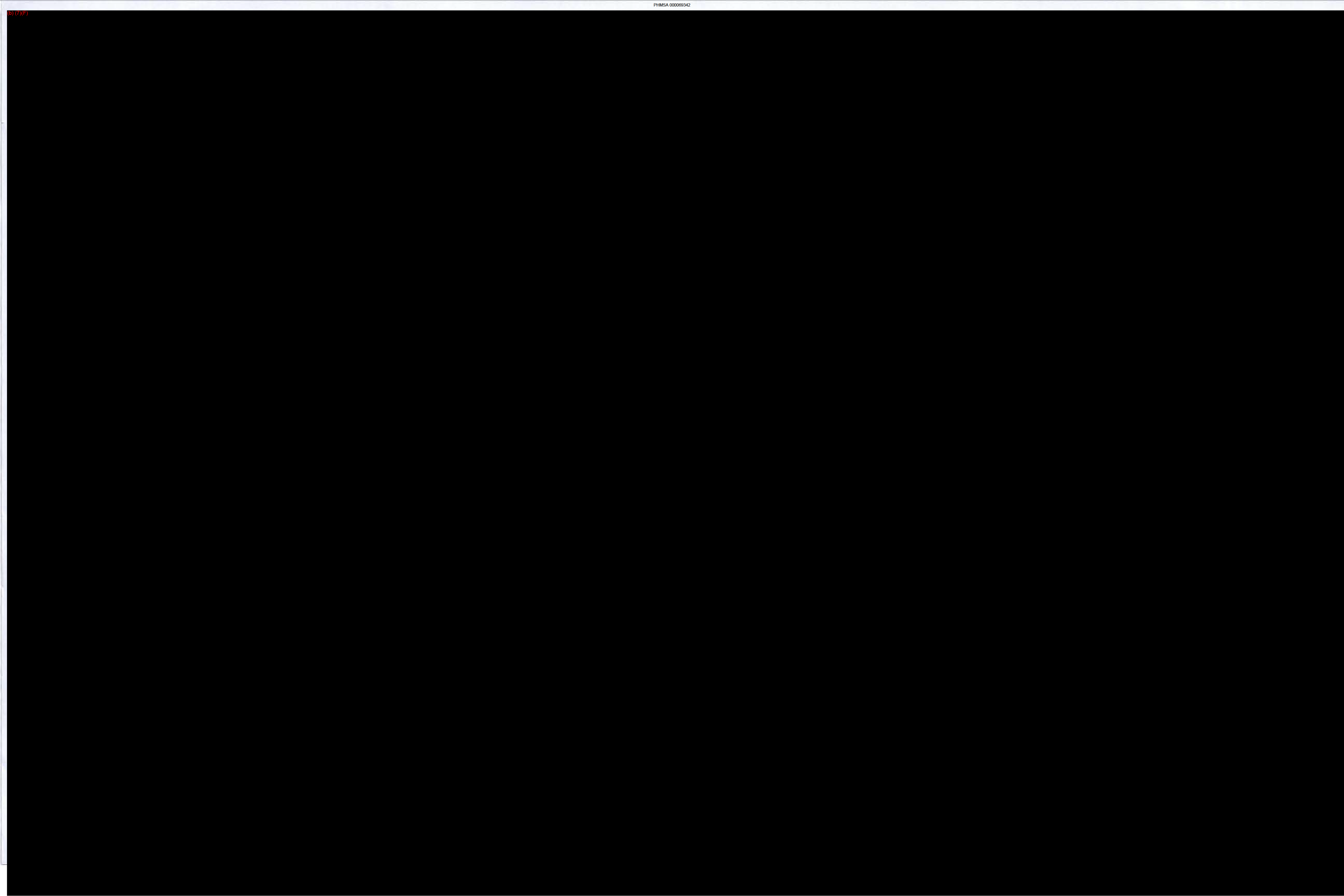
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APPENDIX A

RESPONSE RESOURCES

USCG CLASSIFIED OIL SPILL ORGANIZATIONS (OSROs)

SWS Environmental First Response.....	A-2
Diversified Environmental Services	A-2

COMPANY OWNED EQUIPMENT

Company Owned Emergency Response Equipment List - Orlando	A-3
Company Owned Emergency Response Equipment List - Tampa.....	A-7

Appendix A**Response Resources**

The Company has identified sufficient response resources, by contract or other approved means to respond to a Worst Case Discharge in the Response Zone identified in this Plan.

The following U.S. Coast Guard classified OSROs have been contracted to respond to spills originating from the Pipeline:

USCG Classified Oil Spill Removal Organization (OSRO) – St Petersburg COTP							
OSRO Name	Environment Type	Facility Classification Level				High Volume Port	Contract Responsibility
		MM	W1	W2	W3		
SWS Environmental Services	Rivers/Canals	X	X	X	X	No	This contractor is to provide the properly trained manpower and equipment to perform containment, clean up and proper disposal of spill material per the instructions of the QI.
	Inland	X	X	X	X		
Diversified Environmental Services	Rivers/Canals	X					
	Inland	X					

COMPANY OWNED
EMERGENCY RESPONSE EQUIPMENT LIST
ORLANDO TERMINAL

Boat/Vehicle Equipment			
Type/Model	Quantity	Size	Storage Area
Emergency Response Truck and Trailer	1		By Maintenance Building
Fire Extinguisher			Maintenance Building
Life Jackets			Maintenance Building
Notes:			
<ul style="list-style-type: none"> Materials are inspected periodically. Materials are operational at all times or they are taken out of service for repair. 			

Sorbents/Boom			
Type/Model	Quantity	Size	Storage Area
3M Sorbent Boom	200'	10' x 8"	Stacked left side of trailer
Anchors	10		Right rear floor storage box
Sweep	4 bales		Above front chest box
Pads	4 bales		Above front chest box
Waste Set 3400	10 ea., 5 gal pails		Floor box beneath right chest storage on floor
Notes:			
<ul style="list-style-type: none"> Materials are inspected every month. Materials are operational at all times or they are taken out of service for repair. 			

COMPANY OWNED
EMERGENCY RESPONSE EQUIPMENT LIST
ORLANDO TERMINAL (Cont'd)

Equipment/Tools			
Type/Model	Quantity	Size	Storage Area
4000 - watt electric generator/battery charger	1		Mounted on left rear at doorway
Gas Can (Regular gas/generator)	1		Right rear storage compartment on floor
Portable floodlight, lamp unit/lamp guard	1		Front chest box right side
Replacement bulbs floodlight	1		Front chest box right side
Floodlight stand	1		Behind right storage chest
Extension Cord #12 on reels	2	100'	Right storage chest box
Aluminum boat pole with hook	1		Right side chest box
Materials cart	1		Against front chest box
Aluminum boat poles with net	2		Behind right side chest box
Pointed shovels	2		Behind front chest box
Flat shovels	2		Behind front chest box
Rakes	2		Behind front chest box
Bush Axe	1		Right side chest box
Machetes	2		Right side chest box
Axe	1		Right side chest box
Cutter Blade knives			Right side chest box
Ladder	1	10'	Mounted to interior roof
Notes:			
<ul style="list-style-type: none"> ● Materials are inspected every month. ● Materials are operational at all times or they are taken out of service for repair. 			

COMPANY OWNED
EMERGENCY RESPONSE EQUIPMENT LIST
ORLANDO TERMINAL (Cont'd)

Protective Equipment			
Type/Model	Quantity	Size	Storage Area
Tyvek Coveralls	12	Large	Front chest box
	12	Extra large	
Neoprene/latex gloves	12	Large	Front chest box
	12	Extra large	
Rain Suits	4	Extra Large	Front chest box
Safety Goggles	12		Front chest box
Hard Hats	6		Front chest box
Tingley Over boots	6		Front chest box
First aid station			Mounted right rear cargo door
Fire Extinguisher			Mounted right side forward of rear door
Igloo Water Cooler			Mounted rear of right side storage box
Hand Cleaner/Dispenser			Mounted left rear door
Notes:			
<ul style="list-style-type: none"> Materials are inspected every month. Materials are operational at all times or they are taken out of service for repair. 			

Expendables			
Type/Model	Quantity	Size	Storage Area
Plastic Tarp (Visqueen)	1 roll	20' x 100'	Front floor box, right side
Plastic Bags	2 rolls	55 gal.	Right side chest box
Duct Tape	12 rolls		Right side chest box
Rags	1 bundle		Right side chest box
Paper towels	12 rolls		Front floor box
Liquid Soap	1		Right side chest box
Nylon Rope	600' roll	1/4"	Right side chest box
Nylon Tie Straps	Pkg.		Right side chest box
Notes:			
<ul style="list-style-type: none"> Materials are inspected every month. Materials are operational at all times or they are taken out of service for repair. 			

COMPANY OWNED
EMERGENCY RESPONSE EQUIPMENT LIST
ORLANDO TERMINAL (Cont'd)

Communication Equipment		
Type/Model	Quantity	Frequency
Motorola Hand Held Radios	14	-----
Phones	8	-----
Machines	-----	-----
Conventional telephones	Varies	-----
Computers/email	Varies	-----
Notes: <ul style="list-style-type: none"> ● All materials are stored at the Facility office or are carried by Facility personnel ● Materials are inspected every month. ● Materials are operational at all times or they are taken out of service for repair ● Phone numbers are listed on Section 2.0 		

COMPANY OWNED
EMERGENCY RESPONSE EQUIPMENT LIST
TAMPA TERMINAL

Boat House Equipment			
Type/Model	Quantity	Size	Storage Area
Oil containment boom with universal connectors.	1000'	6" flotation-12" skirt	
Sorbent pads (100 per bale)	12 bales	18" x 18"	
Sorbent boom	10 bales	8" x 40'	
First Aid Kit	1 ea		
Fire Extinguisher	1 ea		
Life jackets	10 ea		
Infection Control Kits	2 ea		
Notes: <ul style="list-style-type: none"> ● Materials maintained by OSRO. ● Materials are operational or taken out of service for repair. 			

COMPANY OWNED
EMERGENCY RESPONSE EQUIPMENT LIST
TAMPA TERMINAL (Cont'd)

Maintenance Department Equipment			
Type/Model	Quantity	Size	Storage Area
Hose	600'	2"	
Oxygen/Explosimeter	2 ea		
Base station for portable radios	1 ea		
Notes: <ul style="list-style-type: none"> Materials are inspected periodically. Materials are operational at all times or they are taken out of service for repair. 			

Operations Equipment			
Type/Model	Quantity	Size	Storage Area
Emergency Response Trailers	2		Area I
Notes: <ul style="list-style-type: none"> Materials are inspected periodically. Materials are operational at all times or they are taken out of service for repair. 			

Sorbents/Boom			
Type/Model	Quantity	Size	Storage Area
Sorbent boom (3M)	200'	10' x 8"	Containers on stacked left side of trailer.
Sausage Boom	2 bales		Above front chest box
Pads	12 bales		Above front chest box
Notes: <ul style="list-style-type: none"> Materials are inspected monthly. Materials are operational at all times or they are taken out of service for repair. 			

COMPANY OWNED
EMERGENCY RESPONSE EQUIPMENT LIST
TAMPA TERMINAL (Cont'd)

Response Trailers – Equipment/Tools			
Type/Model	Quantity	Size	Storage Area
5000 - watt electric generator/battery charger	1		Mounted on left rear at doorway
Gas Can (Regular gas/generator)	1		Right rear storage compartment on floor
Portable floodlight, lamp unit/lamp guard	3		Front chest box right side
Replacement bulbs floodlight	2		Front chest box right side
Floodlight stand	3		Behind right storage chest
Extension Cord #12 on reels	2	100'	Right storage chest box
Aluminum boat poles with net	2		Behind right side chest box
Pointed shovels	4		Behind front chest box
Flat shovels	2		Behind front chest box
Rakes	4		Behind front chest box
Notes: <ul style="list-style-type: none"> ● Materials are inspected monthly. ● Materials are operational at all times or they are taken out of service for repair. 			

COMPANY OWNED
EMERGENCY RESPONSE EQUIPMENT LIST
TAMPA TERMINAL (Cont'd)

Response Trailers - Protective Equipment / Expendables			
Type/Model	Quantity	Size	Storage Area
Tyvek Coveralls	12 12	Large Extra large	Front chest box
Neoprene/latex gloves	12 pair 12 pair	Large Extra large	Front chest box
Rain Suits	4	Extra Large	Front chest box
Safety Goggles	12		Front chest box
Hard Hats	6		Front chest box
Rubber Boots	6 pair		Front chest box
First aid kit (station)	1		Mounted right rear cargo door
Fire Extinguisher	2		Mounted right side forward of rear door
Water Cooler	2		Mounted rear of right side storage box
Hand Cleaner/Dispenser	1		Mounted left rear door
Plastic Tarp (Visqueen)	1 roll	20' x 100'	Front floor box, right side
Plastic Bags	2 rolls	55 gal.	Right side chest box
Duct Tape	12 rolls		Right side chest box
Shop rags	1 bundle		Right side chest box
Paper towels	12 rolls		Front floor box
Liquid Soap	1 bottle		Right side chest box
Nylon Rope	1 roll	600' x 1/4"	Right side chest box
Nylon Tie Straps	1 Pkg.		Right side chest box
Notes: <ul style="list-style-type: none"> ● Materials are inspected monthly. ● Materials are operational at all times or they are taken out of service for repair. 			

COMPANY OWNED
EMERGENCY RESPONSE EQUIPMENT LIST
TAMPA TERMINAL (Cont'd)

Communication Equipment		
Type/Model	Quantity	Frequency
Nextel Hand Held Radios	14	-----
Motorola radios	12	-----
Phones	8	-----
Machines	-----	-----
Conventional telephones	Varies	-----
Computers/email	Varies	-----
Notes: <ul style="list-style-type: none"> ● All materials are stored at the Terminal Office or are carried by Facility personnel. ● Materials are inspected monthly. ● Materials are operational at all times or they are taken out of service for repair. ● Phone numbers are listed on Section 2.0 		

COMPANY OWNED
EMERGENCY RESPONSE EQUIPMENT LIST
CFPL RESPONSE TRAILER INVENTORY

Emergency Response Trailer #1	
QTY	Description
5	Flash lights with batteries
5	Round point shovels
6	Iron rakes
2	Flat shovels
2	Sling blades
1	10-lb sledge hammer
10	Fence stakes
1	Bundle – Wood stakes
10 box	Nitrile Gloves
1	Hand air pump
2 bottle	Hand Cleaner
1	First Aid Kit
5 roll	Caution tape
7 roll	Duct tape
1	Bundle – Shop towels
18 box	Drink cups
2	Water Coolers
10 roll	Paper towels
12 roll	Toilet paper
4 set	Emergency lights
2	Portable fans
3	Hard hats
3 box	40-55 gallon drum liners
200'	8" boom
12	Flotation type work vests
500'	¾" rope
500'	Polly rope
3	Utility knives
7 sets	Rain gear
8	Half-face masks
21	Tyvek suits
1	Packet with boat registration
30 pair	Heavy duty gloves
21	Writing Pads
2	Clip boards
6	Response manuals
3	Heavy duty tarps

COMPANY OWNED
EMERGENCY RESPONSE EQUIPMENT LIST
CFPL RESPONSE TRAILER INVENTORY (Cont'd)

Emergency Response Trailer #2	
QTY	Description
300'	8" boom
24 bale	Spill pads
1 box	Half mask (medium)
1 box	Half mask (small)
50'	2" boom
2	Honda 6500 generator
1	Coleman 5000 generator

APPENDIX B

WORST CASE DISCHARGE ANALYSIS AND SCENARIO

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Introduction	B-2
Worst Case Discharges	B-3

INTRODUCTION

This Appendix identifies potential causes for oil discharges and discusses the response efforts that are necessary for successful mitigation. Included in this Appendix are hypothetical scenarios for various types of spills that have the potential to occur along the system. It is anticipated that the Company will respond to spills in a consistent manner regardless of the location. Therefore, the guidelines discussed in this Appendix will apply to all spills whenever possible.

DOT-PHMSA requires that pipeline operators calculate a Worst Case Discharge amount for each response zone. The calculations and descriptions are as follows:

DOT-PHMSA Discharge Volume Calculation

- **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 is based on the maximum historic discharge, if one exists, adjusted for any subsequent corrective action or preventive 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.*

Scenario Types

The occurrence of a Worst Case Discharge (WCD) could be the result of any number of scenarios along the pipeline system including:

- Piping rupture.
- Piping leak, under pressure and not under pressure.
- Explosion or fire.
- Equipment failure (e.g. pumping system failure, relief valve failure, or other general equipment relevant to operational activities associated with internal or external facility transfers).

The response actions to each of these scenarios are outlined in Section 3.1 and Figure 3.1. The response resources are identified in a quick reference format in Figure 2.6. Pipeline response personnel list/telephone numbers and other internal/external resources telephone numbers are detailed in Figures 2.2 and 2.5.

RESPONSE CAPABILITY SCENARIOS

(b) (7)(F)

The Worst Case Discharge (WCD) in this pipeline is (b) (7)(F)

Description

This size discharge would originate from a leak anywhere along the pipeline between the Tampa and Orlando Terminals.

The types of materials that could be discharged are diesel and Jet A.

Volume

This WCD scenario involves a line segment using the pipeline's maximum release time in hours, plus the maximum shutdown response time in hours, multiplied by the maximum flow rate expressed in barrels per hour (bph), plus the largest line drainage volume after shutdown of the line section. The following values were used:

Pipeline maximum release time¹

(b) (7)(F)

Maximum shutdown time²

Maximum flow rate³

Largest line drainage volume⁴

Worst case discharge

(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.

1. Maximum release time is based on the capabilities of the continuous leak detection system.
2. The maximum shutdown time is an estimate based on the time it would take the operator to assess the alarm, shut down and close motor operated valves.
3. The maximum pumping rate of the pipeline.
4. The pipeline is operated between Tampa and Orlando over terrain that is generally flat. No topographic features exist along the system that would allow the drain down of an entire line segment between two valves. The amount of drain down is estimated at a maximum of (b) (7)(F)

Note: Adverse weather will not affect detection or shut down times.

RESPONSE CAPABILITY SCENARIOS (Cont'd)**(b) (7)(F)*****Response Requirement***

The Company has identified sufficient response resources, by contract or other approved means, to respond to a WCD to the maximum extent practicable. These response resources include:

- Resources capable of arriving at the staging area within the applicable response tier requirements for non-high volume areas (Tier 1 = 12 hours; Tier 2 = 36 hours; Tier 3 = 60 hours).
- Resources capable of oil recovery in inclement weather conditions (i.e. heavy rain, snow, ice).

Notes:

- Contracted and Company-owned equipment and manpower resources are detailed in Appendix A.
- Telephone references are provided in Figures 2.2 and 2.5.

RESPONSE CAPABILITY SCENARIOS (Cont'd)

(b) (7)(F)

The WCD in this pipeline is (b) (7)(F)

Description

This size discharge would originate from a leak anywhere along the pipeline between the Tampa and Orlando Terminals.

The types of materials that could be discharged are gasoline and ethanol.

Volume

This WCD scenario involves a line segment using the pipeline's maximum release time in hours, plus the maximum shutdown response time in hours, multiplied by the maximum flow rate expressed in barrels per hour (bph), plus the largest line drainage volume after shutdown of the line section. The following calculations were used:

Pipeline maximum release time¹

(b) (7)(F)

Maximum shutdown time²

Maximum flow rate³

Largest line drainage volume⁴

Worst case discharge

(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.

1. Maximum release time is based on the capabilities of the continuous leak detection system.
2. The maximum shutdown time is an estimate based on the time it would take the operator to assess the alarm, shut-down and close motor operated valves.
3. The maximum pumping rate of the pipeline.
4. The pipeline is operated between Tampa and Orlando over terrain that is generally flat. No topographic features exist along the system that would allow the drain down of an entire line segment between two valves. The amount of drain down is estimated at approximately (b) (7)(F)

Note: Adverse weather will not affect detection or shut down times.

RESPONSE CAPABILITY SCENARIOS (Cont'd)**(b) (7)(F)*****Response Requirement***

The Company has identified sufficient response resources, by contract or other approved means, to respond to a WCD to the maximum extent practicable. These response resources include:

- Resources capable of arriving at the staging area within the applicable response tier requirements for non-high volume areas (Tier 1 = 12 hours; Tier 2 = 36 hours; Tier 3 = 60 hours).
- Resources capable of oil recovery in inclement weather conditions (i.e. heavy rain).

Notes:

- Contracted and Company-owned equipment and manpower resources are detailed in Appendix A.
- Telephone references are provided in Figures 2.2 and 2.5.

APPENDIX C

EMERGENCY PREPLANNING

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C.2 Pipeline Inspection Systems	C-2

EMERGENCY PREPLANNING

C.1 PIPELINE LEAK DETECTION SYSTEMS

The Company uses a combination of pipeline monitoring equipment and procedures for leak detection. The leak detection equipment consists of accurate measurement devices that measure the volumes entering the pipelines at the Tampa Terminal and exiting the pipelines into tankage at the Orlando Terminal.

(b) (7)(F)



C.2 PIPELINE INSPECTION SYSTEMS

Visual observations during normal routine operations are made of the exposed portions of pipelines to locate signs of corrosion leaks, coating loss or excessive wear. In cases of small leaks, pipeline clamps are used for temporary repair until a more permanent repair can be made. Records on all pipeline failures are maintained and available to DOT/PHMSA upon request.

Based on sound engineering judgment the pipeline is repaired or replaced as necessary.

C.2.A Cathodic Protection

The Pipelines are coated and have cathodic protection. Cathodic rectifiers are inspected six times per year. Cathodic protection is inspected once per year.

C.2 PIPELINE INSPECTION SYSTEMS (Cont'd)

C.2.B Internal Corrosion Inspections

Internal corrosion inspections are conducted twice per year.

C.2.C Visual Inspection

The Pipeline and adjacent areas are visually inspected for leaking oil by either aerial observation or ground patrol with special attention given to locations where the Pipeline crosses highways, railroad tracks, and bodies of water. Aerial Right of Way inspections are conducted 26 times per year.

C.2.D Underwater Crossing Inspections

Underwater crossings are inspected at intervals not to exceed five (5) years.

C.2.E Valve Maintenance

Main-line valves are inspected at intervals not exceeding seven and a half months and at least twice per year to ensure proper working condition.

C.2.F External Corrosion Control

Whenever buried portions of the Pipelines are exposed for any reason, the pipe will be examined for evidence of external corrosion, coating deterioration, and cathodic protection effectiveness. If corrosion is found, a detailed evaluation will be performed to determine the extent of corrosion.

Exposed portions of the Pipelines are painted and/or coated for corrosion protection.

C.2.G Abnormal Conditions

Abnormal conditions that can pose a threat of a discharge and procedures to eliminate or mitigate that threat are addressed in the Products Pipelines Liquids – Operations and Maintenance (L O&M) Manual available via the Company intranet at: http://intranet/operations/products/manuals/liquids_om/.

APPENDIX D

TRAINING AND DRILLS

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	HAZWOPER (29 CFR 1910.120)	
	Incident Command System	
	Volunteers	
	Oil Spill Response Training	
	Supervisor/Team Meetings	
	Contractor Training	
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	Quarterly QI Notification Exercise	
	Semi-Annual Equipment Deployment Exercise	
	Annual Equipment Deployment Exercise	
	Annual Response Team Tabletop Exercise	
	Government-Initiated Unannounced Exercise	
	Exercise Documentation	

D.1 RESPONSE TEAM TRAINING

The Company provides training related to discharge prevention, testing and response, including measures to repair pipeline ruptures and mitigate discharges. The training methods address oil discharges from the pipeline from several perspectives: human health and safety, rupture control and repair operations, pollution control, and overall (crisis) management of the emergency. The Company's Training Section in Alpharetta, GA is responsible for implementation and records maintenance of the emergency response training program. The coordination of employee schedules and location of the training sessions throughout the year is administered by the Alpharetta Office.

The competency of each training program is closely monitored by the Training Section through observation of and/or participation in actual training sessions.

Through the various training methods described below the Company'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 on a 24-hour basis.

That all reporting personnel know:

- The pipelines and response zone details for the affected area (Figure 1.3).
- The telephone number of the National Response Center and other required notifications (Section 2.0).
- The notification process. (Section 2.0).

That all response personnel know:

- The characteristics and hazards of the oil discharged (Section 3.0).
- The conditions that are likely to worsen emergencies, including the consequences of facility malfunctions, and the appropriate corrective actions (Products Pipelines Liquids – Operations and Maintenance (L O&M) Manual).
- The steps necessary to control any accidental discharge of oil and to minimize the potential for fire, explosion, toxicity or environmental damage (Section 3.0).

The Company 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:

D.1 RESPONSE TEAM TRAINING (Cont'd)***Facility Response Plan Review***

All Facility Response Team Members should review their Facility Response Plan whenever their job position or responsibilities change under the Plan. A copy of this 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. At a minimum, Team members will receive "First Responder Awareness Level" training. 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
29CFR 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
29CFR 1910.120(e) Clean Up Sites		
General Site Workers	40 hrs / 3 days on the job training	8 hrs
Occasional Workers (Limited Tasks)	24 hrs / 1 day on the job training	8 hrs
General Site Workers (Low Hazard)	24 hrs / 1 day on the job training	8 hrs
Supervisors	8 hrs supervisor training	8 hrs
29CFR 1910.120(p)(7)(8) RCRA TSD Sites		
New Employees	24 hrs	8 hrs
Current Employees*	24 hrs	8 hrs

* Previous work experience and/or training certified as equivalent by employer.

Incident Command System

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

Volunteers

- The Company will not use volunteers for emergency incident response and no Company provisions exist to train them. Volunteers may be used by government response entities, as allowed by applicable policies/procedures.

D.1 RESPONSE TEAM TRAINING (Cont'd)

Oil Spill Response Training

- Oil Spill Response training is accomplished when the appropriate employees attending Oil Spill Response for Inland Waters by Rogers & Associates, Texas A&M's Inland Oil Spill Response and Recovery School or any equivalent training seminar. These are week long classes that focus on defensive and offensive strategies in controlling an oil spill. This course includes activities such as initial oil spill site assessment and spill response planning, booming techniques, construction of under-flow dams, using absorbent booms and the use of some personal protective equipment.

Supervisor/Team Meetings

- Periodic Supervisor/Team meetings are conducted by the various Areas and Teams with essential personnel assigned to the Response Team in attendance. These meetings typically include a review of various emergency response procedures contained in this Plan. The standard agenda could include some or all of the following:
 - Overview of emergency response.
 - Review and discussion of the Company Pipe Line Response System (with a focus on notification, assessment of severity of the event, functional activities/roles, and organization structure).
 - Review of the emergency response equipment and site plans.
 - A table top emergency response exercise.

Contractor Training

- The Company also recognizes that contract personnel must also have sufficient training to response to Company emergency response situations. The Company communicates this training need to its key contractors during contract negotiations and often specifically spells out this requirement in its contracts. The Company also tends to use well-known spill response contractors whose reputation and experience levels help ensure personnel who respond will be trained to appropriate levels.

Training Qualifications

- As no formalized method of certifying training instructors has been provided by OSHA, the Company ensures the competency of its instructors and training organizations by selecting trainers and/or organizations with professional reputations and extensive hands-on and classroom experience in their subject matter. The Company personnel with responsibility to coordinate the training program also conduct periodic informal audits of training courses selected for the Company's training program to ensure their suitability for the program.

Training Records Maintenance

- Emergency response training records are maintained at the Company's **Alpharetta Office**. Training records for response personnel will be maintained for as long as personnel have duties in this response plan.

D.1 RESPONSE TEAM TRAINING (Cont'd)

Training Records

Training records for local team members will be maintained at the Facility for as long as the individual is assigned duties in the Plan as required by DOT/PHMSA.

D.2 RESPONSE TEAM EXERCISES

Local/Spill Management Team members, government agencies, contractors, and other resources must participate in response exercises required by Federal, state, or local regulations and as detailed in the "National Preparedness for Response Exercise Program (PREP) Guidelines." The Company (through the Environmental Compliance Coordinator) will conduct announced and unannounced drills to maintain compliance, and each plan-holder must participate in at least one exercise annually. The following table lists the triennial exercise cycle for facilities (see PREP Guidelines for full details).

TRIENNIAL CYCLE		
Total Number	Frequency	Exercise Type/Description
12	Quarterly	QI Notification Exercise
3	Annual	Equipment Deployment Exercise (<i>Facility-owned equipment</i>)
3	Annual	Response Team Tabletop Exercise
3	Annual	Equipment Deployment Exercise (<i>facilities with OSRO-owned equipment</i>)
1	Tri-Annual	PHMSA unannounced Exercise (<i>not a separate exercise</i>) Actual response can be considered as an unannounced exercise.
NOTE: All response plan components must be exercised at least once in the Cycle.		

Quarterly QI Notification Exercise

- **Scope:** Exercise communication between Facility personnel and the QI(s) and/or designated alternate(s). At least once each year, one of the notification exercises should be conducted during non-business hours.
- **Objective:** Contact must be made with a QI or designated alternate, as identified in the Plan.
- **General:** All personnel receiving notification shall respond to the notification and verify their receipt of the notification. Personnel who do not respond should be contacted to determine whether or not they received the notification.

D.2 RESPONSE TEAM EXERCISES (Cont'd)

Semi-Annual Equipment Deployment Exercise (for facilities with equipment)

- **Scope:** Deploy and operate Facility response equipment identified in the response plan. The equipment to be deployed must include the following, at a minimum:
 - 1,000 feet of representative type of boom;
 - one of each type of skimming system; or
 - the equipment necessary to respond to the Facility's Small/Average Most Probable Discharge (AMPD), whichever is less.
- **Objective:** Demonstrate personnel's ability to deploy and operate response equipment. Ensure that the response equipment is in proper working order.
- **General:** The Facility may take credit for actual equipment deployment to a spill, or for training sessions, as long as the activities are properly documented.

Annual Equipment Deployment Exercise (OSRO-owned equipment)

- **Review:** The Facility should verify that the OSRO(s) has completed the equipment deployment exercise requirements and has maintained the necessary documentation. The OSRO may deploy equipment at any location, so long as it occurs within an operating environment similar to the Facility's.
- **Scope:** OSRO must deploy and operate response equipment identified in the response plan. The equipment to be deployed must include the following, at a minimum:
 - 1,000 feet of representative type of boom.
 - One of each type of skimming system.
- **Objective:** OSRO must demonstrate the ability of the personnel (OSRO) to deploy and operate response equipment (OSRO). Ensure that the response equipment (OSRO) is in proper working order.

Annual Response Team Tabletop Exercise

- **Scope:** Exercise the response team's organization, communication, and decision-making in managing a spill response. Each team identified within the plan must conduct an annual Response Team Tabletop Exercise.
- **Objective:** Exercise the response team in a review of the following:
 - Knowledge of the Plan.
 - Proper notifications.
 - Communications system.
 - Ability to access an OSRO.
 - Coordination of internal spill response personnel.

D.2 RESPONSE TEAM EXERCISES (Cont'd)

- **Objective (Cont'd)**
 - Review of the transition from a local team to a regional team.
 - Ability to effectively coordinate response activity with the National Response System (NRS) Infrastructure.
 - Ability to access information in the Area Contingency Plan.
- **General:** A minimum of one Response Team Tabletop Exercise in a triennial cycle will involve a Worst Case Discharge scenario.

Government-Initiated Unannounced Exercise

- **Scope:** The Facility is required to participate in only one unannounced exercise every 36 months from the date of the last government-initiated unannounced exercise.
 - Exercises are limited to approximately four (4) hours in duration.
 - Exercises would involve response to a Small/Average Most Probable Discharge scenario.
 - Exercise would involve equipment deployment to respond to a spill scenario.
- **Objective:** Conduct proper notifications to respond to unannounced scenario of a Small/Average Most Probable Discharge.
 - Demonstrate that the response is timely, conducted with an adequate amount of equipment for the scenario, and properly conducted.
- **General:** This exercise is only applicable to those facilities which are randomly chosen.

Exercise Documentation

- All exercises should be documented and maintained at the Facility. **Sample documentation forms are provided in Appendix G. At a minimum,** documentation should specify:
 - The type of exercise;
 - Date and time of the exercise;
 - A description of the exercise;
 - The objectives met in the exercise;
 - The components of the response plan exercised; and
 - Lessons learned.
- Exercise documentation **will** be kept on file for three (3) years **as required by DOT/PHMSA.**

APPENDIX E

EVACUATION PLAN

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E.1 EMERGENCY EVACUATION PROCEDURES

Minimizing employee and public exposure to hazardous substances is the highest priority activity at a Pipeline emergency site. Often this must be done by notifying and/or evacuating employees and nearby residents (or assisting local officials with this activity) and/or by halting or diverting traffic on roads and railroads from the emergency area.

This Appendix is a general procedure for response to a vapor cloud or other hazardous vapor release situation and is intended for use in conjunction with Fire Plans, Site Specific Plans, Site Safety and Health Plans, and other plans and procedures applicable to the work area.

In the event that a hazardous vapor situation is detected, evacuation of all people in the affected area may be the highest priority course of action depending on the circumstances. Large-scale evacuations may require the efforts of entire Response Team and/or assistance from local emergency responders, again depending on site conditions. Phone numbers for local emergency responders are located in Section 2.0.

E.1.A Isolation of Potential Emergency Site

For all potential emergency situations, isolation of the area affected by employees will always be an immediate priority. Since each emergency is different, the size of the area to be isolated and the method of isolation will vary on a case by case basis.

In general, fenced pipeline installations such as tank farms, delivery terminals and pump stations can be isolated by controlling traffic at the installation's main gate. For situations on the Pipeline right-of-way, the Response Team must quickly determine the size of the area potentially affected and work closely with local responders to make every effort to control all access to the area by road, rail or footpath.

In general, a potential emergency situation will be most easily isolated through the prompt enlistment of help from local responders (police, fire, etc.) to help control an area other than a fenced pipeline facility. Section 2.0 contains listings of how to contact these personnel.

E.1.B Pipeline Facility Evacuations

It is often difficult to determine when the quantity of vapors present constitute a hazard severe enough to warrant shutdown of operations and maintenance and the evacuation of the work site or pipeline, even when hazardous atmosphere detectors are in use.

Employees must ultimately use their own judgment based on the available information, in addition to previous experience and training, in making this decision. In all cases these judgments should be conservative, i.e., they should err on the side of safety and caution.

The protection of human life must always take precedence over the protection of physical property or equipment.

E.1 EMERGENCY EVACUATION PROCEDURES (Cont'd)

E.1.C Remote System Locations; Right-of-Way Locations

- The Controller or appropriate supervisor responsible for the remote location or line section will immediately shut down the appropriate lines and isolate the location to the extent possible by closing the appropriate remotely controlled block valves.
- The Controller or appropriate supervisor will notify the QI to start the response to the event. Dependent on the situation, the QI will send the appropriate personnel to the affected location to investigate. If an event is reported from the right-of-way, the QI will contact the appropriate pipeline operator who will be responsible for closing manual line block valves.
- Personnel responding to the affected location should always make an initial assessment of the site at a safe distance from the likely source point of the release. If the source point cannot be isolated without entering a vapor cloud or other hazardous situation, investigating personnel should stay out of the hazardous area. A call for immediate assistance should be made to the Controller and to the QI to begin notification of the appropriate members of the Response Team, who are properly equipped to approach and isolate a release of this nature.
- The QI has responsibility for contacting the appropriate local officials for assistance in evacuating and isolating all persons from the affected area and controlling traffic and spectators if needed.

E.2 EVACUATIONS INVOLVING THE GENERAL PUBLIC

E.2.A Specific Procedure

- The Company's Incident Commander first assesses the incident and determines it is necessary to evacuate the public from the immediate affected area (local officials should be included in this decision making if time permits).
- Coordination of evacuation efforts is the responsibility of the Incident Commander, or the person assigned as the Emergency Response Team's Liaison Officer.
- If the incident involves injured persons, refer to "Medical Emergencies" of Section 3.0.
- Local authorities such as the police, highway patrol and fire departments should be pressed into service assisting an evacuation, with the Company's Incident Commander or Liaison Officer acting as direct liaison to these officials.

E.2 EVACUATIONS INVOLVING THE GENERAL PUBLIC (Cont'd)

E.2.A Specific Procedure (Cont'd)

- All nearby occupied dwellings should then be visited and the inhabitants informed of the dangers as soon as possible. Evacuation instructions to residents must insist that all open flames including pilot lights and gas burners be extinguished if possible.
- Conduct evacuation on foot if necessary.
- Warn all evacuees against activities such as smoking, operating motor vehicles, using spark-producing appliances, etc. The Company should attempt to render whatever assistance is necessary to the evacuees.
- Keep the QI and/or Safety Officer informed of any evacuation efforts so they may pass along the latest information regarding such actions to other support personnel.
- In the interest of safety, the media and other members of the general public may need to be utilized to quickly inform people in the immediate area of an ongoing evacuation effort.
- Members of the press should be advised that electronic equipment such as camera lights and flashes can be potential sources of ignition when explosive vapors are present.

E.2.B Traffic Control

If an incident occurs near a road or railroad, local traffic may need to be halted or diverted from the immediate area. The assistance of local authorities should be solicited to enforce any necessary detours of local traffic until the hazardous situation can be stabilized. Railroads should be notified so they can halt rail traffic.

E.2.C Notification of Public Officials

The Company must be prepared to coordinate the Company's response to emergencies with public officials as appropriate. The QI or other appointee will interface with public officials on the appropriate seniority levels who are concerned about an emergency response in progress. The QI will meet directly with On-Scene Coordinators from other agencies in order to best coordinate response efforts. The Liaison Officer will act as Company liaison with various local emergency responders during the incident. The Environmental Situation Chief will act as liaison with Federal and state-level environmental responders if necessary. The Safety Officer shall act as liaison with OSHA representatives if necessary.

APPENDIX F

DISPOSAL PLAN

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OVERVIEW

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 separated (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 Company's Disposal Specialist to manage waste disposal needs during an oil spill cleanup.

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 stormwater collection systems, vessel and equipment cleaning (i.e., water contaminated with cleaning agents), and office and field operations (i.e., sewage, construction activities).

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.

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.

WASTE HANDLING (Cont'd)

Safety Considerations

Care should be taken to avoid or minimize direct contact with oily wastes. All personnel handling or coming into contact with oily wastes will 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 are to 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 will 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 barge.
- From a barge 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.

WASTE HANDLING (Cont'd)

Waste Transfer (Cont'd)

- **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.

Table F-1 provides a comparative evaluation of 16 types of transfer systems that could be available for transfer operations.

WASTE STORAGE

Interim storage of recovered oil, oily and non-oily waste should 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. Typical short-term storage options are summarized in Table F-2. The majority of these options can be used either onshore or offshore. If storage containers such as bags or drums are used, the container must be clearly marked and/or color-coded to indicate the type of material/waste contained and/or the ultimate disposal option. Bladder or pillow tanks are acceptable, if the available space can support the weight of both the container and the product.

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

Empty barges have drafts of between four and six feet which would increase when these barges are filled with oil or loaded with cargo. Consequently, they may not be able to enter shallow, nearshore waters.

It may be difficult to offload recovered oil stored inside barges. Due to natural forces which affect spilled oil, recovered oil may be very viscous or emulsified, rather than free-flowing. It may be necessary to use steam to heat viscous oil before pumping it from the barge.

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 type.
- Flooding.

WASTE STORAGE (Cont'd)

- Surface water.
- Slope.
- Type of material.
- Capacity of site.
- Climatic factors.
- Land use.
- Toxic air emissions.
- Security of site.
- Access to site.
- Public accessibility.

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 mils 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 stormwater runoff collection system for the size and location of the site would be utilized. Additionally, the sites should be at least 3 meters above mean sea level.

Oily 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 should be removed and disposed of with the rest of the oily debris. Any surrounding soil which has become contaminated with oil should 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.

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 pipeline. 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.

WASTE DISPOSAL (Cont'd)

During an oil spill incident, the Company representative will consult with the federal and state On Scene Coordinators (OSCs) 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 will be prepared by a Disposal Specialist of the Company's Response Team in the form of an Incident Disposal Plan which must then be authorized by the U.S. Coast Guard and/or the EPA. An Incident Disposal Plan should 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 an appropriate combination of disposal methods are employed.

The different types of wastes generated during response operations will require different disposal methods. To facilitate the disposal of wastes, they should be separated by type for temporary storage, transport and disposal. Table F-3 lists some of the options that are available to segregate oily wastes. The table also depicts methods that can be employed to separate free and/or emulsified water from the oily liquid waste.

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.

The Company's Disposal Specialist is responsible for ensuring that all waste materials are disposed of at a Company internally approved disposal site.

Incineration

This technique entails the complete destruction of the recovered oil by high temperature incineration. 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 include:

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

WASTE DISPOSAL (Cont'd)

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 cannot 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 is 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 should 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 are to be disposed of only at Company-approved disposal facilities. The Company's Disposal Specialist is responsible for ensuring that all waste materials are disposed of at a Company internally approved disposal site. Disposal at a non-approved facility would require approval by the Company's Disposal Specialist prior to sending any waste to such a facility.

TABLE F-1
COMPARATIVE EVALUATION OF OIL SPILL TRANSFER SYSTEMS

CHARACTERISTICS OF TRANSFER SYSTEMS	CENTRIFUGAL PUMP	LOBE PUMP	GEAR PUMP	INTERMESHING SCREW	VALVE PUMP	FLEXIBLE IMPELLER	SCREW/AUGER PUMP	PROGRESSING CAVITY	PISTON PUMP	DIAPHRAGM PUMP	AIR CONVEYOR	VACUUM TRUCK	PORTABLE VACUUM PUMP	CONVEYOR BELT	SCREW CONVEYOR	WHEELED VEHICLES
High Viscosity Fluids	1	5	5	5	3	2	5	5	5	3	5	4	4	5	4	5
Low Viscosity Fluids	5	2	2	2	3	4	1	3	3	4	5	5	5	1	1	5
Transfer Rate	5	2	1	1	3	4	1	2	2	3	4	5	3	2	2	2
Debris Tolerance																
• Silt/Sand	5	3	1	1	1	4	5	5	3	4	5	5	5	5	5	5
• Gravel/Particulate	5	2	1	1	1	2	5	3	2	3	5	5	4	5	4	5
• Seaweed/Stringy Matter	2	3	4	3	2	2	4	4	3	3	4	4	3	5	4	5
Tendency to Emulsify Fluids	1	4	3	3	3	3	5	5	2	5	5	5	5	5	5	5
Ability to Run Dry	5	3	2	1	2	3	4	3	3	2	5	5	5	4	3	
Ability to Operate Continuously	5	3	2	2	2	3	3	3	4	4	3	3	3	3	2	4
Self Priming	1	3	2	2	2	5	1	5	4	4	5	5	5	5	5	
Suction/Head	2	3	2	2	3	4	1	5	5	2	5	4	3			
Back Pressure/Head	1	5	5	5	4	3	4	5	2	4	1	1	1	3	3	
Portability	5	3	3	2	4	4	3	2					2	1	1	
Ease of Repair	5	3	2	2	3	4	3	2	3	5	1	1	2	3	2	3
Cost	5	B	2	2	3	3	1	2	3	5	1	1	2	2	2	3
Comments	E,J	B	B	B,J		F	A	B	B,D	A,C,D	F,G,I	F,G,I	F,G			G,H,I

KEY TO RATINGS:**KEY TO COMMENTS:**

5 = Best; 1 = Worst

- A. Normally require remote power sources, thus are safe around flammable fluids.
 B. Should have a relief valve in the outlet line to prevent bursting hoses.
 C. Air powered units tend to freeze up in sub-freezing temperatures.
 D. Units with work ball valves are difficult to prime.
 E. Some remotely powered types are designed to fit in a tanker's butterworth hatch.
 F. Can also pump air at low pressure.
 G. Transfer is batch-wise rather than continuous.
 H. Waste must be in separate container for efficient transfer.
 I. Transportable with its own prime mover.
 J. High shear action tends to emulsify oil and water mixtures.

Table F-2

TEMPORARY STORAGE METHODS

CONTAINER	ONSHORE	OFFSHORE	SOLIDS	LIQUIDS	NOTES
Barrels	x	x	x	x	May require handling devices. Covered and clearly marked.
Tank Trucks	x	x		x	Consider road access. Barge-mounted offshore.
Dump/Flat Bed Trucks	x		x		May require impermeable liner and cover. Consider flammability of vapors at mufflers.
Barges		x	x	x	Liquids only in tanks. Consider venting of tanks.
Oil Storage Tanks	x	x		x	Consider problems of large volumes of water in oil.
Bladders	x	x		x	May require special hoses or pumps for oil transfer.

Table F-3
OILY WASTE SEPARATION AND DISPOSAL METHODS

TYPE OF MATERIAL	SEPARATION METHODS	DISPOSAL METHODS
LIQUIDS		
Non-emulsified oils	Gravity separation of free water	Incineration Use of recovered oil as refinery/production facility feedstock
Emulsified oils	Emulsion broken to release water by: <ul style="list-style-type: none"> ● heat treatment ● emulsion breaking ● chemicals ● mixing with sand ● centrifuge ● filter/belt press 	Use of recovered oil as refinery/production facility feedstock
SOLIDS		
Oil mixed with sand	Collection of liquid oil leaching from sand during temporary storage Extraction of oil from sand by washing with water or solvent Removal of solid oils by sieving	Incineration Use of recovered oil as refinery/production facility feedstock Direct disposal Stabilization with inorganic material Degradation through land farming or composting
Oil mixed with cobbles or pebbles	Screening Collection of liquid oil leaching from materials during temporary storage Extraction of oil from materials by washing with water or solvent	Incineration Direct Disposal Use of recovered oil as refinery/production facility feedstock
Oil mixed with wood, seaweed and sorbents	Screening Collection of liquid oil leaching from debris during temporary storage Flushing of oil from debris with water	Incineration Direct disposal Degradation through land farming or composting for oil mixed with seaweed or natural sorbents
Tar balls	Separation from sand by sieving	Incineration Direct disposal

APPENDIX G

MISCELLANEOUS FORMS

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Forms and Exercise Documentation File Maintenance Procedures

- Forms and exercise documentation records should be maintained in a separate file in the Facility's office filing system.
- These files must be available for presentation upon request by regulatory agency personnel.

Qualified Individual (QI) Notification Exercise

Internal Exercise Documentation

1. Date performed: _____
2. Exercise or actual response: _____
3. Person initiating exercise: _____
4. Name of person notified: _____
 Is this person identified in the response plan as the: ☐ QI ☐ AQI
5. Time initiated: _____
 Time QI or AQI responded: _____
6. Method used to contact:
☐ Telephone ☐ Pager ☐ Radio
☐ Other _____
7. Description of notification procedure:

8. Identify which components of your response plan were exercised during this particular exercise:

Organizational Design

- ☐ Notifications
- ☐ Staff mobilization
- ☐ Ability to operate within the response management system described in the plan

Response Support

- ☐ Communications
- ☐ Transportation
- ☐ Personnel support
- ☐ Equipment maintenance and support
- ☐ Procurement
- ☐ Documentation

Operational Response

- ☐ Discharge control
- ☐ Assessment of discharge
- ☐ Containment of discharge
- ☐ Recovery of spilled material
- ☐ Protection of economically and environmentally sensitive areas
- ☐ Disposal of recovered product

Certifying Signature: _____ Name (Printed): _____

Spill Management Team Tabletop Exercise

Internal Exercise Documentation

1. Date(s) performed: _____
2. Exercise or actual response? _____ Exercise _____ Actual Response
 If an exercise, announced or unannounced? _____ Announced _____ Unannounced
3. Location of tabletop: _____
4. Time started: _____ Time completed: _____
5. Response plan scenario used (check one):
 _____ Average most probable discharge
 _____ Maximum most probable discharge
 _____ Worst case discharge
 Size of (simulated) spill _____
6. Describe how the following objectives were exercised:
 - a) Spill Management Team's knowledge of oil-spill response plan:

 - b) Proper notifications:

 - c) Communications system:

 - d) Spill Management Team's ability to access contracted oil spill removal organizations:

 - e) Spill Management Team's ability to coordinate spill response with On-Scene Coordinator, state, and applicable agencies:

Spill Management Team Tabletop Exercise

Internal Exercise Documentation (Cont'd)

- f) Spill Management Team's ability to access sensitive site and resource information in the Area Contingency Plan:

7. Identify which of the 15 core components of your response plan were exercised during this particular exercise.

Organization Design:

- _____ 1. Notification
 _____ 2. Staff Mobilization
 _____ 3. Ability to operate within management system

Operational Response:

- _____ 4. Discharge Control
 _____ 5. Assessment
 _____ 6. Containment
 _____ 7. Recovery
 _____ 8. Protection
 _____ 9. Disposal

Response Support:

- _____ 10. Communications
 _____ 11. Transportation
 _____ 12. Personnel Support
 _____ 13. Equipment Maintenance and Support
 _____ 14. Procurement
 _____ 15. Documentation

8. Attach description of lesson(s) learned and person(s) responsible for follow up of corrective measures.

 Certifying Signature

Retain this form for a minimum of three (3) years (for USCG/PHMSA/MMS) or five (5) years (for EPA).

Internal Exercise Documentation Form (Annual)

Equipment Deployment Exercise

1. Date(s) performed: _____
 2. Exercise or actual response? _____
If an exercise, announced or unannounced? _____
 3. Deployment location(s):

 4. Time started: _____
Time completed: _____
 5. Equipment deployed was:
Facility - owned
Oil spill removal organization - owned if so, which OSRO? _____
Both
 6. List type and amount of all equipment (e.g., boom and skimmers) deployed and number of support personnel employed:

 7. Describe goals of the equipment deployment and list any Area Contingency Plan strategies tested (Attach a sketch of equipment deployments and booming strategies):

 8. For deployment of facility-owned equipment, was the amount of equipment deployed at least the amount necessary to respond to your facility's average most probable spill?

- Was the equipment deployed in its intended operating environment?
- _____

Internal Exercise Documentation Form (Annual)

Equipment Deployment Exercise (Cont'd)

9. For deployment of OSRO - owned equipment, was a representative sample (at least 1000 feet of each boom type and at least one of each skimmer type) deployed?

Was the equipment deployed in its intended operating environment?

10. Are all facility personnel that are responsible for response operations involved in a comprehensive training program, and all pollution response equipment involved in a comprehensive maintenance program? _____

If so, describe the program: _____

Date of last equipment inspection: _____

11. Was the equipment deployed by personnel responsible for its deployment in the event of an actual spill? _____

12. Was all deployed equipment operational? If not, why not?

Response Equipment Inspection Log

Inspector	Date	Comments

COMMUNICATION and ACCOUNTABILITY POINT Sign-In Sheet	
Date:	
Location:	
Name	Signature
Andres, Doug	
Clark, Mark	
Fleck, Chris	
Garcia, Sue	
Haynes, John	
Hughes, Lee	
Krueger, Sandra	
Lockard, Bobby	
Lonon, Clint	
McBurney, Mike	
Pate, Steve	
Phipps, Rodney	
Ryerson, Rich	
Scharp, Bradley	
Schofield, Rob	

Appendix G**Miscellaneous Forms**

COMMUNICATION and ACCOUNTABILITY POINT Sign-In Sheet (Cont'd)	
Siegel, Dean	
Strade, Joey	
Stewart, Darren	
Thiel, Doreen	
Thorn, Dave	
Tillman, Bill	
Vallejo, Carlos	
Walker, Beryl	
Westwood, Earl	
Willyard, Teresa	
Winchester, Del	
Visitors/Others:	

THREATENING PHONE CALL QUESTIONS

(b) (7)(F)



CALLER CHARACTERISTICS CHECKLIST

(b) (7)(F)

Appendix G

Miscellaneous Forms

Kinder Morgan/ CFPL
EH&S Inspection Checklist

DATE: _____

INSPECTED BY: _____

SUBJECT: Facility Environmental, Health and Safety Inspection

TERMINAL LOCATION: _____

NR = Not Required
OK = Good Condition
NO = Not Observed

CN = Correction Needed
CC = Correction Completed

DESCRIPTION	NR	OK	NO	CN	CC	COMMENTS
Fire Prevention and Protection, and Hazardous Materials (29 CFR 1910.101-120)						
Fire Hydrants						
Fire Extinguishers						
Extinguishing Systems (Racks)						
Flammables Cabinets						
Water Pressure						
Hot Work Procedures						
Confined Space Procedures						
Emergency Exit Signs and Lights						
Cylinders for safe condition						
Alarm System						
Safety Systems (29 CFR 1910.134 and 151)						
Safety Shower/Eye Wash Facilities						
Personal Emergency Equipment (i.e., SCBAs)						
Exhaust Ventilation Systems (Labs/Tanks)						
Evacuation Alarm Systems						
Lock-Out/Tag-Out Procedures						
Warning Signs and Tags						
Wind Socks						
Material Handling Equipment (29 CFR 1910.176, 178, and 181)						
Powered Industrial Trucks (Forklifts)						
Slings, Chains, Hook Assemblies						
Equipment Storage Facilities						
Slings, Chains, Hook Assemblies						
Walking/Working Surfaces (29 CFR 1910 Subpart D)						
Housekeeping						
Tank Roofs, Covers, and Guardrails						
Fixed Industrial Stairs						
Dike/Piping Walkways						
Portable Ladders						
Scaffolding						
Dock Platforms						
Tank Car Racks/Truck Racks						
Emergency Response Equipment (29 CFR 1910.120, 134, and 156)						
Boom, Absorbent Pads, Boat, etc.						
Portable Communication Equipment						
Foam Inventory						
Tank Inspections (40 CFR 112, Appendix F, 1.8.1.1, 1.8.1.2, 1.8.1.3)						
Tank, foundations, piping						
Response eq., secondary containment						
Spill prevention systems						

Appendix G

Miscellaneous Forms

Incidental Test Facilities (29 CFR 1910.1200 and 1450)

Ventilation Equipment					
Storage of Flammables and Other Chemicals					
Housekeeping					
Waste Disposal					
Sample Containers					
Fire Suppression Equipment					

Chemical Storage and Labeling (29 CFR 1910.1200)

Sample Containers					
Label Legibility					
Container Conditions (Drums)					

Personal Protective Equipment (29 CFR 1910.132 through 137)

Gloves					
Boots/Shoes					
Hard Hats					
Eyewear, Goggles, Shields					
Protective Suits (Tyveks)					
Respiratory Protective Equipment					
Contractor Compliance					

Hazardous Waste Accumulation (40 CFR 262.34)

PCW tanks emptied 150 days or less					
Drum accumulation times (<60 days)					
Drum condition					

Industrial Hygiene Survey/Hazard Evaluation (40 CFR 1910.1200)

(Operations that could have an effect on employee exposures.)

Transfer Operations					
Waste Handling Operations					
Maintenance Operations					
Confined Space Entry Operations					
Laboratory Operations					
Sample Handling and Gauging Operations					

Air Quality Management Program**Subpart XX: Tank Truck Racks Audio, Visual, Olfactory Inspection [40 CFR 60.502(j)]**

Vapor Collection System					
Vapor Processing System					
Loading Rack					
NOTE: If a vapor leak is detected, it must be repaired within fifteen (15) days of discovery. Record corrective action taken and date repaired under the "comments" column.					
Periodic Perimeter Inspections					

List of Contractors On-Site

General E, H, and S Comments:

Distribution: _____ Regional Operations Manager
 _____ Operations Manager
 _____ Facility Supervisor
 _____ Environmental Coordinator
 _____ Safety Coordinator



Discharge Report Form

PLEASE PRINT OR TYPE

DEP Form # 62-761,900(1)
Form Title: Discharge Report Form
Effective Date: July 13, 1998

Instructions are on the reverse side. Please complete all applicable blanks

1. Facility ID Number (if registered): _____ 2. Date of form completion: _____

3. General information

Facility name or responsible party (if applicable): _____
Facility Owner or Operator, or Discharger: _____
Contact Person: _____ Telephone Number: () _____ County: _____
Facility or Discharger Mailing Address: _____
Location of Discharge (street address): _____
Latitude and Longitude of Discharge (if known): _____

4. Date of receipt of test results or

discovery of confirmed discharge: _____ month/day/year

5. Estimated number of gallons

discharged: _____

6. Discharge affected: ☐ Air ☐ Soil ☐ Groundwater ☐ Drinking water well(s) ☐ Shoreline ☐ Surface water (water body name) _____

7. Method of discovery (check all that apply)

☐ Liquid detector (automatic or manual) ☐ Internal inspection ☐ Closure/Closure Assessment
☐ Vapor detector (automatic or manual) ☐ Inventory control ☐ Groundwater analytical samples
☐ Tightness test ☐ Monitoring wells ☐ Soil analytical tests or samples
☐ Pressure test ☐ Automatic tank gauging ☐ Visual observation
☐ Statistical Inventory Reconciliation ☐ Manual tank gauging ☐ Other _____

8. Type of regulated substance discharged: (check one)

☐ Unknown ☐ Used/waste oil ☐ Jet fuel ☐ Heating oil ☐ New/lube oil
☐ Gasoline ☐ Aviation gas ☐ Diesel ☐ Kerosene ☐ Mineral acid
☐ Hazardous substance - includes CERCLA substances from USTs above reportable quantities, pesticides, ammonia, chlorine, and derivatives
(write in name or Chemical Abstract Service (CAS) number) _____
☐ Other _____

9. Source of Discharge: (check all that apply)

☐ Dispensing system ☐ Pipe ☐ Barge ☐ Pipeline ☐ Vehicle
☐ Tank ☐ Fitting ☐ Tanker ship ☐ Railroad tankcar ☐ Airplane
☐ Unknown ☐ Valve failure ☐ Other Vessel ☐ Tank truck ☐ Drum
☐ Other _____

10. Cause of the discharge: (check all that apply)

☐ Loose connection ☐ Puncture ☐ Spill ☐ Collision ☐ Corrosion
☐ Fire/explosion ☐ Overfill ☐ Human error ☐ Vehicle Accident ☐ Installation failure
☐ Other _____

11. Actions taken in response to the discharge: _____

12. Comments: _____

13. Agencies notified (as applicable):

☐ State Warning Point ☐ National Response Center ☐ Florida Marine Patrol ☐ Fire Department ☐ DEP (district/person)
1-800 320-0519 1-800-424-8802 (800) 342-5367 ☐ County Tanks Program

14. To the best of my knowledge and belief, all information submitted on this form is true, accurate, and complete.

Printed Name of Owner, Operator or Authorized Representative,
or Discharger

Signature of Owner, Operator or Authorized Representative,
or Discharger

DISCHARGE REPORT FORM

Oil spills to navigable waters of the United States, and releases of reportable quantities of CERCLA hazardous substances must be reported within one hour to the National Response Center or the Florida Marine Patrol. Reports to the National Response Center of oil spills to navigable waters need not be repeated to any other federal, state, or local agency. Conditions at the site that do not involve spills to navigable waters of the United States, or CERCLA hazardous substances, that pose an immediate threat to human health or the environment, must be immediately reported to the State Warning Point or the Local Fire Department. This form must be submitted for all discharges from facilities with storage tank systems, and at other sites, in accordance with Chapters 62-761 and 62-770, F.A.C. Chapter 62-761 and 62-770, F.A.C., should be consulted for specific reporting requirements.

State Warning Point
1-800-320-0519

National Response Center
1-(800)-424-8802

Local Fire Department
(obtain local number)

This form must be used to report any confirmed discharge, or any one of the following from a storage tank system subject to Chapter 62-761, F.A.C., unless the discharge is from a previously-known and reported discharge:

1. Results of analytical or field tests of surface water, groundwater, or soils indicating the presence of contamination by:
 - a. A hazardous substance from a UST;
 - b. A regulated substance, other than petroleum products; or
 - c. Petroleum products' chemicals of concern specified in Chapter 62-770, F.A.C.;
2. A spill or overflow event of a regulated substance to soil equal to or exceeding 25 gallons, unless the regulated substance has a more stringent reporting requirement specified in CFR Title 40, Part 302;
3. Free product or sheen of a regulated substance present in surface water, groundwater, soils, basements, sewers, and utility lines at the facility or in the surrounding area; or
4. Soils stained by regulated substances observed during a closure assessment performed in accordance with Rule 62-761.800, F.A.C.

A copy of this form must be delivered or faxed to the County within 24 hours of the discovery of a discharge, or before the close of the next business day. It is recommended that the original copy be sent in the mail. If the discharge occurs at a county-owned facility, a copy of the form must be faxed or delivered to the local FDEP District office. A discharge of petroleum or petroleum products from a source other than a regulated storage tank system must be reported within one week of discovery in accordance with Rule 62-770.250, F.A.C.

FDEP District Office Addresses:

Northwest District
160 Governmental Center
Pensacola FL 32501-5794
Phone: 850-595-8360
FAX: 850-595-8417

Northeast District
7825 Baymeadows Way Suite B 200
Jacksonville FL 32256-7590
Phone: 904-448-4300
FAX: 904-448-4362

Central District
3319 Maguire Blvd. Suite 232
Orlando, FL 32803-3767
Phone: 407-894-7555
FAX: 407-897-2966

Southwest District
3804 Coconut Palm Dr.
Tampa FL 33619-8218
Phone: 813-744-6100
FAX: 813-744-6125

South District
2295 Victoria Ave. Suite 364
Ft. Myers FL 33901-2549
Phone: 813-332-6975
FAX: 813-332-6969

Southeast District
400 N. Congress Ave.
West Palm Beach, FL 33416-5425
Phone: 561-681-6600
FAX: 561-681-6790

[Effective date of the rule]

Appendix G

Miscellaneous Forms



Incident Notification Form

PLEASE PRINT OR TYPE

Instructions are on the reverse side. Please complete all applicable blanks

DEP Form # 62-761.900(6)

Form Title Incident Notification Form

Effective Date July 13, 1998

1. Facility ID Number (if registered): _____ 2. Date of form completion: _____

3. General information

Facility name: _____
 Facility Owner or Operator: _____
 Contact Person: _____ Telephone number: () _____ County: _____
 Facility mailing address: _____
 Location of incident (facility street address): _____
 Latitude and Longitude of incident (If known.): _____

4. Date of Discovery of incident: _____ month/day/year

5. Monitoring method that indicates a possible release or an incident: (check all that apply)

- | | | |
|--|---|---|
| <input type="checkbox"/> Liquid detector (automatic or manual) | <input type="checkbox"/> Groundwater samples | <input type="checkbox"/> Closure |
| <input type="checkbox"/> Vapor detector (automatic or manual) | <input type="checkbox"/> Monitoring wells | <input type="checkbox"/> Inventory control |
| <input type="checkbox"/> Tightness test | <input type="checkbox"/> Internal inspection | <input type="checkbox"/> Statistical Inventory Reconciliation |
| <input type="checkbox"/> Pressure test | <input type="checkbox"/> Odors in the vicinity | <input type="checkbox"/> Groundwater analytical samples |
| <input type="checkbox"/> Breach of integrity test | <input type="checkbox"/> Automatic tank gauging | <input type="checkbox"/> Soil analytical tests or samples |
| <input type="checkbox"/> Visual observation | <input type="checkbox"/> Manual tank gauging | <input type="checkbox"/> Other _____ |

6. Type of regulated substance stored in the storage system: (check one)

- | | | |
|--------------------------------------|---|---------------------------------------|
| <input type="checkbox"/> Diesel | <input type="checkbox"/> Used/waste oil | <input type="checkbox"/> New/lube oil |
| <input type="checkbox"/> Gasoline | <input type="checkbox"/> Aviation gas | <input type="checkbox"/> Kerosene |
| <input type="checkbox"/> Heating oil | <input type="checkbox"/> Jet fuel | <input type="checkbox"/> Other _____ |
- ☐ Hazardous substance - includes CERCLA substances, pesticides, ammonia, chlorine, and their derivatives, and mineral acids.
 (write in name or Chemical Abstract Service (CAS) number) _____

7. Incident involves or originated from a: (check all that apply)

- | | | | | |
|---|---|---|--|---|
| <input type="checkbox"/> Tank | <input type="checkbox"/> Unusual operating conditions | <input type="checkbox"/> Dispensing equipment | <input type="checkbox"/> Pipe | <input type="checkbox"/> Overfill protection device |
| <input type="checkbox"/> Piping sump | <input type="checkbox"/> Release detection equipment | <input type="checkbox"/> Secondary containment system | <input type="checkbox"/> Other | <input type="checkbox"/> Dispenser Liners |
| <input type="checkbox"/> Loss of >100 gallons to an impervious surface other than secondary containment | | | <input type="checkbox"/> Loss of >500 gallons within secondary containment | |

8. Cause of the incident, if known: (check all that apply)

- | | | | |
|---|--|---|--------------------------------------|
| <input type="checkbox"/> Overfill (<25 gallons) | <input type="checkbox"/> Spill (<25 gallons) | <input type="checkbox"/> Theft | <input type="checkbox"/> Corrosion |
| <input type="checkbox"/> Faulty Probe or sensor | <input type="checkbox"/> Human error | <input type="checkbox"/> Installation failure | <input type="checkbox"/> Other _____ |

9. Actions taken in response to the incident: _____

10. Comments: _____

11. Agencies notified (as applicable):

- | | | |
|---|--|--|
| <input type="checkbox"/> Fire Department. | <input type="checkbox"/> Local Program | <input type="checkbox"/> DEP (district/person) |
|---|--|--|

12. To the best of my knowledge and belief, all information submitted on this form is true, accurate, and complete.

Printed Name of Owner, Operator or Authorized Representative _____

Signature of Owner, Operator or Authorized Representative. _____

Instructions for completing the Incident Notification Form

This form must be completed to notify the County of all incidents, or of the following suspected releases:

1. A failed or inconclusive tightness, pressure, or breach of integrity test,
2. Internal inspection results, including perforations, corrosion holes, weld failures, or other similar defects that indicate that a release has occurred.
3. Unusual operating conditions such as the erratic behavior of product dispensing equipment, the sudden loss of product from the storage tank system, or any unexplained presence of water in the tank, unless system equipment is found to be defective but not leaking;
4. Odors of a regulated substance in surface or groundwater, soils, basements, sewers and utility lines at the facility or in the surrounding area;
5. The loss of a regulated substance from a storage tank system exceeding 100 gallons on impervious surfaces other than secondary containment, driveways, airport runways, or other similar asphalt or concrete surfaces;
6. The loss of a regulated substance exceeding 500 gallons inside a dike field area with secondary containment; and
7. A positive response of release detection devices or methods described in Rule 62-761.610, F.A.C., or approved under Rule 62-761.850, F.A.C. A positive response shall be the indication of a release of regulated substances, an exceedance of the Release Detection Response Level or a breach of integrity of a storage tank system.

If the investigation of an incident indicates that a discharge did not occur (for example, the investigation shows that the situation was the result of a theft or a malfunctioning electronic release detection probe), then a letter of retraction should be sent to the County within fourteen days with documentation that verifies that a discharge did not occur. If within 24 hours of an incident, or before the close of the County's next business day, the investigation of the incident does not confirm that a discharge has occurred, an Incident Report Form need not be submitted.

A copy of this form must be delivered or faxed to the County within 24 hours of the discovery of an incident, or before the close of the next business day. It is recommended that the original copy be sent in the mail. If the incident occurs at a county-owned facility, a copy of the form must be faxed or delivered to the local DEP District office.

DEP District Office Addresses:

Northwest District
160 Governmental Center
Pensacola FL. 32501-5794
Phone: 850-595-8360
FAX: 850-595-8417

Northeast District
7825 Baymeadows Way Suite B 200
Jacksonville FL. 32256-7590
Phone: 904-488-4300
FAX: 904-488-4366

Central District
3319 Maguire Blvd. Suite 232
Orlando, FL. 32803-3767
Phone: 407-894-7555
FAX: 407-897-2966

Southwest District
3804 Coconut Palm Dr.
Tampa FL. 33619-8218
Phone: 813-744-6100
FAX: 813-744-6125

South District
2295 Victoria Ave. Suite 364
Ft. Myers FL. 33901-2549
Phone: 813-332-6975
FAX: 813-332-6969

Southeast District
400 N. Congress Ave.
West Palm Beach, FL. 33416-5425
Phone: 561-681-6600
FAX: 561-681-6790

(02/01/98)

KMLP INCIDENT REPORT**Case Number:****Investigation**

Case Number:

Status:

Region:

RC:

Incident Date:

Incident Time:

Time Zone:

Work/Base ☐ Yes ☐ NoKM Location: ☐ Yes ☐ No

KM State:

Location:

Address:

City:

State:

Zip:

Specific Location:

Desc of Cause:

Desc of Incident:

Action Taken:

Safety Related: ☐ Yes ☐ NoAbnormal Operation: ☐ Yes ☐ No

Ensure Safety:

Root Cause: ☐Correction Action: ☐Personnel Issue: ☐Other: ☐No Further Action: ☐

Incident Type:

Incident Category:

KMLP INCIDENT REPORT (Cont'd)**Case Number:****Supervisor Follow-Up**

Incident Severity:

Incident Probability:

Rating Incident Code:

Remedial Action:

First Name	Last Name	Remedial Action	Details	Target Date	Date Completed
Investigator:					
Date Completed:					
Investigator:					
Date Completed:					
Investigator:					
Date Completed:					
EHS Rep:					
Date Completed:					
Supervisor:					
Date Completed:					
DOT Rep:					
Date Completed:					
API Reportable:		<input type="checkbox"/> Yes <input type="checkbox"/> No			
Recordable:		<input type="checkbox"/> Yes <input type="checkbox"/> No			
Root Cause Completed:		<input type="checkbox"/> Yes <input type="checkbox"/> No			

EMERGENCY RESPONSE EQUIPMENT INSPECTION CHECKLIST

Qty.	Item Description	Item Needs Replacement and/or Repair	Comments	Inspector/Date
Emergency Response Trailer #1				
5	Flash lights with batteries			
5	Round point shovels			
6	Iron rakes			
2	Flat shovels			
2	Sling blades			
1	10-lb sledge hammer			
10	Fence stakes			
1	Bundle - Wood stakes			
10 box	Nitrile Gloves			
1	Hand air pump			
2 bottle	Hand Cleaner			
1	First aid kit			
5 roll	Caution tape			
7 roll	Duct tape			
1	Bundle – Shop towels			
18 box	Drink cups			
2	Water cooler			
10 roll	Paper towels			
12 roll	Toilet paper			
4 set	Emergency lights			
2	Portable fans			
3	Hard hats			
3 box	40-55 gallon drum liners			
200'	8" boom			
12	Life jackets			
500'	3/4" rope			
500'	Poly rope			
3	Utility Knives			
7 sets	Rain gear			
8	Half-face masks			
21	Tyvek suits			
1	Packet with boat registration			

EMERGENCY RESPONSE EQUIPMENT INSPECTION CHECKLIST (Cont'd)

Qty.	Item Description	Item Needs Replacement and/or Repair	Comments	Inspector/Date
Emergency Response Trailer #1 (continued)				
30 pair	Heavy duty gloves			
21	Writing pads			
2	Clip boards			
6	Response manuals			
3	Heavy duty tarps			
1	Packet with boat registration			
Emergency Response Trailer #2				
300'	8" boom			
24 bale	Spill pads			
1 box	Half mask (medium)			
1 box	Half mask (small)			
50'	2" boom			
2 ea	Honda 6500 generators			
1 ea	Coleman 5000 generator			

REGULATORY CROSS REFERENCE

PAGE

DOT/PHMSA 49 CFR Part 194 Final Rule – March 25, 2005 Cross Reference.....Cross Ref-2

Regulatory Cross Reference

DOT/PHMSA 49 CFR Part 194

DOT/PHMSA 49 CFR Part 194 CROSS REFERENCE

§ 194.105	BRIEF DESCRIPTION	LOCATION in PLAN
(a)	...determine the worst case discharge...provide methodology, including calculations, used to arrive at the volume.	App B
(b)	The worst case discharge is the largest volume, in barrels, of the following:	----
(b)(1)	...maximum release time in hours, plus the maximum shutdown response time in hours, multiplied by the maximum flow rate expressed in barrels per hour, plus the largest line drainage volume after shutdown of the line section(s)...	App B
(b)(2)	The largest foreseeable discharge for the line section(s) within a response zone, expressed in barrels, based on the maximum historic discharge, if one exists, adjusted for any subsequent corrective or preventative action taken.	App B
(b)(3)	If the response zone contains one or more breakout tanks, the capacity of the single largest tank or battery of tanks within a single secondary containment system, adjusted for the capacity or size of the secondary containment system, expressed in barrels.	N/A
(b)(4)	Operators may claim prevention credits for breakout tank secondary containment and other specific spill prevention measures as follows:...	N/A

§ 194.107	BRIEF DESCRIPTION	LOCATION in PLAN
(a)	Each response plan must plan for resources for responding, to the maximum extent practicable, to a worst case discharge, and to a substantial threat of such a discharge.	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:	Foreword, § 1.5
(b)(1)	As a minimum to be consistent with the NCP as a facility response plan must:	-----
(b)(1)(i)	Demonstrate an operator's clear understanding of the function of the Federal response structure...	§ 4.0
(b)(1)(ii)	Establish provisions to ensure the protection of safety at the response site; and	§ 4.8, 5.2
(b)(1)(iii)	Identify the procedures to obtain any required Federal and State permissions for using alternative response strategies such as in-situ burning and dispersants...	§ 6.8
(b)(2)	As a minimum, to be consistent with the applicable ACP the plan must:	-----
(b)(2)(i)	Address the removal of a worst case discharge and the mitigation or prevention of a substantial threat of a worst case discharge;	§ 3.0, App C, F
(b)(2)(ii)	Identify environmentally and economically sensitive areas;	§ 6.0
(b)(2)(iii)	Describe the responsibilities of the operator and operator and of Federal, State and local agencies in removing a discharge and in mitigating or preventing a substantial threat of a discharge; and	§ 4.0
(b)(2)(iv)	Establish the procedures for obtaining an expedited decision on use of dispersants or other chemicals.	§ 6.8

Regulatory Cross Reference

DOT/PHMSA 49 CFR Part 194

DOT/PHMSA 49 CFR Part 194 CROSS REFERENCE (Cont'd)

§ 194.107	BRIEF DESCRIPTION	LOCATION in PLAN
(c)	Each response plan must include:	----
(c)(1)	A core plan consisting of ...	----
(c)(1)(i)	An information summary as required in § 194.113,	Fig 1.1
(c)(1)(ii)	Immediate notification procedures,	§ 2.0
(c)(1)(iii)	Spill detection and mitigation procedures,	§ 3.0, App C
(c)(1)(iv)	The name, address, and telephone number of the oil spill response organization, if appropriate,	Fig 2.6, App A
(c)(1)(v)	Response activities and response resources,	§ 3.0, App A
(c)(1)(vi)	Names and telephone numbers of Federal, state, and local agencies which the operator expects to have pollution control responsibilities or support,	Fig 2.5
(c)(1)(vii)	Training procedures,	App D.1
(c)(1)(viii)	Equipment testing,	App D.2
(c)(1)(ix)	Drill program – an operator will satisfy the requirement for a drill program by following the National Preparedness for Response Exercise Program (PREP) guidelines. An operator choosing not to follow PREP guidelines must have a drill program that is equivalent to PREP. The operator must describe the drill program in the response plan and OPS will determine if the program is equivalent to PREP.	App D.2
(c)(1)(x)	Plan review and update procedures;	§ 1.4
(c)(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. An operator submitting a response plan for a single response zone does not need to have a core plan and a response zone appendix. The operator of a single response zone onshore pipeline shall have a single summary in the plan that contains the required information in § 194.113.7; and.	Fig 1.1
(c)(3)	A description of the operator's response management system including the functional areas of finance, logistics, operations, planning, and command. The plan must demonstrate that the operator's response management system uses common terminology and has a manageable span of control, a clearly defined chain of command, and sufficient trained personnel to fill each position.	§ 4.0

§ 194.111	BRIEF DESCRIPTION	LOCATION in PLAN
(a)	Each operator shall maintain relevant portions of its response plan at the operator's headquarters and at other locations from which response activities may be conducted, for example, in field offices, supervisor's vehicles, or spill response trailers.	Foreword Distribution List

Regulatory Cross Reference

DOT/PHMSA 49 CFR Part 194

DOT/PHMSA 49 CFR Part 194 CROSS REFERENCE (Cont'd)

§ 194.113	BRIEF DESCRIPTION	LOCATION in PLAN
(a)	The information summary for the core plan, required by § 194.107, must include:	----
(a)(1)	The name and address of the operator.	Fig 1.1
(a)(2)	For each response zone which contains one or more line sections that meet the criteria for determining significant and substantial harm as described in § 194.103, a listing and description of the response zones, including county(s) and state(s).	Fig 1.1
(b)	The information summary for the response zone appendix, required in § 194.107, must include:	----
(b)(1)	The information summary for the core plan.	Fig 1.1
(b)(2)	The names or titles and 24-hour telephone numbers of the qualified individual(s) and at least one alternate qualified individual(s);	Fig 1.1
(b)(3)	The description of the response zone, including county(s) and state(s), for those zones in which a worst case discharge could cause substantial harm to the environment.	Fig 1.1
(b)(4)	A list of line sections for each pipeline contained in the response zone, identified by milepost or survey station number, or other operator designation.	Fig 1.1
(b)(5)	The basis for the operator's determination of significant and substantial harm.	Fig 1.1
(b)(6)	The type of oil and volume of the worst case discharge.	Fig 1.1

§ 194.115	BRIEF DESCRIPTION	LOCATION in PLAN
(a)	Each operator shall identify and ensure, by contract or other approved means, the resources necessary to remove, to the maximum extent practicable, a worst case discharge and to mitigate or prevent a substantial threat of a worst case discharge.	App A
(b)	An operator shall identify in the response plan the response resources which are available to respond within the time specified, after discovery of a worst case discharge, or to mitigate the substantial threat of such a discharge.	§ 6.0, App A

§ 194.117	BRIEF DESCRIPTION	LOCATION in PLAN
(a)	Each operator shall conduct training to ensure that	----
(a)(1)	All personnel know --	----
(a)(1)(i)	Their responsibilities under the response plan	App D.1
(a)(1)(ii)	The name and address of, and the procedure for contacting, the operator on a 24-hour basis	§ 2.0, Fig 2.2
(a)(1)(iii)	The name of, and procedures for contacting, the qualified individual on a 24-hour basis	§ 2.0, Fig 1.1, Fig. 2.2

Regulatory Cross Reference

DOT/PHMSA 49 CFR Part 194

DOT/PHMSA 49 CFR Part 194 CROSS REFERENCE (Cont'd)

§ 194.117	BRIEF DESCRIPTION	LOCATION in PLAN
(a)(2)	Reporting personnel know --	----
(a)(2)(i)	The content of the information summary of the response plan.	Fig 1.1
(a)(2)(ii)	The toll-free telephone number of the National Response Center	Fig 2.3, Fig. 2.5
(a)(2)(iii)	The notification process	§ 2.0
(a)(3)	Personnel engaged in response activities know --	----
(a)(3)(i)	The characteristics and hazards of the oil discharged	§ 3.0
(a)(3)(ii)	The conditions that are likely to worsen emergencies, including the consequences of facility malfunctions or failures, and the appropriate corrective actions.	§ 3.0
(a)(3)(iii)	The steps necessary to control any accidental discharge of oil and to minimize the potential for fire, explosion, toxicity, or environmental damage	§ 3.0
(a)(3)(iv)	The proper fire fighting procedures and use of equipment, fire suits, and breathing apparatus	§ 2.0, 3.0, App A
(b)	Each operator shall maintain a training record for each individual that has been trained as required by this section. These records must be maintained in the following manner as long as the individual is assigned duties under the response plan	----
(b)(1)	Records for operator personnel must be maintained at the operator's headquarters	App D.1
(b)(2)	Records for personnel engaged in response, other than operator personnel, shall be maintained as determined by the operator.	App D.1
(b)(3)	Nothing in this section relieves as operator from the responsibility to ensure that all response personnel are trained to meet the OSHA standards for emergency response operations in 29 CFR 1910.120...	App D.1

§ 194.119	BRIEF DESCRIPTION	LOCATION in PLAN
(a)	Each owner shall submit two copies...	Distribution
(b)	...PHMSA will notify the operator of any alleged deficiencies...	----
(c)	The operator...may petition PHMSA for reconsideration within 30 days...	----
(d)	...PHMSA will approve the Response Plan...	----
(e)	...The operator may submit a certification to PHMSA...that the operator has obtained, through contract or other approved means, the necessary private personnel and equipment to record, to the maximum extent practicable, to a worst case discharge...	Operator's Statement (FWD)
(f)	...PHNSA may require an operator to provide a copy of the response plan to the OSC...	----

GLOSSARY OF TERMS / ACRONYMS

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Glossary of Terms/Acronyms

This glossary contains definitions of terms that will be used frequently during the course of response operations.

Abandon Pipeline: A pipeline or pipeline segment which has met the criteria of an Out-Of-Service pipeline (purged, sealed and disconnected from an operating system) but will not be maintained to minimum USDOT inspection and maintenance standards.

Activate: The process of mobilizing personnel and/or equipment within the response organization to engage in response operations.

Activator: An individual in the response organization whose responsibilities include notifying other individuals or groups within the organization to mobilize personnel and/or equipment.

Active Pipeline: A pipeline or pipeline segment which is in service whether or not the pipeline is fully operational. This includes pipelines which may have been utilized to transport hazardous liquids but are currently static or unused.

Adverse Weather: The weather conditions that will be considered when identifying response systems and equipment in a response plan for the applicable operating environment. Factors to consider include significant wave height, ice, temperature, weather - related visibility, and currents within the Captain of the Port (COTP) zone in which the systems or equipment are intended to function.

Agency Representative: Individual assigned to an incident from an agency who has been delegated full authority to make decisions on all matters affecting that agency's participation in response operations.

Alert: Means an incident has occurred at the terminal which has the potential to affect off-site locations.

Area Committee: As defined by Sections 311(a)(18) and (j)(4) of CWA, as amended by OPA, means the entity appointed by the President consisting of members from Federal, State, and local agencies with responsibilities that include preparing an Area Contingency Plan for the area designated by the President. The Area Committee may include ex-officio (i.e., non-voting) members (e.g., industry and local interest groups).

Area Contingency Plan: As defined by Sections 311(a)(19) and (j)(4) of CWA, as amended by OPA, means the plan prepared by an Area Committee, that, in conjunction with the NCP, shall address the removal of a discharge including a worst-case discharge and the mitigation or prevention of a substantial threat of such a discharge from a vessel,

offshore facility, or onshore facility operating in or near an area designated by the President.

Average Most Probable Discharge: A discharge of the lesser of 50 barrels or 1% of the volume of the worst case discharge.

Barrel (bbl): Measure of space occupied by 42 U.S. gallons at 60 degrees Fahrenheit.

Bioremediation Agents: Means microbiological cultures, enzyme additives, or nutrient additives that are deliberately introduced into an oil discharge and that will significantly increase the rate of biodegradation to mitigate the effects of the discharge.

Boom: A piece of equipment or a strategy used to either contain free floating oil to a confined area or protect an uncontaminated area from intrusion by oil.

Booming Strategies: Strategic techniques which identify the location and quantity of boom required to protect certain areas. These techniques are generated by identifying a potential spill source and assuming certain conditions which would affect spill movement on water.

Breakout Tank: Means a tank used to (a) relieve surges in a hazardous liquid pipeline system or (b) receive and store hazardous liquid transported by a pipeline for reinjection and continued transportation by pipeline.

Bulk: Material that is stored or transported in a loose, unpackaged liquid, powder, or granular form capable of being conveyed by a pipe, bucket, chute, or belt system.

Captain of the Port Zone (COTP): Means a zone specified in 33 CFR Part 3 and the seaward extension of that zone to the outer boundary of the exclusive economic zone (EEZ).

CERCLA: Means the Comprehensive Environmental Response, Compensation Liability Act regarding hazardous substance releases into the environment and the cleanup of inactive hazardous waste disposal sites.

Chemical Agents: Means those elements, compounds, or mixtures that coagulate, disperse, dissolve, emulsify, foam, neutralize, precipitate, reduce, solubilize, oxidize, concentrate, congeal, entrap, fix, make the pollutant mass more rigid or viscous, or otherwise facilitate the mitigation of deleterious effects or the removal of the oil pollutant

Glossary of Terms/Acronyms

from the water. Chemical agents include biological additives, dispersants, sinking agents, miscellaneous oil spill control agents, and burning agents, but do not include solvents.

CHEMTREC: Means the Chemical Transportation Emergency Center operated by Chemical Manufacturers Association. Provides information and/or assistance to emergency responders. Can be reached 24 hours a day by calling 800-424-9300.

Clean-up Contractor: Persons contracted to undertake a response action to clean up a spill.

Cleanup: For the purposes of this document, cleanup refers to the removal and/or treatment of oil, hazardous substances, and/or the waste or contaminated materials generated by the incident. Cleanup includes restoration of the site and its natural resources.

Coastal Waters: For the purpose of classifying the size of discharges, means the waters of the coastal zone except for the Great Lakes and specified ports and harbors on inland rivers.

Coastal Zone: As defined for the purpose of the NCP, means all United States waters subject to the tide, United States waters of the Great Lakes, specified ports and harbors on inland rivers, waters of the contiguous zone, other waters of the high seas subject to the NCP, and the land surface or land substrata, ground waters, and ambient air proximal to those waters. The term coastal zone delineates an area of federal responsibility for response action. Precise boundaries are determined by EPA/USCG agreements and identified in federal regional contingency plans.

Coast Guard District Response Group (DRG): As provided for by CWA sections 311(a)(20) and (j)(3), means the entity established by the Secretary of the department in which the USCG is operating within each USCG district and shall consist of: the combined USCG personnel and equipment, including firefighting equipment, of each port within the district; additional prepositioned response equipment; and a district response advisory team.

Command: The act of controlling manpower and equipment resources by virtue of explicit or delegated authority.

Command Post: A site located at a safe distance from the spill site where response decisions are made, equipment and manpower deployed, and communications handled. The Incident Commander and the On-Scene Coordinators may direct the on-scene response from this location.

Communications Equipment: Equipment that will be utilized during response operations to maintain communication between the Company employees, contractors, Federal/State/Local agencies. (radio/ telephone equipment and links)

Containment Boom: A flotation/freeboard device, made with a skirt/curtain, longitudinal strength member, and ballast unit/weight designed to entrap and contain the product for recovery.

Contingency Plan: (1) A document used by federal, state, and local agencies to guide their planning and response procedures regarding spills of oil, hazardous substances, or other emergencies; and/or (2) a document used by industry as a response plan to spills of oil, hazardous substances, or other emergencies occurring upon their vessels or at their facilities.

Contract or Other Approved Means: For OPA 90, a written contract with a response contractor; certification by the facility owner or operator that personnel and equipment are owned, operated, or under the direct control of the facility, and available within the stipulated times; active membership in a local or regional oil spill removal organization; and/or the facility's own equipment.

Critical Areas to Monitor: Areas which if impacted by spilled oil may result in threats to public safety or health.

Cultural Resources: Current, historic, prehistoric and archaeological resources which include deposits, structures, ruins, sites, buildings, graves, artifacts, fossils, or other objects of antiquity which provide information pertaining to the historical or prehistorical culture of people in the state as well as to the natural history of the state.

Damage Assessment: The process of determining and measuring damages and injury to the human environment and natural resources, including cultural resources. Damages include differences between the conditions and use of natural resources and the human environment that would have occurred without the incident, and the conditions and use that ensued following the incident. Damage assessment includes planning for restoration and determining the costs of restoration.

Decontamination: The removal of hazardous substances from personnel and their equipment necessary to prevent adverse health effects.

Discharge: Any spilling, leaking, pumping, pouring, emitting, emptying, or dumping.

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Dispersants: Means those chemical agents that emulsify, disperse, or solubilize oil into the water column or promote the surface spreading of oil slicks to facilitate dispersal of the oil into the water column.

Diversion Boom: A floatation/freeboard device, made with a skirt/curtain, longitudinal strength member, and ballast unit/weight designed to deflect or divert the product towards a pick up point, or away from certain areas.

Drinking Water Supply: As defined by Section 101(7) of CERCLA, means any raw or finished water source that is or may be used by a public water system (as defined in the Safe Drinking Water Act) or as drinking water by one or more individuals.

Economically Sensitive Areas: Those areas of explicit economic importance to the public that due to their proximity to potential spill sources may require special protection and include, but are not limited to: potable and industrial water intakes; locks and dams; and public and private marinas.

Emergency Planning Zone: Means the area designated by the jurisdiction boundaries of those communities which are within a radial distance of one-half mile from the terminal.

Emergency Response: Means the response to any occurrence which results, or is likely to result, in a release of a hazardous substance due to an event.

Emergency Service: Those activities provided by state and local government to prepare for and carry out any activity to prevent, minimize, respond to, or recover from an emergency.

Emulsion: Suspension of oil in water.

Environmentally Sensitive Areas: Streams and water bodies, aquifer recharge zones, springs, wetlands, agricultural areas, bird rookeries, endangered or threatened species (flora and fauna) habitat, wildlife preserves or conservation areas, parks, beaches, dunes, or any other area protected or managed for its natural resource value.

Exclusive Economic Zone: Means the zone contiguous to the territorial sea of the United States extending to a distance up to 200 nautical miles from the baseline from which the breadth of the territorial sea is measured.

Facility (DOT): Means new and existing pipe, rights-of-way and any equipment, facility, or building used in the transportation of hazardous liquids or carbon dioxide.

Facility (EPA/USCG): Either an onshore facility or an offshore facility and includes, but is not limited to structures, equipment, and appurtenances thereto, used or capable of being used to transfer oil to or from a vessel or a public vessel. A facility includes federal, state, municipal, and private facilities.

Facility That Could Reasonably Be Expected To Cause Significant And Substantial Harm: Means any fixed MTR on-shore facility (including piping and any structures that are used for the transfer of oil between a vessel and a facility) that is capable of transferring oil, in bulk, to or from a vessel of 250 barrels or more, and a deepwater port. This also includes any facility specifically identified by the COTP.

Facility That Could Reasonably Be Expected To Cause Substantial Harm: Means any mobile MTR facility that is capable of transferring oil to or from a vessel with a capacity of 250 barrels or more. This also includes any facility specifically identified by the COTP.

Facility Operator: The person who owns, operates, or is responsible for the operation of the facility.

Federal Fund: The spill liability trust fund established under OPA.

Federal Regional Response Team (RRT): The federal response organization (consisting of representatives from selected federal and state agencies) which acts as a regional body responsible for planning and preparedness before an oil spill occurs and providing advice to the FOSC in the event of a major or substantial spill.

Federal Response Plan (FRP): Means the agreement signed by 25 federal departments and agencies in April 1987 and developed under the authorities of the Earthquake Hazards Reduction Act of 1977 and the Disaster Relief Act of 1974, as amended by the Stafford Disaster Relief Act of 1988.

First Responders, First Response Agency: A public health or safety agency (e.g., fire service or police department) charged with responding to a spill during the emergency phase and alleviating immediate danger to human life, health, safety, or property.

General Emergency: Means an incident has occurred and the affected community is implementing protective actions.

Handle: To transfer, transport, pump, treat, process, store, dispose of, drill for, or produce.

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Harmful Quantity Of Oil: The presence of oil from an unauthorized discharge in a quantity sufficient either to create a visible film or sheen upon or discoloration of the surface of the water or a shoreline, tidal flat, beach, or marsh, or to cause a sludge or emulsion to be deposited beneath the surface of the water or on a shoreline, tidal flat, beach, or marsh.

Hazardous Chemicals: Means all chemicals which constitute a physical hazard or a health hazard as defined by 29 CFR 1910.1200, with the exceptions listed in section 311(e). This term comprises approximately 90 percent of all chemicals.

Hazardous Material: Any nonradioactive solid, liquid, or gaseous substance which, when uncontrolled, may be harmful to humans, animals, or the environment. Including but not limited to substances otherwise defined as hazardous wastes, dangerous wastes, extremely hazardous wastes, oil, or pollutants.

Hazardous Substance: Any substance designated as such by the Administrator of the EPA pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act; regulated pursuant to Section 311 of the Federal Water Pollution Control Act, or discharged by the SERC.

Hazardous Waste: Any solid waste identified or listed as a hazardous waste by the Administrator of the EPA pursuant to the federal Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA), 42 U.S.C., Section 6901, et seq as amended. The EPA Administrator has identified the characteristics of hazardous wastes and listed certain wastes as hazardous in Title 40 of the Code of Federal Regulations, Part 261, Subparts C and D respectively.

HAZMAT: Hazardous materials or hazardous substances, exposure to which may result in adverse effects on health or safety of employees.

HAZWOPER: Hazardous Waste Operations and Emergency Response Regulations published by OSHA to cover worker safety and health aspects of

Health Hazard: Means a chemical for which there is statistically significant evidence based on at least one study conducted in accordance with established scientific principals that acute or chronic health effects may occur in exposed employees.

Heat Stress: Dangerous physical condition caused by over exposure to extremely high temperatures.

Hypothermia: Dangerous physical condition caused by over exposure to freezing temperatures.

Incident: Any event that results in a spill or release of oil or hazardous materials. Action by emergency service personnel may be required to prevent or minimize loss of life or damage to property and/or natural resources.

Incident Briefing Meeting: Held to develop a comprehensive, accurate, and up-to-date understanding of the incident, nature of status of control operations, and nature and status of response operations; ensure the adequacy of control and response operations; begin to organize control and response operations; and prepare for interactions with outside world.

Incident Command Post (ICP): That location at which all primary command functions are executed.

Incident Command System (ICS): The combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure, with responsibility for the management of assigned resources at an incident.

Incident Commander (IC): The one individual in charge at any given time of an incident. The Incident Commander will be responsible for establishing a unified command with all on-scene coordinators.

Indian Tribe: As defined in OPA section 1001, means any Indian tribe, band, nation, or other organized group or community, but not including any Alaska Native regional or village corporation, which is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians and has governmental authority over lands belonging to or controlled by the Tribe.

Initial Cleanup: Remedial action at a site to eliminate acute hazards associated with a spill. An initial clean-up action is implemented at a site when a spill of material is an actual or potentially imminent threat to public health or the environment, or difficulty of cleanup increases significantly without timely remedial action. All sites must be evaluated to determine whether initial cleanup is total cleanup, however, this will not be possible in all cases due to site conditions (i.e., a site where overland transport or flooding may occur).

Initial Notification: The process of notifying the necessary Company personnel and Federal/ State/Local agencies that a spill has occurred, including all pertinent available information surrounding the incident.

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Initial Response Actions: The immediate actions that are to be taken by the spill observer after detection of a spill.

Inland Area: means the area shoreward of the boundary lines defined in 46 CFR part 7; in the Gulf of Mexico, it means the area shoreward of the lines of demarcation (COLREG lines) as defined in §80.740 through 80.850 of this chapter. The inland area does not include the Great Lakes.

Inland Waters: State waters not considered coastal waters; lakes, rivers, ponds, streams, underground water, et. al.

Inland Zone: Means the environment inland of the coastal zone excluding the Great Lakes, and specified ports and harbors on inland rivers. The term inland zone delineates an area of federal responsibility for response action. Precise boundaries are determined by EPA/USCG agreements and identified in federal regional contingency plans.

Interim Storage Site: A site used to temporarily store recovered oil or oily waste until the recovered oil or oily waste is disposed of at a permanent disposal site. Interim storage sites include trucks, barges, and other vehicles, used to store waste until the transport begins.

Internally Reported Event: An incident that does not meet the reporting criteria established for notification of off-site authorities. No evacuation has occurred.

Lead Agency: The government agency that assumes the lead for directing response activities.

Lead Federal Agency: The agency which coordinates the federal response to incident on navigable waters. The lead federal agencies are:

- **U.S. Coast Guard:** Oil and chemically hazardous materials incidents on navigable waters.
- **Environmental Protection Agency:** Oil and chemically hazardous materials incidents on inland waters.

Lead State Agency: The agency which coordinates state support to federal and/or local governments or assumes the lead in the absence of federal response.

Line Section: Means a continuous run of pipe between adjacent pressure pump stations, between a pressure pump station and terminal or breakout

tanks, between a pressure pump station and a block valve, or between adjacent block valves.

Light Oil Terminal Operations: Means the storage and distribution of gasoline and diesel fuel to wholesale customers.

Loading: Transfer from Facility to vehicle.

Local Emergency Planning Committee (LEPC): A group of local representatives appointed by the State Emergency Response Commission (SERC) to prepare a comprehensive emergency plan for the local emergency planning district, as required by the Emergency Planning and Community Right-to-Know Act (EPCRA).

Local Response Team: Designated Facility individuals who will fulfill the roles determined in the oil spill response plan in the event of an oil or hazardous substance spill. They will supervise and control all response and clean-up operations.

Lower Explosive Limit: Air measurement utilized to determine the lowest concentration of vapors that support combustion. This measurement must be made prior to entry into a spill area.

Marinas: Small harbors with docks, services, etc. for pleasure craft.

Marine Transportation Related Facility (MTR FACILITY): Means an on-shore facility, including piping and any structure used to transfer oil to or from a vessel, subject to regulation under 33 CFR Part 154 and any deepwater port subject to regulation under 33 CFR Part 150.

Maximum Extent Practicable: Means the planning values derived from the planning criteria used to evaluate the response described in the response plan to provide the on-water recovery capability and the shoreline protection and cleanup capability to conduct response activities for a worst case discharge from a facility in adverse weather.

Maximum Most Probable Discharge: Means a discharge of the lesser of 1,200 barrels or 10 percent of the volume of a worst case discharge.

Medium Discharge: Means a discharge greater than 2,100 gallons (50 Bbls) and less than or equal to 36,000 gallons (85+ Bbls) or 10% of the capacity of the largest tank, whichever is less and not to exceed the WCD.

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National Contingency Plan: The plan prepared under the Federal Water Pollution Control Act (33 United State Code §1321 et seq) and the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 United State Code § 9601 et seq), as revised from time to time.

National Pollution Funds Center (NPFC): Means the entity established by the Secretary of Transportation whose function is the administration of the Oil Spill Liability Trust Fund (OSLTF). Among the NPFC's duties are: providing appropriate access to the OSLTF for federal agencies and states for removal actions and for federal trustees to initiate the assessment of natural resource damages; providing appropriate access to the OSLTF for claims; and coordinating cost recovery efforts.

National Response System (NRS): Is the mechanism for coordinating response actions by all levels of government in support of the OSC. The NRS is composed of the NRT, RRTs, OSC, Area Committees, and Special Teams and related support entities.

National Strike Force (NSF): Is a special team established by the USCG, including the three USCG Strike Teams, the Public Information Assist Team (PIAT), and the National Strike Force Coordination Center. The NSF is available to assist OSCs in their preparedness and response duties.

National Strike Force Coordination Center (NSFCC): Authorized as the National Response Unit by CWA section 311(a)(23) and (j)(2); the entity established by the Secretary of the Department of Transportation through which the USCG, operating from Elizabeth City, North Carolina, is responsible for administration of the USCG Strike Teams, maintenance of response equipment inventories and logistic networks, and conducting a national exercise program.

Natural Resource: Land, fish, wildlife, biota, air, water, ground water, drinking water supplies, and other such resources belonging to, managed by, held in trust by, appertaining to or otherwise controlled by the state, federal government, private parties, or a municipality.

Navigable Waters: As defined by 40 CFR 110.1 means the waters of the United States, including the territorial seas. The term includes:

All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide;

Interstate waters, including interstate wetlands;

All other waters such as interstate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, and wetlands, the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters;

That are or could be used by interstate or foreign travelers for recreational or other purposes;

From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; and

That are used or could be used for industrial purposes by industries in interstate commerce. All impoundments of waters otherwise defined as navigable waters under this section;

Tributaries of waters identified in paragraphs (a) through (d) of this definition, including adjacent wetlands; and

Wetlands adjacent to waters identified in paragraphs (a) through (e) of this definition: Provided, that waste treatment systems (other than cooling ponds meeting the criteria of this paragraph) are not waters of the United States.

Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act jurisdiction remains with EPA.

Nearshore Area: For OPA 90, the area extending seaward 12 miles from the boundary lines defined in 46 CFR Part 7, except in the Gulf of Mexico. In the Gulf of Mexico, it means the area extending seaward 12 miles from the line of demarcation defined in §80.740 - 80.850 of title 33 of the CFR.

Non-persistent or Group I Oil: A petroleum-based oil that, at the time of shipment, consists of hydrocarbon fractions:

1. At least 50% of which by volume, distill at a temperature of 340 degrees C (645 degrees F);
2. At least 95% of which by volume, distill at a temperature of 370 degrees C (700 degrees F).

Ocean: The open ocean, offshore area, and nearshore area as defined in this subpart.

Offshore area: The area up to 38 nautical miles seaward of the outer boundary of the nearshore area.

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Oil or Oils: Naturally occurring liquid hydrocarbons at atmospheric temperature and pressure coming from the earth, including condensate and natural gasoline, and any fractionation thereof, including, but not limited to, crude oil, petroleum gasoline, fuel oil, diesel oil, oil sludge, oil refuse, and oil mixed with wastes other than dredged spoil. Oil does not include any substance listed in Table 302.4 of 40 CFR Part 302 adopted August 14, 1989, under Section 101(14) of the federal comprehensive environmental response, compensation, and liability act of 1980, as amended by P. L. 99-499.

Oil Spill Liability Trust Fund: Means the fund established under section 9509 of the Internal Revenue Code of 1986 (26 U.S.C. 9509).

Oil Spill Removal Organization (OSRO): Means an entity that provides response resources.

Oily Waste: Product-contaminated waste resulting from a spill or spill response operations.

On-Scene Coordinator (OSC): Means the federal official predesignated by the EPA or the USCG to coordinate and direct response under subpart D.

On-site: Means the areal extent of contamination and all suitable areas in very close proximity to the contamination necessary for implementation of a response action.

Open Ocean: means the area from 38 nautical miles seaward of the outer boundary of the nearshore area, to the seaward boundary of the exclusive economic zone.

Operating Area: Refers to the rivers and canals, inland, nearshore, Great Lakes, or offshore geographic location(s) in which a facility is handling, storing, or transporting oil.

Operating Environment: Refers to rivers and canals, inland, Great Lakes, or ocean. These terms are used to define the conditions in which response equipment is designed to function.

Out of Service (OOS) Pipeline: A pipeline or pipeline segment which has been effectively cleaned of all hazardous liquids, filled with water or inert gas and blinded or otherwise isolated from an active pipeline system.

Owner or Operator: Any person, partnership, corporation, association, governmental unit or public or private organization of any character that owns, operates pipelines, facilities, or is involved in the transportation of oil.

Persistent Oil: A petroleum-based oil that does not meet the distillation criteria for a non-persistent oil. For the purposes of this Appendix, persistent oils are further classified based on specific gravity as follows:

1. Group II specific gravity less than .85
2. Group III specific gravity between .85 and less than .95
3. Group IV specific gravity .95 and including 1.0
4. Group V specific gravity greater than 1.0

Pipeline System: Means all parts of a pipeline facility through which a hazardous liquid or carbon dioxide moves in transportation, including but not limited to, line pipe, valves, and other appurtenances connected to line pipe, pumping units, fabricated assemblies associated with pumping units, metering and delivery stations and fabricated assemblies therein, and breakout tanks.

Plan Holder: The plan holder is the industry transportation related facility for which a response plan is required by federal regulation to be submitted by a vessel or facility's owner or operator.

Post Emergency Response: The phase of a response performed after the immediate threat of a release has been stabilized or eliminated and cleanup of the sites has begun.

Primary Response Contractors or Contractors: An individual, company, or cooperative that has contracted directly with the plan holder to provide equipment and/or personnel for the containment or cleanup of spilled oil.

Qualified Individual (QI): That person or entity who has authority to activate a spill cleanup contractor(s), act as liaison with the "On-Scene Coordinator" and obligate funds required to effectuate response activities.

Recreation Areas: Publicly accessible locations where social/sporting events take place.

Regional Response Team (RRT): The Federal response organization (consisting of representatives from selected federal and state agencies) which acts as a regional body responsible for overall planning and preparedness for oil and hazardous materials releases and for providing advice to the OSC in the event of a major or substantial spill.

Remove or Removal: As defined by section 311(a)(8) of the CWA, refers to containment and removal of oil or hazardous substances from the water and shorelines or the taking of such other actions as may be necessary to minimize or mitigate damage to the public health or welfare (including, but

Glossary of Terms/Acronyms

not limited to, fish, shellfish, wildlife, public and private property, and shorelines and beaches) or to the environment. For the purpose of the NCP, the term also includes monitoring of action to remove discharge.

Response Activities: The containment and removal of oil from the water and shorelines, the temporary storage and disposal of recovered oil, or the taking of other actions as necessary to minimize or mitigate damage to public health or welfare, or the environment.

Response Contractors: Persons/companies contracted to undertake a response action to contain and/or clean up a spill.

Response Guidelines: Guidelines for initial response that are based on the type of product involved in the spill, these guidelines are utilized to determine clean-up methods and equipment.

Response Plan: A practical manual used by industry for responding to a spill. Its features include: (1) identifying the notifications sequence, responsibilities, response techniques, etc. in a easy to use format; (2) using decision trees, flowcharts, and checklists to ensure the proper response for spills with varying characteristics; and (3) segregating information needed during the response from data required by regulatory agencies to prevent confusion during a spill incident.

Response Priorities: Mechanism used to maximize the effective use of manpower and equipment resources based upon their availability during an operational period.

Response Resources: All personnel and major items of equipment available, or potentially available, for assignment to incident tasks on which status is maintained.

Responsible Party: Any person, owner/operator, or facility that has control over an oil or hazardous substance immediately before entry of the oil or hazardous substance into the atmosphere or in or upon the water, surface, or subsurface land of the state.

Restoration: The actions involved in returning a site to its former condition.

Rivers and Canals: A body of water confined within the inland area that has a project depth of 12 feet or less, including the Intracoastal Waterway and other waterways artificially created for navigation.

Securing the Source: Steps that must be taken to stop discharge of oil at the source of the spill.

Sinking Agents: Means those additives applied to oil discharges to sink floating pollutants below the water surface.

Site Characterization: An evaluation of a cleanup site to determine the appropriate safety and health procedures needed to protect employees from identified hazards.

Site Conditions: Details of the area surrounding the facility, including shoreline descriptions, typical weather conditions, socioeconomic breakdowns, etc.

Site Emergency: Means an incident has occurred and the entire terminal, with the exception of critical employees has been sheltered on-site or evacuated.

Site Safety and Health Plan: A site specific plan developed at the time of an incident that addresses:

- Safety and health hazard analysis for each operation.
- Personal protective equipment to be used.
- Training requirements for site workers.
- Medical surveillance requirements.
- Air monitoring requirements.
- Site control measures.
- Decontamination procedures.
- Emergency response procedures.
- Confined space entry procedures.

Site Security and Control: Steps that must be taken to provide safeguards needed to protect personnel and property, as well as the general public, to ensure an efficient clean-up operation.

Skimmers: Mechanical devices used to skim the surface of the water and recover floating oil. Skimmers fall into four basic categories (suction heads, floating weirs, oleophilic surface units, and hydrodynamic devices) which vary in efficiency depending on the type of oil and size of spill.

Snare Boom: Oil will adhere to the material of which this boom is made of and thus collect it.

Sorbents: Materials ranging from natural products to synthetic polymeric foams placed in confined areas to soak up small quantities of oil. Sorbents are very effective in protecting walkways, boat decks, working areas, and previously uncontaminated or cleaned areas.

Spill: An unauthorized discharge of oil or hazardous substance into the waters of the state.

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Spill Observer: The first Facility individual who discovers a spill. This individual must function as the first responder and person-in-charge until relieved by an authorized supervisor.

Spill of National Significance (SONS): Means a spill which due to its severity, size, location, actual or potential impact on the public health and welfare or the environment, or the necessary response effort, is so complex that it requires extraordinary coordination of federal, state, local, and responsible party resources to contain and cleanup the discharge.

Spill Management Team: The personnel identified to staff the organizational structure identified in a response plan to manage response plan implementation.

Spill Response: All actions taken in responding to spills of oil and hazardous materials, e.g.: receiving and making notifications, information gathering and technical advisory phone calls, preparation for and travel to and from spill sites, direction of clean-up activities; damage assessments, report writing, enforcement investigations and actions, cost recovery, and program development.

Spill Response Personnel: Federal, state, local agency, and industry personnel responsible for participating in or otherwise involved in spill response. All spill response personnel will be pre-approved on a list maintained in each region.

Staging Areas: Designated areas near the spill site accessible for gathering and deploying equipment and/or personnel.

State Emergency Response Commission (SERC): A group of officials appointed by the governor to implement the provisions of Title III of the Federal Superfund Amendments and Re-authorization Act of 1986 (SARA). The SERC approves the State Oil and Hazardous Substance Discharge Prevention and Contingency Plan and Local Emergency Response Plans.

Substantial Threat of a Discharge: Means any incident or condition involving a facility that may create a risk of discharge of fuel or cargo oil. Such incidents include, but are not limited to storage tank or piping failures, above ground or underground leak, fires, explosions, flooding spills contained within the facility, or other similar occurrences.

Surface Collecting Agents: Means those chemical agents that form a surface film to control the layer thickness of oil.

Surface Washing Agent: Is any product that removes oil from solid surfaces, such as beaches and rocks, through a detergency mechanism and does not involve dispersing or solubilizing the oil into the water column.

Tanker: A self-propelled tank vessel constructed or adapted primarily to carry oil or hazardous material in bulk in the cargo spaces.

Tidal Current Tables: Tables which contain the predicted times and heights of the high and low waters for each day of the year for designated areas.

Toxic Substances: Any substances which have the capacity to produce personal injury or illness to man through ingestion, inhalation, or absorption through any body surface.

Trajectory Analysis: Estimates made concerning spill size, location, and movement through aerial surveillance or computer models.

Transfer: Any movement of oil to, from, or within a vessel by means of pumping, gravitation, or displacement.

Trustee: Means an official of a federal natural resources management agency designated in subpart G of the NCP or a designated state official or Indian tribe or, in the case of discharges covered by the OPA, a foreign government official, who may pursue claims for damages under section 1006 of the OPA.

Underwriter: An insurer, a surety company, a guarantor, or any other person, other than an owner or operator of a vessel or facility, that undertakes to pay all or part of the liability of an owner or operator.

Unified Command: The method by which local, state, and federal agencies and the responsible party will work with the Incident Commander to:

- Determine their roles and responsibilities for a given incident.
- Determine their overall objectives for management of an incident.
- Select a strategy to achieve agreed-upon objectives.
- Deploy resources to achieve agreed-upon objectives.

Unified or Coordinated Command Meeting: Held to obtain agreement on strategic objectives and response priorities, review tactical strategies, engage in joint planning, integrate response operations, maximize use of resources, and minimize resolve conflicts.

Glossary of Terms/Acronyms

Unusual Event: Means an incident has occurred which is noticeable and dramatic from the Terminal perimeter; however, no outside assistance is required and no evacuation outside the incident scene has occurred.

Volunteers: An individual who donates their services or time without receiving monetary compensation.

Waste: Oil or contaminated soil, debris, and other substances removed from coastal waters and adjacent waters, shorelines, estuaries, tidal flats, beaches, or marshes in response to an unauthorized discharge. Waste means any solid, liquid, or other material intended to be disposed of or discarded and generated as a result of an unauthorized discharge of oil. Waste does not include substances intended to be recycled if they are in fact recycled within 90 days of their generation or if they are brought to a recycling facility within that time.

Waters of the U.S. - See Navigable Waters, page G-11.

Wetlands: Those areas that are inundated or saturated by surface or groundwater at a frequency or duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include playa lakes, swamps, marshes, bogs, and similar areas such as sloughs, prairie potholes, wet meadows, prairie river overflows, mudflats, and natural ponds (40 CFR 112.2(y)).

Wildlife Rescue: Efforts made in conjunction with federal and state agencies to retrieve, clean, and rehabilitate birds and wildlife affected by an oil spill.

Worst Case Discharge: The largest foreseeable discharge under adverse weather conditions. For facilities located above the high water line of coastal waters, a worst case discharge includes those weather conditions most likely to cause oil discharged from the facility to enter coastal waters.

Glossary of Terms/Acronyms

AC	- Area Committee	CHEMTREC	- Chemical Transportation Emergency Center
ACP	- Area Contingency Plan	CHRIS	- Chemical Hazards Response Information System
ADAPTS	- Air Deliverable Anti-Pollution Transport	CMA	- Chemical Manufacturers Association
AFFF	- Aqueous Film Forming Foam	CNG	- Compressed Natural Gas
AGT	- Any Gross Tonnage (TONS)	CO	- Commanding Officer
AOR	- Area of Responsibility	COA	- Certificate of Adequacy
API	- American Petroleum Institute	COC	- Certificate of Compliance
AQI	- Alternate Qualified Individual	COE	- U. S. Army Corps of Engineers
ARPA	- Automatic Radar Plotting Aid	COF	- Certificate of Fitness
AST	- Aboveground Storage Tank	COFR	- Certificate of Financial Responsibility
ASTM	- American Society for Testing and Materials	COI	- Certificate of Inspection
AT	- Airtight	COIL	- Central Oil Identification Laboratory
ATSDR	- Agency for Toxic Substances and Disease Registry	COMDTINST	- Commandant Instruction
AWG	- American Wire Gauge	COMDTNOTE	- Commandant Notice
B	- Beam	COMDTPUB	- Commandant's Publication
BIA	- Bureau of Indian Affairs	CONUS	- Continental United States
BBL	- Barrel (Unit of Volume Equal to 42 Gallons)	COPH	- Cargoes of Particular Hazard
BLM	- Bureau of Land Management	CORE	- Contingency Response
BPD	- Barrels Per Day	COTP	- Captain of the Port Zone
BPH	- Barrels Per Hour	COW	- Crude Oil Washing
BOD	- Biological Oxygen Demand	CRZ	- Contamination Reduction Zone
BOM	- Bureau of Mines	CS	- General Cargo Ship
C	- Degrees Centigrade	CSA	- Canada Standards Association
C3	- Command, Control, and Communications	CSC	- International Convention for Safe Containers, 1972
C & R	- Cargoes and Restriction (List)	CT	- Cargo Tank
CAER	- Community Awareness and Emergency Response	C/V	- Container Vessel
CERCLA	- Comprehensive Environmental Response, Compensation and Liability Act	CVS	- Commercial Vessel Safety Program
CCR	- California Code of Regulations	CWA	- Clean Water Act (Federal - Public Law 100-4)
CDB	- Continuous Discharge Book	CWS	- Community Water System
CDG	- Subcommittee on the Carriage of Dangerous Goods	CZM	- Coastal Zone Management
CEQ	- Council on Environmental Quality	DECON	- Decontamination
CFM	- Cubic Feet per Minute	DEQ	- Department of Environmental Quality
CFR	- Code of Federal Regulations	DL	- Decision Letters
CG or USCG	- Coast Guard	DOC	- Department of Commerce
CGA	- Compressed Gas Association		
CH	- Cargo Hold		

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DOD	- Department of Defense	FEMA	- Federal Emergency Management Agency
DOE	- Department of Energy	FMC	- Federal Maritime Commission
DOI	- Department of Interior	FOIA	- Freedom of Information Act
DOJ	- Department of Justice	FOIL	- Field Oil Identification Laboratory
DOL	- Department of Labor	FOSC	- Federal On-Scene Coordinator
DOS	- Department of State	FP	- Flashpoint
DOSC	Deputy On-Scene Coordinator	FPN	- Federal Project Number
DOT	- Department of Transportation	FR	- Federal Register
DSHO	- Designated Safety and Health Official	FRDA	- Freshwater Resource Damage Assessment
DWT	- Deadweight Tons	FRF	- Federal Revolving Fund
EBS	- Emergency Broadcast System	FT	- Fuel Tank
EEBA	- Emergency Escape Breathing Apparatus	FTJ	- Failure to Join
EEI	- Essential Elements of Information	FWPCA	- Federal Water Pollution Control Act (as amended) (33 U.S.C. 1251 et seq.)
EERU	- Environmental Emergency Response Unit	GIS	- Geographic Information System
EG	- Emergency Generator Room	GMT	- Greenwich Mean Time
EHS	- Extremely Hazardous Substance	GPM	- Gallons Per Minute
EIS	- Environmental Impact Statement	GSA	- General Services Administration
EMA	- Emergency Management Agency	GT	- Gross Tons
EMS	- Emergency Medical Service	HAZMAT	- Hazardous Materials
EMT	- Emergency Medical Technician	HAZWOPER	- Hazardous Waste Operations and Emergency Response
EO	- Executive Order	HHS	- Department of Health and Human Services
EOC	- Emergency Operations Center	HP	- High Pressure
EOD	Explosive Ordinance Disposal	IC	- Incident Commander
EP	- Estimated Position	ICS	- Incident Command System
EPA	- U. S. Environmental Protection Agency	IDLH	- Immediately Dangerous to Life - or Health
EPCRA	- The Emergency Planning and Right-to-Know Act of 1986 (Title III of SARA)	IG	- Inert Gas
EQ	- Environmental Quality	IGS	- Inert Gas System
ERT	- Environmental Response Team	IOPP	- International Oil Pollution Prevention Convention
ESA	- Endangered Species Act	IS	- Intrinsically Safe
ESD	- Emergency Shutdown	JRT	- Joint Response Team
ETA	- Estimated Time of Arrival	KW	- Kilowatt
ETF	- Emergency Task Force	LEL	- Lower Explosive Limit
FAA	- Federal Aviation Administration	LEPC	- Local Emergency Planning Committee
FAX	- Facsimile Machine	LFL	- Lower Flammable Limit
FCC	- Federal Communications Commission	LNG	- Liquefied Natural Gas
FCL	- Flammable Cryogenic Liquid	LOA	- Length Overall
		LOC	- Letter of Compliance

Glossary of Terms/Acronyms

LOP	-	Line of Position	NTNCWS	-	Non -Transient Non-Community Water System
LOSC	-	Local On-Scene Coordinator	OPA	-	Oil Pollution Act
LOX	-	Liquefied Oxygen	OPS	-	Office of Pipeline Safety (DOT)
LP	-	Low Pressure	ORB	-	Oil Record Book
LPG	-	Liquefied Petroleum Gas	OSC	-	On-Scene Coordinator
LRT	-	Local Response Team	OSHA	-	Occupational Safety and Health Administration (USDH)
MAWP	-	Maximum Allowable Working Pressure	OSLTF	-	Oil Spill Liability Trust Fund
MBL	-	Mobile	OSPRA	-	Oil Spill Prevention and Response Act
MEP	-	Marine Environmental Protection	OSRL	-	Oil Spill Response Limited
MOU	-	Memorandum of Understanding	OSRO	-	Oil Spill Response Organization
MSDS	-	Material Safety Data Sheet	OT	-	Oil Tight
MSO	-	Marine Safety Office	OVA	-	Organic Vapor Analyzer
MSU	-	Marine Safety Unit	OVS	-	Oily Water Separator
N/A	-	Not Applicable	PCB	-	Polychlorinated Biphenyls
NC	-	Not Certified	PFD	-	Personal Flotation Device
NCP	-	National Contingency Plan	PGR	-	Pager
NCWS	-	Non-Community Water System	PHMSA	-	Pipeline and Hazardous Materials Safety Administration (DOT – OPS)
NEPA	-	National Environmental Policy Act	PIAT	-	Public Information Assist Team
NIIMS	-	National Interagency Incident Management System	POLREP	-	Pollution Report
NIOSH	-	National Institute for Occupational Safety and Health	PPE	-	Personal Protective Equipment
NLS	-	Noxious Liquid Substances	PPM	-	Parts Per Million
NM	-	Nautical Mile	PSD	-	Prevention of Significant Deterioration
NMFS	-	National Marine Fisheries Service	QDC	-	Quick Disconnect Coupling
NMT	-	Not More Than	QI	-	Qualified Individual
NOAA	-	National Oceanic and Atmospheric Administration (Department of Commerce)	RACT	-	Reasonably Achievable Control Technology
NPDES	-	National Pollution Discharge Elimination System	RCP	-	Regional Contingency Plan
NPFC	-	National Pollution Funds Center	RCRA	-	Resource Conservation and Recovery Act
NPRM	-	Notice of Proposed Rulemaking	RECON	-	Reconnaissance
NPS	-	National Park Service	RQ	-	Reportable Quantity
NRC	-	National Response Center	SARA	-	Superfund Amendments and Reauthorization Act
NRDA	-	Natural Resource Damage Assessment	SCBA	-	Self Contained Breathing Apparatus
NRS	-	National Response System	SDWA	-	Safe Drinking Water Act
NRT	-	National Response Team	SERC	-	State Emergency Response Commission
NSF	-	National Strike Force	SI	-	Surface Impoundment
NSFCC	-	National Strike Force Coordination Center	SIC	-	Standard Industrial Classification

Glossary of Terms/Acronyms

SKIM	- Spill Cleanup Equipment Inventory	U.S.	- United States
SMT	- Spill Management Team	USACOE	- U.S. Army Corps of Engineers
SONS	- Spill of National Significance	U.S.C.	- United States Code
SOP	- Standard Operating Procedure	USCG	- U.S. Coast Guard
SPCC	- Spill Prevention Control and Countermeasures	USDA	- U.S. Department of Agriculture
SSC	- Scientific Support Coordinator (NOAA)	USDL	- U.S. Department of Labor
STEL	- Short Term Exposure Limits	USDOD	- U.S. Department of Defense
SUPSALV	- United States Navy Supervisor of Salvage	USDOE	- U.S. Department of Energy
SWD	- Salt Water Disposal	USDW	- Underground Source of Drinking Water
TLV	- Threshold Limit Value	USFWS	- U. S. Fish and Wildlife Services
TSCA	- Toxic Substances Control Act	USGS	- U. S. Geological Survey
TSDF	- Treatment, Storage or Disposal Facility	USPCI	- United States Pollution Control, Incorporated
UCS	- Unified Command System	UST	- Underground Storage Tank
		WCD	- Worst Case Discharge
		WT	- Water Tight

REGULATORY AGENCY CORRESPONDENCE AND OTHER AGENCY REQUIREMENTS

Mathis, Charles

From: melanie.BARBER@dot.gov
Sent: Tuesday, March 17, 2009 10:02 AM
To: Mathis, Charles
Cc: Frazier, Quintin; Fant, Buzz
Subject: RE: Facility Response Plan Questionnaire for Central Florida, Sequence Number 608

The United States Department of Transportation Office of Pipeline Safety has received the Facility Response Plan from Kinder Morgan for Central Florida, Sequence Number 608. I have approved the Facility Response Plan for Central Florida, Sequence Number 608.

Sincerely,

Melanie M. C. Barber
Environmental Planning Officer
United States Department of Transportation
Office of Pipeline Safety
Room E22-210
1200 New Jersey Avenue, S.E.
Washington, D.C. 20590
Office: 202-366-4560

From: Mathis, Charles [mailto:Charles_Mathis@kindermorgan.com]
Sent: Monday, March 16, 2009 9:09 AM
To: Barber, Melanie <PHMSA>
Cc: Frazier, Quintin; Fant, Buzz
Subject: Facility Response Plan Questionnaire for Central Florida, Sequence Number 608

Ms Barber,

The attached Facility Response Plan Questionnaire is being forwarded per your request to Quintin Frazier of Kinder Morgan on February 5, 2009 . The Questionnaire addresses revisions made to the Central Florida Pipeline Integrated Contingency Plan dated February 2009 made as a result of changes in the Qualified Individual, a reevaluation of the Worst Case Discharge volumes and a change to the U.S. Coast Guard Area Contingency Plan. A hard copy of the Questionnaire is included with the two (2) electronic copies of the Integrated Contingency Plan that are being processed for shipping today.

If you have questions, comments or need further information please contact me at your convenience.

Chuck Mathis
Manager - Emergency Response Programs
Kinder Morgan Energy Partners, L.P.
713.369.8530 Office
832.405.1701 Cell
713.369.9215 Fax
Charles_mathis@kindermorgan.com

3/17/2009

Liquid Volume Release Algorithm Overview

The Liquid Volume release (LVR) Model calculations include two separate algorithms: one for calculating rupture volume and the other for calculating volume related to orifice leaks. Each of these algorithms can be broken out into two parts, initial volume loss and stabilization volume loss.

Rupture Volume Algorithm

The rupture volume algorithm is a two part algorithm. The first part determines the volume of product released between the time of the rupture and the time it takes to close off the nearest upstream and downstream valves. The second part determines the volume of product left within the pipeline that could potentially drain to and out of the rupture. The two parts can be described as:

1. Initial Volume: $Flow\ Rate \times Time\ To\ Recognize\ Rupture$
2. Stabilization Volume: $\sum_{DownstreamValve}^{UpstreamValve} Modified\ Pipe\ Volume$

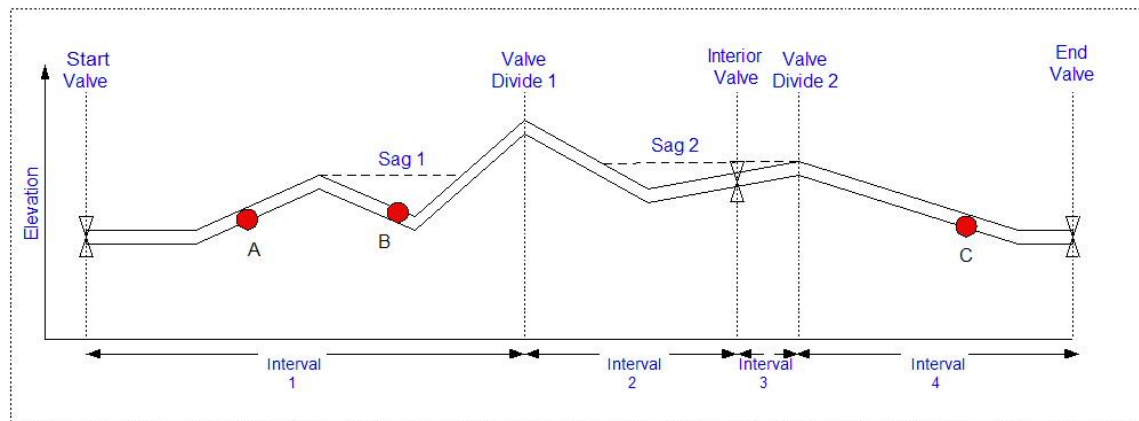
The initial volume algorithm is straight-forward and only requires the Input Model values of *Flow Rate* and *Time To Recognize Rupture* to calculate.

The stabilization volume algorithm is somewhat more complicated. The basic algorithm is that it is the sum of the “modified” pipe volume between the downstream and upstream valve in which the rupture occurs. The modifications to the pipe volume are as follow:

- Only sections of pipe higher than the leak will contribute to the rupture volume.
- For any rupture location, sections of pipe on the other side of a valve divide (the highest point within the valve interval) do not contribute to the rupture volume.
- No section of pipe that is within a sag interval contributes to a rupture not within the sag interval.

These points are illustrated in the figure below, which shows a pipe Component with valves at the beginning and end of the Component in addition to one interior valve. Two valve divides occur on either side of the interior valve and two sag areas are present. Three separate ruptures are shown at A, B, and C.

Rupture volume for this scenario would be calculated separately for each of the intervals labeled 1 through 4. Interval 1 extends from the start valve to valve divide 1; interval 2 from valve divide 1 to the interior valve; interval 3 from the interior valve to valve divide 2; and interval 4 from valve divide 2 to the end valve. Within each of these intervals, there is no contribution to rupture volume from outside of the interval.



A rupture at point A would see contribution from the rupture point to the beginning of sag 1, and also from the end of sag 1 to the valve divide 1.

A rupture at point B would see contribution from all of the higher pipe within sag 1 as well the interval from the end of sag 1 to the valve divide 1.

A rupture at point C would see contribution from all of the pipe left of the rupture point up to the valve divide 2.

EXECUTED**SEP 17 2013****WORK DIRECTIVE**

To: **SWS ENVIRONMENTAL SERVICES**
600 GRAND PANAMA BLVD.
SUITE 200
PANAMA CITY BEACH, FL 32407
Attention: MIKE BEVACQUA

Date: **September 16, 2013**
 Work Directive No.: **478307-3-CONT**

Agreement No.: **26223**

Requisition No/ **270223**
 Accounting
 Information:

This Work Directive is entered pursuant to the terms of the Professional Emergency Response Services Agreement ("Agreement") dated October 19, 2011, by and between **KINDER MORGAN ENERGY PARTNERS, L.P.** ("COMPANY") and **SWS ENVIRONMENTAL SERVICES** ("CONTRACTOR"). By its execution hereof, CONTRACTOR agrees to perform for the Kinder Morgan ("KM") entity named below and executing this Work Directive pursuant to the terms, conditions and provisions of the Agreement, the following described Work which will additionally describe "Covered Tasks" as provided for under DOT Operator Qualification Requirements, and shall furnish all services, labor, supervision, technical capability, tools, equipment, vehicles, vessels, barges, transportation, materials, (except as set forth below), and other facilities and items necessary or convenient to complete the following work as further described and specified in the Specifications and/or Drawing(s) attached hereto or the Agreement and by this reference made a part of this Work Directive ("the Work"). If CONTRACTOR'S proposal, quotation, or any other CONTRACTOR document supplied to the KM entity named below is included as part of this Work Directive or another exhibit to the Agreement, then any terms or conditions provided by CONTRACTOR which differ from or conflict with COMPANY'S terms and conditions are hereby rejected and shall be of no force or effect. The KM entity named below in this Work Directive shall be solely responsible for the liabilities and obligations set forth in the Agreement under which this Work Directive is being issued and this Work Directive arising out of or related to the Work to be performed pursuant hereto. All such liabilities and obligations, as they apply to this Work Directive, shall be non-recourse to the COMPANY (if the COMPANY is not the KM Entity executing this Work Directive) and all other related entities as further provided for and agreed in the Agreement. Payments made to CONTRACTOR under this Work Directive shall include all taxes and similar charges except as otherwise agreed to herein or under the terms of the Agreement. Any capitalized term used in this Work Directive and not otherwise defined herein shall have the meaning as ascribed in the Agreement.

- 1.0 Project Name and Work Location Details:** Emergency Response Services on an "On Call" basis for Tampa Petroleum Facilities - Kinder Morgan Administrative Services Tampa LLC – Tampa, Florida
- 2.0 Scope of Work:** The following is a full and complete description of the Work (and goods) to be provided by CONTRACTOR including, but not limited to specifications, conditions and referenced bids/proposals.
 - 2.1 SWS Environmental Services shall be used on an "On Call" basis for emergency response services for Kinder Morgan Administrative Services Tampa LLC.
 - 2.2 See attached Addendum A to Work Directive 478307-3-CONT.
 - 2.3 For questions, please contact Clint Lonon at 813-241-1106.
- 3.0** The COMPANY will not furnish any materials to the Work Site(s), unless previously approved by the Designated Representative.
- 4.0** CONTRACTOR shall commence the Work by the 09/16/2013 and shall complete the Work on or before 12/31/2013..
- 5.0** CONTRACTOR offers to complete the Work in accordance with the Agreement. This is a Blanket Work Directive for 2013.

6.0 The parties hereby agree to AMEND Agreement 26223 as follows (or if the Agreement has been thus amended previously, to repeat the following sections):

- i) Under the Compliance with Laws section, a **new subsection** is hereby added to the Agreement which reads as follows:

CONTRACTOR certifies that at the time of execution of this Agreement CONTRACTOR is not included on any debarment list maintained by any federal, state or local governmental authority nor prevented from performing Work for COMPANY by virtue of any governmental order, proceeding or otherwise. If at any time during the term of this Agreement CONTRACTOR cannot so certify to COMPANY, CONTRACTOR shall promptly notify COMPANY as to CONTRACTOR'S status.

- ii) The following language is hereby added to the Termination section under the termination for default paragraphs:

-- violates any EHS law; or

- iii) All other provisions of the Agreement shall continue in full force and effect.

7.0 Retainage: Waive 10% retainage.

8.0 CONTRACTOR shall submit invoices in duplicate to:

KM ADMIN SERVICES TAMPA, LLC

2101 GATX Drive
Tampa, FL 33605

Attn: Clint Lonon
Phone: 813-241-1106
Fax: 813-247-4274

8.1 Invoices must clearly indicate the Agreement Number, Work Directive Number and Requisition Number, as indicated above.

8.2 For Construction Projects, a Certificate of Final Completion must be completed, signed by an authorized representative, notarized, and attached to CONTRACTOR'S final invoice.

9.0 CONTRACTOR hereby certifies that it has downloaded, reviewed and understood the Kinder Morgan Contractor Safety Manual and shall, prior to the commencement of any Work hereunder, make the same available to its employees and subcontractors who will be performing work on premises owned and/or operated by the KM entity named below. If the English language is a communication barrier, CONTRACTOR at its expense shall timely convert/translate the Kinder Morgan Contractor Safety Manual accurately into the appropriate language for its employees and subcontractors. Questions concerning the Manual should be directed to the Kinder Morgan Contractor Safety Indemnities at: contractor_safety@kindermorgan.com prior to commencement of any Work.

10.0 Facsimile Signatures/Counterparts. This Work Directive may be executed in multiple original counterparts, each of which shall be deemed an original, and together they shall constitute one and the same agreement. Signature of this Work Directive may be effected by facsimile (with confirmation by transmitting machine) and/or transmitted by portable document format ("pdf") file which shall be treated as an original signature, and any such signature, facsimile, pdf file or copy of this signed Work Directive shall be construed and treated as the original and shall be binding as if it were the original.

In the Agreement, if there is a reference to "Kinder Morgan Kansas, Inc.," it shall now be deemed a reference to Kinder Morgan, Inc., a Delaware corporation. This change resulted from an internal corporate reorganization. Kinder Morgan, Inc. owns the same assets formerly owned by Kinder Morgan Kansas, Inc.

By signing below, COMPANY and CONTRACTOR affirm that the individual signing below has the requisite authority to authorize the commitment described herein, and that this Work Directive No. **478397-3-CONT** is by reference hereby made part of Agreement No. **26223**.

This Work Directive is hereby agreed to and accepted:

KM ADMIN SERVICES TAMPA, LLC

Rose C. Lucret
Signature

ROSE LUCRET
Name

Senior Contract Administrator
Title

September 16, 2013
Date

SWS ENVIRONMENTAL SERVICES

James Weber, Jr.
Signature

James Weber, Jr.
Name

CEO
Title

9/16/2013
Date

Please return executed Work Directive to:

Rose_Lucret@kindermorgan.com

ADDENDUM A
TO
WORK DIRECTIVE NO. 478307-3-CONT
SCOPE OF WORK

1. CONTRACTOR shall provide all tools, labor and equipment to complete the Work.
2. In performing the Work CONTRACTOR shall have 24/7 emergency response capabilities under Section 3.3 to Appendix E of 40CFR 112 for EPA Jurisdictional Facility's and Section 3 to Appendix C of 33CFR 154 for USCG Regulated Facilities including but not limited to:

1.1 One thousand feet (1,000 ft) of containment boom (or, for complexes with marine transfer components, one thousand feet (1,000 ft) of containment boom or two times the length of the largest vessel that regularly conducts oil transfers to or from the facility, whichever is greater, and a means of deploying it within one (1) hour of the discovery of a discharge;

1.2 Oil recovery devices with an effective daily recovery capability equal to the amount of oil discharge in a small discharge (Average Most Probable Discharge) or greater which is available at the facility within 2 hours of the detection of an oil discharge; and

1.3 Oil storage capability for recovered oily material.

3. CONTRACTOR will provide response equipment and manpower resources in accordance with the National Preparedness for Response Exercise Program (PREP) Guidelines, Specific reference for USCG regulated facilities is located on pages 3-18 and 3-19 of the August 2002 PREP Guideline. Specific reference for EPA regulated facilities is located on pages 4-9 and 4-10 of the August 2002 PREP Guideline. These requirements include, but are not limited to, an annual equipment deployment exercise in the operating environment of the Area of the Facility, a comprehensive OSRO personnel training program, and a maintenance program to ensure that the equipment is periodically inspected and maintained in good operating condition. The satisfactory completion of these PREP requirements must be documented and submitted annually to Kinder Morgan to the attention of Director, Compliance and KM The Ops Manager.

4. The Incident Commander is Clint Lonon.

5. These exercises will involve notifications and equipment deployment (Company or OSRO owned equipment) in response to an Average Most Probable Discharge (AMPD - 50 barrels or 1% of the USCG Worst Case Discharge whichever is less). Under this guidance Sector Commanders are being encouraged to conduct at least four (4) unannounced exercises for either tank vessels or terminals per year in each Captain of the Port Zone. These exercises may be conducted in cooperation with state agencies (ODEQ, OSPR, WDOE) and/or the EPA.

The Coast Guard expects that boom will be deployed within one (1) hour, recovery equipment (vac trucks, skimmers, etc) in two (2) hours and notifications be conducted in a timely manner in accordance with our Integrated Contingency Plan/Facility Response Plan.

478307-3-CONT

KINDER MORGAN**RQ#: 270223**

REQUESTER: JOHN HAYNES

SWS First Response - 160043 Blanket P.O. for remainder 2013

SWS First Response shall be used as an "On Call" basis for emergency response services for Kinder Morgan Administrative Services Tampa LLC

SWS First Response contact: Mike Bevacqua 813-241-0282

Kinder Morgan Admin. Svcs contact: Chris Fleck 813-415-1698

Please send a copy of the Purchase Order to Teresa Willyard at:
teresa_willyard@kindermorgan.com**REQUISITION**

DELIVERING LOCATION: TAMPA, FL - TAMPA TERMINAL

VENDOR: 100112991

SWS ENVIRONMENTAL SERVICES

BUYER: BILL TUCKER

APPROVAL VALUE: 1.00

LINE	ITEM AND LINE COMMENTS	QTY	UOM	UNIT COST	DELIVERY DATES
1	EMERGENCY SERVICES Type: S Emergency Svcs.-On Call basis Accounting: 049500180775 - 623200 - 9400	1.00	LO	1.00	09/17/2013

<< End of Requisition >>

RQ#: 270223

Reg. # 270223

KINDER MORGAN

Procurement Receipt Date:

Request for Services (RFS)

For assistance or guidance in completing this form, please contact your Procurement representative.

AGREEMENT INFORMATION									
<input type="checkbox"/> New Agreement <input type="checkbox"/> Amendment <input checked="" type="checkbox"/> Work Directive for Agreement # 26223 <input type="checkbox"/> Change Order for WD # -									
Payment Type: <input checked="" type="checkbox"/> Lump Sum <input type="checkbox"/> Unit price <input type="checkbox"/> Time & Materials <input type="checkbox"/> Schedule of Values									
REQUESTER / BILLING INFORMATION									
KM Company Name: Kinder Morgan Administrative Services				Requester: John Haynes					
Billing Address: Tampa LLC				Req. Phone: 813-241-1128			Ext.		
City, State, Zip: 2101 GATX Drive				Designated Representative: Teresa Willyard					
Attention: Tampa, FL 33605				D/R Phone: 813-241-1138			Ext.		
CONTRACTOR INFORMATION									
Contractor Name: SWS First Response - 160043				Vendor #: 100112991					
Contact Name: Mike Bevacqua				Agreement / Work Directive Amt: \$1.00					
Mailing Address: 600 Grand Panama Blvd, Suite 200				Secondary Cost:					
Physical Address: 901 McClosky Blvd, Tampa, FL 33605				Retainage: <input type="checkbox"/> Yes: % OR <input checked="" type="checkbox"/> No					
City, State, Zip: Panama City Beach, FL 32407				Agreement Start Date: 09-30-2013					
Contact Phone: 813-241-0282				Agreement Term: 08-31-2016 (e.g. 1 year)					
Fax:				Work Directive Start Date:					
Email: <u>mike.bevacqua@susienvironmental.com</u>				Work Directive End Date:					
ACCOUNTING INFORMATION									
Note: For Work Directive commitment, at least one line must be completed!									
Company 10 /20 /30	Accounting Unit (12) (Entity / Loc / RC)	Account (6)	TOC / Sub- Account (4)	Activity (AFE) (15)	Account Category (5) (Property Unit)	Choose One: \$ Amount % of Charges		Project Mgr Name on AFE	Lawson Loc Code (HO2TX, SNITX)
10	049500180775	623200	9400			\$ 1.00	%		
						\$	%		
						\$	%		
						\$	%		
						\$	%		
Are multiple lines required for Lawson Work Directive commitment? <input type="checkbox"/> Yes <input type="checkbox"/> No									
LOCATION OF WORK OR SERVICES									
Be Specific: (e.g. Address, location of project within KM facility, surroundings, etc.) Tampa Petroleum Facilities									

Distribution: Original and supporting documentation
 to: Procurement Representative
 Copies: Requester
 Project Manager
 Project Files

DOT AND/OR OPERATOR QUALIFICATION COVERED TASK(S)

☐ Performs DOT Jurisdictional Work (Drug & Alcohol Testing) ☐ OQ Tasks Required ☐ OQ Tasks NOT Required

If OQ required, check one option: ☐ OQ Covered Task List Attached OR ☐ OQ set up in ISNetworld completed

SAFETY EVALUATION REQUIREMENTS

Choose One: ☒ ISNetworld Score Acceptable OR ☐ Manual Evaluation/Exemption on File OR ☐ Offsite Vendor/Consultant

SCOPE OF WORK OR SERVICES

Note: If for a Change Order, please specify reason for scope change and/or addition(s). If attachments need to be incorporated into Agreement/Amendment/WD/Change Order, please indicate and provide attachments to Procurement representative with RFS.

Requester must refer to Work Code Matrix and enter appropriate risk level here: **MED**

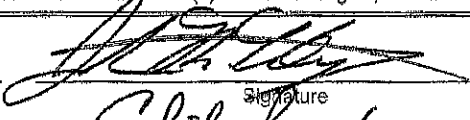
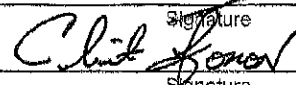
(See Scope of Work Guidelines and Scope of Work Attribute Checklist for additional guidance.)

Scope of Work or Services:

SWS First Response shall be used as an "On Call" basis for emergency response services for Kinder Morgan Administrative Services Tampa LLC.

APPROVALS

Note: In addition to Requester's information/signature, appropriate approval(s) are required for Lawson Work Directive commitment(s), per org chart and EAR guidelines. If AFE No.(s) will be charged, additional approval from AFE owner is also required.

John Haynes		18860	9/10/2013
Name (typed or printed)	Signature	Employee ID	Date
Clint Lonon		27546	9/10/2013
Name (typed or printed)	Signature	Employee ID	Date
_____	Signature	Employee ID	Date
Name (typed or printed)	Signature	Employee ID	Date

Distribution: Original and supporting documentation
to: Procurement Representative
Copies: Requester
Project Manager
Project Files



My To-Do List

Collect. Verify. Connect.

My Contractors

Messages

Reports

Favorites

More

Rose Lucret Kinder Morgan
| Meetings | Webcasts | My Profile | Log Out**KINDER MORGAN**YOU ARE HERE: [Home](#) • [Find Companies](#) • Dashboard

Help

Search Results

Progressive Environmental Services, Inc.

Company ID:
400-129965Val Garner
Health & Safety
Coordinator
(850)234-8428

KMEP - US PCL

C



Dashboard Overview

Dashboard Overview

Questionnaire

OSHA & EMR

Insurance

Compliance & Training

Audits, Evaluations & Reviews

Company Profile and
Information

Summary (Print View)

Grade Component	Status	Points	Gaps
Contractor Job Evaluation (Does Not Negatively Impact Grade)	Contractor Job Evaluation is between 0 and 69.99	0 / 10	
EMR Letters	Rate is 1.00	13 / 13	
Insurance	Insurance Documents are Accepted	0 / 0	
Open Audit Action Items - Past Due	Open Audit Action Items - Past Due Grade N/A	0 / 0	
OQ Plan Approved?	OQ Plan Approved Grade Not Applicable	0 / 0	
RAVS Safety Program	RAVS score is 100	35 / 35	
T-RAVS	T-RAVS score is 100	5 / 5	
US MSQ Grading / Rating	MSQ Score is between 67.00 and 69.99	7.83 / 47	
Total		60.83 / 110	

View Archived Grades

Contractor Notes

ISN Customer Service Notes

Disclaimer

Time/Date	Action	Category
6:30 PM - 07/30/2013	Responded to Inbound Email	Change in Contact, Contractor Follow Up
5:34 PM - 07/30/2013	Initiated Outbound Email	ISNetwork - Changing/Removing a Primary Contact: Progressive Environmental Services, Inc.
3:09 PM - 07/09/2013	Responded to Inbound Call	Insurance
2:03 PM - 07/09/2013	Initiated Outbound Call	Insurance
1:57 PM - 07/09/2013	Responded to Inbound Call	Insurance

Variance

US PCL Variance: **Not Submitted**


PO #: 478307-3-CONT

PO DATE: 09/10/2013

100112991
TO SWS ENVIRONMENTAL SERVICES
 600 GRAND PANAMA BLVD.
 SUITE 200
 PANAMA CITY BEACH FL 32407

VENDOR CONTACT: WENDY MIELLER
 PHONE: (850)534-8428 FAX:

Bill To:
 KINDER MORGAN ENERGY PARTNERS
 ATTN: ACCOUNTS PAYABLE
 1100 ALDERMAN DR STE 200
 ALPHARETTA GA 30005

Ship To: TA1FL
 TAMPA, FL - TAMPA TERMINAL CFP
 KINDER MORGAN TERMINAL
 CENTRAL FLORIDA PIPELINE
 2101 GATX DRIVE
 TAMPA FL 33605
 UNITED STATES

SELLER certifies that at the time of execution of this Purchase Order SELLER is not included on any debarment list maintained by any federal, state or local governmental authority, nor prevented from performing this Purchase Order by virtue of any governmental order, proceeding or otherwise. If at any time during the term of this Purchase Order (including warranty periods) SELLER cannot so certify to COMPANY, SELLER shall promptly notify COMPANY as to SELLER's status.

TERMS		NET 30 DAYS FROM INVOICE DATE		SHIP VIA		PRICE	TOTAL
FRT TERMS		PREPAY AND ADD					
SHIP TERMS							
ITEM#	QUANTITY	U.O.M.	DESCRIPTION				
1	1.00	LO	<p>Deliver on September 17, 2013 unless specified by line Purchase Order Currency: US Dollars Invoice by mail SWS First Response - 160043 Blanket P.O. for remainder 2013 SWS First Response shall be used as an "On Call" basis for emergency response services for Kinder Morgan Administrative Services Tampa LLC ***** SWS First Response contact: Mike Bevacqua 813-241-0282 Kinder Morgan Admin.Svcs contact: Chris Fleck 813-415-1698 ***** Please send a copy of the Purchase Order to Teresa Willyard at: teresa_willyard@kindermorgan.com</p> <p>EMERGENCY SERVICES Emergency Svcs.-On Call basis Deliver To: John Haynes Requesting Location: TA1FL 1.0000 LO Req Comp: 0010 Vendor Item Number: EMERGENCY SVCS-ON CALL BASIS Vendor Item Desc: Customer Contract Number: 26223 Item Detail: EMERGENCY SERVICES</p>			1.00	1.00
SUBTOTAL:							1.00

TOTAL: \$1.00

PLEASE OBSERVE ATTACHED TERMS AND CONDITIONS
 PLEASE REPORT ANY PROCUREMENT RELATED ETHICS CONCERNS TO WWW.ETHICSPPOINT.COM OR (866) 293-2402

BUYER NAME: ROSE LUCRET
 BUYER PHONE AND FAX: (770)751-4187 (770)751-4176
 BUYER EMAIL: rose_lucet@kindermorgan.com

ACKNOWLEDGEMENT OF THIS ORDER IS REQUIRED BY EMAIL OR FAX
 ORDER CONFIRMED BY VENDORS SIGNATURE _____

AGREEMENT FOR PROFESSIONAL EMERGENCY RESPONSE SERVICES

AGREEMENT NUMBER: 26223

COMMENCES: OCTOBER 19, 2011

TERMINATES: OCTOBER 19, 2016

BETWEEN

KINDER MORGAN ENERGY PARTNERS, L.P.

"COMPANY"

AND

**PROGRESSIVE ENVIRONMENTAL SERVICES, INC. DBA SWS ENVIRONMENTAL
SERVICES**

"CONTRACTOR"

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AGREEMENT FOR PROFESSIONAL EMERGENCY RESPONSE SERVICES

NUMBER 26223

THIS AGREEMENT FOR PROFESSIONAL EMERGENCY RESPONSE SERVICES (the "Agreement") is entered as of OCTOBER 19, 2011, and effective as of **OCTOBER 19, 2011** (the "Effective Date"), by and between **KINDER MORGAN ENERGY PARTNERS, L.P.**, a limited partnership, with its principal place of business in **Houston, Texas**, (the "COMPANY"), acting for itself and on behalf of any of its affiliates and subsidiaries which execute Work Directives hereunder (defined below), and **PROGRESSIVE ENVIRONMENTAL SERVICES, INC. DBA SWS ENVIRONMENTAL SERVICES**, a corporation, with its principal place of business in **Panama City Beach, Florida** (the "CONTRACTOR").

WITNESSETH:

WHEREAS, CONTRACTOR represents that it has the requisite knowledge, familiarity, experience, equipment, tools and fully trained and experienced personnel to perform emergency response services for the containment and cleanup of petroleum products and other hazardous and non-hazardous materials on an on-call, 24 hours 7 days a week basis as further described herein; and

WHEREAS, COMPANY desires CONTRACTOR to perform said work.

NOW, THEREFORE, for and in consideration of the covenants and agreement hereinafter contained, the parties do hereby agree as follows:

1.0 CONTRACT DOCUMENTS AND DEFINITIONS

- 1.1 The "Contract Documents", in their order from highest precedence to lowest precedence, shall consist of:
 - 1.1.1 This Agreement No. 26223
 - 1.1.2 Exhibit A Form of Work Directive
 - 1.1.3 Exhibit B Schedule of Values
 - 1.1.4 Exhibit C Drug & Alcohol/Operator Qualification Program Requirements
 - 1.1.5 Exhibit D Form of Certificate of Final Acceptance
 - 1.1.6 Exhibit E Form of Conditional and Unconditional Lien Waiver
 - 1.1.7 Exhibit F Certificate of Insurance
- 1.2 In the event of a conflict between this Agreement and any Exhibit hereto, this Agreement shall control. In the event of a conflict between or among the Exhibits to this Agreement, the Exhibit with the highest order of precedence shall control (that is, for example, Exhibit B is higher in order of precedence than Exhibit C). For the avoidance of doubt, the term "Agreement" when used hereinafter in this Agreement shall mean this Agreement along with the Exhibits referenced in Section 1.1 and attached hereto (including any actual Work Directive(s), Certificate(s) of Final Acceptance, Lien Waivers or any other document executed by the parties in connection with this Agreement). As used in this Agreement, the terms "hereunder", "herein", "herewith" and "hereof" are references to this Agreement and the Exhibits, taken as a whole. All references to a given

agreement, instrument or other document shall be a reference to that agreement, instrument or other document as modified, amended, supplemented and restated through the date as of which such reference is made, and reference to a law, regulation or ordinance includes any amendment or modification thereof, unless otherwise stated in the context. A reference to a person includes its successors and permitted assigns. The singular shall include the plural and the masculine shall include the feminine, and vice versa.

1.3 Definitions

- 1.3.1 **"Agreement"** shall have the meaning set forth on the first page of this Agreement and as further described in Section 1.2 of this Agreement.
- 1.3.2 **"Anniversary Date"** shall have the meaning set forth in Section 2.1 of this Agreement.
- 1.3.3 **"COMPANY"** shall have the meaning set forth on the first page of this Agreement.
- 1.3.4 **"COMPANY Indemnitees"** shall have the meaning set forth in Section 7.1 of this Agreement.
- 1.3.5 **"Confidential Information"** shall have the meaning set forth in Section 14.0 of this Agreement.
- 1.3.6 **"CONTRACTOR"** shall have the meaning set forth on the first page of this Agreement.
- 1.3.7 **"CONTRACTOR Indemnitees"** shall have the meaning set forth in Section 7.2 of this Agreement.
- 1.3.8 **"Contract Administrator"** shall have the meaning set forth in Section 2.2 of this Agreement.
- 1.3.9 **"Contract Documents"** shall have the meaning set forth in Section 1.1 of this Agreement.
- 1.3.10 **"Covered Task(s)"** shall have the meaning set forth in Section 11.6 of this Agreement.
- 1.3.11 **"Designated Representative"** shall have the meaning set forth in Section 2.2 of this Agreement.
- 1.3.12 **"Effective Date"** shall have the meaning set forth on the first page of this Agreement.
- 1.3.13 **"EHS Laws"** shall have the meaning set forth in Section 9.5 of this Agreement.
- 1.3.14 **"Extra Work"** shall have the meaning set forth in Section 3.4 of this Agreement.
- 1.3.15 **"Force Majeure"** shall have the meaning set forth in Section 13.1.1 in this Agreement.
- 1.3.16 **"General Partner"** shall have the meaning set forth in Section 19.0 of this Agreement.
- 1.3.17 **"Hazardous Materials"** and **"Hazardous Substance"** shall have the meaning set forth in Section 9.5 of this Agreement.
- 1.3.18 **"Losses"** shall have the meaning set forth in Section 7.1 of this Agreement.

- 1.3.19 **"MSDS"** shall have the meaning set forth in Section 9.8.2 of this Agreement.
- 1.3.20 **"Non-COMPANY Onsite Situation"** shall have the meaning set forth in Section 10.1.2 of this Agreement.
- 1.3.21 **"OPA"** shall have the meaning set forth in Section 7.6 of this Agreement.
- 1.3.22 **"Safety Manual"** shall have the meaning set forth in Section 9.2 of this Agreement.
- 1.3.23 **"Underground Facilities"** shall have the meaning set forth in Section 3.6 of this Agreement.
- 1.3.24 **"Waste"** shall mean any form of material or substance identified or determined by COMPANY as having no beneficial value and may include any Hazardous Materials and/or Hazardous Substance.
- 1.3.25 **"Work"** shall have the meaning set forth in Section 3.1 of this Agreement.
- 1.3.26 **"Work Directive"** shall have the meaning set forth in Section 3.1 of this Agreement.

2.0 **TERM AND NOTICES**

- 2.1 This Agreement becomes effective upon the Effective Date and shall terminate on the earlier of (i) Error! Reference source not found. (the "Anniversary Date"), or (ii) cancellation or termination of the Agreement pursuant to Section 12.0 provided, however, that if COMPANY desires CONTRACTOR to complete a Work Directive that is unfinished at the time of termination or expiration, then this Agreement shall continue with respect to that Work Directive until the Work Directive is satisfactorily completed.
- 2.2 For the term of this Agreement, matters of a technical nature should be directed to the COMPANY'S "Designated Representative" and/or the "Incident Commander" designated in the particular Work Directive, and matters of a commercial nature should be directed to the COMPANY'S "Contract Administrator" identified below.
- 2.3 All notices to be given with respect to this Agreement, unless provided for to the contrary herein or in a Work Directive, shall be given to COMPANY and to CONTRACTOR respectively at the address herein below shown, and shall be in writing, and sent via nationally recognized courier, facsimile (with the confirmation by the machine), or if mailed, postage prepaid via certified mail return receipt requested. All notices shall be effective upon actual receipt during normal business hours by the party to whom given if receipt occurs outside of normal business hours, then receipt shall be deemed to occurred on the next business day.

COMPANY:

**KINDER MORGAN ENERGY PARTNERS,
L.P.**

1100 Alderman Drive
Suite 200
Alpharetta, GA 30005

CONTRACT ADMINISTRATION

Attention: Rose Lucret
Phone: 770-751-4187

CONTRACTOR:

**PROGRESSIVE ENVIRONMENTAL
SERVICES, INC. DBA SWS
ENVIRONMENTAL SERVICES
600 Grand Panama Blvd
Suite 200
Panama City Beach, FL 32405**

Attention: Legal Department
Phone: 850-234-8428

FAX: 303-984-3879
 E-Mail Address:
 rose_lucret@kindermorgan.com

FAX: 850-234-2451
 E-Mail Address:
 legaldept@swsenvironmental.com

- 2.4 The individual and/or addresses for notices may be changed upon written notice to the other party which is sent in the manner stated herein. Notices shall be effective upon receipt.

3.0 **GENERAL DESCRIPTION OF AGREEMENT AND SERVICES**

- 3.1 CONTRACTOR shall furnish and pay for everything including all services, items, labor, supervision, tools, technical capability, permits, licenses, transportation, materials and supplies (except those materials and supplies which COMPANY hereinafter expressly agrees to furnish) necessary for CONTRACTOR to perform and accomplish emergency response services on an on-call, 24 hours 7 days a week basis at the locations or within the geographic area designated by COMPANY on the applicable Work Directive by having a team of professional personnel capable of (a) containment, characterization, handling, transportation, treatment, processing, recovery, repackaging, removal, storage and disposal of Waste and Hazardous Materials; (b) site evaluation, decontamination and restoration; (c) technical services, including sampling, laboratory services, analysis, and other related services; (d) training and mock spill deployments; (e) performing such other activities as further described in any applicable Work Directive; and (f) coordination of all such activities and services with COMPANY'S Designated Representative or his or her designee. For each assignment the Work shall be further described in a Work Directive, which shall be executed in a form substantially in accordance with Exhibit A ("Work Directive"), and in every case, shall also include all services, materials and goods reasonably inferable therefrom. CONTRACTOR shall not provide and shall not be compensated for any services, goods, materials or equipment except pursuant to a properly executed Work Directive. Each Work Directive shall set forth CONTRACTOR'S compensation for the Work described therein. The Work shall be performed pursuant to the provisions of the Contract Documents. Notwithstanding the foregoing, in the case of any emergency COMPANY may require CONTRACTOR to perform the Work prior to the execution of a Work Directive which CONTRACTOR hereby agrees to do pursuant to the terms of this Agreement. As soon as reasonably practicable thereafter the parties will finalize and execute the Work Directive for the performance of Work with respect to such emergency situation. Termination or suspension of any Work under any Work Directive, in whole or in part, shall not diminish CONTRACTOR'S liability or obligation to continue prosecution of Work under any other Work Directive.
- 3.2 This Agreement does not obligate COMPANY to order materials or services from the CONTRACTOR, nor does it obligate the CONTRACTOR to accept orders for same, but it shall control and govern all Work requested by COMPANY and accepted by CONTRACTOR, and shall define the rights and obligations of the COMPANY and CONTRACTOR during the term hereof, notwithstanding anything to the contrary contained in instructions orally or in writing from the Designated Representative. CONTRACTOR shall not accept any Work from COMPANY other than pursuant to this Agreement.
- 3.3 All items which CONTRACTOR is required to furnish, prepare or develop in the performance and completion of the Work (whether delivered to COMPANY or not), including, but not limited to, reports, plans, drawings and specifications, calculations, maps, sketches, notes, data and samples, are the sole and exclusive property of COMPANY without limitation (except CONTRACTOR may retain a copy thereof, subject to CONTRACTOR'S right to use the same solely to perform the Work under this Agreement. Such items (including all copies thereof other than the copy that may be retained by CONTRACTOR pursuant to the foregoing sentence) shall, together with any materials furnished by COMPANY hereunder, be delivered to COMPANY upon request and in any event upon completion or termination of this Agreement. All such items shall be considered to be Confidential Information.

- 3.4 COMPANY may require CONTRACTOR to perform other services or furnish materials or equipment, or the use thereof, in connection with the Work which are not included in a given Work Directive (hereinafter referred to as "Extra Work"). Extra Work may be occasioned by major changes in specifications requiring materials or equipment of a materially different nature, kind and cost from that contemplated at the time of execution of a given Work Directive, or the performance of other or additional services incidental to the completion of the Work, but not in contemplation of the parties at the time of execution of a given Work Directive. CONTRACTOR shall not perform any Extra Work without first having secured written authorization from COMPANY (by Work Directive or written change order) which shall be signed by COMPANY'S Designated Representative. Such authorization shall describe the Extra Work to be done and specify the price to be paid therefore, or the basis on which such price shall be calculated. Should CONTRACTOR perform any Extra Work without advance written authorization from COMPANY'S Designated Representative such Extra Work shall be at CONTRACTOR'S expense and risk.
- 3.5 If in the course of performance of Work, there is a change in law applicable to the Work, CONTRACTOR shall bear any increased cost in performing the Work. If there is a change in law applicable to COMPANY'S business operations which directly impacts the Work, any increased costs in performing the Work shall be for COMPANY'S account provided CONTRACTOR requests and clearly documents any such increased costs within thirty (30) days from the date the change in law first impacted the Work.
- 3.6 To the extent that Work requires any sampling, boring, excavation, ditching or other disruption of the soil or subsurface at the COMPANY'S site, CONTRACTOR shall confer with COMPANY (and others, in CONTRACTOR'S discretion and at its expense) prior to such activity and be responsible for making the appropriate one-call or other required notifications to third parties and for identifying, locating and marking, as necessary, any subterranean archaeological artifacts, structures or utilities ("Underground Facilities"). Thereafter, CONTRACTOR shall take all reasonable precautions to avoid damage or injury to Underground Facilities which were or reasonably should have been discovered by CONTRACTOR in the course of its Work. CONTRACTOR will be liable for all costs and claims resulting from damage to the Underground Facilities arising out of the Work, if they were or reasonably should have been identified by CONTRACTOR.

4.0 **INSPECTION**

4.1 Inspection

Throughout the performance of the Work, COMPANY shall have the right to designate one or more inspectors or engineers to inspect and test the Waste, Work site and the progress of the Work. CONTRACTOR shall cooperate with such inspectors and engineers in order that the Waste, Work site and Work may be fully inspected and tested and that COMPANY may at all times be fully advised of the progress of the Work and the manner in which it is being performed.

4.2 Inspection or Testing Not Acceptance

CONTRACTOR expressly understands and agrees that any inspection or testing by COMPANY pursuant to this Agreement shall be for COMPANY'S sole benefit and shall not be deemed an acceptance by COMPANY of all or any portion of the Work so inspected or tested. CONTRACTOR further understands and agrees that no inspection or testing by COMPANY pursuant to this Agreement or approval or failure to object to any portion of the Work shall relieve or release CONTRACTOR from any duties, obligations, or liabilities provided in this Agreement.

4.3 Non-Conforming Work

CONTRACTOR shall notify COMPANY in writing when the Work has been completed. If, in the sole good faith discretion of COMPANY, the Work conforms to all of the requirements of the Contract Documents, COMPANY shall accept the Work within ten (10) working days after receipt of such written notice. If, in the sole good faith discretion of COMPANY, the Work or any portion of the Work does not conform to all of the requirements of the Contract Documents, COMPANY shall give CONTRACTOR notice of any non-conforming Work. Within five (5) working days after receiving such notice from COMPANY, CONTRACTOR shall at its expense correct all non-conforming Work or provide a mutually accepted written plan of work for correction of the non-conforming Work. Corrected Work shall be resubmitted for acceptance by COMPANY and the above approval process will be repeated until the Work is acceptable or otherwise rejected by COMPANY.

5.0 INDEPENDENT CONTRACTOR

- 5.1 The parties expressly understand and agree that CONTRACTOR is acting as an independent contractor unrelated to COMPANY or any of its subsidiary or affiliated companies, entities and persons.
- 5.2 COMPANY shall have no direction and control over CONTRACTOR or CONTRACTOR'S employees, agents, subcontractors, volunteers or the manner and method utilized by CONTRACTOR and is interested only in results obtained by CONTRACTOR. CONTRACTOR shall determine and have sole discretion over the manner and methods utilized to achieve the results desired by COMPANY and shall be solely responsible for the direction, control, and supervision of its acts and those of its agents, employees, volunteers, and subcontractors incident to the performance of this Agreement.
- 5.3 It is understood that the Designated Representative may make suggestions to CONTRACTOR solely for the purpose of obtaining the desired results, but CONTRACTOR shall be free to control the details necessary to accomplish such results.
- 5.4 CONTRACTOR has sole responsibility to determine those matters governing the employment terms and conditions for its employees working under this Agreement, including but not limited to selection, hiring, discipline, grievance resolution, pay and benefits and supervision and control of its employees. COMPANY has no authority or rights and shall not share or have any responsibility in the determination of such matters for such employees, except that COMPANY may require CONTRACTOR to reassign employees to non-COMPANY projects if COMPANY determines that any such employee is working in an unsafe manner, in violation of any labor laws including equal employment opportunity laws or immigration laws, or is not performing the Work according to the terms of this Agreement. In the event an employee of CONTRACTOR or one of its subcontractors files a claim of employment against COMPANY, CONTRACTOR agrees to indemnify and hold COMPANY Indemnitees harmless for and against liability and expense arising therefrom and further agrees to (a) promptly notify COMPANY of any employment related claim to which COMPANY may be a party and (b) cooperate fully with COMPANY by providing COMPANY with all information, and access to employees and records so that COMPANY can investigate and defend such claim.
- 5.5 CONTRACTOR shall be solely responsible, at its own expense, and CONTRACTOR represents that it has the necessary accounting resources and an employer identification number, for withholding or paying all applicable state and federal income taxes, making all applicable filings and reports with respect to FICA and FUTA taxes, and making all applicable filings and reports in connection with or relating to the services of CONTRACTOR or any individual employed or provided to work under this Agreement by CONTRACTOR. CONTRACTOR agrees to comply with any applicable laws and regulations governing the retention of employment-related records. CONTRACTOR will indemnify and hold harmless COMPANY Indemnitees for and against liability and expense arising from CONTRACTOR'S failure to make such filings and reports or retain such records.

- 5.6 CONTRACTOR agrees to observe and comply with all applicable provisions and amendments of federal; state and local laws, rules and regulations, including strict compliance with federal immigration laws, employment verification laws enacted in the state(s) in which the Work will be performed, and the Fair Labor Standards Act of 1938.

6.0 PAYMENT, TAXES, COMPLIANCE WITH LAWS, AND LIENS

- 6.1 Once each month following commencement of the Work, CONTRACTOR shall prepare an invoice for the amount accrued to CONTRACTOR for Work satisfactorily completed during the period covered by such invoice. All invoices, with supporting data, lien releases and waivers, and sworn statements that all bills and materials have been paid, shall be sent with the invoice. If requested by COMPANY or as otherwise required under any Work Directive, lien waivers will be furnished by CONTRACTOR with each invoice substantially in accordance with the form(s) set forth in Exhibit E. Invoices and supporting documents will be sent to the Designated Representative unless otherwise instructed by COMPANY. Upon approval of such invoice, and subject to the further provisions hereof, COMPANY shall pay CONTRACTOR the amount approved, less any amounts for which payment was made in connection with previous invoices within thirty (30) days from COMPANY'S receipt of the invoice and supporting data. COMPANY may, in its sole discretion, withhold ten percent (10%) of the amount of such payments.
- 6.2 In the event COMPANY disputes the amount or content of any invoice, COMPANY shall not be responsible for payment of such invoice or portion of such invoice that is in dispute, until such time as the dispute is resolved.
- 6.3 All invoices must show Agreement Number (and Work Directive Number) in order to be paid. Any rate schedule or pricing terms provided by CONTRACTOR and accepted by COMPANY shall remain in effect until new rates or pricing terms are mutually agreed upon by COMPANY and CONTRACTOR and amended into the Agreement. Notwithstanding the foregoing, no rate schedule or pricing terms shall be adjusted prior to the expiration of one (1) year from the Effective Date.
- 6.4 A copy of any time sheets required under any Work Directive for each classification of work or worker showing actual hours worked, description of work performed, progress, valid receipts for all reimbursable expenses, if any, shall accompany each invoice submitted.
- 6.5 Final payment to CONTRACTOR shall be made by COMPANY only after CONTRACTOR has fully performed and completed the Work to the reasonable satisfaction of COMPANY and presentation of CONTRACTOR'S final adjusted invoice (initialed and dated by COMPANY'S Representative), accompanied by an executed CONTRACTOR'S Certificate of Final Acceptance, substantially in the form of Exhibit D. Acceptance by CONTRACTOR of such final payment shall constitute a waiver by it of all claims against COMPANY related to or arising out of this Agreement. Such final acceptance and payment by either party hereto shall not, however, release CONTRACTOR and its surety from any warranty work or other unperformed obligations hereunder.
- 6.6 It is understood and the parties agree that the sums to be paid under any Work Directive shall be the entire consideration to be received by CONTRACTOR from COMPANY for the Work and that said sums shall include any and all applicable taxes and contributions as otherwise set forth herein.
- 6.7 Prior to starting the Work, CONTRACTOR shall obtain the necessary permits and licenses to allow CONTRACTOR to remit sales, use, gross receipts and like taxes to the applicable taxing authority. CONTRACTOR agrees to indemnify COMPANY Indemnitees for all taxes, penalties and interest resulting from CONTRACTOR'S failure to properly remit itemized taxes to the applicable taxing authority.

6.8 Portions of Work Invoiced on a Time Plus Material Basis and/or Variations

Upon written notice to CONTRACTOR, COMPANY may elect to directly remit sales, use, gross receipts or like taxes to the taxing authority to whom such taxes are due and directly payable. If COMPANY exercises such election, COMPANY shall provide CONTRACTOR with written evidence, as required by applicable taxing authority, prior to CONTRACTOR'S procurement or payment of taxable purchases of goods and services. CONTRACTOR agrees that the price to be paid for Work performed on a time plus materials basis under this Agreement includes any such sales, use, gross receipts or like taxes on materials, supplies, equipment or services furnished by CONTRACTOR and on services performed by CONTRACTOR. CONTRACTOR shall itemize price(s), including associated sales, use, gross receipts or like taxes for each component of Work performed on a time plus material basis for which title and possession will be transferred to COMPANY. If the appropriate taxes are not separately listed, COMPANY shall have the right to calculate such tax based upon the charges, and withhold the calculated amount from its payment.

6.9 Portions of Work Invoiced on a Lump Sum or Unit Price Basis

CONTRACTOR agrees that the price to be paid for Work performed on a lump sum basis, or unit price basis (such as a price per truckload), under this Agreement includes any such sales, use, gross receipts or like taxes on materials, supplies, equipment or services furnished by CONTRACTOR and on services performed by CONTRACTOR. CONTRACTOR shall separately list all sales, use, gross receipts or like taxes included in the lump sum or unit prices and provide such written verification reasonably acceptable to COMPANY that such taxes have been paid. If the appropriate taxes are not separately listed, COMPANY shall have the right to calculate such tax based upon the charges, and withhold the calculated amount from its payment.

6.10 Other Taxes

CONTRACTOR assumes full responsibility for and agrees to pay for, and agrees that the price to be paid by COMPANY as set herein shall be fully inclusive of, all labor, including overtime as legally required, all overhead, and all contributions and taxes payable under federal and state social security acts, old age pension, worker's compensation laws, unemployment compensation laws and income tax laws and any other applicable laws as to all of its employees and agents engaged in the performance of the Work hereunder; and CONTRACTOR hereby agrees to indemnify and save COMPANY Indemnitees harmless against the consequences of any failure by CONTRACTOR or any of its subcontractors to pay or withhold taxes, charges or compensation due on behalf of its employees or agents involved in the Work.

6.11 To the fullest extent permitted by applicable law, CONTRACTOR covenants and agrees to protect and keep the Work or any site where the Work is performed, any and all interests and estates therein, and all improvements or materials now or hereafter placed thereon pursuant to this Agreement, free from any and all claims, liens, charges or encumbrances in the nature of mechanics, labor, or material liens or otherwise, arising out of or in connection with performance of the Work by CONTRACTOR or any of its subcontractors (including the furnishing of any materials hereunder), and to promptly have any such lien released by bond or otherwise. If CONTRACTOR disputes in good faith any lien or claim or encumbrance of any laborer, materialman or subcontractor, in lieu of the immediate payment thereof, CONTRACTOR shall post security to protect COMPANY from liability for the payment thereof on terms acceptable to COMPANY and from any expense of defending against that liability, until the dispute is finally resolved. COMPANY may, at its sole discretion, post or place upon the site where any Work is being performed notices of non-responsibility or do any other act permitted by law to exempt COMPANY, the site, any and all interests and estates therein, and any improvements or materials thereon from any liability to third parties for the performance of the Work. The failure of COMPANY to perform any of the actions described in the previous sentence shall not release or discharge CONTRACTOR of any of its obligations hereunder.

- 6.12 To the fullest extent permitted by applicable law, (a) CONTRACTOR hereby covenants and agrees to waive and does hereby waive any rights to liens to which CONTRACTOR might be entitled for Work performed under this Agreement and (b) CONTRACTOR additionally covenants and agrees to require or cause all of its subcontractors and vendors performing or furnishing any portion of the Work to consent, prior to the performance thereof, to the waiver of any such rights to liens which might accrue to such subcontractor or vendor.
- 6.13 CONTRACTOR shall comply with all applicable U.S. federal, state, local laws, ordinances, codes, local and national standards and regulations, including the EHS Laws, all as the same may be amended from time to time. CONTRACTOR certifies that unless specifically exempted, all Work furnished under this Agreement has been furnished in compliance with the following laws, regulations and orders, as amended, Title VI and Title VII of the Civil Rights Act of 1967, the Equal Pay Act of 1963, and Rehabilitation Act of 1974, the Immigration Reform Control Act of 1986, the Americans With Disabilities Act of 1990, Executive Orders of the President of the United States, the Office of Federal Contract Compliance Programs and Executive Orders 11246 and 11758, the Equal Opportunity Regulations at 41 CFR Subsection 60-1.4, Age Discrimination in Employment Act of 1967 (including the Older Workers Benefit Protection Act of 1990), Vietnam Era Veterans Readjustment Assistance Act, the Civil Rights Act of 1871 and 1991, the National Labor Relations Act, the Worker Adjustment and Retraining Notification Act, the Affirmative Action Regulations at 41 CFR Subsections 250.5 and 741.5, and any other applicable anti-discrimination laws or other applicable laws pertaining to an employment relationship. CONTRACTOR shall assure that each of its permitted subcontractors complies with said requirements as well. CONTRACTOR agrees to protect, indemnify and save harmless COMPANY Indemnitees from all claims, suits, liabilities and costs, including attorney's fees and costs of court, arising out of CONTRACTOR'S or its permitted subcontractors' violation of or non-compliance with such laws, regulations, orders and guidelines. Any breach in any material respect by CONTRACTOR of any provisions contained in this paragraph (including, without limitation, any citation of CONTRACTOR for failure to comply with any valid law, ordinance, regulation or rule) which adversely affects the proper and timely completion or the performance of the Work by CONTRACTOR or affects COMPANY'S operations, shall afford COMPANY the right, in addition to all other remedies, to invoke the termination provisions hereof.
- 6.14 For any Work performed or furnished in Louisiana, in all cases where CONTRACTOR'S employees (including CONTRACTOR'S direct, borrowed, special or statutory employees) are covered by the Louisiana Worker's Compensation act, La., R.S. 23:1021 et seq., COMPANY and CONTRACTOR agree that all Work and operations performed by CONTRACTOR and its employees pursuant to this Agreement are an integral part of and are essential to the ability of COMPANY to generate COMPANY'S goods, products and services. Furthermore, COMPANY and CONTRACTOR agree that COMPANY is a statutory employer of CONTRACTOR'S employees for purposes of La. R.S. 23:1061(A)(3). Notwithstanding COMPANY'S status as a statutory employer or special employer (as defined in La. R.S. 23:1031 (C) of CONTRACTOR'S employees, CONTRACTOR shall remain primarily responsible for the payment of Louisiana Worker's Compensation benefits to its employees, and shall not be entitled to seek contribution from COMPANY for any such payments.

7.0 INDEMNIFICATION

- 7.1 CONTRACTOR agrees to release, protect, indemnify and hold harmless COMPANY, its parent, subsidiaries, and affiliates, and its and their respective directors, officers, agents and employees (collectively, "COMPANY Indemnitees"), from all damages (including punitive damages), losses, costs, liabilities, penalties, expenses, demands or claims, including but not limited to those arising from personal injury, violation of any laws including EHS Laws, release of any Waste or Hazardous Materials or any other type of claim (whether arising in tort, contract, or otherwise), and including any and all costs and fees (including attorney's and experts' fees, and discovery costs) arising out of litigation or settlement, (collectively, "Losses"), including Losses described in the remainder of this Section 7.0, to the extent the Losses are caused by, arise from or relate to,

directly or indirectly, (a) breach of this Agreements, or (b) the acts or omissions of CONTRACTOR and/or its affiliates, or each of their respective agents, employees (including leased employees) or subcontractors. If such Losses were caused in part by the acts or omissions of any COMPANY Indemnatee or any third party (that is not one of the CONTRACTOR Indemnitees), then CONTRACTOR shall only be liable to the extent and for such portion that such Losses were caused by, arise from or relate to, directly or indirectly, the acts or omissions of CONTRACTOR and/or its affiliates or each of their respective agents, employees or subcontractors. CONTRACTOR further agrees that it shall pay any and all costs and expenses (including attorney's fees) incurred by COMPANY in recovering the amount of agreed settlement and/or rendered judgment due to COMPANY from CONTRACTOR'S insurer.

- 7.2 COMPANY agrees to release, protect, indemnify and hold harmless CONTRACTOR, its affiliates, and its and their respective directors, officers, agents and employees (collectively, "CONTRACTOR Indemnitees"), from every kind or character of Losses, to the extent the Losses are caused by, arise from or relate to, directly or indirectly, a) breach of this Agreements, or (b) the negligent acts or omissions of COMPANY, its agents or employees. If such Losses were caused in part by the acts or omissions of a CONTRACTOR Indemnatee or any third party (that is not one of the COMPANY Indemnitees), then COMPANY shall only be liable to the extent and for such portion that such Losses were caused by, arise from or relate to, directly or indirectly, the negligent acts or omissions of COMPANY, its agents or employees.
- 7.3 CONTRACTOR shall require each of its subcontractors engaged for performance of the Work to provide express indemnities, enforceable by and for the benefit of the COMPANY Indemnitees, to the same extent required of CONTRACTOR under Section 7.1 above.
- 7.4 The Parties agree that, to the extent permitted by applicable law, this Section 7.0 shall constitute an effective waiver of any cap(s) established by statute or case law which may limit the indemnified party's recovery, but for this Agreement; provided, however, such a waiver is not intended to benefit any third parties and is not a waiver of any rights or defenses either party hereto may have against a third party, provided however, such a waiver is not intended to benefit any third parties and is not a waiver of any rights or defenses either party hereto may have against a third party.
- 7.5 CONTRACTOR shall release, protect, indemnify and hold harmless the COMPANY Indemnitees from and against any claim, damage, liability, loss or expense (including costs for defense, settlement, conciliation, and attorney's fees) for which COMPANY may become responsible or pay out, to the extent resulting from any act or omission by CONTRACTOR or any of its subcontractors in the performance of the Work, under the Resource Conservation and Recovery Act (RCRA) and the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), as the same may be amended from time to time, or any similar state statutes, regulations or requirements related to the collection, transportation, treatment, storage or disposal of the Waste covered under this Agreement or out of CONTRACTOR'S failure to comply with any warranty contained in this Agreement. **NOT APPLICABLE TO CONTRACT 26223.**
- 7.6 Notwithstanding any provision of this Section 7.0, COMPANY shall indemnify and hold harmless the CONTRACTOR, its affiliates, directors, officer, employees, agents and subcontractors from and against any and all costs, liabilities, claims, demands and causes of action under the Oil Pollution Act of 1990, 33 U.S.C. 2701-2761, as the same may be amended from time to time ("OPA") or corresponding applicable state law for Removal Costs (as defined in OPA) and damages which result from actions taken or omitted to be taken in the course of rendering care, assistance or advice in connection with a Discharge (as defined in OPA) or threatened Discharge from a Vessel (as defined in OPA) consistent with the National Contingency Plan or as otherwise directed by the COMPANY, the U.S. Coast Guard or other governmental authorities, which the CONTRACTOR, its affiliates, directors, officers, employees, agents and subcontractors, individually or collectively, may suffer, incur, or pay out, EXCEPT TO THE EXTENT THAT:

- 7.6.1 CONTRACTOR, and any of its affiliates, officers, directors, employees or subcontractors is entitled to immunity from liability under laws granting responders immunity;
- 7.6.2 such liabilities, claims, demands and causes of action arise out of the gross negligence or willful misconduct of CONTRACTOR or any of its affiliates, officers, directors, employees or subcontractors;
- 7.6.3 COMPANY would have been entitled to a complete defense to liability under federal law and any relevant state law had such claim, demand or cause of action been made against COMPANY or the Vessel (as defined in OPA) directly;
- 7.6.4 such payment or indemnification would result in a payment and/or liability of COMPANY in excess of that to which COMPANY would have been entitled to limit its liability under federal law and any relevant state law had such claim, demand or cause of action been made against COMPANY or the Vessel (as defined in OPA) directly; or
- 7.6.5 such liabilities, claims, demands and causes of action arise in respect of death or personal injury.

8.0 INSURANCE

- 8.1 CONTRACTOR agrees to carry and maintain the following insurance, from carriers with an A.M. Best rating of at least A-/VIII:

- 8.1.1 Statutory Coverage Workers' Compensation Insurance (including Occupational Disease Coverage) in accordance with the laws of the states where the Work is to be performed and if CONTRACTOR performs Work on or adjacent to navigable waterways CONTRACTOR shall furnish a certificate of insurance showing compliance with the provisions of the Federal Longshoremen's and Harbor Workers' Compensation Law and the Jones Act.
- 8.1.2 Employer's Liability Insurance with limits of not less than **\$1,000,000** per occurrence and **\$1,000,000** per disease/each employee. In the event Work is being performed more than three miles offshore, Maritime Employer's Liability (or Bumbershoot off Vessel P&I policy) coverage of not less than **\$1,000,000** per occurrence.
- 8.1.3 Commercial General Liability Insurance insuring the indemnity agreements set forth in this Agreement with a combined single limit of not less than **\$1,000,000** per occurrence and **\$2,000,000** in the aggregate. All policies shall remove any exclusion for explosion, collapse and underground operations (XCU) and include coverage for blanket contractual liability assumed hereunder.
- 8.1.4 Comprehensive Automobile Liability Insurance covering liability arising out of any auto (owned, hired and non-owned); with a combined single limit of not less than **\$1,000,000**. If necessary, the policy shall be endorsed to provide contractual liability coverage and, where applicable, pollution. In the event the Work includes transporting Hazardous Waste, with limits of not less than **\$1,000,000** and which will include an endorsement to auto liability insurance for upsets or overturns (MCS-90 endorsement).
- 8.1.5 Professional Liability (Engineer's Errors and Omissions) Insurance, in the event CONTRACTOR is performing design, engineering or other professional services, with limits of at least **\$1,000,000** per occurrence and **\$2,000,000** in the aggregate.

8.1.6 Builder's "All Risk" Insurance, in the event CONTRACTOR is performing construction services at the COMPANY'S project site, written on a commercially recognized policy form, providing coverage for the equipment furnished and the project in a minimum amount equal to the "full insurable value" of such equipment and the project, including any additional costs which are normally insured under such policy. The insurance coverage shall include boiler and machinery insurance on a comprehensive basis including coverage against damage or loss caused by earth movement (including but not limited to earthquake, landslide, subsidence and volcanic eruption), flood and hurricanes, and coverage against damage or loss caused by machinery accidents and operational and performance testing, commissioning and start-up, with extended coverage, and providing coverage for transit, with sublimits sufficient to insure the full replacement value of the property or equipment removed from its site and while located away from its site. At COMPANY'S election, and in lieu of CONTRACTOR providing Builder's "All Risk" Insurance, COMPANY may provide such coverage in which case CONTRACTOR will be named as an additional insured on such policy, as its interests may appear, and be granted a waiver of subrogation under such policy. **NOT APPLICABLE TO CONTRACT 26223.**

8.1.7 Umbrella Insurance with a minimum limit of not less than **\$1,000,000** per occurrence. Such umbrella policy shall follow the form of the Employer's Liability Insurance, Commercial General Liability Insurance and Comprehensive Automobile Liability Insurance set out above, be in excess of those underlying policies without gaps in limits and provide coverage and provide coverage as broad as those underlying policies.

8.1.8 Comprehensive Aircraft Liability Insurance with combined bodily injury, including passengers, and property damage liability single limits of not less than **\$5,000,000** each occurrence. This coverage is necessary only when CONTRACTOR uses owned or non-owned aircraft in connection with Work performed under this Agreement.

8.1.9 Hull and Machinery Insurance if the Work includes the use of a marine vessel, with full market replacement value of the vessel and including coverage for the removal of the wreck; Protection and Indemnity Insurance including marine pollution coverage with a minimum limit of **\$5,000,000** per occurrence; Marine Towing Liability Insurance if the Work includes towing of any vessel; Marine Cargo Insurance if the Work includes transporting goods or materials on waterways, with limits sufficient to cover the replacement cost thereof (including the cost of insurance and freight). **NOT APPLICABLE TO CONTRACT 26223.**

8.1.10 Pollution Liability Insurance, in the event the Work includes excavation where there is a known potential for release of Hazardous Materials and/ or treatment or remediation of Hazardous Material(s), coverage of not less than **\$5,000,000** per occurrence and in the aggregate. **Pollution liability limits are included within the General Liability limits of \$1,000,000 each occurrence/\$2,000,000 aggregate, but umbrella policy would kick in after that.**

8.2 As additional security for COMPANY and the separate obligation of CONTRACTOR, whether or not required by the other provisions of this Agreement, all insurance policies carried by CONTRACTOR hereunder (except Worker's Compensation and Professional Liability) shall name Kinder Morgan Energy Partners, L.P. and each of its respective subsidiary or affiliated companies and entities, their respective successors and assigns, and all of their respective directors, officers, agents and employees, and the respective owners of affiliated entities (for their vicarious liability) (all of the foregoing persons and entities, for the purposes of Section 8.3 and 8.4 below only, being identified as "Kinder Morgan") and COMPANY's indemnifying contractors as additional

insureds with respect to liability arising out of the Work performed by CONTRACTOR or subcontractor, as applicable.

- 8.3 Also, as additional security for COMPANY and the separate obligation of CONTRACTOR, whether or not required by other provisions of this Agreement, all insurance policies of CONTRACTOR (except Professional Liability) shall include a waiver of subrogation in favor of Kinder Morgan (unless prohibited by law).
- 8.4 Before commencing any performance under this Agreement, CONTRACTOR shall furnish COMPANY with certificate(s) of insurance and copies of such endorsements to evidence insurance coverage as required by the provisions of this Agreement. Failure of CONTRACTOR to furnish such evidence of insurance coverage shall not be considered a waiver by COMPANY of such coverage. All insurance certificates which are submitted shall include the following statement:
- "As required by written contract: (a) Kinder Morgan and its indemnifying contractors are named as additional insured on all above policies (except Worker's Compensation and Professional Liability) and (b) waiver of subrogation in favor of Kinder Morgan applies on all policies (except Professional Liability)."
- 8.5 The insurance coverages required of CONTRACTOR shall apply as primary insurance with respect to any other insurance or self-insurance programs afforded to or maintained by or for the benefit of COMPANY, and shall not require the exhaustion of any other coverage.
- 8.6 Should any of the above described CONTRACTOR policies be cancelled before the expiration date thereof, CONTRACTOR shall cause its carrier to deliver notice to COMPANY within the timeframe provided by the policy for notice of cancellation to be provided to the insured. CONTRACTOR shall notify COMPANY immediately if the carrier declines or fails to so notify COMPANY and shall also notify COMPANY of any such cancellation.
- 8.7 CONTRACTOR shall promptly notify COMPANY when any insurance policy required above is not reasonably available and shall state the reasons therefore.
- 8.8 All deductibles, self insured retentions and self insurance carried by the CONTRACTOR under its insurance program are the sole responsibility of the CONTRACTOR and will not be borne in any way by the COMPANY. The CONTRACTOR will indemnify the COMPANY Indemnitees in full for any amounts related to such deductibles, retentions and self insurance.
- 8.9 In the event of the CONTRACTOR'S failure to carry out any of the provisions of this Section 8.0, the COMPANY shall, in addition to any right to recover damages or to obtain other relief, have the right to terminate this Agreement or any Work Directive issued pursuant hereto.
- 8.10 All subcontractor policies shall be endorsed with the waiver of subrogation and additional insured wording set forth in Section 8.4 above. Any deficiency in the coverage, policy limits, or endorsements of said subcontractors will be the sole responsibility of CONTRACTOR.

9.0 SAFETY AND ENVIRONMENTAL REQUIREMENTS

- 9.1 CONTRACTOR shall comply with all applicable federal, state and local laws, ordinances, codes, local and national standards and regulations, including the EHS Laws. CONTRACTOR agrees to provide all necessary training, safety equipment and safety instruction, including a written safety plan, necessary for the safety of its employees, the COMPANY'S invitees, employees, representatives and subcontractors, if any, and all other individuals who may be at the Work location pursuant to the requirements, invitation or permission of CONTRACTOR or COMPANY.

- 9.2 CONTRACTOR shall be proactive, prudent and take all necessary precautions toward all safety issues and shall actively promote working conditions and Work practices which will ensure all workers a safe and healthful work environment. This Agreement shall be governed by the provisions, as the same may be amended from time to time, of the U.S. Occupational Health and Safety Act (OSHA) of 1970 and other EHS Laws, and by regulations imposed by any federal, state or local authority having jurisdiction therefore. CONTRACTOR shall access COMPANY'S Contractor Safety Manual and supplemental forms at: http://www.kindermorgan.com/work/contractor_co/safety_req.cfm prior to execution of any Work Directive and the commencement of any Work. If CONTRACTOR cannot access the Safety Manual, CONTRACTOR shall contact the Designated Representative prior to execution of any Work Directive and the commencement of any Work. CONTRACTOR further agrees to access the Safety Manual no less frequently than every six (6) months during the term of this Agreement to check for updates to the Manual throughout the term hereof. CONTRACTOR shall cause copies of the Safety Manual to be available for its employees and subcontractors on the Job Site throughout the course of any Work being performed, and require said employees and subcontractors to comply with said Safety Manual at all times when they are performing work on COMPANY premises. CONTRACTOR can request copies of the Kinder Morgan Contractor Safety Pre-Job Orientation Program materials by emailing the KM Contractor Safety Group at: contractor_safety@kindermorgan.com
- 9.3 CONTRACTOR will take all necessary precautions to protect personnel and property from injuries or damage due to falls, fumes, fire, explosion or other hazards presented by the Work. It shall be CONTRACTOR'S responsibility to contact, and instruct its employees, subcontractors and agents to contact, COMPANY'S Designated Representative, prior to commencing any Work, regarding safety policies and procedures and potential hazards or Hazardous Materials in the Work areas, whether or not such hazards are addressed by federal, state or local law or regulations.
- 9.4 COMPANY may, at its option, suspend the Work for a full safety inspection and correction at any time if the Designated Representative (1) discovers a safety violation, (2) sees the possibility of a dangerous condition in any Work area, or (3) notices a pattern by CONTRACTOR or any subcontractor of disregard for maintaining a safe jobsite. If CONTRACTOR has one major or two or more minor safety violations, then such violations shall be grounds for immediate termination of this Agreement and/or Work Directive and/or COMPANY may eject CONTRACTOR'S personnel and CONTRACTOR'S subcontractor(s) and their personnel from COMPANY'S premises or jobsite.
- 9.5 COMPANY will make available to CONTRACTOR all information in its possession regarding the Waste, including its chemical analysis, known surface conditions, topographical surveys or other relevant information, that would assist CONTRACTOR in properly evaluating the nature and character of the Waste and the Work to be performed; provided, however, that COMPANY does not warrant the accuracy or completeness of the information provided. COMPANY shall be responsible for any environmental condition existing at the Work site prior to the time CONTRACTOR commences performance under this Agreement. However, CONTRACTOR shall remedy at its sole expense any creation or release of Waste or a Hazardous Material at or from the Work site to the extent that such creation or release is the result of CONTRACTOR'S performance of Work, whether such Waste or Hazardous Material existed on the site prior to the performance of the Work. CONTRACTOR shall indemnify and hold COMPANY Indemnitees harmless from and against all liability, loss, cost, damage and expense (including attorney's fees) arising from or in connection with (a) such release or creation of Waste or Hazardous Materials, or (b) CONTRACTOR'S violation of EHS Laws or any applicable permit, in the course of CONTRACTOR'S performance of the Work. "Hazardous Material(s)" means and includes: (i) all elements or compounds that are contained in the list of hazardous substances adopted by the United States Environmental Protection Agency and the list of toxic pollutants designated by Congress or the Environmental Protection Agency or under any EHS Laws, and (ii) any "hazardous waste," "hazardous substance," "toxic substance," "regulated substance," "pollutant" "contaminant," "oil" or "petroleum", each as defined under any EHS Laws. "EHS Laws" means any

and all U.S. federal, state, and local laws, regulations, permits, approvals and requirements pertaining to health, safety, or the environment.

- 9.6 In performing the Work CONTRACTOR agrees to maintain all COMPANY premises in a clean, safe condition in compliance with applicable regulations and to COMPANY'S reasonable satisfaction. If CONTRACTOR fails to so maintain any COMPANY premises, COMPANY may secure such maintenance from another source at CONTRACTOR'S expense without affecting CONTRACTOR'S obligations or responsibility to perform hereunder.
- 9.7 CONTRACTOR shall remove all Hazardous Materials, Waste, unused material belonging to CONTRACTOR, rubbish, releases, spills, oil sludge, trash, debris or excavations and structures (not necessary to be left as part of the completed Work) from COMPANY premises or other areas where work has been performed, or where such material has accumulated, unless COMPANY elects to retain such matter. CONTRACTOR warrants and guarantees that the sludge, spills, releases, trash, debris or other Waste will be disposed of in accordance with all federal, state and other governmental laws, rules and regulations, environmental or otherwise.
- 9.8 CONTRACTOR warrants that:
 - 9.8.1 It shall report usage of all toxic chemicals in the performance of the Work.
 - 9.8.2 It will obtain Material Safety Data Sheets ("MSDS") for all Hazardous Materials or substances utilized hereunder and will make same available at all times to COMPANY, CONTRACTOR and subcontractor employees at any Work location hereunder. At COMPANY'S request, CONTRACTOR shall be responsible for and deliver to COMPANY shipping papers, manifests and labels with each shipment of Waste in accordance with all applicable requirements of the United States Department of Transportation, (DOT) and the United States Environmental Protection Agency (EPA) under the Toxic Substances Control Act (TSCA), the Resource Conservation and Recovery Act (RCRA), or any replacement or successor agency thereto, and all other federal, state and local statutes, regulations and ordinances. It is knowledgeable about current, existing, known Hazardous Materials, Waste, or substances at any jobsite where the Work is performed and shall be solely responsible to solidify, remove, remediate, encapsulate, treat, neutralize, transport and complete the required record keeping or documentation to take these same Hazardous Materials, wastes or substances away from those jobsites, to treatment and disposal sites approved by COMPANY and approved by the federal, state or local authorities having jurisdiction over the treatment, disposition and control of these products and to the complete satisfaction of these authorities. **However, it is expressly understood and agreed that any technical assistance or advice rendered by Contractor to Company in reference to the efforts of Company to properly package and/or classify Company's Hazardous Materials, shall be deemed gratis advice only, as under the environmental laws, rules and regulations it is the obligation solely of the "Generator" of a waste stream to classify its waste.**
 - 9.8.3
 - 9.8.4 It has the knowledge, trained personnel, skills, equipment, experience and any other qualification needed to comply fully with this Section 9.0 as defined by the authorities having jurisdiction therefore, or will hire individual(s) or subcontractors which have same, at no additional cost to COMPANY. CONTRACTOR further represents to COMPANY that it has the skill and professional competence, expertise, experience with United States Coast Guard classification and all other necessary training,

certification, licenses and approvals to undertake the obligations imposed by this Agreement.

- 9.8.5 It will immediately notify COMPANY in the event that it encounters Hazardous Material(s) during the course of its Work which were not known or disclosed at the time of commencement of this Agreement.
- 9.8.6 It understands the known hazards and risks to human beings, property, and the environment associated with the handling, transporting, treating, processing, storing and disposing of Waste.
- 9.8.7 It is engaged in the business of transporting and disposing of Waste, has the highest level of professional skill, competence and expertise in these areas, and shall perform the Work in compliance with all EHS Laws using its best professional judgment and in a manner consistent with the level of care and skill ordinarily exercised by comparable members of the profession currently practicing under similar conditions in the community.
- 9.8.8 It shall have all permits, licenses, certificates and any other necessary approvals for performing the Work as required by applicable laws, statutes, ordinances, orders, rules, regulations and guidance of the federal, state and local governments having jurisdiction over the Work and such equipment and facilities used for the transporting, treatment and disposal of the Waste. CONTRACTOR shall provide COMPANY with reasonable advance written notice if any license, permit, certificate or any other approval is necessary to perform the Work hereunder, or if any license, permit, certificate, or any other approval necessary to perform the Work is to expire and cannot be renewed during the term of the corresponding Work Directive or is the subject of any judicial or administrative action seeking to impose a penalty or fine or to revoke or suspend such license, permit, certificate or approval. Such notice shall also be provided if CONTRACTOR decides not to obtain any necessary license, permit, certificate or approval which becomes required after execution of the corresponding Work Directive. Upon COMPANY'S receipt of such notice or upon COMPANY'S learning that CONTRACTOR is performing the Work without a required license, permit, certificate or any other necessary approval, COMPANY shall be entitled to terminate the Work Directive upon written notice thereof to CONTRACTOR as set forth in Section **12.3.2**.
- 9.8.9 It shall be responsible for and shall deliver to COMPANY all shipping papers, manifests and labels with each shipment of Waste in accordance with all applicable requirements of the United States Department of Transportation (DOT) and the United States Environmental Protection Agency (EPA) under the Toxic Substances Control Act (TSCA), the Resources Conversation and Recovery Act (RCRA), the Hazardous Materials Transportation Act, and all other EHS Laws.
- 9.8.10 The Work shall be free from defects in workmanship and shall conform in all aspects to the terms of the Contract Documents, applicable laws, and the approved practices and standards of the industry.
- 9.8.11 CONTRACTOR shall provide each person whom CONTRACTOR should reasonably foresee being exposed to Waste and Hazardous Materials (including, but not limited to, CONTRACTOR'S employees and subcontractors) with clear and reasonable warning of the hazards associated therewith, and shall take all actions necessary to protect such persons, property and the environment from such hazards.
- 9.8.12 CONTRACTOR shall immediately notify COMPANY of all directions CONTRACTOR receives from and all communication with any governmental body or agency with

regard to the Work. CONTRACTOR shall, to the extent practicable, under the circumstances, coordinate any response to a governmental body or agency's direction, request or other communication with COMPANY'S Designated Representative or his or her designee.

- 9.9 If CONTRACTOR'S Work includes activity for which a one-call telephone call must be made prior to commencement of such activity and CONTRACTOR fails to make the required call(s), which failure becomes known to COMPANY prior to payment of CONTRACTOR'S final invoice, then COMPANY may take a credit against such final invoice according to the following schedule: one (1) failure to call equals five hundred dollars (\$500); two (2) failures to call equals one thousand dollars (\$1,000); three failures to call equals (\$5,000); more than three failures to call equals ten thousand dollars (\$10,000).
- 9.10 CONTRACTOR shall be liable to COMPANY without limitation for any and all costs and/or damages arising out of any breach by CONTRACTOR of Department of Homeland Security ("DHS") Chemical Facility Anti-Terrorism Standards ("CFATS") requirements, codified at 6 C.F.R. Part 27, as the same apply to the Premises. By way of example, these costs and/or damages may result from the possession, use, storage, handling and/or management by CONTRACTOR of a chemical of interest ("COI") identified in Appendix A to CFATS, 6 C.F.R. Part 27, Appendix A, on COMPANY Premises and/or from the failure by CONTRACTOR to comply with reporting, record-keeping, or any other requirements contained in CFATS, including but not limited to the submission of a CFATS Top-Screen.
- 9.11 CONTRACTOR must notify COMPANY thirty (30) days in advance of any plans by CONTRACTOR to bring any COI onto the Premises, and must obtain the written approval of COMPANY's Director - Security or COMPANY representative designated by the COMPANY's Director - Security or COMPANY Officer for the Premises prior to bringing any COI onto the Premises. If providing such notice and obtaining such approval is not possible within this time frame due to an emergency situation, CONTRACTOR shall notify COMPANY and gain approval from the COMPANY Director - Security or designated COMPANY representative as soon as reasonably possible.

10.0 CALIFORNIA RELEASE NOTIFICATION REQUIREMENTS

In the event any of the Work is to be performed by CONTRACTOR or its permitted subcontractors in the State of California then the following provisions in this Section 10.0 shall apply with respect to such Work:

- 10.1 CONTRACTOR shall ensure that its employees, agents, and subcontractors' employees engaged in CONTRACTOR'S activities in the performance of the Work:
 - 10.1.1 Are notified, and when required, as determined by COMPANY, trained and instructed by COMPANY, either directly or through a train-the-trainer program instituted by COMPANY, concerning the order of actions to be taken upon discovery of a release or threatened release condition of a Hazardous Material or pollutant substance; and
 - 10.1.2 Understand that no Work or visit shall be undertaken to any COMPANY right-of-way or facility where there is no COMPANY representative onsite and readily accessible (a "Non-COMPANY Onsite Situation"), unless the training referred to in subsection 10.1.1 above has occurred for CONTRACTOR'S employees, agents and subcontractors' employees who will be performing at such a site.
- 10.2 COMPANY has determined that CONTRACTOR:]

- ☐ Will be working in a Non-COMPANY Onsite Situation and MUST complete the training.
- ☒ Will be working in a COMPANY Onsite Situation and MUST ensure that its employees, agents and subcontractors' employees have been notified accordingly, and if deemed necessary by COMPANY, CONTRACTOR will assure that prior to performing any Work CONTRACTOR'S employees, agents and subcontractors' employees will be trained relative to COMPANY'S revised release reporting criteria.

11.0 DRUG AND ALCOHOL POLICY AND TESTING REQUIREMENTS; FIREARMS POLICY; OPERATOR QUALIFICATION REQUIREMENTS FOR COVERED TASKS

Per COMPANY'S determination, the Work includes DOT Jurisdictional Work as follows:

☐ YES ☐ NO If YES Section 11.1 and Section 11.5 apply.

If NO above Section 11.2 or Section 11.5 below applies, as determined by COMPANY and checked below.

☐ Section 11.2 Drugs/Alcohol/Weapons Policy in Non-DOT situations. (For example office type work)

☐ Section 11.5 Non DOT Drugs/Alcohol/Weapons Policy in Non-DOT situations requiring Pre-Employment, Accident and Random Testing. (For example field type work)

In the event neither the "yes" or "no" box is checked, then Sections 11.2 and 11.5 shall be deemed to apply, and CONTRACTOR shall not undertake any DOT jurisdictional work unless and until CONTRACTOR satisfies Section 11.1.

11.1 Drug/Alcohol/Operator Qualification Program and Testing – DOT Situations:

CONTRACTOR represents and warrants that it has established, maintains, and enforces both a Drug and Alcohol Program and an Operator Qualification Program per requirements as outlined in Exhibit C.

11.2 COMPANY Policy Regarding Drugs/Alcohol/Weapons in Non-DOT Situations:

CONTRACTOR agrees to advise its employees/provided personnel and the employees/provided personnel of its subcontractors and agents that it is the policy of COMPANY that:

- 11.2.1 The use, possession, manufacture, and/or distribution of illegal drugs or unauthorized drugs, drug-related paraphernalia, or weapons (to the extent permissible by applicable state law) is strictly prohibited on COMPANY Premises. The use or possession of alcoholic beverages, except where authorized by COMPANY'S management, is also prohibited. CONTRACTOR'S employees and provided personnel shall not carry or transport any firearm or weapon, whether or not concealed, on the Premises in any COMPANY-owned vehicle or in any other vehicle (except as allowed by applicable State law) while engaged on COMPANY business or in the performance of Work. In the event applicable State law expressly allows weapons to be brought on any Premises, then all such allowed weapons must be unloaded and locked out of sight at all times;
- 11.2.2 Entry onto or presence on COMPANY'S premises by any person, including CONTRACTOR, CONTRACTOR'S employees, subcontractors, subcontractors' employees, contract personnel, temporary employees and visitors, constitutes

consent to COMPANY to conduct searches, whether announced or unannounced, on COMPANY'S premises of the person and his or her personal effects for such prohibited items, and consent to drug testing at any time while on COMPANY'S premises;

- 11.2.3 Any person suspected or found in violation of the policy, abusing prescription or over-the-counter medications, or who refuses to permit a search or drug or alcohol test may be removed and barred from COMPANY'S premises, at the sole discretion of COMPANY; and
- 11.2.4 CONTRACTOR personnel, who test positive for illegal drugs or unauthorized alcohol as a result of a test conducted in connection with CONTRACTOR's performance of this Agreement, or upon request of COMPANY, will be removed from any further performance or services under this Agreement.
- 11.3 CONTRACTOR is now and at all times during performance of this Agreement shall continue to be a member of ISNetworld or any similar organization which is successor thereto for COMPANY'S purposes, as notified by COMPANY to CONTRACTOR;
- 11.4 CONTRACTOR has and during the performance of this Agreement shall continue to report full, complete and accurate information to ISNetworld concerning CONTRACTOR'S employees;
- 11.5 COMPANY Policy Regarding Drugs/Alcohol/Weapons in **Non-DOT jurisdiction** situations requiring Pre-Employment, Accident and Random Testing.

In addition to the notification and other requirements contained in Section 11.2 above, CONTRACTOR shall:

- 11.5.1 At CONTRACTOR'S cost, test his employees/provided personnel utilized in performance of the Work for drug and alcohol (D/A) impairment under the following conditions:

- 11.5.1.1 Pre-Employment Testing:

CONTRACTOR shall conduct pre-employment D/A testing of all employees/provided personnel who will be required to work on property owned, operated or leased by COMPANY or any Jobsite. A negative test result is required for each of CONTRACTOR'S employees or provided personnel prior to commencing Work.

- 11.5.1.2 Post-Accident Testing:

- (A) Employees/Provided Personnel Subject to Post-Accident Testing:

An employee/provided personnel whom COMPANY or CONTRACTOR reasonably believes may have contributed to an accident on the Jobsite or while engaged in the performance of Work may be required to undergo D/A impairment testing as determined by the COMPANY. Such a test will be conducted at CONTRACTOR'S cost as soon as practicable after the accident, but for drugs not later than thirty-two (32) hours after the accident and for alcohol not later than eight (8) hours after the accident. CONTRACTOR will make reasonable attempts to obtain a sample from an employee/provided personnel following an Accident (as defined below), but any injury should be treated first.

- (B) **Accident** is defined as "an unplanned, undesired event, resulting in injury and/or damaging to property and/or process interruption."
- (C) Obligations of Employee/Provided Personnel Subject to Post-Accident Testing:
 - (a) CONTRACTOR (or subcontractor, as the case may be) shall require the employee/provided personnel who is subject to post-accident testing to remain readily available for such testing and caution him/her not take any action which could interfere with the testing or the results of testing.

11.5.1.3 Notify CONTRACTOR'S and subcontractors' employees/provided personnel that random testing will occur under the following conditions:

- (A) All CONTRACTOR (and subcontractor, as the case may be) employees/provided personnel working on property owned, operated or leased by COMPANY (including right-of-way) or any Jobsite shall be subject to unannounced and random drug and alcohol testing by CONTRACTOR at CONTRACTOR'S expense. The primary purposes of unannounced random testing are to deter illegal D/A use which may affect work performance or safety, and to ensure a D/A free workforce. Random D/A testing shall be conducted each year during the term of this Agreement, at a minimum twenty-five percent (25%) of the employee/provided personnel engaged in the Work. CONTRACTOR shall exercise reasonable efforts to make random testing selections spread reasonably over a twelve (12)-month period.
- (B) Random tests will only be administered just before, during, or shortly after a CONTRACTOR'S (or subcontractor's) employee's/provided personnel's Work time;
- (C) CONTRACTOR (and subcontractor) employees/provided personnel engaged in the Work must remain in the random selection pool at all times, regardless of whether or not they have been previously selected for testing.
- (D) CONTRACTOR (and subcontractor) employees/provided personnel shall be selected for testing by using a computer-based random number generator;
- (E) No advance warning will be given to employees/provided personnel regarding the dates and times of random testing.

11.5.1.4 Testing Upon Reasonable Suspicion

If in the course of CONTRACTOR'S performance of the Work on COMPANY premises, COMPANY has reasonable suspicion based upon objective observation (or report by a non-COMPANY objective observer) that CONTRACTOR (or subcontractor) personnel has violated the policy, COMPANY may require such person(s) to undergo testing. If a person who is CONTRACTOR'S (or subcontractor's) personnel is reasonably suspected to be in violation of the policy and does test positively, the expense of the test shall be borne by CONTRACTOR.

- 11.5.2 Any person reasonably suspected or found in violation of the policy (by positive test result or otherwise) or who refuses to permit a search or drug or alcohol test may be removed and barred from COMPANY'S premises (owned, operated or leased) or Jobsite, at the sole discretion of COMPANY. CONTRACTOR shall

advise its employees/provided personnel and subcontractors' employees/provided personnel concerning this provision.

- 11.5.3 CONTRACTOR and subcontractor personnel (whether employees, leased employees, temporary employees, or contract workers) who test positive for illegal drugs or unauthorized alcohol, will be removed from any further performance of services under this Agreement; provided that if such personnel has self-reported to his employer as requiring drug or alcohol treatment and successfully completes that treatment, (s)he may become eligible for readmittance to COMPANY'S premises after (s)he submits proof to CONTRACTOR of attendance and successful completion of a substance abuse program recognized by CONTRACTOR as adequate, and CONTRACTOR certifies to COMPANY that CONTRACTOR has received the same along with a negative return-to-work test result. An individual whose test specimen is "cancelled without medical explanation" shall be required to undergo a re-test under direct supervision.

11.6 Operator Qualifications

COMPANY has determined that the Work includes the performance of "Covered Task(s)" (as defined in Kinder Morgan's Operator Qualification Plan) as follows:

- ☐ YES Section 11.6 applies.
- ☐ NO Section 11.6 does not apply.

In the event neither box is checked then Section 11.6 shall be deemed to apply.

- 11.6.1 With respect to Work to which operator qualifications requirements apply, CONTRACTOR warrants and covenants to COMPANY as follows, and shall cause its subcontractors performing Work hereunder to which operator qualifications requirements apply to warrant and covenant to CONTRACTOR as follows, with respect to their respective workers (whether they be permanent or temporary employees, or contracted/leased workers):
- 11.6.1.1 All of the workers utilized on COMPANY premises in the performance of Work under this Agreement to which operator qualifications requirements as set forth in Exhibit C hereto (the "Operator Qualifications Requirements") apply (whether such workers be permanent or temporary employees, or contracted/leased workers) shall be in compliance with said Operator Qualifications Requirements at all times when performing such Work; and
- 11.6.1.2 All welders utilized in the performance of Work under this Agreement are qualified under COMPANY-established welding procedures which shall be notified by COMPANY to CONTRACTOR; and
- 11.6.1.3 For five (5) years following completion or termination of the Work and for so long thereafter as there may remain any unresolved questions or disputes regarding any aspect of operator qualifications as pertains to the Work, CONTRACTOR shall provide and retain in ISNetworld (a) copies of its employees' Operator Qualification records, and (b) copies of its applicable subcontractors' employees' records regarding compliance by such subcontractors' employees with said Operator Qualifications Requirements during the performance of the Work.

- 11.6.2 During the performance of the Work and for five (5) years following completion or termination of the Work in accordance with this Agreement and for so long thereafter as there may remain any unresolved questions or disputes regarding any aspect of operator qualifications, COMPANY or COMPANY's designee shall have the right to audit CONTRACTOR'S personnel records (and its subcontractors' records, as retained per paragraph 11.6.1.2 above) concerning compliance with said Operator Qualifications Requirements in connection with the Work.

- 11.7 The provisions of this Section 11.0 are in addition to and not intended to limit COMPANY's right to audit as provided in Section 12.0 below.

12.0 **ASSIGNMENT, TERMINATION AND RIGHT TO AUDIT**

- 12.1 This Agreement shall extend to and be binding upon the heirs, executors, administrators, successors and assigns of the parties hereto, but CONTRACTOR, due to CONTRACTOR'S qualifications and experience, shall not assign CONTRACTOR'S rights or obligations or pledge as security any sum that may accrue to CONTRACTOR hereunder without the prior written consent of COMPANY. Any such assignment or pledge without COMPANY'S prior written consent shall, at COMPANY'S election, be considered null and void or result in the immediate termination of this Agreement and all or part of the Work being performed hereunder. Notwithstanding such termination, CONTRACTOR shall be liable for all additional costs incurred by COMPANY resulting from such termination and in completing the Work.

- 12.2 CONTRACTOR shall not sublet or subcontract any Work to be performed except as authorized in writing by COMPANY. CONTRACTOR further agrees to require that its authorized subcontractors accept and comply with all terms of this Agreement.

12.3 Termination

12.3.1 For Convenience

COMPANY may terminate for its convenience this Agreement or any Work Directive in whole or in part for any reason at any time upon ten (10) days written notice to CONTRACTOR.

12.3.2 For Default

COMPANY may terminate this Agreement or any Work Directive in whole or in part for default by CONTRACTOR in its contractual obligations hereunder by giving ten (10) days prior written notice to CONTRACTOR; provided, however, that termination pursuant to Section 9.4 shall not require such ten-day notice. Without limiting the generality of the foregoing sentence, CONTRACTOR shall be deemed to be in default hereunder if CONTRACTOR

12.3.2.1 persistently or repeatedly refuses or fails to supply enough properly skilled workers or proper materials;

12.3.2.2 consistently fails to achieve any milestones set out in any given Work Directive;

12.3.2.3 fails to make prompt payment to subcontractors or materialmen for materials or labor;

- 12.3.2.4 violates, or is indicted for any violation of, any law, ordinance, rule regulation or order of any public authority having jurisdiction;
- 12.3.2.5 fails to obtain and maintain insurance as required hereunder or fails to observe the insurance provisions hereof;
- 12.3.2.6 fails to remedy a default or potential default (which would occur through lapse of time) under the terms governing any security provided by CONTRACTOR pursuant to Section 20.0 hereof; or
- 12.3.2.7 is in breach or default in any material respect of any other duty, obligation, representation or term set forth in the Contract Documents;
- 12.3.2.8 suffers any of the following to occur:
 - 12.3.2.8.1 institutes or has instituted against it a proceeding seeking a judgment of insolvency or bankruptcy or any other relief under any bankruptcy or insolvency law or other similar law affecting creditors' rights, or a petition is presented for its winding-up or liquidation, and
 - 12.3.2.8.1.1 this Agreement is not assumed or rejected within sixty (60) days after an order for relief is entered, or
 - 12.3.2.8.1.2 such proceeding or petition results in a judgment of insolvency or bankruptcy or the making of an order for CONTRACTOR'S winding up or liquidation which judgment is not dismissed, discharged, stayed or restrained within sixty (60) days after commencement of the action, and this Agreement is not assumed or rejected within such sixty (60) day period;
 - 12.3.2.8.2 such proceeding or petition results in a judgment of insolvency or bankruptcy or the entry of an order for relief or the making of an order for CONTRACTOR'S winding up or liquidation which judgment is not dismissed, discharged, stayed or restrained within sixty (60) days of its entry;
 - 12.3.2.8.3 has a secured party take possession of all or substantially all of its assets or has a distress, execution, attachment, sequestration or other legal process levied or enforced against all or substantially all of its assets and such secured party maintains possession, and any such process is not dismissed, discharged, stayed or restrained; or
 - 12.3.2.8.4 following the occurrence of any of the following, fails to provide assurances of future performance to COMPANY which are satisfactory to COMPANY in COMPANY'S reasonable discretion within fifteen (15) days of COMPANY'S demand therefore:
 - 12.3.2.8.4.1 makes a general assignment, arrangement or composition with or for the benefit of its creditors;

12.3.2.8.4.2 becomes insolvent or is generally unable to pay its debts or fails or admits in writing its inability generally to pay its debts as they become due;

12.3.2.8.4.3 seeks or becomes subject to the appointment of an administrator, provisional liquidator, conservator, receiver, trustee, custodian or other similar official for all or substantially all of its assets;

12.3.2.8.4.4 otherwise seeks protection from creditors.

- 12.4 Upon termination for convenience under subsection **12.3.1**, COMPANY will pay CONTRACTOR'S costs properly allocable and directly relating to the termination, together with reasonable profit for the portions of the Work performed prior to termination, but in no case shall COMPANY be liable for payment to CONTRACTOR for unrealized costs or anticipated profits hereunder. COMPANY shall be entitled to deduct any costs or expenses owed to COMPANY by CONTRACTOR against any sums due to CONTRACTOR as a result of COMPANY terminating this Agreement. CONTRACTOR shall provide COMPANY with an itemized invoice for said termination costs allowed hereunder along with supporting documentation within thirty (30) days from the date of termination; otherwise, said termination costs shall be deemed waived by CONTRACTOR.
- 12.5 Upon termination for default under subsection **12.3.2**, COMPANY may take over the Work and prosecute the same to completion and may utilize any other remedies available at law or equity. In addition to any such remedies, CONTRACTOR shall be liable to COMPANY for all additional costs and expenses incurred by COMPANY to complete the Work, including any damages for delay in completing the Work, and for any damages or injury of any type or kind caused by CONTRACTOR'S failure to fulfill its obligations to complete the Work or fulfill its obligations hereunder.
- 12.6 Upon receipt of COMPANY'S notice to terminate, CONTRACTOR shall, unless the notice directs otherwise, immediately cease Work and if so directed make every reasonable effort to secure cancellation of all existing orders or contracts upon terms and conditions satisfactory to COMPANY and transfer to COMPANY all data, specifications, reports, estimates, summaries and other materials and information supplied by COMPANY or obtained by CONTRACTOR in performing hereunder. In addition, CONTRACTOR will take any action that may be necessary, or required by the COMPANY, for the protection, treatment and preservation or disposal, as directed by COMPANY, of the property related to this Agreement that is in the possession of the CONTRACTOR and which COMPANY has or may acquire an interest. The parties agree that "reasonable effort", as a minimum, shall be that CONTRACTOR has explicitly contacted each and every supplier for which outstanding orders and/or contracts exist in connection with the Agreement, and has attempted to cancel every such order and/or contract upon terms and conditions reasonably satisfactory to COMPANY.
- 12.7 Throughout the term of this Agreement and for a period of five (5) years following the completion or termination of this Agreement and for so long thereafter as there may remain any unresolved questions or disputes regarding any item: (a) COMPANY shall, at all reasonable times and upon prior notice to CONTRACTOR, have access to all CONTRACTOR'S, subcontractors', and vendors' personnel, books, records, correspondence, instructions, plans, equipment maintenance records, drawings, receipts, vouchers, financial accounts and memoranda of every description pertaining to the Work for the purpose of auditing and verifying costs of the Work, CONTRACTOR'S compliance with applicable laws, CONTRACTOR'S safety performance under this Agreement or for any other reasonable purpose; (b) COMPANY shall have the right to reproduce any of the aforesaid documents; (c) in the event that any audit reveals an error or discrepancy of any nature whatsoever, such error or discrepancy will be corrected promptly, and any moneys owing and due either COMPANY or CONTRACTOR will be paid promptly by the

other party; and (d) CONTRACTOR shall not charge for any costs incurred by assisting COMPANY with audits performed pursuant to this Agreement.

- 12.8 Neither CONTRACTOR nor COMPANY shall be liable to the other for indirect, special, exemplary, consequential or punitive damages, EXCEPT (i) arising out of breach of the confidentiality provisions under this Agreement, (ii) resulting from gross negligence or willful misconduct, or (iii) except as otherwise provided herein.

13.0 DELAYS; REMEDIES AND DISPUTE RESOLUTION

13.1 Force Majeure

- 13.1.1 "Force Majeure", as used herein, shall mean acts of God, acts of public enemies, fire, war or civil disturbance, insurrection, blockades, strikes, riots, epidemics, landslides, lightning, hurricanes, earthquakes, floods and/or washouts, explosions, commandeering of raw materials or products or plants or facilities by a government, labor disputes involving a general stoppage of work on the job, rules, regulations, orders or acts of governmental authority, loss or shortage of transportation facilities due solely to an event described in this subsection **13.1.1**, inability with reasonable diligence to obtain materials due solely to the effect of an event described in this subsection **13.1.1**, and in each case not involving the fault or negligence of COMPANY or CONTRACTOR.
- 13.1.2 It is agreed that in the event either party is rendered unable wholly or in part by Force Majeure to carry out its obligations hereunder, then such party shall give notice of the full particulars of such Force Majeure event in writing to the other party as soon as practicable after the occurrence of the cause relied on. The obligation of the party giving such notice, so far and only insofar as affected by such Force Majeure, shall be suspended during the continuance of any inability so caused, but for no longer period, and such cause shall be remedied with all reasonable dispatch. This obligation to remedy shall not require the settlement of labor matters when such course is inadvisable in the judgment of the party claiming same as a Force Majeure. Neither party shall be entitled to any additional compensation for delays resulting from a Force Majeure event.
- 13.1.3 Time is of the essence for performance hereunder. A delay shall be deemed excusable if the delay is a COMPANY-directed schedule delay. Delays due to subcontractors, suppliers or transporters of CONTRACTOR-furnished material, shall not be deemed excusable unless such delay is due to Force Majeure. The party claiming a Force Majeure event shall have the burden of proof with respect to demonstrating that such delay in fact constitutes a Force Majeure event.

13.2 Remedies and Dispute Resolution

- 13.2.1 This Agreement and any Work Directives associated herewith shall be deemed to have been made and accepted in Harris County, Texas, and the laws of Texas (without giving effect to Texas' choice of law rules) to the extent permitted by applicable law shall govern any interpretations or constructions of this Agreement. Any dispute between COMPANY and CONTRACTOR arising from or related to this Agreement shall be resolved first through discussions among upper management of the parties, and if the dispute cannot be resolved within forty-five (45) days from the date the matter was first brought by the disputing party to the attention of the other party, then either party may elect to resolve the matter through litigation which shall be brought in any court sitting in Harris County, Texas having jurisdiction thereof. COMPANY and CONTRACTOR each submits to the exclusive jurisdiction of said

courts and waives the right to change venue. The costs and expenses of the litigation (including attorney's fees) of the prevailing party will be borne by the other party.

- 13.2.2 If in COMPANY'S sole reasonable discretion the Work cannot be suspended pending the resolution of a dispute, COMPANY may (a) require that CONTRACTOR continue prosecuting the Work to completion pursuant to the terms and conditions of this Agreement, or (b) take over the Work and itself prosecute the same to completion. If the pending dispute is resolved in COMPANY'S favor, CONTRACTOR shall be liable to COMPANY for any costs and expenses incurred in completion of the Work which are in excess of the amount(s) COMPANY would have paid pursuant to this Agreement.

14.0 CONFIDENTIALITY

It is understood that both parties may have access to confidential materials and information ("Confidential Information") of the other Party, its parent, subsidiaries, or affiliates in order to provide the Work hereunder. Although the other Party shall endeavor to supply the non-disclosing Party with reliable and accurate information, the disclosing Party does not make any representation or warranty, express or implied, as to the accuracy or completeness of the Confidential Information furnished for the purposes of the Work. The disclosing Party shall have no liability to the non-disclosing Party, nor its directors, officers, employees or advisors the non-disclosing Party, or any of its representatives, arising out of the use of Confidential Information by the non-disclosing Party or its representatives. The above provisions of this Section 14.0 shall apply to the non-disclosing Party's parent corporation and all of its subsidiaries and affiliates, if any. It is further understood that the non-disclosing Party will utilize the Confidential Information received by it only for the purpose of providing the Work contemplated hereunder and for no other purposes whatsoever, and will not utilize the Confidential Information in any manner which could be adverse to the disclosing Party's interests. In no event shall the non-disclosing Party divulge any such Confidential Information to any third party without the express prior written consent of the disclosing Party's Representative. In the event any Confidential Information is requested or required of the non-disclosing Party in the course of legal proceedings, interrogatories, subpoenas, or similar process conducted by a third party, the non-disclosing Party shall promptly notify the disclosing Party of such request or requirement in order that the disclosing Party may seek appropriate injunctive relief or protective order, or waive the non-disclosing Party's compliance with the provisions hereof.

15.0 TITLE

If CONTRACTOR is required to transport the Waste from the Work site then title to the Waste passes to the time the CONTRACTOR'S vehicle is loaded with the Waste. If instead COMPANY transports the Waste from the Work site to CONTRACTOR'S facility or site then title to the Waste passes to the CONTRACTOR at the time the Waste is delivered to CONTRACTOR'S facility or site. **If CONTRACTOR is required to transport the Waste from the Work site then title to the Waste passes to CONTRACTOR at the time the CONTRACTOR'S vehicle is loaded with the Waste. If instead COMPANY transports the Waste for the Work site to CONTRACTOR'S facility or site then title to the Waste passes to the CONTRACTOR at the time the Waste is delivered to CONTRACTOR'S facility or site. In the event that the Waste is determined to be Nonconforming Waste, as defined below, title to, risk of loss and all other incidents of ownership shall revert back to the COMPANY at the time CONTRACTOR communicates to COMPANY, or its designee, that the Waste is nonconforming. Nonconforming Waste shall include all Waste that: (a) are improperly packaged or labeled by the Company, or its designee; (b) contain constituents or have characteristics or properties not disclosed on the waste profile and which increase the costs of disposal or increase the risk of hazard to human health and the environment by the acceptance, handling and/or disposal of the Waste; or (3) the designated disposal facility is not permitted to dispose of the Waste due to such previously undisclosed characteristics or properties.**

16.0 WAIVER

No waiver or failure to act by COMPANY with respect to any of its rights under this Agreement shall be construed as a waiver or relinquishment of that right in any other instance or of COMPANY'S right to assert or to rely on the terms of this Agreement. Any express waiver of a provision of this Agreement shall not be binding and effective unless made in writing and properly executed by the waiving party.

17.0 SEVERABILITY AND SURVIVAL

Each provision of this Agreement is severable. If any provision of this Agreement is determined to be illegal, invalid or unenforceable in any jurisdiction, the illegality, invalidity or unenforceability of that provision shall not affect (a) the legality, validity or enforceability of the remaining provisions of this Agreement, or (b) the legality, validity or enforceability of that provision in any other jurisdiction; and provided further, the subject provision shall be applied to the fullest extent permitted by applicable law, and COMPANY and CONTRACTOR shall revise the provision so as to confirm their mutual intention upon entering this Agreement and yet be legal, valid and enforceable in the applicable jurisdiction. The provisions of Sections 1.0, 3.0, 5.0, 6.0, 7.0, 9.0, 12.0, 13.0, 14.0, 15.0, 16.0, 17.0, 18.0, 19.0, and 21.0 shall survive the termination of this Agreement.

18.0 SERVICES FOR AFFILIATES

The Work to be performed by CONTRACTOR under this Agreement shall be performed, in certain cases, for one or more entities under common control with COMPANY or controlled by the COMPANY or for which the COMPANY serves as an operator of one or more of COMPANY'S affiliates. In the event any such entity requires CONTRACTOR to perform Work under this Agreement, a Work Directive for such Work shall be issued by the entity requiring the Work, substantially in the form shown in Exhibit A. Upon execution of said Work Directive, CONTRACTOR shall perform such Work for the executing entity in accordance with the Work Directive and the terms and conditions of this Agreement. By execution of the Work Directive, such entity shall be entitled to all rights and privileges, and liable for all commitments and responsibilities held by COMPANY under this Agreement, as same applies to said Work Directive. Upon execution of said Work Directive, CONTRACTOR'S agreement to insure and indemnify COMPANY pursuant to this Agreement shall extend to both COMPANY and such entity for purposes of said Work Directive. Unless expressly provided in the Work Directive, such entity which executes the Work Directive shall be solely responsible for the liabilities and obligations set forth in this Agreement under which that Work Directive is being issued as the same apply to the Work to be performed pursuant to that Work Directive. All such liabilities and obligations, as they apply to that Work Directive, shall be non-recourse to the direct and indirect parents (or a general partner or company member, as the case may be) and to the affiliates of the entity executing the particular Work Directive, and such non-recourse character shall survive any expiration or termination of this Agreement.

19.0 LIABILITY OF GENERAL PARTNER

In the case where Kinder Morgan G.P., Inc., a Delaware corporation, or any other Kinder Morgan entity is the general partner of COMPANY, or the entity executing a Work Directive, as the case may be (the "General Partner"), the CONTRACTOR agrees that the General Partner shall not be liable, directly or indirectly, for any of obligations or liabilities of COMPANY (or the entity executing the Work Directive, as the case may be) under this Agreement. All such obligations and liabilities shall be non-recourse to the General Partner and shall not constitute debts or obligations of the General Partner. No judgment, attachment, execution or other writ or process shall be sought, issued, or levied in connection with this Agreement against the General Partner or any of its assets or properties to satisfy any such liabilities or obligations or any judgments rendered in connection therewith and all such liabilities and obligations shall be satisfied solely from the assets of COMPANY, or the entity executing the Work Directive, as the case may be

20.0 SECURITY

In the event COMPANY elects to require CONTRACTOR to obtain a Letter of Credit, Performance and/or Labor and Material Bond(s), Parent Guaranty or other instrument or vehicle to provide financial security for the performance and payment obligations of CONTRACTOR under this Agreement or for any particular job or project assigned to CONTRACTOR pursuant to any Work Directive, COMPANY shall notify CONTRACTOR of COMPANY'S election upon execution of this Agreement or in the Work Directive for the particular job or project, and CONTRACTOR shall furnish to COMPANY, at COMPANY'S expense in case of a Bond, within ten (10) days of such notice and prior to commencing the Work or promptly thereafter in the case of an emergency, all documentation associated with such CONTRACTOR-provided security, which shall be on terms and in a form satisfactory to COMPANY.

21.0 PUBLIC RELATIONS

CONTRACTOR shall exert all reasonable efforts to maintain good will for the benefit of COMPANY with the landowners and the general public in the course of CONTRACTOR performing the Work. Nothing contained herein shall permit or be deemed to permit use by CONTRACTOR of COMPANY'S name, directly or indirectly, in the form of advertising or in a press release without the prior receipt of COMPANY'S written approval.

22.0 FACSIMILE/SIGNATURE COUNTERPARTS

Agreement may be executed in multiple original counterparts, each of which shall be deemed an original, and together they shall constitute one and the same agreement. Signature of this Agreement may be effected by facsimile (with confirmation by transmitting machine) and/or transmitted by portable document format ("pdf") file which shall be treated as an original signature, and any such signature, facsimile, pdf file or copy of this signed Agreement shall be construed and treated as the original and shall be binding as if it were the original.

23.0 ENTIRE AGREEMENT

This Agreement together with the Contract Documents and Work Directive(s) constitutes the entire agreement between COMPANY and CONTRACTOR and supersedes any prior written or oral agreements, or contemporaneous communications with respect to this subject matter. No subsequent amendment to this Agreement between the parties shall be binding on either party unless reduced to writing and signed by an authorized representative of each party. Preparation of the Contract Documents has been a joint effort of the parties and the resulting documents shall not be construed more severely against one of the parties than against the other.

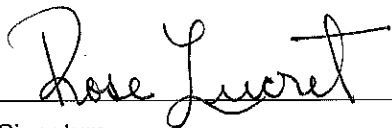
IN WITNESS WHEREOF, the parties have executed this Agreement to be effective as of the day and year first above written.

KINDER MORGAN ENERGY PARTNERS, L.P.

By: Kinder Morgan G.P., Inc.

By: Kinder Morgan Management, LLC,

the Delegate of the General Partner



Signature

Rose Lucret

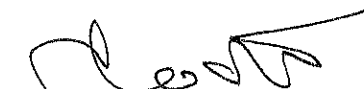
Name

Authorized Signatory

Title

OCTOBER 19, 2011

Date

**PROGRESSIVE ENVIRONMENTAL SERVICES,
INC. DBA SWS ENVIRONMENTAL SERVICES**

Signature

Robert Coston

Name

Chief Financial Officer/Secretary

Title

October 25, 2011

Date

Agreement Number: 26223

EXHIBIT A – WORK DIRECTIVE

To:	Attention:	Date:	
		Work Directive No.:	
		Agreement No.:	
	Phone:	Account Coding:	
	Fax:		
	Email:		

Work Directive Origin: [Specify KM Office or Field Location]

This Work Directive is entered pursuant to the terms of the Agreement for Emergency Response Services ("Agreement") dated _____, by and between ("COMPANY") and ("CONTRACTOR"). By its execution hereof, CONTRACTOR agrees to perform for the KM entity named below and executing this Work Directive pursuant to the terms, conditions and provisions of the Agreement, the following described Work [which, if noted below, will additionally describe "Covered Tasks" as provided for under DOT Operator Qualification Requirements,] and shall furnish all services, labor, supervision, technical capability, tools, equipment, transportation, materials, (except as set forth below) and other facilities and items necessary or convenient to complete the following work as further described and specified in the Specifications and/or Drawing(s) attached hereto or the Agreement and by this reference made a part of this Work Directive ("the Work"). If CONTRACTOR's proposal, quotation, or any other CONTRACTOR document supplied to the KM entity named below is included as part of this Work Directive or another exhibit to the Agreement, then any terms or conditions provided by CONTRACTOR which differ from or conflict with COMPANY's terms and conditions are hereby rejected and shall be of no force or effect. The KM entity named below in this Work Directive shall be solely responsible for the liabilities and obligations set forth in the Agreement under which this Work Directive is being issued, as the same apply to the Work to be performed pursuant hereto. All such liabilities and obligations, as they apply to this Work Directive, shall be non-recourse to the COMPANY (if the COMPANY is not the KM Entity executing this Work Directive, and other related entities as further provided for and agreed in the Agreement. Payments made to CONTRACTOR under this Work Directive shall include all taxes and similar charges except as otherwise agreed to herein or under the terms of the Agreement. Any capitalized term used in this Work Directive and not otherwise defined herein shall have the meaning as ascribed in the Agreement.

1. Project Name:	Location:
Description of Work: Full and complete description of the services (and goods) to be provided by CONTRACTOR including, but not limited to specifications, conditions and referenced bids/proposals.	
For Questions, contact _____ (the "COMPANY Designated Representative") at _____ or _____ at _____	
2. The COMPANY shall furnish the following materials to the work site(s):	None, unless previously approved by the KM Entity's authorized representative.
3. The Work shall be performed at the following location:	Location where work will be performed, if different from Project Location indicated above
4. CONTRACTOR shall commence the Work by _____	and shall complete the Work on or before _____
5. CONTRACTOR offers to complete the Work in accordance with the Agreement for the following consideration, which shall constitute full and complete payment therefore:	
(a) the total Lump Sum Amount	Fixed Price Of _____
(b) the total Time & Materials Amount	Not To Exceed _____ with rates specified in the Schedule of Values (Exhibit _____ to the Agreement)
(c) in accordance with the Schedule of Values (Exhibit _____ to the Agreement) or	
(d) For this Work Directive only, the schedule of values/rate sheet dated _____, 20XX, attached hereto as Exhibit _____, shall supersede the Schedule of Values in the Agreement. All other terms and conditions of Agreement and its prior amendments will remain unchanged and in force.	

SELECT WAIVER ACCORDING TO PROJECT'S TOTAL DOLLAR VALUE

Waive 10% Retainage Fee; or Do not Waive 10% Retainage Fee

6. CONTRACTOR shall submit invoices in duplicate to: Attn.: Phone: Fax:
7. CONTRACTOR hereby certifies that it has downloaded, reviewed and understood the Kinder Morgan Contractor Safety Manual and shall, prior to the commencement of any Work hereunder, make the same available to its employees and subcontractors who will be performing work on premises owned and/or operated by the Kinder Morgan entity named below. If the English language is a communication barrier, CONTRACTOR at its expense shall timely convert/translate the Kinder Morgan Contractor Safety Manual accurately into the appropriate language for its employees and subcontractors. Questions concerning the Manual should be directed to the Kinder Morgan Contractor Safety Group at: contractor_safety@kindermorgan.com prior to commencement of any Work.
8. Facsimile Signatures/Counterparts.
- This Work Directive may be executed in multiple original counterparts, each of which shall be deemed an original, and together they shall constitute one and the same agreement. Signature of this Work Directive may be effected by facsimile (with confirmation by transmitting machine) and/or transmitted by portable document format ("pdf") file which shall be treated as an original signature, and any such signature, facsimile, pdf file or copy of this signed Work Directive shall be construed and treated as the original and shall be binding as if it were the original.

For Work performed within the state of California, the attached Exhibit B must be acknowledged and signed.

Invoices must clearly indicate the Agreement Number, Work Directive Number, and Work Order/ Account Coding, as indicated above.

For Construction Projects, a Certificate of Final Acceptance must be completed, signed by an authorized representative, notarized, and attached to CONTRACTOR's final invoice.

In the Agreement, if there is a reference to "Kinder Morgan, Inc.," it shall now be deemed a reference to Kinder Morgan Kansas, Inc. This is not a change of entity, but merely a change of name only.

By signing below, KM Entity and CONTRACTOR affirm that the individual signing below has the requisite authority to authorize the commitment described herein, and that this Work Directive No. _____ is by reference hereby made part of Agreement No. _____.

This Work Directive is hereby agreed to and accepted this _____ day of _____, 20____.

[KM Entity]

[CONTRACTOR]

Signature	Date	Signature	Date
By: _____	_____	By: _____	_____
Print Name		Print Name	
Title: _____	_____	Title: _____	_____
Print Title		Print Title	

CC: _____ Contracts Administration, with all attachments

Please return executed work directive to:

ATTENTION:

- Exhibit WD_A** - Scope of Work
- Exhibit WD_B** - Revised Release Reporting Criteria (California only)
- Exhibit WD_C** - Work Directive Specific Schedule of Values/Rates
- Exhibit WD_D** - Operator Qualification Form
- Exhibit WD_E** - Certificate of Final Acceptance
- Exhibit WD_F1** - Conditional Waiver and Release
- Exhibit WD_F2** - Unconditional Waiver and Release

List of
Attachments:

**ADDENDUM A
TO
WORK DIRECTIVE NO.
SCOPE OF WORK**

[Modify as Appropriate]

1. CONTRACTOR shall provide all tools, labor and equipment necessary to complete the Work.
2. In performing the Work CONTRACTOR shall have 24/7 emergency response capabilities under Section 3.3 to Appendix E of 40CFR 112 for EPA Jurisdictional Facility's and Section 3 to Appendix C of 33CFR 154 for USCG Regulated Facilities including but not limited to:
 - 1.1. one thousand feet (1,000 ft) of containment boom (or, for complexes with marine transfer components, one thousand feet (1,000 ft) of containment boom or two times the length of the largest vessel that regularly conducts oil transfers to or from the facility, whichever is greater), and a means of deploying it within one (1) hour of the discovery of a discharge;
 - 1.2. oil recovery devices with an effective daily recovery capacity equal to the amount of oil discharged in a small discharge (Average Most Probable Discharge) or greater which is available at the facility within 2 hours of the detection of an oil discharge; and
 - 1.3. oil storage capacity for recovered oily material.
3. CONTRACTOR will provide response equipment and manpower resources in accordance with the National Preparedness for Response Exercise Program (PREP) Guidelines. Specific reference for USCG regulated facilities is located on pages 3-18 and 3-19 of the August 2002 PREP Guideline. Specific reference for EPA regulated facilities is located on pages 4-9 and 4-10 of the August 2002 PREP Guideline. These requirements include, but are not limited to, an annual equipment deployment exercise in the operating environment of the Area of the Facility, a comprehensive OSRO personnel training program, and a maintenance program to ensure that the equipment is periodically inspected and maintained in good operating condition. The satisfactory completion of these PREP requirements must be documented and submitted annually to Kinder Morgan to the attention of Director, Compliance [or insert appropriate KM representative], at [insert address of KM representative].
4. The Incident Commander is: [Insert name and contact information.]

AGREEMENT 26223**EXHIBIT B – SCHEDULE OF VALUES****1.0 OVERVIEW**

- 1.1 The amounts set forth in the Agreement cover payment in full for all materials, work, tools, equipment, insurance, bonds, profit, overhead and all other costs and expense of every kind, character and nature for which the CONTRACTOR is entitled to payment. Unless specifically set forth in the Agreement, no additional payment of any kind will be contemplated.
- 1.2 COMPANY (throughout this Schedule "KM Entity" or "COMPANY", as the case may be) agrees to pay CONTRACTOR, for Work performed pursuant to this Agreement, on a COST REIMBURSABLE BASIS in accordance with the Schedule of Values in this Exhibit B.
- 1.3 CONTRACTOR shall submit the timesheets and reimbursable expenses to the Designated Representative (or his or her delegate) on a daily basis for verification/acknowledgement of expenses and time spent on the project. All supporting documentation must be signed by the COMPANY'S project inspector prior to invoicing. Signature by these personnel does not constitute COMPANY'S agreement to pay these expenses.

2.0 INVOICING**2.1 Standard Invoice Procedure**

- 2.1.1 At the end of each calendar month, CONTRACTOR shall submit to COMPANY an original detailed invoice for Work performed during that month, together with one copy of such invoice and one set of supporting documentation. Such invoice shall be sent to the following address or as otherwise set forth on any Work Directive.
- 2.1.2 Reference each individual Work Directive for the appropriate addressee and company name for the invoice to be submitted.

COMPANY Name: Per individual Work Directive

2.2 Non-acceptance of Invoices

- 2.2.1 Invoices that do not relate to this Agreement will not be processed and such invoices will not be accepted by COMPANY. All charges not in compliance with the stated terms and conditions of this Agreement will be deducted from the invoice prior to payment processing.

2.3 Required Invoice Detail

Each of CONTRACTOR'S invoices shall contain the following information on its face:

- 2.3.1 An invoice date.
- 2.3.2 A reference number (invoice number) which is unique to the transaction.
- 2.3.3 Site or project name (if applicable) and COMPANY or KM Entity name.
- 2.3.4 Reference of COMPANY'S Designated Representative.

- 2.3.5 Agreement Number, Work Directive Number and Change Order Number (as applicable).
- 2.3.6 Billing period (time period of charges).
- 2.3.7 CONTRACTOR'S remittance address or electronic funds transfer routing information, (as applicable).
- 2.3.8 CONTRACTOR'S name and telephone number of contact to handle invoice related questions.
- 2.3.9 Amount due CONTRACTOR.
- 2.3.10 Project Status Report.
- 2.3.11 Summary of amount invoiced to date, this invoiced amount, retention (as applicable), and the amount remaining to be invoiced.

2.4 Supporting Documentation

Each of CONTRACTOR'S invoices shall be itemized and submitted to COMPANY together with receipts, time records, lien waivers, evidence of payment to subcontractors, and any other evidence of CONTRACTOR'S right to payment under this Agreement as COMPANY may, in its sole good faith discretion, from time to time require.

2.5 Final Invoice

When CONTRACTOR submits its final invoice to COMPANY for the Work, in addition to the requirements outlined above, CONTRACTOR shall additionally include the following which shall be submitted no later than thirty (30) days after the project completion date:

- 2.5.1 Mechanics lien and stop notice releases executed by CONTRACTOR and by each person or entity that furnished any labor, services or materials in connection with the Work;
- 2.5.2 Reasonable proof satisfactory to COMPANY that any claims for labor, materials or any other claim or potential claim for which COMPANY withheld compensation pursuant to the Agreement have been paid or satisfied in a manner acceptable to COMPANY;
- 2.5.3 Any other documents required by this Agreement; and
- 2.5.4 A Certificate of Final Acceptance.

3.0 **PAYMENT PROCEDURE**

3.1 Processing of Approved Invoices

Provided that such invoice meets all of the requirements as explained, COMPANY shall pay all undisputed charges set forth in each invoice, less any retention amount applicable, within thirty (30) days after such invoice is received by COMPANY.

3.2 Processing of Disputed Invoices

If COMPANY, in good faith, disputes and does not approve an item billed, COMPANY shall notify CONTRACTOR of the item or portion of an item disputed and withhold payment thereof

until settlement of the dispute. Such right of COMPANY to withhold such payments shall be in addition, and not in any way in lieu of, any other right of COMPANY hereunder, including the right to raise disputes for the first time after audit. Payment shall be contingent upon COMPANY'S review of the invoice and determination that the Work described in the invoice complies with all of the terms of this Agreement. Interest penalties for disputed invoices will not be paid by COMPANY.

3.3 Delayed submittal of Invoices and Non-payment

Any Work for which CONTRACTOR does not submit an invoice to COMPANY within sixty (60) days after the month in which such Work is completed shall be deemed to have been performed by CONTRACTOR without compensation; provided however, that if prior to the end of such sixty (60) day period, CONTRACTOR requests in writing from COMPANY'S Designated Representative a further extension of time for submitting such invoice (stating the reasons therefore and the amount of additional time requested), and COMPANY elects to authorize such extension in writing, CONTRACTOR shall have until the end of the extension to submit such invoice, and provided further, that nothing in this Agreement shall affect CONTRACTOR'S right to submit invoices within a longer period of time if so afforded by applicable statute.

4.0 TIME AND MATERIALS RATES

4.1 Time and Material Rates will apply to any Work Directive or Extra Work which - if requested by COMPANY - shall be specifically designated by COMPANY by written change order, which shall modify the applicable Work Directive, as being in addition to the work to be performed under lump sum designated above.

4.2 Labor:

Table 1 Labor Rates Effective From OCTOBER 19, 2011 to OCTOBER 18, 2012			
Description/Category/Classification	Straight Time (Rate Per Hour) (US \$0.00)	Overtime (Rate Per Hour) (US \$0.00)	Double Time (Rate Per Hour) (US \$0.00)
See attached Rate Schedule			

4.2.1 Rates shown on the rate sheet in the Schedule of Values include all benefits, withholding, workers compensation, taxes and similar assessments, and CONTRACTOR'S cost of insurance premiums (unless otherwise specified in the Agreement).

4.2.2 All Labor rates INCLUDE Level D PPE consisting of hard hats, reflective vests, safety glasses, work uniforms, and steel toe boots. Rates do not include costs for travel, subsistence, reproduction, communications, computer, modeling, subcontracts, freight, etc.

4.2.3 It is further stipulated and agreed that the pricing in this Exhibit B is firm and not subject to escalation for one (1) calendar year after the Effective Date of the Agreement. Modification of any pricing terms thereafter shall be in effect only upon the concurrence of both COMPANY and CONTRACTOR, and any such modification shall be evidenced by replacement of this Exhibit B. All Work related to a particular

Work Directive will be invoiced at the rates in effect on this Exhibit B at the time the Work is requested by COMPANY.

4.2.4 Day rates as approved in advance by COMPANY will apply to mobilization and demobilization personnel to the worksite subject to the terms of this Section 4.

4.2.5 Travel pay - See Section 4.4 below.

4.3 Overtime for Emergency Response Services

4.3.1 "STRAIGHT TIME" is defined as work performed from 8 AM to 4 PM, Monday through Saturday. "OVERTIME" is defined as work performed before 8 AM and after 4 PM, Monday through Saturday. Overtime will be paid at the "OVERTIME" rates shown in Table 1 of Schedule of Values, or at a factor of 1.3 times the straight or flat rate, if applicable, multiplied by the number of hours worked.

4.3.2 "DOUBLE TIME" is defined as work performed on Sundays or COMPANY'S observed holidays. Double time shall be paid at the rates shown in Table 1 of the Schedule of Values, or at a factor of 1.7 times the Straight Time or flat rate, if applicable, multiplied by the number of hours worked.

4.3.3 CONTRACTOR agrees not to pay shift differential for swing (evening) or graveyard (night) shifts. NOT APPLICABLE TO CONTRACT 26223.

4.3.4 CONTRACTORS employee(s) put on standby, through no fault of CONTRACTOR, shall be paid for actual hours on standby. Stand-by hours will be credited for the purpose of overtime. For Emergency Response Services STANDBY RATES are 50% of Straight Time, Overtime or Double Time Rates.

4.3.5 Travel Time and Expenses

4.3.6 Travel time is charged at the standard hourly rate. Travel time for hourly rate personnel will be actual travel time outside of a fifty (50) mile radius from the project site and shall not exceed eight hours per day.

4.3.7 COMPANY shall reimburse CONTRACTOR, without markup, for the direct, reasonable cost to CONTRACTOR for employee travel expenses away from the project site or employee's base office when this travel occurs as a direct result of the performance of the Work. Travel expenses include air (excluding first class or business airfare), ground transportation, lodging, meals, and telephone expenses. All travel expenses must have prior COMPANY approval and shall be supported by valid receipts.

4.3.8 Mileage Reimbursement will be paid for Mobilization and Demobilization only and shall be no more than the IRS allowable per mile, per vehicle. (COMPANY will compensate only per vehicle and not per man within the vehicle.)

4.3.9 Per Diem (subsistence) when in outlying areas (outside of a fifty (50) mile radius from office/site) will be forty dollars (\$40) per person per day; or fifty dollars (\$50) per person per day in high cost areas agreed to in advance by the parties.

5.0 MATERIALS AND SUBCONTRACTS

- 5.1 Materials purchased, at wholesale or jobber's cost plus ten percent (10%).
- 5.2 Subcontracts, at cost plus ten percent (10%).

Table 2 Materials Rates Effective From OCTOBER 19, 2011 To OCTOBER 19, 2012		
Description/Category/Classification	Rate (U.S. \$0.00)	Unit of Measure (Per Hour, Day, Week, Etc.)
See attached Rate Schedule		

6.0 EQUIPMENT

- 6.1 Equipment, rented, at cost plus ten percent (10%).

Table 3 Equipment Rates Effective From OCTOBER 19, 2011 To OCTOBER 19, 2012		
Description/Category/Classification	Rate (U.S. \$0.00)	Unit of Measure (Per Hour, Day, Week, Etc.)
See attached Rate Schedule		

KINDER MORGAN CONTRACT 26223 EMERGENCY RESPONSE SERVICES
TABLE I - EMERGENCY RESPONSE LABOR RATE SCHEDULE
Effective October 19 2011

Description/Category/Classification LABOR	Straight Time Rate per Hour	Overtime Rate per Hour	Double Time Rate per Hour
PRINCIPAL	\$156.00	\$202.80	\$265.20
INCIDENT COMMANDER	\$156.00	\$202.80	\$265.20
INDUSTRIAL HYGIENIST	\$150.00	\$195.00	\$255.00
PROJECT MANAGER	\$150.00	\$195.00	\$255.00
ENGINEER	\$150.00	\$195.00	\$255.00
ZONE MANAGER	\$125.00	\$162.50	\$212.50
HEALTH AND SAFETY OFFICER	\$118.00	\$153.40	\$200.60
CHEMIST	\$118.00	\$153.40	\$200.60
CONTRACT OFFICER	\$95.00	\$123.50	\$161.50
LEGAL SPECIALIST	\$300.00	\$390.00	\$510.00
SUPERVISOR	\$84.00	\$109.20	\$142.80
MARINE OPERATOR (LICENSED CAPTAIN)	\$80.00	\$104.00	\$136.00
TRAINED DIVER	\$80.00	\$104.00	\$136.00
LOGISTICS COORDINATOR	\$75.00	\$97.50	\$127.50
DISPOSAL COORDINATOR	\$75.00	\$97.50	\$127.50
FOREMAN	\$60.00	\$78.00	\$102.00
TRAFFIC CONTROL SUPERVISOR	\$60.00	\$78.00	\$102.00
EQUIPMENT OPERATOR	\$54.00	\$70.20	\$91.80
MARINE OPERATOR (<25ft)	\$48.00	\$62.40	\$81.60
QUALITY ASSURANCE OFFICER	\$50.00	\$65.00	\$85.00
WELDER (40 HR TRAINED)	\$50.00	\$65.00	\$85.00
MECHANIC (40 HR TRAINED)	\$48.00	\$62.40	\$81.60
TECHNICIAN II (40 HR TRAINED)	\$48.00	\$62.40	\$81.60
SAMPLING TECHNICIAN	\$45.00	\$58.50	\$76.50
BIOHAZARDOUS TECHNICIAN	\$40.00	\$52.00	\$68.00
ADMINISTRATIVE TECH (40 HR TRAINED)	\$48.00	\$62.40	\$81.60
FIELD CLERK	\$42.00	\$54.60	\$71.40
OFFICE STAFF	\$40.00	\$52.00	\$68.00

KINDER MORGAN CONTRACT 26223 EMERGENCY RESPONSE SERVICES
TABLE 2 - EMERGENCY RESPONSE MATERIAL RATE SCHEDULE

Description/Category/Classification	Rate (US \$0.00)	UNIT OF MEASURE
Material		
PERSONNEL PROTECTION - LEVEL OF PROTECTION		
EPA LEVEL D" (ALL PERSONNEL IN LEVEL D)*	No Charge	Each
EPA LEVEL C" (ALL PERSONNEL IN LEVEL C)*	\$ 85.00	Each
EPA LEVEL B" (ALL PERSONNEL IN LEVEL B)*	\$ 150.00	Each
EPA LEVEL A" (ALL PERSONNEL IN LEVEL A)*	\$ 200.00	Each
NFPA FIRE BUNKER GEAR*	\$ 150.00	Each
NFPA FIRE BUNKER GEAR (DECONTAMINATION)	\$ 150.00	Each
PERSONNEL EQUIPMENT	DAY	WEEK
CASCADE SYSTEM (TWO WAY)	\$ 200.00	\$ 1,250.00
AIR PACKS - SCBA/SKA PACKS	\$ 40.00	\$ 280.00
CONFINED SPACE ENTRY SAFETY PACKAGE	\$ 350.00	\$ 2,000.00
NIGHT VISION BINOCULARS	\$ 50.00	\$ 250.00
SCUBA EQUIPMENT	\$ 85.00	\$ 525.00
LEVEL A" - LIMITED USE ENCAPSULATED SUIT"	\$ 700.00	EACH
RESPIRATOR CARTRIDGES (Mercury)	\$ 40.00	PAIR
RESPIRATOR CARTRIDGES (OVAG)	\$ 26.00	PAIR
RESPIRATOR CARTRIDGES (HEPA)	\$ 7.00	PAIR
RESPIRATOR CARTRIDGES (Not otherwise specified)	Cost + 10%	
CASCADE SYSTEM RE-FILLS	\$ 30.00	BOTTLE
AIR PACK RE-FILLS	\$ 7.50	EACH
POLY-COATED COVERALLS	\$ 10.00	EACH
SARANEX SUITS (Tychem® SL)	\$ 34.00	EACH
LEVEL B SUIT	\$ 98.00	EACH
RAIN GEAR (OTHER THAN PPE)	\$ 35.00	EACH
CHEST WADERS	\$ 95.00	EACH
HIP WADERS	\$ 56.00	EACH
SPLASH SUIT	\$ 153.00	EACH
PVC-NITRILE GLOVES	\$ 3.50	PAIR
DISPOSABLE GLOVES (INNER)	\$ 36.00	BOX
SILVER SHIELD-GLOVES	\$ 10.00	PAIR
BUTYL GLOVES	\$ 30.00	EACH
UNIQUE CONSUMABLES	Rate (US \$0.00)	UNIT OF MEASURE
BIOHAZARDOUS BOX	\$ 40.00	EACH
BIOHAZARDOUS BAG	\$ 1.00	EACH
SHARPS CONTAINER (SMALL)	\$ 12.00	EACH
SHARPS CONTAINER (LARGE)	\$ 30.00	EACH
BIO SOLUTION	\$ 25.00	BOTTLE
LIQUID SPILL CONTROL (REMEDIAL SOLUTION)	\$ 35.00	GALLON
SODIUM HYPOCHLORITE SOLUTION, 5%	\$ 3.00	GALLON
DEGREASER (SIMPLE GREEN)	\$ 27.00	GALLON
CITRUSOL CLEANER	\$ 56.00	GALLON
SHRINK WRAP	\$ 18.50	ROLL
PLUG-N-DIKE	\$ 28.00	APPLICATION
WOODEN STAKES	\$ 16.00	BUNDLE
SIPHON PUMP	\$ 23.00	EACH
STRESS MANAGEMENT (LIQUIDS)	\$ 10.00	PER MAN/PER DAY

KINDER MORGAN CONTRACT 26223 EMERGENCY RESPONSE SERVICES
TABLE 2 - EMERGENCY RESPONSE MATERIAL RATE SCHEDULE

SAMPLING/TESTING/EQUIPMENT	Rate (US \$0.00)	UNIT OF MEASURE
OVA METER	\$ 200.00	DAY
FOUR GAS METER	\$ 100.00	DAY
SOIL SAMPLER (5GRAM, EPA METHOD 8260)	\$ 45.00	EACH
MERCURY VAPOR ANALYZER	\$ 350.00	DAY
MULTI-RAE PID	\$ 350.00	DAY
PH METER	\$ 25.00	DAY
PH PAPER	\$ 8.40	ROLL
HAZ-MAT TEST INDICATORS	\$ 50.00	TEST
OIL CLASSIFICATION KITS	\$ 30.00	EACH
AIR SAMPLING PUMPS	\$ 35.00	DAY
AIR SAMPLING TUBES	\$ 15.00	EACH
HAZARD CLASSIFICATIONS (FIELD TESTS)	\$ 20.00	TEST
HAZARDOUS CATEGORY TESTS	\$ 30.00	TEST
GEIGER COUNTER	\$ 35.00	DAY
MERCURY SPILL KIT	\$ 220.00	EACH
DEXSIL CLOR-D-TECT 1000 HALOGEN KIT	\$ 20.00	EACH
DEXSIL CLOR-D-TECT Q4000 HALOGEN KIT	\$ 24.00	EACH
HYDROCLOR Q4000 HALOGEN KIT	\$ 24.00	EACH
THIEF 25 MIL	\$ 2.75	EACH
THIEF 75 MIL	\$ 4.00	EACH
DISPOSABLE BALERS	\$ 21.00	EACH
COLIWASA	\$ 29.00	EACH
ONE GALLON SAMPLE CAN	\$ 8.00	EACH
FIVE GALLON SAMPLE CAN	\$ 17.75	EACH
SAMPLE JARS (1LTR) EPA 2000 SERIES	\$ 6.25	EACH
SAMPLE JARS (1 QT) CASE 12 NON EPA	\$ 16.00	CASE
SAMPLE JARS (1 PINT) CASE 12 NON EPA	\$ 12.00	CASE
SAMPLE COOLER (SHIPPING CHARGE EXTRA)	\$ 32.40	EACH
DEIONIZED WATER (5 GALLONS)	\$ 15.00	EACH
MANIFESTS	\$ 1.00	EACH
LABELS	\$ 1.00	EACH

KINDER MORGAN CONTRACT 26223 EMERGENCY RESPONSE SERVICES
TABLE 2 - EMERGENCY RESPONSE MATERIAL RATE SCHEDULE

BOOM/SORBENTS/LINERS	Rate (US \$0.00)	UNIT OF MEASURE
CONTAINMENT BOOM (18)"	\$ 1.75	PER FT/DAY
CONTAINMENT BOOM (27 -- 29)"	\$ 2.00	PER FT/DAY
CONTAINMENT BOOM (36)"	\$ 4.50	PER FT/DAY
5 ABSORBENT BOOM"	\$ 105.00	PACKAGE
8 ABSORBENT BOOM"	\$ 180.00	PACKAGE
SORBENT PADS 100CT	\$ 90.00	PACKAGE
SORBENT, INDUSTRIAL RUG	\$ 225.00	ROLL
SORBENT, ROLLS	\$ 125.00	ROLL
SORBENT, ROLLS (CHEMICAL)	\$ 145.00	ROLL
SORBENT, PADS (CHEMICAL) 100CT	\$ 94.50	PACKAGE
ABSORBENT, CLAY	\$ 15.00	BAG
ABSORBENT, ENCAPSULATING (CHEMICAL)	\$ 30.00	BAG
PORTLAND CEMENT	\$ 18.00	BAG
VERMICULITE	\$ 15.00	BAG
SHREDDED SORBENT (ACID/BASE)	\$ 176.00	PACKAGE
SNARE (ON ROPE)	\$ 65.00	PACKAGE
SNARE (BAG)	\$ 45.00	PACKAGE
SWEEP (OIL) 50'	\$ 72.00	PACKAGE
VISQUENE (ROLL)	\$ 96.00	ROLL
POLY BAGS	\$ 63.00	ROLL
LINER, DRUM (CORRUGATED)	\$ 16.00	EACH
LINER, DRUM (POLY)	\$ 5.90	EACH
LINER, DRUM (CHEMICAL RESISTANT)	\$ 20.00	EACH
LINER, DUMPSTER (ROLL-OFF)	\$ 53.00	EACH
LINER, DUMPTRUCK	\$ 76.50	EACH
LINER, FAST TANK	\$ 160.00	EACH
CAUSTIC NEUTRALIZER	\$ 150.00	BAG
ACID NEUTRALIZER	\$ 40.00	BAG
MERCURY ABSORBENT POWDER	\$ 94.00	BAG
MERCURY VAPOR ABSORBENT	\$ 25.00	BAG
SODA ASH	\$ 30.00	BAG
CONTAINERS	Rate (US \$0.00)	UNIT OF MEASURE
55 GAL DRUM, STEEL (17C) NEW	\$ 75.00	EACH
55 GAL DRUM, STEEL (17E) NEW	\$ 65.00	EACH
55 GAL DRUM, STEEL (17H) NEW	\$ 90.00	EACH
55 GAL DRUM, STEEL (17E) RECON*	\$ 45.00	EACH
55 GAL DRUM, STEEL (17H) RECON*	\$ 50.00	EACH
OPEN-TOP DRUM, POLY (20 GAL) NEW	\$ 106.00	EACH
OPEN-TOP DRUM, POLY (30 GAL) NEW	\$ 120.00	EACH
OPEN-TOP DRUM, POLY (55 GAL) NEW	\$ 166.00	EACH
SALVAGE DRUM, STEEL (8 GAL) NEW	\$ 65.00	EACH
SALVAGE DRUM, STEEL (15 GAL) NEW	\$ 90.00	EACH
SALVAGE DRUM, STEEL (30 GAL) NEW	\$ 110.00	EACH
SALVAGE DRUM, STEEL (55 GAL) NEW	\$ 135.00	EACH
SALVAGE DRUM, STEEL (85 GAL) NEW	\$ 245.00	EACH
SALVAGE DRUM, STEEL (85 GAL) RECON*	\$ 175.00	EACH
SALVAGE DRUM, POLY (20 GAL) NEW	\$ 70.00	EACH
SALVAGE DRUM, POLY (30 GAL) NEW	\$ 73.00	EACH
SALVAGE DRUM, POLY (65 GAL) NEW	\$ 181.00	EACH
SALVAGE DRUM, POLY (85 GAL) NEW	\$ 190.00	EACH
SALVAGE DRUM, POLY (95 GAL) NEW	\$ 235.00	EACH
SALVAGE DRUM, POLY (85 GAL) RECON*	\$ 170.00	EACH
SALVAGE DRUM, POLY (95 GAL) RECON*	\$ 185.00	EACH
5 GALLON BUCKET	\$ 21.00	EACH
1-CUBIC YD NON-HAZ BOX W/LINER & COVER	\$ 54.00	EACH
1-CUBIC YD HAZ BOX W/LINER & COVER	\$ 93.00	EACH
* WHEN AVAILABLE		

KINDER MORGAN CONTRACT 26223 EMERGENCY RESPONSE SERVICES
TABLE 3 - EMERGENCY RESPONSE EQUIPMENT RATE SCHEDULE

Description/Category/Classification		
EQUIPMENT / VEHICLES	HOUR	DAY
SUPERVISOR – RESPONSE VEHICLE	\$ 34.00	\$ 360.00
RESPONSE VEHICLES	\$ 22.00	\$ 275.00
FOUR WHEEL DRIVE RESPONSE VEHICLE	\$ 28.00	\$ 300.00
TRACTOR TANKER	\$ 120.00	\$ 2,160.00
TRACTOR WITH DUMP TRAILER	\$ 120.00	\$ 2,160.00
TRACTOR WITH FLATBED/LOWBOY	\$ 120.00	\$ 2,160.00
TRACTOR WITH BOX TRAILER	\$ 120.00	\$ 2,160.00
TRACTOR WITH ROLL-OFF TRAILER (2 BOX)	\$ 150.00	\$ 2,700.00
ROLL OFF TRUCKS		
ROLL OFF TRUCK	\$ 75.00	\$ 1,200.00
ROLL OFF TANK (4000 GALLON)	N/A	\$ 75.00
ROLL OFF BOX (20 CUBIC YARD)	N/A	\$ 35.00
ROLL OFF FLATBED (25 FT.)	N/A	\$ 25.00
ROLL OFF CLOSED TOP	N/A	\$ 45.00
VACUUM BOX	N/A	\$ 120.00
VACUUM TRUCKS*		
3300 GAL LIQUID RING TRUCK	\$ 125.00	\$ 2,250.00
3300 GAL INDUSTRIAL VACUUM TRUCK	\$ 100.00	\$ 1,800.00
2500 - 4000 GALLON LIQUID TRUCK	\$ 100.00	\$ 1,800.00
2300 GALLON COMBINATION	\$ 100.00	\$ 1,800.00
VACCON COMBINATION	\$ 150.00	\$ 2,700.00
INDUSTRIAL LOADER	\$ 180.00	\$ 3,240.00
GUZZLER (PREDATOR)	\$ 180.00	\$ 3,240.00
HIGH RAIL VACUUM TRUCK	\$ 250.00	\$ 4,500.00
*All vacuum trucks will be charged a minimum of four (4) hours and will also require a truck decon charge under most circumstances.		
SPECIALTY VEHICLES		
HIGH PRESSURE WATER JET	\$ 125.00	\$ 2,250.00
DUMP TRUCK	\$ 75.00	\$ 1,250.00
A.T.V. 4-WHEELERS	N/A	\$ 300.00
ERT/QRT (HAZ-MAT RESPONSE)	\$ 75.00	\$ 1,250.00
PORTABLE COMMAND CENTER	N/A	\$ 300.00
MECHANIC/WELDING TRUCK	\$ 75.00	\$ 1,350.00
BOOM TRUCK/LIFT GATE	\$ 50.00	\$ 900.00
STAKE BODY TRUCK	\$ 40.00	\$ 720.00
BOOM TRUCK 4X4	\$ 40.00	\$ 720.00
MILEAGE*	COST	UOM
PICKUP TRUCK/PERSONNEL VEHICLE	\$ 0.50	PER/MILE
VACUUM TRUCK/RESPONSE VAN	\$ 0.50	PER/MILE
TRACTOR	\$ 0.50	PER/MILE

*Mileage is calculated from equipment location (at time of call) to job site. Applicable to projects >50 miles from responding service center.

KINDER MORGAN CONTRACT 26223 EMERGENCY RESPONSE SERVICES
TABLE 3 - EMERGENCY RESPONSE EQUIPMENT RATE SCHEDULE

PROFESSIONAL DOCUMENTATION	COST	UOM
FLA. STATE REPORT	\$ 500.00	Per Report
CAD DRAWINGS	\$75.00/HR	Hour
ALL OTHER REPORTS*	HRLY RATE	
*Time required for additional review or re-generation of reports charged at applicable personnel hourly rates (Project Mgr.\Office Staff).		
PUMPS/SKIMMERS	HOURLY	DAY
6 HYDRAULIC/CENTRIFUGAL"	N/A	\$ 600.00
1" DOUBLE DIAPHRAM*	N/A	\$ 45.00
4 SINGLE/DOUBLE DIAPHRAM"	\$ 25.00	\$ 500.00
3" SINGLE DIAPHRAM PUMPS	\$ 10.00	\$ 180.00
2-5" TRANSFER PUMPS**	\$ 15.00	\$ 300.00
3" ALUMINUM DOUBLE DIAPHRAM	N/A	\$ 250.00
3 STAINLESS STEEL DOUBLE DIAPHRAM**	N/A	\$ 500.00
2 TEFLON/POLY DOUBLE DIAPHRAM**	N/A	\$ 300.00
4 POPPIT PUMP ("Sludgemaster")"	N/A	\$ 1,200.00
6 MASERATOR PUMP"	\$ 55.00	\$ 990.00
HIGH VOLUME TRANSFER PUMP (PETRO)*	N/A	\$ 3,250.00
HIGH VOLUME TRANSFER PUMP (CHEMICAL)*	N/A	\$ 3,500.00
DIESEL PERISTALTIC PUMPS*	\$ 50.00	\$ 600.00
DRUM VAC HEAD	N/A	\$ 125.00
DRUM SKIMMER (36)**	N/A	\$ 450.00
DRUM SKIMMER (72)**	N/A	\$ 750.00
GT 185 SKIMMER	N/A	\$ 2,000.00
FOILEX SKIMMER	N/A	\$ 1,500.00
**PLUS COMPRESSOR (SEE ANCILLARY EQUIPMENT)		
DIESEL HYDRAULIC UNIT	\$ 50.00	\$ 900.00
PRESSURIZED LIQUID TRANSFER PUMP	N/A	\$ 1,000.00
HOSES	COST	UOM
PETROLEUM (2 AND 3") LOW PRESSURE	\$ 0.50	FT
CHEMICAL (2 AND 3") LOW PRESSURE	\$ 1.00	FT
CHEMICAL TRANSFER	\$ 35.00	FT
FLEX HOSE -- 6"	\$ 1.50	FT
MARINE RADIOS (EACH)	\$ 30.00	DAY
UHF RADIOS (INTRINSICALLY SAFE)	N/A	EACH
BASE STATION W/REPEATER	\$ 100.00	DAY
REMOTE HARDWIRE LINES	Cost + 10%	
LAPTOP COMPUTER	\$ 125.00	DAY
FACSIMILE MACHINE	\$ 15.00	DAY
DESKTOP COMPUTER (W/PRINTER & MODEM)	\$ 125.00	DAY
GPS	\$ 25.00	DAY
PHOTOGRAPHS WITH PROCESSING	\$ 50.00	EACH

KINDER MORGAN CONTRACT 26223 EMERGENCY RESPONSE SERVICES
TABLE 3 - EMERGENCY RESPONSE EQUIPMENT RATE SCHEDULE

BOATS*	HOUR	DAY
COMMAND VESSEL	\$ 95.00	\$ 2,280.00
LARGE WORK BOAT W/ MOTOR & TRAILER (24' -26')	\$ 75.00	\$ 1,350.00
MEDIUM WORK BOAT W/ MOTOR & TRAILER (21'-23')	\$ 55.00	\$ 850.00
SMALL WORK BOAT W/ MOTOR & TRAILER (16'-20')	N/A	\$ 225.00
JOHN BOAT (15 FEET AND UNDER)	N/A	\$ 175.00
PONTOON BOAT W/MOTOR (22'-26')	N/A	\$ 360.00
WAVE RUNNER (INVESTIGATION)	N/A	\$ 180.00
VESSELS OF OPPORTUNITY	Cost + 10%	
*ALL VESSELS DO NOT INCLUDE FUEL OR OPERATOR		
OPEN OCEAN EQUIPMENT PRICES (AVAILABLE UPON REQUEST)		
ANCILLARY EQUIPMENT	DAY	WEEK
FRAC TANKER	\$ 100.00	\$ 600.00
MINI FRAC TANKER	\$ 50.00	\$ 300.00
POLY-TANK (500 GAL)	\$ 30.00	\$ 120.00
POLY-TANK (1,000 GAL)	\$ 40.00	\$ 160.00
POLY-TANK (3,000 GAL)	\$ 75.00	\$ 300.00
FAST TANK (2,300 GAL)	\$ 100.00	\$ 400.00
ROLL-OFF TRAILER	\$ 150.00	\$ 600.00
EQUIPMENT TRAILERS	\$ 25.00	\$ 100.00
DRUM TRAILER	\$ 75.00	\$ 300.00
CONTAINMENT BOOM TRAILER (BOX)	\$ 35.00	\$ 140.00
PRESSURE WASHERS	\$ 200.00	\$ 800.00
STEAM/PRESSURE CLEANERS	\$ 450.00	\$ 1,600.00
WELDER/GENERATOR COMBO	\$ 200.00	\$ 800.00
LIGHT TOWER/GENERATOR	\$ 200.00	\$ 800.00
LIGHT STAND (>1000W)	\$ 100.00	\$ 400.00
AIR HANDLERS (PORTABLE)	\$ 25.00	\$ 100.00
MERCURY VACUUM	\$ 500.00	N/A
SAMPLING AUGER	\$ 25.00	\$ 125.00
CHAIN SAW	\$ 50.00	\$ 250.00
SOD CUTTER	\$ 150.00	N/A
GAS BLOWERS	\$ 20.00	\$ 100.00
DECONTAMINATION STATION	\$ 350.00	N/A
DECONTAMINATION POOL	\$ 250.00	N/A
LARGE CYLINDER RECOVERY CASKET	\$ 800.00	\$ 5,600.00
FAT BOY COFFIN	\$ 550.00	\$ 3,850.00
CHLORINE COFFIN	\$ 600.00	\$ 4,200.00
	HOUR	DAY
GENERATOR (MOBILE, TRAILER MOUNTED)	N/A	\$ 630.00
GENERATOR (PORTABLE)	N/A	\$ 270.00
AIR COMPRESSOR (MOBILE, TRAILER MOUNTED)	N/A	\$ 270.00
AIR COMPRESSOR (PORTABLE)	N/A	\$ 180.00

KINDER MORGAN CONTRACT 26223 EMERGENCY RESPONSE SERVICES**TABLE 3 - EMERGENCY RESPONSE EQUIPMENT RATE SCHEDULE**

HEAVY EQUIPMENT	DAY	WEEK
BACKHOE - RUBBER TIRE	\$ 500.00	\$ 2,400.00
BACKHOE W/EXTENDED HOE	\$ 500.00	\$ 2,400.00
BOBCAT	\$ 300.00	\$ 1,540.00
BULLDOZER (D-6 OR EQUIVALENT)	\$ 675.00	\$ 3,375.00
FORKLIFT, 4WD ALL TERRAIN	\$ 425.00	\$ 1,980.00
FORKLIFT, TELESCOPIC-PETTIBONE	\$ 480.00	\$ 2,420.00
FRONT END LOADER (544 OR EQUIVALENT)	\$ 650.00	\$ 3,250.00
FRONT END LOADER (624 OR EQUIVALENT)	\$ 750.00	\$ 3,850.00
TRACKHOE (120 OR EQUIVALENT)	\$ 700.00	\$ 3,500.00
TRACKHOE (690 OR EQUIVALENT)	\$ 800.00	\$ 4,000.00
TRACKHOE (790 OR EQUIVALENT)	\$ 1,250.00	\$ 5,750.00
COMPACTOR	\$ 500.00	\$ 2,400.00
MINI EXCAVATOR	\$ 425.00	\$ 1,980.00
GRADALL	\$ 2,000.00	\$ 11,000.00

In addition to any terms outlined in Exhibit B, Schedule of values, all Equipment will be billed portal to portal, with a minimum of 4 hours. The cost of fuel consumed by equipment while performing the work, will be passed through as a line item on equipment invoices with documented back up or when no receipts are available, a fuel recovery fee may apply only to the portion of an invoice charge related to fuel consuming equipment.

The Fuel Recovery Fee is based on the US Department of Energy US national average diesel fuel cost. On the first day of each month, our Fuel Recovery Fee will be set for all jobs billed for that month based on the US national average fuel cost posted on the Department of Energy website from the prior Wednesday. The Department of Energy data can be found here: <http://www.eia.doe.gov/oog/info/wohdp/diesel.asp>. When the US national average is above \$2.50 per gallon, the Fuel Recovery Fee is set at 12% plus an additional 0.5% for every \$.10/gallon increase above \$2.50.

APPENDIX - SCHEDULE OF ALLOWABLE COSTS AND/OR CHARGES

Cost/Charge	Allowable		Cost / Charge Allowable Conditions
	Yes	No	
First Class Air Fare		X	Coach class only. Company will not reimburse for upgrades.
			Vehicle Charges (all charges require adequate documentation)
Personal Owned Vehicle		X	Charge miles allowed per IRS allowance per vehicle only. Provide vehicle VIN#, start/end odometer readings and purpose of trip. Charge business related miles only. Refer to this Exhibit for further requirements concerning mileage charged. Mileage includes fuel and insurance. Fuel and insurance charges should not be submitted for reimbursement.
Rental Vehicle		X	Rental cars should be insured by the Contractor's automobile insurance. Rental vehicles should be returned with the same amount of fuel in the tank as when it was checked out; therefore the Fuel Option should be rejected. Company will pay for required fuel purchased at a gas station only. Charges for Rental Car Insurance and the Fuel Option should not be submitted for reimbursement.
			Vehicle Charges (all charges require adequate documentation)
Hotel to Jobsite Contractor Owned Vehicles	X		Charge miles allowed per IRS allowance per vehicle only. Provide vehicle VIN#, start/end odometer readings and purpose of trip. Charge business related miles only. Refer to this Exhibit for further requirements concerning mileage charged. Mileage includes fuel and insurance. Fuel and insurance charges should not be submitted for reimbursement.
Home to Project Location Contractor Owned Vehicles	X		Charge miles allowed per IRS allowance per vehicle only. Provide vehicle VIN#, start/end odometer readings and purpose of trip. Charge business related miles only. Refer to this Exhibit for further requirements concerning mileage charged. Mileage includes fuel and insurance. Fuel and insurance charges should not be submitted for reimbursement.
Job Site Mileage Contractor-owned Vehicles	X		Charge miles allowed per IRS allowance per vehicle only. Provide vehicle VIN#, record daily total miles and purpose of trip(s). Charge business related miles only. Refer to this Exhibit for further requirements concerning mileage charged. Mileage includes fuel and insurance. Fuel and insurance charges should not be submitted for reimbursement.
Travel Time	X		Travel time is charged at the standard hourly rate. Travel time for hourly rate personnel will be actual travel time outside of a 50 mile radius from the project site and shall not exceed eight (8) hours per day unless the contract sets forth an alternate working schedule (ex. 5 x 10/hr days). First and last day of travel to be billed at 75% of the GSA-Domestic Per Diem M&IE Rates. (www.gsa.gov/perdiem)
			Other Charges (all charges require adequate documentation)
Per Diem	X		Per diem rates shall be in accordance with published GSA-Domestic Per Diem Rates at time of travel. Costs not included in MIE (meals and incidental expenses) must be business related, proper and reasonable, pre-approved by Project Manager, and substantiated by receipts. (www.gsa.gov/perdiem)
Holidays/Vacation		X	If applicable, only Company-observed holidays are allowable. Contractor vacations are not allowable and should not be billed.
Labor Titles		X	Only labor titles listed on Contractor's Personnel Rate Sheet are reimbursable. Labor titles not listed on Contractor's Personnel Rate Sheet must be approved and the contract amended before being invoiced and paid.
Computer/Laptop		X	Flat rental rate of \$35.00 per month per laptop. Refer to contract for variance.
Software & License Fees		X	Standard software provided by Contractor is Windows XP OS, MS Office, Internet Explorer, Adobe Acrobat Reader, anti-virus, FAX and WinZip. Refer to contract for allowable software and license fees.
Reproduction		X	Refer to this Exhibit for allowable charges.
Cell Phones		X	Flat rental rate of \$50.00 per month per phone. Refer to contract for variance.
Personal Protection Equipment	X		See Company's Contractor Safety Manual. Contractor shall evaluate the situation daily and determine what equipment is necessary for the performance of the Scope of Work. PPE includes all items necessary to protect Contractor from injury on the job site such as hard hat, eye and ear protection, safety shoes, NOMEX coveralls, snake leggings, and H2S monitors.
Fuel Charges	X		Equipment rates shall include servicing, fuel, lubricants and maintenance. Equipment not listed in the equipment rates in this Exhibit must be approved and substantiated for reimbursement.
Small Tools & Consumables		X	Small tools having a cost of less than \$1,000, disposable parts, consumables that are normally utilized in the performance of daily work are considered non reimbursable.
Equipment Rental	X		Cost plus 10%. Equipment rented must be authorized by Company.

Cost/Charge	Allowable		Cost / Charge Allowable Conditions
	Yes	No	
Subcontracts	X		Cost plus 10%.
Material Buy Outs	X		Cost plus 10%. Materials purchased must be authorized by Company.
Non-Consumable Supplies		X	Non-consumable supplies such as, but not limited to, radios, cameras, hole-punches, compasses, and other similar items are deemed to be Contractor's overhead and shall be considered non reimbursable.
Other Charges Not Stated in Contract		X	Charges not specifically stated in the contract (such as executive and clerical salaries; office rent; mortgage payments; warehouse rent; depreciation; property taxes; insurance; utilities and telephone expenses; professional and trade licenses and fees; employee recruitment; relocation; training and education; photocopying; data processing; office supplies; postage; books and periodicals; miscellaneous general and administrative expenses; advertising expenses; interest on borrowing and other financial costs; entertainment expenses; contributions and donations; bad debts; losses on other contracts; equipment storage and upkeep (if not specifically required and company-approved for individual jobs); and bid and proposal costs require prior approval and must be substantiated for reimbursement.

AGREEMENT 26223**EXHIBIT C – DRUG & ALCOHOL/OPERATOR QUALIFICATION PROGRAM REQUIREMENTS**

CONTRACTOR shall comply with requirements for both DOT Drug and Alcohol and Operator Qualification Requirements Programs, as follows:

1.0 DOT DRUG AND ALCOHOL PROGRAM

CONTRACTOR represents and warrants that it has established, maintains, and enforces a drug and alcohol policy.

- 1.1 COMPANY, under 49 CFR Parts 199 and 40, is required by law to ensure compliance with the pipeline safety regulations for drug and alcohol testing applicable to its CONTRACTORS', subcontractors and their agents, performing operations, maintenance, or emergency response functions on a pipeline or LNG facility subject to 49 CFR Parts 191, 192, 193 and 195 or any other provision or Part thereof (or any successor thereof) covering the type of work CONTRACTOR may perform pursuant to this Agreement as follows:
 - 1.1.1 CONTRACTOR agrees that CONTRACTOR, its subcontractors, and their agents will abide by a DOT anti-drug plan and alcohol Misuse Program which applies to all employees of CONTRACTOR, its subcontractors, and agents if performing an operations, maintenance or emergency response function on COMPANY'S facilities.
 - 1.1.2 CONTRACTOR agrees that CONTRACTOR, its subcontractors and their agents shall provide to their respective employees an Anti-drug Plan and Alcohol Misuse Program, the drug and alcohol testing, education, and training required by 49 CFR Parts 199 and 40. Prior to and during the performance of any work hereunder, CONTRACTOR shall have in place and shall implement a drug testing program meeting the requirements imposed by the regulations of the Code of Federal Regulations.
 - 1.1.3 CONTRACTOR agrees that CONTRACTOR, its subcontractors, and their agents, are in compliance with the drug and alcohol testing regulations at 49 CFR Parts 199 and 40 and Motor Carrier Regulations at 49 CFR Parts 391 and 394 Part 382, if applicable.
 - 1.1.4 CONTRACTOR agrees that CONTRACTOR, its subcontractors, and their agents shall allow COMPANY, COMPANY'S designee, the administrator and/or representative of a state agency (as defined in 49 CFR Part 199) access to property and records for the purpose of monitoring compliance with the requirements of the Pipeline and Hazardous Material Safety Administration (or any successor agency) for drug and alcohol testing at 49 CFR Part 199. This access shall occur periodically, and without prior notice to allow COMPANY, the administrator and/or representative of a state agency to audit CONTRACTOR, its subcontractors, and their agents' Anti-drug Plan and Alcohol Misuse Program, the required drug and alcohol testing and results thereof.
 - 1.1.5 COMPANY requires that CONTRACTOR'S written Alcohol and Drug Testing Program be approved in writing by COMPANY'S Policy and Compliance Department or its third party designee prior to start of work hereunder. Thereafter, COMPANY reserves the unqualified right to audit the said program at any time, or to ask its third party designee to do likewise, during the performance of work hereunder. In the event that COMPANY, at its sole discretion believes that the said program no longer meets the applicable law and/or regulatory statutes recited in this Policy and its subsections, then COMPANY may suspend work until such time as CONTRACTOR restores the said

program to full compliance. Any costs incurred by COMPANY because of such suspension, shall be borne by CONTRACTOR.

- 1.1.6 COMPANY, to the extent required by applicable laws or regulations, will monitor the CONTRACTOR'S compliance with these regulations and from time to time require certificates regarding compliance with such testing requirements to be provided by CONTRACTOR from CONTRACTOR'S testing agency. CONTRACTOR will allow access to its property and records by COMPANY or by any authorized state agency (or its representative) having jurisdiction over COMPANY or its facilities, for the purpose of monitoring COMPANY'S compliance with governmental laws, rules or regulations.

2.0 OPERATOR QUALIFICATION PROGRAM

CONTRACTOR represents and warrants that it has established, maintains and enforces an Operator Qualification (OQ) program.

- 2.1 COMPANY under 49 CFR Parts 192 and 195 is required by law to ensure compliance with the pipeline safety regulations for OQ applicable to its CONTRACTORS, its subcontractors and their agents who perform specific OQ covered tasks during operations and maintenance work on hazardous liquids (including CO₂) or natural gas pipelines or facilities subject to 49 CFR Parts 192 or 195 as follows:
 - 2.1.1 CONTRACTOR agrees that CONTRACTOR, its subcontractors and their agents shall review and comply with COMPANY'S OQ Program. CONTRACTOR agrees that CONTRACTOR, its subcontractors and their agents will also review the list of OQ-covered tasks and identify any and all OQ-covered tasks that they would perform for COMPANY (OQ Program and list of covered tasks attached).
 - 2.1.2 CONTRACTOR agrees that CONTRACTOR, its subcontractors and their agents will be qualified under a COMPANY approved evaluation program which applies to all employees of CONTRACTOR, its subcontractors and their agents who perform specific OQ-covered tasks during operations and maintenance work.
 - 2.1.3 CONTRACTOR agrees that proper and approved documentation will be kept by CONTRACTOR or their agents to verify the OQ evaluations and that CONTRACTOR will provide for COMPANY'S access to this documentation as required by required by COMPANY'S OQ Program Appendix E: Procedures for Contractor Compliance with OQ and Appendix F: Required OQ "Action" Plan Elements for Contractors (see website information below) necessary for verification. CONTRACTOR will keep documentation in ISNetworld unless instructed by COMPANY.
 - 2.1.4 CONTRACTOR agrees that CONTRACTOR, its subcontractors and their agents shall allow COMPANY'S representative and/or the representative of a local, State or Federal agency access to property and records for the purpose of monitoring compliance with the requirements of the OQ regulation. This access shall occur periodically and without prior notice.
 - 2.1.5 CONTRACTOR personnel who do not have proper and documented OQ qualifications will not be allowed to perform specific OQ-covered tasks during operations and maintenance work on hazardous liquids (including CO₂) or natural gas pipelines or facilities subject to 49 CFR Parts 192 or 195, unless those non-OQ qualified personnel are supervised by an OQ-qualified individual within the span of control limits, as described in COMPANY'S OQ Program.

- 2.1.6 CONTRACTOR agrees to provide OQ-related information on its personnel when requested by COMPANY. Typically, this will be requested by COMPANY Project Management or Operations Designated Representatives during the bidding process or if the work is not bid, when the work is assigned to CONTRACTOR.
- 2.1.7 CONTRACTOR agrees to review the work it is being asked to perform and identify any OQ-covered tasks being performed which were not identified as OQ-covered tasks by COMPANY'S Project Management personnel, and notify COMPANY'S Project Management personnel of the discrepancy prior to commencement of the work.

Detailed information on COMPANY'S DOT and Operator Qualification program requirements are located on the Internet at:

DOT Drug and Alcohol Compliance:

http://www.kindermorgan.com/work/contractor_co/dot_drug_alcohol_req.cfm

or via telephone by contacting:

DOT Compliance, Phone: 713-369-9480

Operator Qualification Program:

http://www.kindermorgan.com/work/contractor_co/dot_operator_qual.cfm

Exhibit E: http://www.kindermorgan.com/work/contractor_co/oq_procedure_for_Contractor_Compliance.pdf

Exhibit F: http://www.kindermorgan.com/work/contractor_co/oq_action_plan_elements_for_contractors.pdf

or via telephone by contacting:

Manager, Operator Qualification & Training, Phone: 307-232-4423.

IMPORTANT NOTICE

To Contractors Of Kinder Morgan And/Or Its Affiliates ("KM")

**Department of Transportation Regulations
For
Anti-Drug and Alcohol Misuse Plans**

The Department of Transportation ("DOT") continues to report drug/alcohol testing compliance problems with contractors who perform DOT-covered work for pipeline operators. In response to these compliance problems, DOT promises to step-up their enforcement of the regulations contained in 49 CFR Parts 199 and 40. DOT places the responsibility upon the pipeline operators such as KM, to see that contractors and contractor employees performing DOT-covered work are in compliance with the drug testing regulations. Given what we know about DOT drug/alcohol testing plans and contractor monitoring, it is possible many existing contractor's drug plans do not meet the standards required by these regulations. In addition, new alcohol regulations became effective January 1, 1995, for the Pipeline and Hazardous Materials Safety Administration and the Federal Motor Carrier Safety Administration. Consequently, reasonable measures must be undertaken to safeguard against civil penalties from DOT.

Effective January 1996, COMPANY contracted with National Compliance Management Service, Inc., (NCMS) to act as its agent for monitoring contractor DOT anti-drug and alcohol misuse prevention plans and to obtain contractor drug/alcohol testing data. NCMS is authorized by KM to request anti-drug and alcohol misuse plans and statistical data and other documentation from contractors who plan to perform an operating, maintenance or emergency response function on KM covered facilities.

CONTRACTOR can access COMPANY'S website for further information and contacts for the NCMS at:

http://www.kindermorgan.com/work/contractor_co/dot_drug_alcohol_req.cfm

CONTRACTOR can call NCMS directly or access the required documentation through the National Compliance Management Services website. This information is available under forms: <http://www.nationalcompliance.com/forms.htm>, selecting the PHMSA Contractor Packet at the bottom of the page. Detailed instructions and information are provided to facilitate completion of the package. The completed package should be then submitted via email to:

dot@nationalcompliance.com

If email is not available, then please contact NCMS as follows:

*National Compliance Management Service
(Kinder Morgan Audit)
7 Compound Drive
Hutchinson, KS 67502
Phone: (620) 669-0954 Fax: (620) 669-8430*

Only contractors with approved drug/alcohol testing programs will be allowed to perform DOT-covered tasks for KM. If you should have any question pertaining to this matter or require additional information, for general information please contact: Director, Compliance HR. For those Contractors registered in ISNetworld, information is downloaded from NCMS to ISNetworld contractor dashboard

AGREEMENT 26223

EXHIBIT D - CERTIFICATE OF FINAL ACCEPTANCE

THE STATE OF §

COUNTY OF §

Date:

To: [Insert Name and Address of KM Entity executing the applicable Work Directive]

Ref: Work Directive dated , 20 (the "Work Directive") by and between ("KM") and
 ("CONTRACTOR") under that certain Agreement for Professional Emergency Response
 Services dated , 20 (the "Agreement")

1. The Work under the Work Directive has been completed in accordance with the terms of the Contract Documents;
2. CONTRACTOR has met all its obligations under the terms of the Contract Documents, other than warranty obligations and any other obligations that expressly survive the termination thereunder;
3. All amounts that were due and payable by KM in connection with the Work have been paid;
4. CONTRACTOR has not directly or indirectly created, incurred, assumed or suffered to be created by it or any subcontractor, employee, laborer, mechanic, materialman, or other supplier of goods or services any lien relating to the Work, the Kinder Morgan Energy Partners, L.P.'s or KM's premises or any part thereof or interest therein except to the extent lien security has been provided by CONTRACTOR and accepted by KM in connection therewith;
5. CONTRACTOR has promptly paid and discharged any liens which, notwithstanding paragraph 4 hereof, it has directly or indirectly created or suffered to be created by it or any subcontractor, employee, laborer, mechanic, materialman, or other supplier of goods or services relating to the Work, Kinder Morgan Energy Partners, L.P.'s or KM's premises, or any part thereof or interest therein except to the extent lien security has been provided by CONTRACTOR and accepted by KM in connection therewith;
6. Title to all Work is free and clear of any and all liens, claims, charges, security interests, encumbrances and rights of other persons arising as a result of any actions or failure to act of CONTRACTOR, its subcontractors, or their employees or representatives except to the extent lien security has been provided by contractor and accepted by KM in connection therewith;
7. All federal and state unemployment and old age benefit taxes have been paid, or will be paid when due; all valid state sales and use taxes properly levied on materials, equipment, supplies and services furnished by CONTRACTOR have been paid; all federal and state income taxes required by law to be withheld from employees or others have been withheld and remitted to the proper taxing authority, or will be remitted when due;
8. All premiums for insurance requirements under the Contract Documents have been paid;
9. All claims for damages of any nature arising from the fulfillment of the Contract Documents and for which CONTRACTOR is responsible pursuant thereto have been paid, and payment has been made by CONTRACTOR in full for all claims for damages for which CONTRACTOR is required under the Contract Documents to indemnify KM, its general partner (if any) and its affiliated companies; and

10. Any other items payable by CONTRACTOR under the Contract Documents have been paid in full.

CONTRACTOR agrees to indemnify and hold harmless KM, its parent, general partner (if any), affiliated and subsidiary companies and entities from any claims, damages, fines or penalties, or expenses arising from CONTRACTOR'S failure to perform or fulfill any of the acts or obligations referred to above.

CONTRACTOR'S EXECUTION OF THIS CERTIFICATE SHALL CONSTITUTE A WAIVER BY IT OF ALL CLAIMS AGAINST KM RELATED TO OR ARISING OUT OF THE APPLICABLE WORK DIRECTIVE; PROVIDED, HOWEVER, THAT CONTRACTOR (NOR ITS SURETY, IF ANY) SHALL NOT BE RELEASED FROM ANY WARRANTY WORK OR OTHER UNPERFORMED OBLIGATIONS UNDER THE CONTRACT DOCUMENTS.

This Certificate of Final Acceptance shall be governed by, construed and enforced in accordance with the laws of the State of Texas (without giving effect to the principles thereof relating to conflicts of laws), except with regard to the creation, recordation and discharge of a lien, which shall be governed by the laws of the state in which the Work was performed.

IN WITNESS WHEREOF, CONTRACTOR has duly executed and acknowledges this Certificate of Final Acceptance on the _____ day or _____, 20____.

[Insert CONTRACTOR Name]

By: _____

Name: _____

Title: _____

THE STATE OF _____)

COUNTY OF _____) §

This instrument was acknowledged before me on the _____ day of _____,

20____ by _____, as _____ of [Name of CONTRACTOR].

By: _____

Notary Public, State of _____

Printed Name of Notary: _____

My Commission expires: _____

Countersigned:

[Name of KM Entity on the Work Directive]

By: _____

Printed Name: _____

Title: _____

Date: _____

AGREEMENT 26223

EXHIBIT E – CONDITIONAL and UNCONDITIONAL WAIVER AND RELEASE

CONDITIONAL WAIVER AND RELEASE

THE STATE OF

§

COUNTY OF

§

§

WHEREAS:

1. [] ("KM") and [] ("CONTRACTOR") have entered into that certain Work Directive dated as of [] under that certain Agreement for Professional Emergency Response Services dated as of [] (the "Agreement"), pursuant to which CONTRACTOR is to provide [] services in connection with a [] (the "Project") located at [] (the "Site").
2. As a condition precedent of the obligation of KM to make each payment under the Work Directive that CONTRACTOR supplies KM with a waiver and release of liens and security interests and waiver of any claims to the extent of such payment and CONTRACTOR provides this Conditional Waiver and Release in order to satisfy the aforesaid condition precedent in relation to its invoice no. [to be inserted] dated [to be inserted] (the "Invoice").

NOW THEREFORE:

Capitalized terms used and not defined herein shall have the meaning assigned to them in the Agreement (except as may be expressly modified by the terms of the Work Directive).

2. Upon payment by KM to CONTRACTOR of the sum of [], which sum represents the full amount due to CONTRACTOR under the Invoice, CONTRACTOR irrevocably waives, releases or relinquishes any lien, security interest or claim (whether for breach of contract, pursuant to law or otherwise) relating to the Work, the Project or the Site for which payment is requested under the Invoice.
3. CONTRACTOR certifies that:
- 3.1 All amounts that were due and payable in connection with the Work have been paid by KM as of the date of payment and as of the last advance applicable to CONTRACTOR [save in relation to the amounts of (a) [\$] under Invoice Nos. [], which CONTRACTOR acknowledges that KM is withholding in accordance with the Agreement and/or Work Directive and (b) [], which CONTRACTOR acknowledges are subject to dispute with KM.
- 3.2 CONTRACTOR has not directly or indirectly created, incurred, assumed or suffered to be created by it or any subcontractor, employee, laborer, mechanic, materialman or other supplier of goods or services any lien relating to the Work, the Project, the Site or any part thereof or interest therein, except to the extent lien security has been provided by CONTRACTOR and accepted by KM in connection therewith;
- 3.3 CONTRACTOR has promptly paid and discharged any liens which, notwithstanding paragraph 3.2 hereof it has directly or indirectly created or suffered to be created by it or any subcontractor, employee, laborer, mechanic, materialman or other supplier of goods or services relating to the Work, the Project, the Site or any part thereof or interest therein, except to the extent lien security has been provided by CONTRACTOR and accepted by KM in connection therewith; and

- 3.4 Title to all Work is free and clear of any and all liens, claims, charges, security interests, encumbrances and rights of other persons arising as a result of any actions or failure to act of CONTRACTOR, its subcontractors, or their employees or representatives except to the extent lien security has been provided by CONTRACTOR and accepted by KM in connection therewith.
- 3.5 THIS CONDITIONAL WAIVER AND RELEASE SHALL BE GOVERNED BY, CONSTRUED AND ENFORCED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF TEXAS (WITHOUT GIVING EFFECT TO THE PRINCIPLES THEREOF RELATING TO CONFLICTS OF LAWS), EXCEPT WITH REGARD TO THE CREATION, RECORDATION AND DISCHARGE OF A LIEN, WHICH SHALL BE GOVERNED BY LAWS OF THE STATE WHERE THE PROJECT IS LOCATED.

IN WITNESS WHEREOF, CONTRACTOR has duly executed and acknowledges this Conditional Waiver and Release on the _____ day of _____, 20__.

[CONTRACTOR Name]

By:

Name:

Title:

sample

ACKNOWLEDGEMENT

THE STATE OF _____
COUNTY OF _____

§
§
§

This instrument was acknowledged before me on the _____ day of _____, 20__, by _____, as _____ of _____.

By:

Notary Public, State of _____

Printed Name of Notary: _____

My Commission Expires: _____

UNCONDITIONAL WAIVER AND RELEASE

THE STATE OF

§

COUNTY OF

§

§

WHEREAS:

- 1 [] ("KM") and [] ("CONTRACTOR") have entered into that certain Work Directive dated as of [] under that certain Agreement for Professional Emergency Response Services dated as of (the "Agreement"), pursuant to which CONTRACTOR is to provide services in connection with a (the "Project") located at (the "Site").
2. As a condition precedent of the obligation of KM to make each payment under the Work Directive that CONTRACTOR supplies KM with a waiver and release of liens and security interests and waiver of any claims to the extent of such payment and CONTRACTOR provides this Unconditional Waiver and Release in order to satisfy the aforesaid condition precedent in relation to its invoice no. [to be inserted] dated [to be inserted] (the "Invoice").

NOW THEREFORE:

- 1 Capitalized terms used and not defined herein shall have the meaning assigned to them in the Agreement (except as may be expressly modified by the terms of the Work Directive).
2. The undersigned hereby irrevocably waives, releases, or relinquishes any lien, security interest, or claim (whether for breach of contract, pursuant to law or otherwise) relating to the Work, the Project or the Site.
3. CONTRACTOR certifies that:

- 3.1 All amounts that were due and payable by KM in connection with the Work have been paid.
- 3.2 CONTRACTOR has not directly or indirectly created, incurred, assumed or suffered to be created by it or any subcontractor, employee, laborer, mechanic, materialman, or other supplier of goods or services any lien relating to the Work, the Project, the Site or any part thereof or interest therein except to the extent lien security has been provided by CONTRACTOR and accepted by KM in connection therewith;
- 3.3 CONTRACTOR has promptly paid and discharged any liens which, notwithstanding paragraph 3.2 hereof, it has directly or indirectly created or suffered to be created by it or any subcontractor, employee, laborer, mechanic, materialman, or other supplier of goods or services relating to the Work, the Project, the Site or any part thereof or interest therein except to the extent lien security has been provided by CONTRACTOR and accepted by KM in connection therewith; and
- 3.4 Title to all Work is free and clear of any and all liens, claims, charges, security interests, encumbrances and rights of other persons arising as a result of any actions or failure to act of CONTRACTOR, its subcontractors, or their employees or representatives except to the extent lien security has been provided by CONTRACTOR and accepted by KM in connection therewith.
- 3.5 THIS UNCONDITIONAL WAIVER AND RELEASE SHALL BE GOVERNED BY, CONSTRUED AND ENFORCED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF TEXAS (WITHOUT

GIVING EFFECT TO THE PRINCIPLES THEREOF RELATING TO CONFLICTS OF LAWS), EXCEPT WITH REGARD TO THE CREATION, RECORDATION AND DISCHARGE OF A LIEN, WHICH SHALL BE GOVERNED BY LAWS OF THE STATE WHERE THE PROJECT IS LOCATED.

IN WITNESS WHEREOF, the undersigned has duly executed and acknowledges this Unconditional Waiver and Release on the day of _____, 20.

[CONTRACTOR Name]

By:

Name:

Title:

ACKNOWLEDGEMENT

THE STATE OF

COUNTY OF

This instrument was acknowledged before me on the _____ day of _____, 20, by _____, as _____ of.

By:

Notary Public, State of

Printed Name of Notary:

My Commission Expires:

AGREEMENT 26223**EXHIBIT F – CERTIFICATE OF INSURANCE**

CONTRACTOR is required to submit the text required for a certificate of insurance (as contained in Section 8.0 of the Agreement) directly to its insurance carrier so that evidence of proper insurance coverage may be submitted. Upon receipt from its carrier of the fully executed certificate, CONTRACTOR shall forward same to ISNetworld for ISN's review and approval, unless submission shall be to COMPANY, as explained below. If CONTRACTOR has been exempted from ISNetworld, CONTRACTOR shall submit said certificate of insurance along with its Agreement requirements for review by the Contract Administrator designated in **Section 2.3** of the Agreement. Upon acceptance by COMPANY or its designated representative(s), the executed certificate of insurance shall be incorporated into this Exhibit..

Do not delete this spacing – contains a code – insert any additional exhibits before this marker.

bonnie.curry@eaglesws.com

August 27, 2012

Agreement No: 26223 /
EPA Amendment

PROGRESSIVE ENVIRONMENTAL
SERVICES, INC. DBA DBA SWS
ENVIRONMENTAL SERVICES
600 GRAND PANAMA BLVD.
PANAMA CITY BEACH, FL 32407

Attention: Bonnie Curry

Re: Amendment to: Master Services

Pursuant to the terms and conditions of Agreement No. 26223 effective 10/19/2011, by and between KINDER MORGAN ENERGY PARTNERS, L.P. and PROGRESSIVE ENVIRONMENTAL SERVICES, INC. DBA DBA SWS ENVIRONMENTAL SERVICES, which Agreement is made a part hereof by reference, the same as if set forth herein in full, you are hereby requested to amend the Agreement to include the following:

The following language is hereby added at the end of the Compliance with Laws section:

"CONTRACTOR certifies that at the time of execution of this Agreement CONTRACTOR is not included on any United States Federal Government debarment list (such as the Excluded Parties List System ("EPLS") (<http://www.epls.gov>) and/or the System for Award Management ("SAM") (<http://sam.gov>) maintained by any federal, state or local governmental authority nor prevented from performing Work for COMPANY by virtue of any governmental order, proceeding or otherwise. If at any time during the term of this Agreement CONTRACTOR cannot so certify to COMPANY, CONTRACTOR shall promptly notify COMPANY as to CONTRACTOR'S status."

The following language is hereby added to the Termination section under the termination for default paragraphs:

"Failure by CONTRACTOR to comply with EHS Laws constitutes a material breach of this Agreement and COMPANY shall be permitted to immediately terminate this Agreement or any Work Directive, if any, in whole or in part for default by CONTRACTOR without affording a cure period upon the occurrence of such a breach."

All other terms and conditions of Agreement No. **26223**, as amended by prior contract amendments (if any), which are not changed by this amendment will continue in full force and effect. This amendment now forms an integral part of this Agreement. Confirm your acceptance by signing on the line provided and return to COMPANY'S Contract Administrator as listed below:

KINDER MORGAN ENERGY PARTNERS, L.P.
1001 Louisiana Street
Houston, TX 77002
Attn: Katrina Magatagan
Email: Katrina_Magatagan@kindermorgan.com

This Amendment is effective as of August 27, 2012.

COMPANY

KINDER MORGAN ENERGY PARTNERS, L.P.

By: Kinder Morgan G.P., Inc., its General Partner
By: Kinder Morgan Management, LLC, the
Delegate of the General Partner

Katrina Magatagan
Signature

Katrina Magatagan
Name

Authorized Signatory
Title

8-28-12
Date

CONTRACTOR

PROGRESSIVE ENVIRONMENTAL SERVICES,
INC. DBA DBA SWS ENVIRONMENTAL
SERVICES

Jim Weber
Signature

Jim Weber
Name

CEO
Title

8-28-2012
Date