U.S. Department
of Transportation
**Pipeline and Hazardous
Materials Safety Administration**

1200 New Jersey Avenue, S.E.
Washington, D.C. 20590

The following Oil Spill Response Plan has been submitted to the Department of Transportation (DOT) Pipeline Hazardous Materials Safety Administration (PHMSA) in HyperText Markup Language (HTML) format, and has since been converted to Portable Document Format (PDF) form. Any hyperlink included in the PDF file is NOT functional, and materials referenced in the links have been attached as an addendum at the end of the document.

Southern Zone

Oil Spill Response Plan


KOCH
KOCH PIPELINE COMPANY LP
103
Developed by:
TRP
TECHNICAL RESPONSE PLANNING
CORPORATION
1610 Woodstead Court #355 • The Woodlands, Texas 77380 USA • Tel: 281-955-9600 • Fax: 281-955-0369 • info@trpcorp.com • www.emergency-response-planning.com

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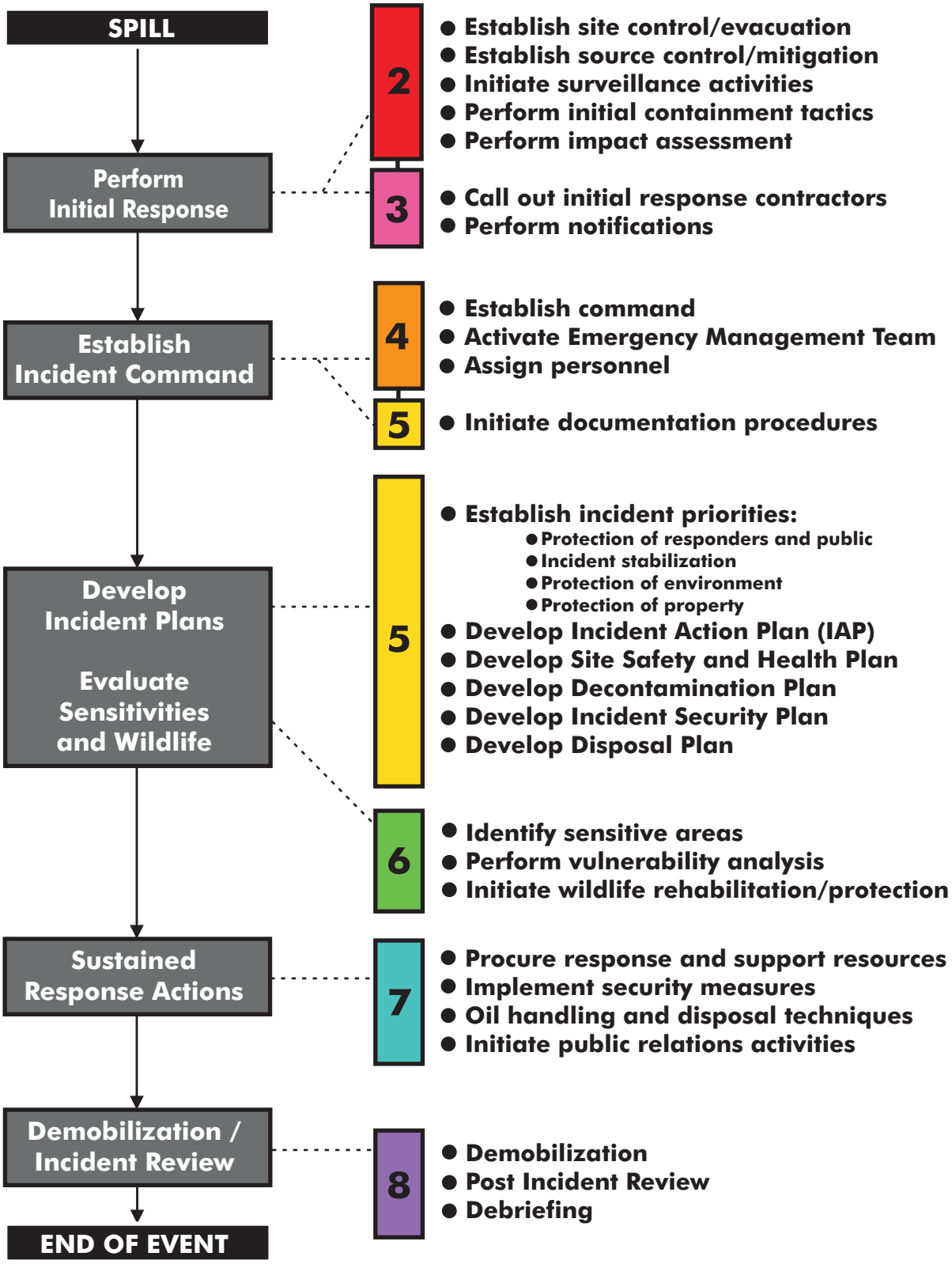
Response Procedures Flow Chart



1. Introduction
2. Initial Response Actions
3. Notifications Phone Numbers
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1/27/2011	Appendix C.6 and Figure C.6-1, added Product Hazards and Charateristics for Light Cycle Oil, Tolune, Xylene, and Naphtha based on Work-order 191556	
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12/20/2011	Section 3 Figure 3.1-4; removed Kevin Swaner as Zone QI, significant change catagory.	
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11/2/2012	Section 3 Figure 3.1-4, removed J. Gonzalez.	
11/2/2012	Section 3 Figure 3.1-4 added response times to M McCauley and N Schoonover.	

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12/16/2012	Section 7 Figure 7.4-4; removed current information and added reference to KPL M260.010 Waste Management Program as required per Lynx Finding 86589	
12/20/2012	Section 1.4; Added 5-yr Plan submittal letter	

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SECTION 1 Last revised: April 15, 2013

INTRODUCTION

FIGURE 1-1 - DISTRIBUTION LIST

PLAN HOLDER	ADDRESS	NUMBER OF COPIES		DISTRIBUTION DATE
		PAPER	ELECTRONIC	
Response Plans Officer - Pipeline and Hazardous Material Safety - U.S. Department of Transportation	1200 New Jersey Ave., Room E22-210 Washington , DC 20590	0	2	
Southern Operating Group Main Office (Field USer Guides)	8606 IH 37 Corpus Christi , TX 78409	0	1	
KPL Employee (Intranet/ On-line)	KPL's Emergency Response Web Page ,	0	0	

FIGURE 1-2 - SOUTHERN ZONE INFORMATION SUMMARY

Owner/Operator:	Koch Pipeline Company, L.P. 4111 East 37th Street North Wichita , KS 67220
Owner Telephone:	(316) 828-8526
Zone Name:	Southern Zone
Zone Address:	8606 IH 37 Corpus Christi , TX 78409
Zone Telephone/Fax:	(361) 242-5539 / (361) 241-6096
Zone PHMSA #:	451

FIGURE 1-2 - SOUTHERN ZONE INFORMATION SUMMARY, CONTINUED

Qualified Individuals: (Refer to APPENDIX A, FIGURE A.1-3 for QI Training Records)	**Facility**		
	Name and Contact Information	**Work Address**	**Home Address**
	Wayne Brandl		

	Maintenance Supervisor Command: On-Scene Incident Commander, EOC - Director, Operations: Section Chief, UCS (361) 242-5548 (Office) (b) (6) (361) 318-2463 *(Mobile)	8606 IH 37 Corpus Christi, Texas 78409	(b) (6)
	Timothy Woodruff Operations Supervisor Command: On-Scene Incident Commander, EOC - Liaison (FHR Refinery), Operations: Section Chief, UCS (361) 242-5511 (Office) (b) (6) (361) 813-5124 *(Mobile), (512) 657-9440 (personal cell phone) *(Mobile)	8606 IH 37 Corpus Christi, Texas 78409	(b) (6)
	Benito Rodriguez Operations Supervisor On-Scene Incident Commander, Operations Section Chief, EOC Liaison (City Representation) (361) 528-3219 (Office) (361) 877-6040 *(Mobile) (361) 881-0957 (Pager)	108 Humble Rd Refugio , Texas 78377	(b) (6)
	Gerald Page Inspection Team Leader On-Scene Incident Commander, EOC Director Operations: Repair Group Supervisor, (512) 237-3371 (Office) (361) 543-6010 *(Mobile)	197 Jeddo Road Rosanky, Texas 78953	(b) (6)
	Wade Parrott Assistant Division Manager Chief of Staff (EOC Director), On-Scene Incident Commander, Crisis Manager (361) 242-5593 (Office) (b) (6) (612) 965-2438 *(Mobile)	8606 IH 37 Corpus Christi, Texas 78409	(b) (6)

FIGURE 1-2 - SOUTHERN ZONE INFORMATION SUMMARY, CONTINUED

Line Sections/ Products Handled: (Refer to Product Characteristic and Hazards, FIGURE C.6-1)

SECTION	MILEAGE	DIAMETER	PRODUCTS
System 601 / Pipelines Regulated Per 49CFR 192.605 (Gas, Hydrogen and other Gases)			
Interconnect P-1 6/10in	2.59	6" and 10"	Hydrogen
Interconnect P-2, 6in	0.47	6"	Hydrogen
Interconnect P-14, 10in	2.73	10"	Natural and other gas
System 601 / Pipelines Regulated Per 49CFR 195.402 (HVL's)			
Interconnect P-7B, 6in	6.37	6"	HVL (PP)
Interconnect P-8, 6in	7.45	6"	HVL (BB)
Interconnect P-13, 8in	5.10	8"	HVL (Propane)
Interconnect P-9, 4in	3.0	4"	HVL (Butane)
Interconnect 7A, 8in	1.94	8"	HVL (Propane)
Interconnect P-13A, 6in.	0.11	6"	HVL (Propane)
C3 Lynondell to Viola, 6"	0.74	6	Propane
System 601/ Refinery Interconnects, Regulated per 49 CFR 195.402 and 49 CFR 194			
Interconnect P-3, 8in.	7.45	8"	Refined Product
Interconnect P-4, 8in.	7.45	8"	Refined Product
Interconnect P-6, 6in.	7.45	6"	Refined Products, toluene, naphtha and xylene
Interconnect P-17, 14in	6.91	14"	Refined Product
Interconnect P-5, 6in	7.60	6"	Refined Products (Light Cycle Oil)
Interconnect P-18, 10in.	1.38	10"	Refined Product
Interconnect P-17A, 12in	0.11	12	Refined Products (currently Inactive in with a Nitrogen Blanket)
Interconnect P-16, 12in	0.10	14	Refined Products

	Interconnect P-10, 8in	0.48 miles	6.625	Pentanes, Isopentanes and Natural Gasoline
	Interconnect P-15(East), 14in	1.50	14	Refined Product
	Interconnect P-16(West), 14in	5.20	14	Refined Product
	FHR Pi-Gas, 6in	0.152	6	Refined Product (O&M list this pipeline as non-regulated under 49CFR195
	FHR Turkey Creek, 6in	0.10	6	Refined Product
	FHR Coastal Origin - Sinclair	0.60	6	Refined Product (O&M list this pipeline as non-regulated under 49CFR195)
	I/A FHR Kerosene	1.50	8	Refined Product
	System 604 / South Crude Pipelines,Regulated per 49 CFR 195.402 and 49 CFR 194			
	Viola to FHR East	6.645	10"	Crude
	Seeligson to Mayo	61.83	10"	Crude
	Pontiac to Viola	9.451	8"	Crude
	Kelsey to Seeligson	52.633	8"	Crude
	Sunfield to Kelsey	10.76	6"	Crude
	Plains to Viola, 16in	0.713	16	Crude

FIGURE 1-2 - SOUTHERN ZONE INFORMATION SUMMARY, CONTINUED

Description of Zone:	The pipelines carry petroleum products (including) in the areas shown in **FIGURE 1-3**
Response Zone Consists of the Following Counties:	Brooks, Jim Wells, Kleberg, Nueces, Starr, San Patricio
Alignment Maps (Piping, Plan Profiles):	Maintained at: Maintained at: http://gatir/gatirweb/gatirres.aspx?sw=1024&sh=768
Worst Case Discharge (bbls) :	(b) (7)(F), (b) (3) [redacted]
Statement of Significant and Substantial Harm:	The response zones in this system contain pipelines that are either greater than 6 5/8 inches and/or longer than 10 miles. At least one section of pipeline in each response zone crosses a major waterway or comes within five miles of a public drinking water intake. Therefore, in accordance with 49 CFR 194.103(c), each entire response zone

	described in this Plan will be treated as if expected to cause significant and substantial harm.
Spill Detection and Mitigation Procedures:	Refer to **SECTION 2.1.1** and **APPENDIX C.1**.
Date Prepared:	October 30, 2006

The information contained in this Plan is intended to be used as guidelines for the spill responder. Actual circumstances will vary and will dictate the procedures to be followed, some of which may not be included in this manual.

NOTE: For further information on the Qualified Individuals' training and qualifications, refer to **SECTION 4.5** and **APPENDIX A.2** in this Plan.

FIGURE 1-3 - OVERVIEW MAP

Click here to view the file

FIGURE 1-4 - PIPELINE FACILITIES OVERVIEW

Facility:	Sunfield	**Address:**	County Road 2294 Delmita, Texas Starr 78218
Phone:	956-481-3395	**Fax:**	956-481-3468
Latitude:	(b) (7)(F), (b) (3)	**Longitude:**	(b) (7)(F), (b) (3)
Agency Assigned Plan Number:	PHMSA Plan #451		
Distance To Navigable Water:	28 miles south (Rio Grande River)		
Description:			
This site is a pipeline pump station with truck unloading operations. The materials handled at the station are limited to crude oil and an oil-based corrosion inhibitor. Products at this station are stored in aboveground storage containers. Gathering lines come into the station from the south and the west from third party companies. Crude oil is delivered by third party tanker trucks and is unloaded into third-party owned truck unloading containers located along eastern station border, plus a KPL operated truck unloading facility (Star Delivery) along the southern border of the station. The crude oil is transferred from the unloading containers and Star Delivery into the stations above ground bulk storage containers prior to being pumped into the main pipeline. Crude oil is pumped through the station?s three mainline pumps and is delivered to the Seeligson station via a six-inch pipeline, which exits the station to the north. A below ground sump is also located in the pump station. The automatic sump is part of the pipeline system and automatically discharges back into the pipeline. The capacity of the sump is approximately 40 barrels.			
Driving Directions:			

From Falfurrias, Texas take Highway 281 south to FM Road 755. Head west on 755 to FM 1017. Take 1017 east to FM Road 2294. Head south on 2294, the station is located on the right hand side of FM 2294.

Tank #:	Product	Capcity (bbls)	Secondary Containment Volume Type (bbls)
(b) (7)(F), (b) (3)			

Sunfield

Sunfield Emergency Evacuation and Fire Equipment Plot Plan
Sunfield Station Drainage Plan

FIGURE 1-4 - PIPELINE FACILITIES OVERVIEW, CONTINUED

Facility:	Seeligson	**Address:**	Highway 281 & County Road 434 Premont, Texas Jim Wells 78375
Phone:	361-348-3551	**Fax:**	361-348-2154

Latitude:	(b) (7)(F), (b) (3)	**Longitude:**	(b) (7)(F), (b) (3)
Agency Assigned Plan Number:	PHMSA Plan #451		
Distance To Navigable Water:	0.8 miles to Ebanito Creek and 24 miles east (Baffin Bay)		

Description:

This site is a pipeline pump station with associated truck unloading operations. The materials handled at the station are limited to crude oil. Crude oil is received via an eight-inch pipeline entering the station on the north side from Sun Field Station. Crude oil delivered by third party tanker trucks is unloaded into four third party-owned truck unloading containers located along the eastern and western sides of the station. The crude oil is then transferred into the bulk storage containers prior to being pumped into the main pipeline. The crude oil leaves the station via a ten inch pipeline exiting on the north side of the station proceeding north towards Mayo Junction in route to Viola Station in Corpus Christi, TX.

Driving Directions:

4 miles north of Premont on US Highway 281 take Junction CR 434 and go east 3/4 mile. Station is on the right hand side.

Tank #:	Product	Capcity (bbls)	Secondary Containment Volume Type (bbls)
(b) (7)(F), (b) (3)			

Seeligson, CONTINUED

Seelingson Evacuation and Fire Equipment Plot Plan
Seelingson Pump Station Drainage

FIGURE 1-4 - PIPELINE FACILITIES OVERVIEW, CONTINUED

Facility:	Viola	**Address:**	2500 Suntide Road Corpus Christi, Texas Nueces 78409
Phone:	361-289-7301	**Fax:**	361-289-2869
Latitude:	(b) (7)(F), (b) (3)	**Longitude:**	(b) (7)(F), (b) (3)
Agency Assigned Plan Number:	PHMSA Plan #451		
Distance To Navigable Water:	Tule Lake is approximately 1/2 mile northeast of the station which connects to Corpus Christi Ship Channel		

Description:

This site is a pipeline pump station with truck unloading operations. Incoming pipelines to the station include a 8? line from Seelingson to Pontiac and Pontiac to Viola, plus a 16? Ingleside bypass thru Viola. The outgoing pipelines include two 4? lines, an 8? and 10? line to the Refinery and a Viola to FHR East Refinery 10? line. The materials handled at the station are limited to crude oil which is stored in aboveground storage containers.

Crude oil delivered by tanker trucks is stored in third party-owned truck unloading containers located along the northern and southern station borders. The crude oil is then transferred into the bulk storage containers prior to being pumped into the main pipeline.

Two below ground sumps are located at the station. The mainline pump station is located just west of the station office and the Old Viola pump station is located just west of the surge

container. Sumps at this station are consider an appertenance to the pipeline.			
Driving Directions:			
From Interstate 37, take Sun Tide/Tuloso Road Exit. Head north on Suntide. The station is on the right hand side of Suntide Road.			
Tank #:	**Product**	**Capcity (bbls)**	**Secondary Containment Volume Type (bbls)**

(b) (7)(F), (b) (3)

[redacted]

Viola, CONTINUED

Viola Station Evacuation & Fire Equipment Plot Plan
Viola Pump Station Drainage Plan

1.1 PURPOSE / SCOPE OF PLAN

The purpose of this Spill Response Plan (Plan) is to provide guidelines to quickly, safely, and effectively respond to a spill. The Facility is owned and operated by Koch Pipeline Company, L.P. , herein referred to as "Company."

This Plan is intended to satisfy the requirements of the Oil Pollution Act of 1990 (OPA 90),

and has been prepared in accordance with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) and applicable Area Contingency Plans (ACP), Region 6 Integrated Contingency Plan (ICP) and One Gulf- MSO Corpus Christi Geographic Response Plan (GRP). Specifically, this Plan is intended to satisfy:

- Pipeline and Hazardous Materials Safety Administration (PHMSA), U.S. Department of Transportation requirements for an OPA 90 Plan (49 CFR 194)
- Occupational Safety and Health Administration (OSHA) requirements for emergency response plans (EAP and ERP) (29 CFR 1910)
- 31 TAC 19.11 Classification of Waterfront and Offshore Facilities; Large Facility. 31 TAC 19.13 Requirements for Discharge Prevention and Response Plans (TGLO Certificate # 30131 & 30132).
- 16TAC8.301 (c) Facility Response Plans

Arrangements to familiarize police, fire departments, and emergency response teams with the layout of the facility, properties of hazardous waste handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to roads inside the facility, and possible evacuation routes are accomplished by distribution of this plan to the respective agency.

This document includes procedures and forms that are applicable to different types and severities of emergency events. It is intended that the appropriate procedures and forms be used in each event, as detailed herein, but it is not specifically required that every form and/or procedure be used for every emergency event. It is also acceptable to use comparable forms versus those shown in this document, unless such substitution is specifically prohibited in this document or other regulatory documents.

1.2 PLAN REVIEW AND UPDATE PROCEDURES

In accordance with the regulations cited in **SECTION 1.1**, this plan will be reviewed and modified to address new or different operating conditions or information included in the Plan. In the event that the Company experiences a Worst Case Discharge, the effectiveness of the plan will be evaluated and updated as necessary.

Upon review of the response plan for each five-year period, revisions will be submitted to PHMSA provided that changes to the current plan are needed, or a letter stating that the plan is still current will be submitted to PHMSA.

If new information or different operating conditions would substantially affect implementation of the Plan, the Company will modify the Plan to address such changes and, within 30 days of making such changes, submit the changes to PHMSA.

Examples of changes in operating conditions that would cause a significant change to the Plan include:

CONDITIONS REQUIRING REVISIONS AND SUBMISSIONS	PHMSA	RCRA
Relocation or replacement of the transportation system in a way that substantially affects the information included in the Plan, such as a change to the Worst Case Discharge volume.	x	

A change in the type of oil handled, stored, or transferred that materially alters the required response resources.	x	
A change in key personnel (Qualified Individuals).	x	
Material change in capabilities of the Oil Spill Removal Organization(s) (OSROs) that provide equipment and personnel.	x	
Any other changes that materially affect the implementation of the Plan.	x	
A change in the NCP or ACP that has significant impact on the equipment appropriate for response activities.	x	
Applicable regulations are revised	x	x
The plan fails in an emergency;		x
The facility changes in its design, construction, operation, maintenance, or circumstances in a way that materially increases the potential fires, explosions, or releases of hazardous waste or hazardous waste constituents, or changes the response necessary in an emergency;		
The list of emergency coordinates changes; or		x
The list of emergency equipment changes.		x

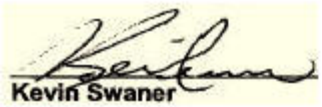
All requests for changes must be made through the Operations Manager and will be submitted to PHMSA by the DOT Compliance Coordinator or Designee.

The most current version of the plan is always the electronic copy. Revisions to the site-specific information are made through the password protected maintenance interface. The date at the beginning of each Section indicates the last date that Section was revised. Any revisions made after that date need to be reprinted and inserted in to the paper copy of the plan.

1.3 CERTIFICATION OF ADEQUATE RESOURCES

CERTIFICATION
Pursuant to the Clean Water Act Section 311(j)(5)(F)
Koch Pipeline Company, L.P.

The Koch Pipeline Company, L.P., hereby certify to the Pipeline and Hazardous Materials Safety Administration of the Department of Transportation that they have obtained, through contract or other approved means, the necessary private personnel and equipment to respond, to the maximum extent practicable, to a Worst Case Discharge or a substantial threat of such a discharge.



Kevin Swaner
Southern Operations Group - Operations Manager

1.4 AGENCY SUBMITTAL / APPROVAL LETTERS

Click here to view PHMSA New Plan Submittal.pdf

Click here to view SOG - 5-yr PHMSA Submittalpdf.pdf

SECTION 2 Last revised: February 2006

INITIAL RESPONSE ACTIONS

2.1 SPILL / RELEASE RESPONSE

"General Order of Response" for a Spill or Emergency Event can be as follows:

- Discovery (Detection), Classification and Assessment: This is where the discovery and classification occur and where the initial assessment of severity of the event occurs.
- Security: Ensure security of personnel and the site during the entire response. Allows the opportunity to engage different security needs depending on the nature of the incident.
- Response: Initial Notification, Response, and Mitigation of the event occur at this time. Longer-term, more complex responses which will likely require multiple operational periods will be considered a Sustained Response.
- Closure: Process to conclude an event that has been resolved to the satisfaction of the ICS/UCS (Responsible Party, Federal, State, and Local Agencies).
- Termination and follow-up: The response is terminated, but periodic follow-up or additional remediation activities may be required by the regulating Agencies.

This plan contains check-off sheets and procedures, based on the general order of response, intended to minimize the possibility of omitting critical actions when dealing with emergency events.

2.1.1 Incident Detection

Detection of an emergency event is the first step in an Emergency Incident or Spill / Release response. There are several methods by which an emergency situation may be detected, including the following:

- Detection during an aerial patrol (fly over).
- Detection on the pipeline leak detection system (PLDS) or SCADA systems.
- Reported by private citizens or by public officials.
- Reported by company personnel.
- Reported by contract personnel on site.

2.1.2 Emergency Classifications

There are two classes of emergency events, "reported" and "confirmed".

A "reported" emergency is either an event reported by someone other than a company employee and which cannot be immediately confirmed or a pressure or flow rate change that is not confirmed by a second source.

A "confirmed" emergency is an event reported by a company employee or reported by someone other than a company employee and confirmed by a second source. Any event that threatens lives or public safety if immediate action is delayed, is to be considered a confirmed emergency.

Immediately upon receiving notification of an emergency event/incident, the company employee shall make appropriate internal notifications (**FIGURE 3.1-4**) ensuring the Qualified Individual (QI) and others such as the supervisor and Control Center are advised.

Possible Sources which can be utilized to confirm an emergency event include checking with the supervisory control monitors for signs of problems or confirming information through direct observations by dispatching the nearest available employee to the scene of the reported event.

2.1.3 Assessment

Once an emergency event or release is detected, the need for assessment of the situation is paramount for rapid, reliable, and effective response. In every case, we must collect accurate initial information (**FIGURE 3.1-2**). The information acquired is passed along to responsible company officials to ensure proper actions are taken.

As the situation dictates, additional assessment may be necessary to perform specific activities. For example, the repair team leader may further evaluate the incident for the safest and most effective means to control the release and to repair the source. The Qualified Individual or Incident Commander may perform their own assessment of the situation before taking control of the incident to get the most up-to-date information of the situation for further planning and actions.

During significant events, the incident assessment may be done in concert with Federal and State Agencies. It is the responsibilities of the FOCS to officially classify the size and type of the discharge and normally work within the Unified Command System (UCS) to determine the course of actions to be followed.

INCIDENT ASSESSMENT	
Person Assessing the Incident	
Approach any suspected emergency incident or suspected release cautiously.	☐
Take appropriate personal protective measures (Do not enter any areas without proper PPE).	☐
Eliminate possible sources of ignition in the vicinity of the spill (if applicable, use E-Stops).	☐
Initiate a general site assessment giving emphasis to the following:	
• Immediate danger to the general public	☐
• Immediate danger to the environment (e.g. waterways, wildlife)	☐
• Identify significant impact areas (e.g. drinking water intakes, commercial businesses)	☐
• Identify topographic features that could impact the migration of the spill	☐
• Identify any municipalities or public areas such as churches, parks, etc.	☐
• Identify what other requirements will be necessary when KPL is inside other facilities.	☐

Immediately notify Qualified Individual, Supervisory Personnel and, if necessary, Control Center with the results of your assessment.	☐
Make internal notifications as necessary (**FIGURE 3.1-4**).	☐
Initiate the Initial Incident Response Procedures.	☐

2.1.4 Spill / Release Emergency Response

This section provides a general guidance checklist to identify and mitigate damage due to a leak. This checklist is intended to provide a general approach to cover the emergency situation and does not constitute what actions need to be taken first.

FIGURE 2.1-1 - SPILL / RELEASE RESPONSE ACTION CHECKLIST

INITIAL RESPONSE ACTION	
First Responder (First Person to Respond to Spill)	
Assume role of Incident Commander, will not relinquish this position until formally passed on.	☐
Take appropriate personal protective measures (EH&S Work Permit).	☐
Eliminate possible sources of ignition in the vicinity of the spill (use E-Stops if applicable).	☐
Call 911 if appropriate.	☐
Immediately notify Qualified Individual (QI), Supervisory Personnel, and Control Center, if necessary, of the incident.	☐
Make internal notification, call for resources as needed (**FIGURE 3.1-4**).	☐
If necessary, evacuate or remove nonessential personnel and any general public within the response area.	☐
Secure the scene. Isolate the area and assure the safety of people and the environment. Keep people away from the scene and outside the safety perimeter.	☐
Call out spill response contractors (**FIGURE 3.1-6**).	☐
Incident Commander	
Confirm or conduct more extensive assessment of health and safety hazards (EH&S work permit). For multiple responders, geographic areas, or more complex responses, Site Safety plan may be needed.	☐
Provide or Confirm Security of area (as necessary). Have nonessential personnel or any general public evacuated. Consider local authorities (police and fire departments) to accomplish the site control recommended.	☐
Call out or confirm Oil Spill Response Contractors (OSRO) or Company-owned spill response resources (**FIGURE 3.1-6**).	☐
As necessary, establish ICS/UCS for Response. It may be necessary to call out members of the IMT. Ensure response objectives are established for emergency and that response activities are being activated.	☐
Make or ensure appropriate notifications have been made; may need to recruit	

personnel from IMT such as Government Liaison and assign within the ICS. • National Response Center (800) 424-8802 • External Regulatory notifications (**FIGURE 3.1-5**) • Make appropriate internal notifications (**FIGURE 3.1-4)**	☐
If safe to do so, direct responders to eliminate potential ignition sources in the vicinity of the spill including motors, electrical pumps, electrical power, etc. Keep drivers away from truck rack if spill occurs there.	☐
If safe to do so, direct responders to eliminate, control, and "isolate" the source of the spill. Be aware of potential hazards associated with product and ensure that lower explosive limits (LELs) are within safe levels before sending personnel into the spill area.	☐
If safe to do so, direct responders to stabilize and contain the situation. This may include berming or deployment of containment and/or sorbent boom.	☐

FIGURE 2.1-1 - SPILL / RELEASE RESPONSE ACTION CHECKLIST, CONTINUED

INITIAL RESPONSE ACTION	
Incident Commander, Continued	
Consider applying foam over the product, using water spray to reduce vapors, grounding equipment handling the oil, and using non-sparking tools.	☐
If there is a potential to impact shorelines, consider lining shoreline with sorbent or diversion boom to reduce impact.	☐
If safe to do so, deploy containment/recovery equipment (OSRO or Company-owned) based on release impact.	☐
Maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, unless aisle space is not needed for any of these purposes.	☐
Once deployment of response equipment has been commenced, initiate recovery of product.	☐
Notify Local Emergency Responders (as appropriate). Obtain the information necessary to complete the Oil Spill Report Form (**FIGURE 3.1-3**).	☐
Ensure drug/alcohol testing completed per DOT 199 if applicable (alcohol within 2 hours or max of 8 hours, drug within 32 hours). See DNet for a list of approved Lab Corp Collections Sites.	☐
Evaluate personnel requirements for the initial cleanup. Consider what the operational periods will be necessary and begin planning for the shift/crew replacement.	☐
Initiate spill tracking and surveillance operations. Determine extent of release. Estimate volume of spill utilizing information in **SECTION 2.1.3** or appropriate means.	☐

SITE-SPECIFIC ACTIONS

DOCUMENT ACTIONS TAKEN	
Once a response has been activated, initiate and direct participants to document the initial assessment and response activities.	☐
Upon establishing an ICS/UCS, ensure there is a unit or people (suggest Situation Unit or Scribe) responsible to require documentation from people engaged in the spill response.	☐
Through the ICS/UCS, ensure that planned and executed response activities are being captured through a general Incident Action Plan (IAP).	☐

FIGURE 2.1-1 - SPILL / RELEASE RESPONSE ACTION CHECKLIST, CONTINUED

PREPARING FOR SUSTAINED RESPONSE ACTION	
Incident Commander, Continued	
Activate Incident Management Team (IMT) (as necessary). Set up a Command Center and begin to utilize the ICS/UCS structure. Establish the site Safe Areas and provide the site with communications in order to coordinate the response effort.	☐
Evaluate and establish a communication plan as necessary. Generally communications will consist of mobile telephones. Other methods may be acquired based on the needs as established by the ICS/ICS.	☐
May consider multiple geographic or cleanup areas depending on size and areas of impact. Ensure equipment is evaluated to be sufficient for different areas if zoned off.	☐
Evaluate safety air monitoring devices and PPE supplies for response.	☐
Planning unit may be established to evaluate the proper containment and response equipment for changing conditions. Maintain vigilance on changing conditions and how will this equipment protect environmentally sensitive areas within the impact area or bordering the impact areas.	☐
Evaluate recovery methods on site; look for efficiency and minimal intrusion into the environment and change accordingly. Consider vacuum trucks skimmers and absorbent material.	☐
Initiate spill tracking and surveillance operations. Determine extent of release. Estimate volume of spill utilizing information in **SECTION 2.1.3** or appropriate means.	☐
Address storage of recovered materials (Disposal Plan).	☐
Establish “Cleanup Assessment Teams” which can determine cleanup progress.	☐
Establish “How clean is clean” parameters which the Cleanup Assessment Teams will utilize to approve the removal of cleanup equipment.	☐
Document response actions taken, including notifications, agency/media meetings, equipment and personnel mobilization and deployment, and area impacted. (Refer to **SECTION 5** for documentation)	☐
SECONDARY RESPONSE ACTIONS (Refer to IMT job descriptions in **SECTION 4.6**).	

FACILITY SPECIFIC RESPONSE CONSIDERATIONS
(Refer to **SECTION 6** for maps, tactical plans, and sensitivity information.

2.1.5 Spill Mitigation Procedures

Each spill mitigation situation is unique and must be treated according to the circumstance present. In every situation, however, personnel safety must be assessed as the first priority. The potential for ignition and/or toxic exposure must be promptly evaluated. Spill mitigation procedures are listed in **FIGURE 2.1-2**. Discharge volume calculations are provided in **APPENDIX C.4**.

FIGURE 2.1-2 - SPILL MITIGATION PROCEDURES

TYPE	MITIGATION PROCEDURE
Failure of Transfer Equipment	1. Personnel safety is the first priority. Evacuate nonessential personnel or personnel at high risk. 2. Terminate transfer operations and close valves (if appropriate). 3. Drain product into containment areas (if possible). 4. Eliminate sources of vapor cloud ignition.*
Tank Overfill/Failure	1. Personnel safety is the first priority. Evacuate nonessential personnel or personnel at high risk. 2. Shut down or divert source of incoming flow to tank. 3. Transfer fluid to another tank with adequate storage capacity (if possible). 4. Eliminate source of vapor cloud ignition.* 5. Ensure that dike discharge valves are closed. 6. Monitor diked containment area for leaks and potential capacity limitations. 7. Begin transferring spilled product to another tank as soon as possible.
Piping Rupture/Leak (under pressure and no pressure)	1. Personnel safety is the first priority. Evacuate nonessential personnel or personnel at high risk. 2. Shut down pumps. Close the closest valves on each side of the rupture (if appropriate). 3. Drain the line back into contained areas (if possible). Alert nearby personnel of potential safety hazards. 4. Eliminate source of vapor cloud ignition.* 5. If piping is leaking and under pressure, relieve pressure by draining into a containment area or to a tank (if possible). Consider additional measures for repair.
Piping Rupture/Leak (Highly Volatile Liquids / Vapor)	1. Personnel safety is the first priority. Evacuate nonessential personnel or personnel at high risk. 2. Shut down pumps. Close the closest valves on each side of the rupture (if appropriate). 3. Contact local Emergency Services (Fire, Police, etc) 4. Analyze vapor cloud migration utilizing wind direction; Establish perimeter and monitoring

	5. Eliminate sources of potential ignition* 6. Alert nearby personnel of potential safety hazards, consider evacuation or shelter in place as necessary. 7. If piping is leaking and under pressure, relieve pressure; if possible to existing pressure release method. Consider additional measures for repair.
Failure of Pipeline at Railway Facilities	1. Personnel safety is the first priority. Evacuate nonessential personnel or personnel at high risk. 2. Terminate transfer operations and close valves (if appropriate). 3. Eliminate source of vapor cloud ignition.* 4. Respond to event in accordance with procedures listed in this Plan. 5. Contact the Railway Authorities to inform of the event, engage into Incident Command and Response as necessary.
Fire/Explosion	1. Personnel safety is the first priority. Evacuate nonessential personnel or personnel at risk of injury. 2. Notify local fire and police departments (if appropriate). 3. Attempt to extinguish fire if it is in incipient (early) stage and **if it can be done safely**. 4. Shut down transfer or pumping operation. Attempt to divert or stop flow of product to the hazardous area (if it can be done safely). Also refer to fire/explosion response procedures in **SECTION 2.11**.
Manifold Failure	1. Personnel safety is the first priority. Evacuate nonessential personnel or personnel at high risk. 2. Terminate transfer operations immediately. 3. Isolate the damaged area by closing valves on both sides of the leak/rupture. 4. Eliminate source of vapor cloud ignition.* 5. Drain fluids back into containment areas (if possible).

* Examples of ignition sources include: roads, houses, farm buildings, railroad tracks, electrical equipment, industrial or manufacturing facilities, office buildings or parking lots, irrigation pumps or water wells, any other source that may contain an open flame, electrical equipment or other ignition source.

2.1.6 Spill Surveillance Guidelines

- Surveillance of an oil spill should begin as soon as possible following discovery to enable response personnel to assess spill size, movement, and potential impact locations.
- Dispatch observers to crossings downstream or downgradient to determine the spill's maximum reach.
- Clouds, shadows, sediment, floating organic matter, submerged sand banks, or wind-induced patterns on the water may resemble an oil slick if viewed from a distance.
- Sorbent pads may be used to detect oil on water.

- Use surface vessels to confirm the presence of any suspected oil slicks (if safe to do so); consider directing the vessels and photographing the vessels from the air, the latter to show their position and size relative to the slick.
- It is difficult to adequately observe oil on the water surface from a boat, dock, or shoreline.
- Spill surveillance may be accomplished through various methods: walking, driving, boats, helicopters, or small planes. The use of helicopters may be considered the preferred method due to their superior visibility and maneuverability.
- If fixed-wing planes are to be used, high-wing types provide better visibility than low-wing types.
- Observations should be documented. Consider using photographs, video, maps, and pre-determined ICS forms.
- Describe the approximate dimensions of the oil slick based on available reference points (i.e. vessel, shoreline features, facilities); use the aircraft or vessel to traverse the length and width of the slick while timing each pass; calculate the approximate size and area of the slick by multiplying speed and time.
- Consider the use of boats in the event of reduced visibility, such as dense fog or cloud cower; however, this method may not be safe if the spill involves a highly flammable product.
- Consider visual assessment during spill response operations to gauge the effectiveness of response operations, to assist in placing skimmers, and to assess the spill's size, movement, and impact.

A Spill Surveillance Checklist is provided in **FIGURE 2.1-3**.

FIGURE 2.1-3 - SPILL SURVEILLANCE CHECKLIST

Record your observations of spilled oil either in a notebook or directly on a chart of the area under observation. This checklist is an aid for organizing your observations.

General Information	
Date:	Tidal or river stage (flood, ebb, slack, low water, dry):
Time:	On-scene weather (wind, sea state, visibility):
Incident name:	Method of observation (helicopter, fixed-wing aircraft, boat, shore):
Observer?s name:	Flight path/trackline:
Observer's affiliation:	Altitude where observation taken:
Location of source (if known):	Areas not observed (i.e. foggy locations, restricted air spaces, shallow water areas):
Oil Observations	

Spill location(s):	If on water, describe color and appearance (i.e. rainbow, dull or silver sheen, black or brown in color or mousse):
Spill dimensions:	Percent coverage:
Orientation of spill(s):	Is oil recoverable (Y/N)?:
Distribution of oil (i.e. windrows, streamers, pancakes or patches):	

Considerations
• During surveillance, travel beyond known impacted areas to check for additional oil spill sites • Include the name and phone number of the person making the observations • Clearly describe the locations where oil is observed and the areas where no oil has been seen

Other Observations

Response Operations
Equipment deployment (general locations where equipment is working and whether the work is done in the heaviest concentration of oil):
Boom deployment (general locations of boom, whether the boom contains oil, and whether the oil entrains under the boom):

FIGURE 2.1-3 - SPILL SURVEILLANCE CHECKLIST, CONTINUED

Record your observations of spilled oil either in a notebook or directly on a chart of the area under observation. This checklist is an aid for organizing your observations.

Environmental Observations
Locations of convergence lines, terrain, and sediment plumes:

Locations of debris and other features that could be mistaken for oil:
Wildlife present in area (locations and approximate numbers):
Spill Sketch

2.1.7 Spill Volume Estimating

Early in a spill response, estimation of spill volume is required in order to:

- Report to agencies
- Determine liquid recovery requirements
- Determine personnel and equipment requirements
- Estimate disposal and interim storage requirements

One tool available to assist in making this calculation is PRC 1604.209 Release Information

Estimating Procedures. There are other tools which can be used, some of which are discussed below:

- **Spill Estimating Spreadsheet**
    - Visual assessment of the surface area and thickness (**FIGURE 2.1-4**); the method may yield unreliable results because:
        - Interpretation of sheen color varies with different observers
        - Appearance of a slick varies depending upon amount of available sunlight, sea-state, and viewing angle
        - Different products may behave differently, depending upon their properties

FIGURE 2.1-4 - SPILL ESTIMATION FACTORS ON WATER

OIL THICKNESS ESTIMATIONS				
Standard Form	**Approx. Film Thickness**		**Approx. Quantity of Oil in Film**	
	inches	**mm**	**gallons/mile^2**	**liters/km^2**
Barely Visible	0.0000015	0.00004	25	44
Silvery	0.000003	0.00008	50	88
Slightly colored	0.000006	0.00015	100	179
Brightly colored	0.000012	0.0003	200	351
Dull	0.00004	0.001	666	1,167
Dark	0.00008	0.002	1,332	2,237
Thickness of light oils: 0.0010 inches to 0.00010 inches				
Thickness of heavy oils: 0.10 inches to 0.010 inches				

NOAA, 09/2000

FIGURE 2.1-5 - LEAK SIZE DETERMINATION TABLE

PIPE SIZE	WALL THICKNESS	BBLS/FOOT	BBLS/MILE
6"	.188	.0379342	200.293
8"	.188	.0661017	349.017
10"	.188	.1045450	551.998
12"	.219	.1472539	777.501
12"	.250	.1457746	769.690
16"	.250	.2333852	1232.274
18"	.281	.2952087	1558.702
20"	.281	.3670238	1937.885
24"	.281	.5336190	2817.508

2.1.8 Estimating Spill Trajectories

In some cases, oil spill trajectories should be estimated in order to predict direction and speed of the slick movement. Trajectory calculations provide an estimate of where oil slicks may impact shorelines and other sensitive areas, and also provide an estimate of the most effective location in which to mobilize spill response resources for protection, containment, and recovery.

Oil spill trajectories can be estimated using vector addition or with computer programs. Hand calculations typically utilize the following assumptions:

- Oil moves at approximately the same direction and speed as the water currents, unless the winds are strong
- Wind speed can be multiplied by 0.034 to determine the effect of winds on speed and direction of spill movement
- The combined effects of winds and currents can be added to estimate spill movement speed and direction

More sophisticated predictions can be obtained from computer programs. Oil spill trajectory services can be obtained from:

- National Oceanic and Atmospheric Administration (NOAA) through the Federal On-Scene Commander (FOSC)
- Private consulting firms
- High Consequence Area (HCA) over land spread calculations developed for the Integrity Management Plan

2.1.9 Containment

Containment actions should take into consideration inclement weather or unsafe conditions such as high winds, fast currents, or unstable terrain.

Containment Safety Considerations

More vapors are formed by the spilled liquid during hot weather. As the liquid spreads over a greater area, the vapors form along the leading edge of the liquid and are being exposed to more possible ignition sources. For this reason early containment is important.

- Eliminate ignition sources
- Avoid contact with the spilled product as much as possible
- Use respiratory protection (if applicable)
- Ensure that the area remains secure to applicable traffic (pedestrian, motor vehicles, air traffic)

Containment Goals

The following containment goals should give the responding personnel some guidance enabling them to prioritize the containment efforts.

1. To prevent liquid or vapors from reaching possible ignition sources:

- Roads
- Houses
- Farm buildings
- Railroad tracks
- Electrical equipment
- Industrial or manufacturing facilities
- Office buildings or parking lots
- Irrigation pumps or water wells
- Any other structure or facility that may contain an open flame, spark, or electrical equipment

Containment Goals, Continued

2. To prevent spilled liquid from reaching any environmentally sensitive area:

- Lakes
- Streams
- Rivers
- Wildlife areas
- Marsh environment
- Other environmentally sensitive area (**SECTION 6**)

3. To prevent spilled liquid or vapors from reaching areas containing livestock:

- Horses (stalls)
- Cattle (pens)
- Pigs
- Fowl

Containment Methods / Actions

Initial containment actions will focus on utilizing containment on site in the most effective manner to:

- Prevent the oil from impacting water, thereby reduce the surface area and the shoreline to be cleaned
- Concentrate the oil (when safe to do so), making physical recovery more efficient
- Limit the environmental impact to the immediate spill area

Selection of the appropriate location and method will depend upon:

- Length of time spill occurs before being noticed
- Amount of spill
- Area of coverage
- Environmental factors such as wind speed and direction
- Oil's characteristics

- Ability to collect and recover product

The following methods may be used in containment of a release. It may be necessary to use different methods during one release.

- Earthen dikes or dams
- Spill containment booms
- Absorbents such as hay, straw, dry dirt or sand, and commercial products (peat moss)
- Absorbents such as sorbent pads, socks, booms
- Collection and skimming: diverting and collection in low areas or diversionary structures and removing with skimming equipment such as vacuum trucks or pumps

Note: Understanding that each release is different and circumstances may be unique, some operational areas may have additional details to containment and response methods listed in **SECTION 6** Sensitive Areas / Response Tactics

2.2 EVACUATION

EVACUATION CHECKLIST	
TASK	
Request assistance from off-site agencies; convey Command Post's location	☐
Assemble personnel at predetermined safe location: upwind/up gradient of release (assembly area)	☐
Account for Company and contractor personnel	☐
Assess injuries/fatalities (number/type/location)	☐
Determine probable location of missing personnel	☐
Secure site, establish re-entry point and check-in/check-out procedures	☐
Develop list of known hazards (confined spaces, electrical hazards, physical hazards, vapors, oxygen deficiency, fire/explosion, etc.)	☐
Monitor situation (weather, vapors, product migration) for significant changes	☐
Assist in developing a Rescue Plan, if necessary	☐
Site Specific Actions:	
(b) (7)(F), (b) (3) [redacted]	☐

Section 3.1.	

2.3 LIGHTNING

LIGHTNING CHECKLIST	
TASK	
Maintain equipment grounding systems to dissipate the effects of a lightning strike.	☐
Provide lightning arrestors on electrical equipment throughout the system.	☐
During thunderstorms, personnel are to avoid the following: • Storage Tanks • Pumping Equipment • Being in contact with or in close proximity to above ground piping or any non-insulated device attached to the pipeline • Trees and metal buildings • Open fields • Holding metallic objects	☐
During thunderstorms, personnel should be aware of the potential for lightning and remain alert for strikes that may affect the pipeline operation.	☐

Possibly the most frequent effect of lightning is the interruption of electric power or communications to one or more locations on the pipeline. These events are covered in "abnormal" operation procedures described in the Operations Manual.

The most devastating effect of lightning is the striking of a tank and resulting fire. The response to a fire or explosion event is outlined in the **SECTION 2.11**.

2.4 EARTHQUAKES

Earthquakes generally strike without warning, making them very difficult to prepare for. While the initial quake may be unpredictable, there is a certain amount of post-quake activity accompanying most quakes. These procedures should be followed in the aftermath of an earthquake:

The Pipeline Control center has registered with the USGS to receive earthquake notifications within the operational areas of the continental USA. Based on the magnitude and distance of the earthquake the following procedures should be followed in the aftermath:

EARTHQUAKES CHECKLIST	
Stations and Terminal	
If an earthquake is within a 50 mile radius of the asset, the following is completed based on the magnitude.	
2.0 to 2.9 - Pipeline Control Center will notify the station or terminal of the earthquake. Inspect the asset at the next scheduled station walkthrough.	☐

3.0 to 3.9 ? Pipeline Control Center will issue a "Priority 3" notification for a visual inspection of the station.	☐
4.0 to 4.9 ? Pipeline Control Center will issue a "Priority 2" notification for a visual Inspection of the station.	☐
If an earthquake is within a 100 mile radius of the asset, the following is completed based on the magnitude.	
5.0 to 5.9 ? Pipeline Control Center will issue a "Priority 2" notification for a visual Inspection of the station.	☐
> 6.0 ? Pipeline Control Center will issue a "Priority 0" notification to shut down the station until a visual inspection is completed.	☐
Underground Pipelines	
If an earthquake is within a 100-mile radius of the asset, the following is completed based on the magnitude.	
5.0 to 5.9 ? Pipeline Control Center will notify the PCC communicator scenario of the earthquake; plus reduce to 50% MOP and monitor for 12 hours. Operation Management will evaluate what other actions may be necessary on a case-by-case basis.	☐
> 6.0 ? Pipeline Control Center will notify the PCC communicator scenario of the earthquake and shut the pipeline until a visual inspection is completed; plus operate at 50% MOP for 12 hours once the pipeline is brought back on.	☐

Priority 3 = means within 24-hours of receiving notice of the earthquake occurrence and coupled with the control center is not registering any alarms.
Priority 2 = means as soon as feasible, safe, and practical; to coincide with the earliest available daylight to give the best viewing possible and coupled with the control center is not registering any alarms.
Priority 1 = registers a high sense of urgency; contact pipeline operator on call-out whatever the time of day or night it may be.
Priority 0 = registers the highest sense of urgency, Shut station down and contact pipeline operator on call-out whatever the time of day or night it may be.

2.5 TORNADO

TORNADO CHECKLIST	
TASK	
Monitor news media reports (**FIGURE 3.1-7**) • Tornado watch means conditions are favorable for tornadoes • Tornado warning means a tornado has been sighted	☐
When a tornado warning is issued, sound the local alarm	☐
Have location personnel report to the designated area	☐
Account for personnel on duty	☐
Take shelter:	

Go to an interior room on the lowest floor or designated storm shelter • Get under a sturdy piece of furniture • Use your arms to protect head and neck	☐
If the facility is damaged by the tornado, notify Supervisory Personnel	☐
Go to the scene of the incident to evaluate the situation • Be aware of broken glass and downed power lines • Check for injuries • Use caution entering a damaged building	☐
Update Supervisory Personnel/Management	☐
Conduct post-emergency evaluation and report	☐

2.6 HURRICANE

Since hurricanes are very erratic in nature, Hurricane Preparedness Plan SOP (Standard Operating Procedures) will be implemented and followed when a storm path is predicted for a particular operational area. The SOP will provide procedures for a safe and orderly shutdown of operational assets within the predicted storm path. The procedures will also enact an organized tracking effort for hurricane preparedness activities which will allow for employees to handle company as well as their own domestic hurricane preparedness needs.

The Hurricane Preparedness Plan (SOP) is divided into two sections based on potential weather survey tracking forecasts and the timetables predicted for landfall within operating assets.

HURRICANE CHECKLIST	
TASK	
Tropical Storm / Hurricane forms and is being tracked by National Weather Surveys	
Hurricane Season begins, general coastal areas heighten awareness to storm reports.	☐
Tropical Storm/Hurricane forms or enters general area of operational assets.	☐
Hurricane Preparedness Standard Operating Procedures Implemented	
Tropical Storm/Hurricane is 48 - 36 hours away and path is predicted in the direction of the operational assets threshold parameter to implement the Hurricane Preparedness Plan (SOP).	☐
Hurricane Preparedness Plan (SOP) is implemented.	☐
Site Specific Actions:	
In the event of a hurricane, KPL will follow PRC1801.030 - Hurricane_Tropical Storm Preparedness.	☐

2.7 FLOOD

FLOOD CHECKLIST	
TASK	
When conditions warrant, perform continuous monitoring of the situation by listening to radio and/or television reports (**FIGURE 3.1-7**) • Flash flood watch means flooding is possible • Flash flood warning means flooding is occurring or is imminent	☐
As appropriate, update Supervisory Personnel	☐
Establish an evacuation plan (**SECTION 2.2**)	☐
Take preliminary actions to secure the facility before flooding and mandatory evacuation	☐
Consider having sandbags brought to sites that could be affected by the flooding	☐
Consider obtaining portable pumps and hoses from local suppliers or from other petroleum service locations in the area	☐
Consider removing product from underground storage tanks, sumps, and separators (if applicable). Consider replacing with water to prevent them from floating out of the ground	☐
Keep at least a normal bottom in above ground tankage, more if possible	☐
Plug rack drains and facility drains connected to the sump	☐
Consider anchoring bulk additive tanks, fuel barrels, empty drums, and propane tanks (if applicable)	☐
Notify Supervisory Personnel/Management that the facility will be closed	☐
Consider shutting off high voltage power and natural gas lines	☐
Close valves on product and additive storage tanks	☐
Before evacuation, know where employees will be residing and obtain phone numbers so they can be contacted if additional emergencies occur	☐
Conduct a post-emergency evacuation and report	☐
Maintain hazards awareness: • Structural damage • Downed power lines • Leaking natural gas, water, and sewer lines • Poisonous snakes and other wildlife sheltering in structures, vehicles, and furniture • Avoid direct contact with flood water, mud, and animal carcasses	☐

2.8 MEDICAL

MEDICAL CHECKLIST	
TASK	
Summon Emergency Medical Services (EMS) to the scene (**FIGURE 3.1-5**)	☐
Do not move the patient unless a situation (such as a fire) threatens patient's life	☐
If trained, provide first aid until the EMS arrive at the scene	☐
As the situation warrants, try to stop the bleeding and keep the patient breathing until the EMS arrive at the scene	☐
The rescuer's role includes: • Removing the patient from any situation threatening patient's life or the lives of rescuers • Correcting life-threatening problems and immobilizing injured parts before transporting the patient • Transporting the patient in a way that minimizes further damage to injured parts • Administering essential life support while the patient is being transported • Observing and protecting the patient until medical staff can take over • Administering care as indicated or instructed	☐

2.9 SABOTAGE

(b) (7)(F), (b) (3)

[redacted]

(b) (7)(F), (b) (3)

[redacted]

(b) (7)(F), (b) (3)

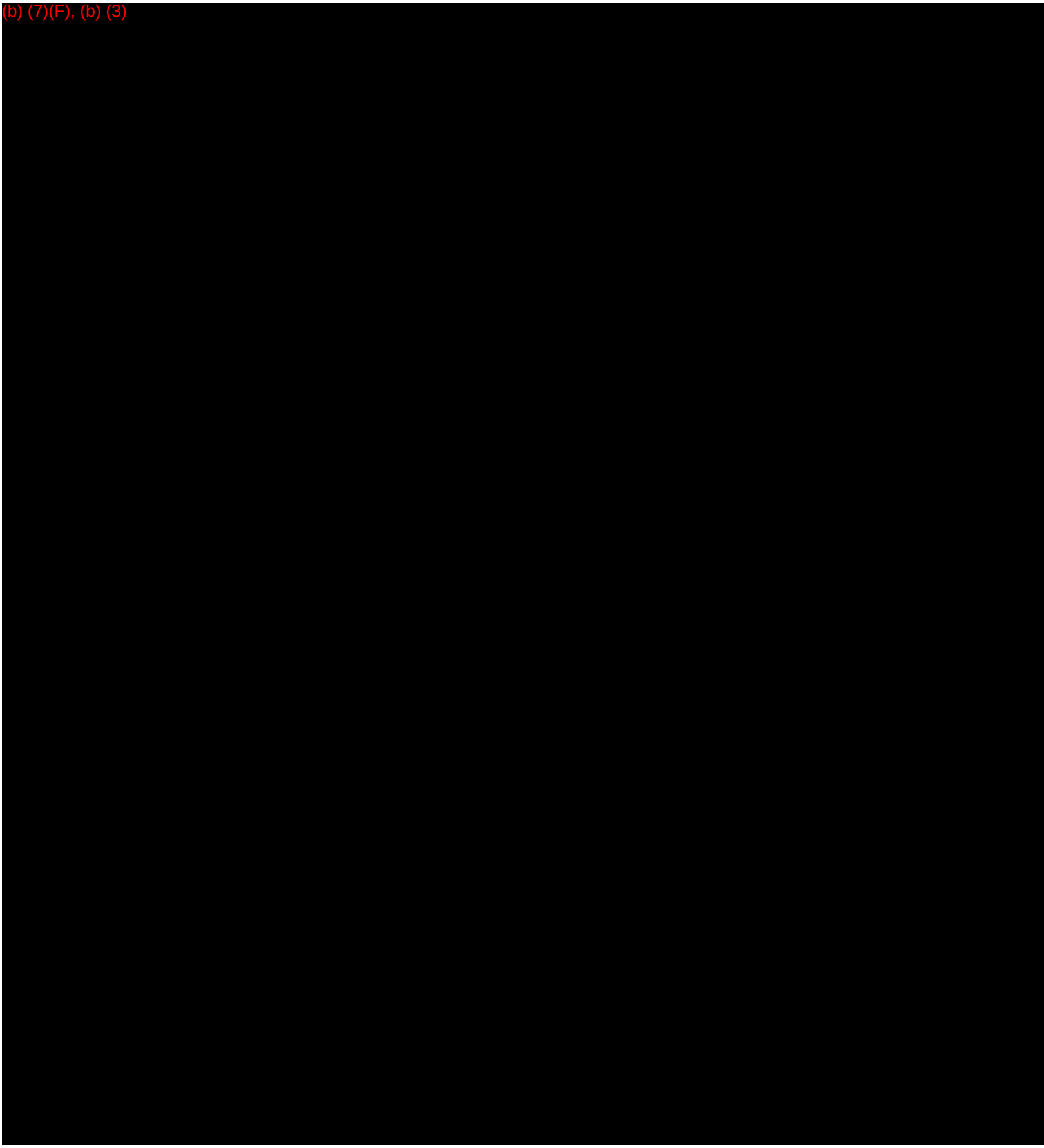
(b) (7)(F), (b) (3)

2.10 BOMB THREAT

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)



2.11 FIRE AND/OR EXPLOSION

Your first consideration is always the safety of people in the immediate area, including your own.

The first responder's initial objective is site management.

FIRE AND/OR EXPLOSION CHECKLIST	
TASK	
At a manned facility	
Evaluate the situation; approach cautiously from upwind; do not rush in	☐
Notify the local police and fire departments (as appropriate)	☐
Notify Supervisory Personnel	☐
Appropriately trained personnel may attempt to extinguish the fire if it is in the incipient (early) stage and **if it can be done safely**	☐
If the fire/explosion is a result of a pipe rupture, isolate product release by closing valves	☐
Undertake basic site control: • Make an assessment of hazards • Isolate the area • Keep people away from the scene and outside the safety perimeter as per the evacuation plan (**SECTION 2.2**) • Establish safety zones and escape routes	☐
Respond to the fire: • Establish a Command Post and lines of communication • Maintain site control • Establish Incident Command/Unified Command as necessary (**SECTION 4.4**)	☐
Call in additional resources if on-scene personnel and equipment are inadequate to handle the emergency (**FIGURE 3.1-4**, **FIGURE 3.1-6**)	☐
Conduct a post-emergency evaluation (**SECTION 8.3**) and report	☐

2.11 FIRE AND/OR EXPLOSION, CONTINUED

Your first consideration is always the safety of people in the immediate area, including your own.

The first responder's initial objective is site management.

FIRE AND/OR EXPLOSION CHECKLIST, CONTINUED	
TASK	
At an unmanned facility	
Handle the call	☐
Notify the local police and fire departments (as appropriate)	☐
Notify Supervisory Personnel	☐
Go to the incident scene to evaluate the situation; approach cautiously from upwind; do not rush in	☐
Undertake basic site control: • Make an assessment of hazards • Evaluate the area for visitors or personnel in the area prior to the event • Isolate the area • Keep people away from the scene and outside the safety perimeter as per the evacuation plan (**SECTION 2.2**) • Establish safety zones and escape routes	☐
Update Supervisory Personnel/Management	☐
If the fire/explosion is a result of a pipe rupture, isolate the product release by closing valves	☐
Respond to the fire: • Establish a Command Post and lines of communication • Maintain site control • Establish Incident Command/Unified Command as necessary (**SECTION 4.4**)	☐
Call in additional resources if on-scene personnel and equipment are inadequate to handle the emergency (**FIGURE 3.1-4**, **FIGURE 3.1-6**)	☐
Conduct a post-emergency evaluation (**SECTION 8.3**) and report	☐

2.12 RELEASE WITH A FLAMMABLE VAPOR CLOUD

Once a Flammable vapor cloud is detected, the need for assessment of the situation is paramount in implementing and sustaining an effective response. In every case, we must collect accurate initial information (**FIGURE 3.1-2**). The information acquired is passed along to responsible company officials to ensure proper actions are taken.

As the situation dictates, a thorough and accurate assessment is necessary to determine specific activities required to respond to the situation.

INCIDENT ASSESSMENT

Person Assessing the Incident	
Approach any suspected emergency incident or suspected release cautiously.	☐
Take appropriate personal protective measures (Do not enter any areas without proper Personal Protective Equipment (PPE).	☐
Eliminate possible sources of ignition in the vicinity of the release (if applicable, use Emergency-Stops).	☐
Initiate a general site assessment giving emphasis to the following:	
• Immediate danger to the general public	☐
• Immediate danger to the environment (e.g. waterways, wildlife)	☐
• Identify significant impact areas (e.g. highways, railroads, or commercial businesses)	☐
• Identify topographic features that could impact the migration of the release	☐
• Identify any municipalities or public areas such as churches, parks, etc.	☐
• Identify other requirements that will be necessary when inside third party facilities.	☐
• Make notifications and call for resources as needed. (**SECTION 3.1**)	☐
INITIATE THE INITIAL INCIDENT RESPONSE AND SPILL MITIGATION PROCEDURES DESCRIBED IN THIS PLAN (FIGURE 2.1-1)	☐

2.12 RELEASE WITH A FLAMMABLE VAPOR CLOUD, CONTINUED

INCIDENT ASSESSMENT	
Flammable Vapor Cloud Release - General Response Guide	**Comments**
STAY UP WIND, UP HILL, AND UP STREAM OF THE VAPOR CLOUD AND THE SOURCE. Assess wind direction and vapor cloud movement. Be aware of possible weather changes that could affect cloud movement.	
Sound the Alarm; Alert personnel and affected public as soon as possible after discovering that a flammable or otherwise hazardous vapor cloud is present.	
Determine Extent and Coverage of the Vapor Cloud. A responder may use Audio, Visual and Olfactory (AVO) Methods along with wind direction and handheld monitors to determine the initial extent and coverage of a vapor cloud. (**Section 2.1.5 Spill Mitigation Procedures**).	
The Emergency Response Guidebook (ERG) - can also supply generic and specific hazard information regarding public safety for vapor clouds	

emanating from a flammable gas, HVL or other hazardous liquid release.	
Site Management and Control; If "Local Emergency Responders" such as fire or police are already on scene, ensure operations are coordinated and unified. If these resources are not on site; request emergency and medical support services as needed.	
Vacate the Hazard Area - Direct non-essential persons to move in a crosswind direction away from the release to the designated muster point for roll call and further instructions. Consider protective actions (such as evacuation) within the specified distance upwind of the release and any identified Vapor Cloud.	
Establish Exclusion Zone ? Command the physical layout of the incident by establishing a "Hot zone" which safely encompasses the Vapor Cloud area. The physical layout of this exclusion zone should be communicated to all personnel operating on the site	
Only qualified emergency service or rescue personnel should consider incident site entry as safety conditions and the On-scene Incident Commander allow.	
Determine the concentrations of toxic or flammable gases present using both fixed monitors (if available) and portable intrinsically safe instruments.	
Defensive Operations are always desirable over Offensive tactics if they accomplish the same objectives. Only the On-Scene Incident Commander can deem it necessary to enter a "Hot Zone" and when approved this should be done only by a trained and qualified Hazardous-Material Team with adequate resources.	
If a release is occurring, fixed water monitors, and/or sprinkler or deluge systems can be activated to dilute, disperse, and "scrub" the vapors and prevent their advancement to uncontrolled areas (This tactic is situation dependent and may not be the appropriate tactic for all situations, i.e. dealing with lighter than air gases or certain HVL?s).	
Manage water supply, and control runoff/drainage, care should be taken to activate only those water systems that can effectively mitigate vapors.	
Vapor Cloud Surveillance. Continuous surveillance and evaluation of the extent and coverage of Vapor Cloud may be accomplished through various methods. Audio, Visual and Olfactory (AVO) Methods along with handheld monitors may be used to further refine the determined extent and coverage of a vapor cloud. As resources and personnel arrive, additional portable and fixed positions monitors can be set up to continuously monitor, gauge and predict the extent and coverage of the vapor cloud. These may include, but not limited to four gas monitors with LEL capability and Area Monitors	
SECONDARY RESPONSE ACTIONS (Refer to IMT job descriptions in **SECTION 4.6**).	
FACILITY SPECIFIC RESPONSE CONSIDERATIONS (Refer to **SECTION 6** for maps, tactical plans, and sensitivity information.	

SECTION 3 Last revised: April 23, 2013

NOTIFICATIONS / TELEPHONE NUMBERS

3.1 EMERGENCY INFORMATION AND NOTIFICATION PROCEDURES

There are two classes of emergency events, "reported" and "confirmed."

A "reported" emergency is either an event reported by someone other than a company employee and which cannot be immediately confirmed or a pressure or flow rate change that is not confirmed by a second source.

A "confirmed" emergency is an event reported by a company employee or reported by someone other than a company employee and "confirmed" by a second source. Any event that threatens lives or public safety if immediate action is delayed, is to be considered a confirmed emergency.

In either case, upon receiving notification about an emergency event, the company employee will take immediate actions (**SECTION 2**) and begin notification procedures based on the situation.

The general “Internal Incident Notification Sequence” is as follows:

- **First:** Isolate the source and then call emergency services
- **Second:** Dial: 1-316-828-5001 :
  - Koch Security will answer:
  - ?Koch Security, what is your Emergency??
- **Third:** Reply with one of the following Incident Types:
  - Injury / Illness
  - Environmental Incident
  - Vehicle Accident
  - Pipeline Hit
  - Fire, Explosion, or Lightning Strike
  - Third Party Release on KPL Property
  - Operations Priority Event
- **Fourth:** Security will ask:
  - Your name, location, date and time of incident, severity of the incident, if response resources are needed, and if emergency services are required
  - For an Environmental incident, the amount, product type, source, affected areas, and if response resources are needed
- **Fifth:** After activating the Communicator:
  - Expect a call-back from the Compliance on-call person within 15 minutes.
  - If the incident requires Oil Spill Response resources, contact your QI.
  - Important: Reactivate the Communicator and/or call your QI if you do not receive a call-back from the Compliance on-call person.

3.1 EMERGENCY INFORMATION AND NOTIFICATION PROCEDURES, CONTINUED

Should the person making notifications encounter problems with the notification process listed

above, individual calls may be required to ensure appropriate notifications are made.

The priority of actions and response procedures will depend upon actual circumstances and will be determined by the Incident Commander.

Information required (in order below):

1 - Your name and phone number, type of incident reported and location

2 - Supervisor name.

3 - Time and Date

4 - Product released and estimated quantity

5 - Source of release

6 - Affected medium (Land or Water)

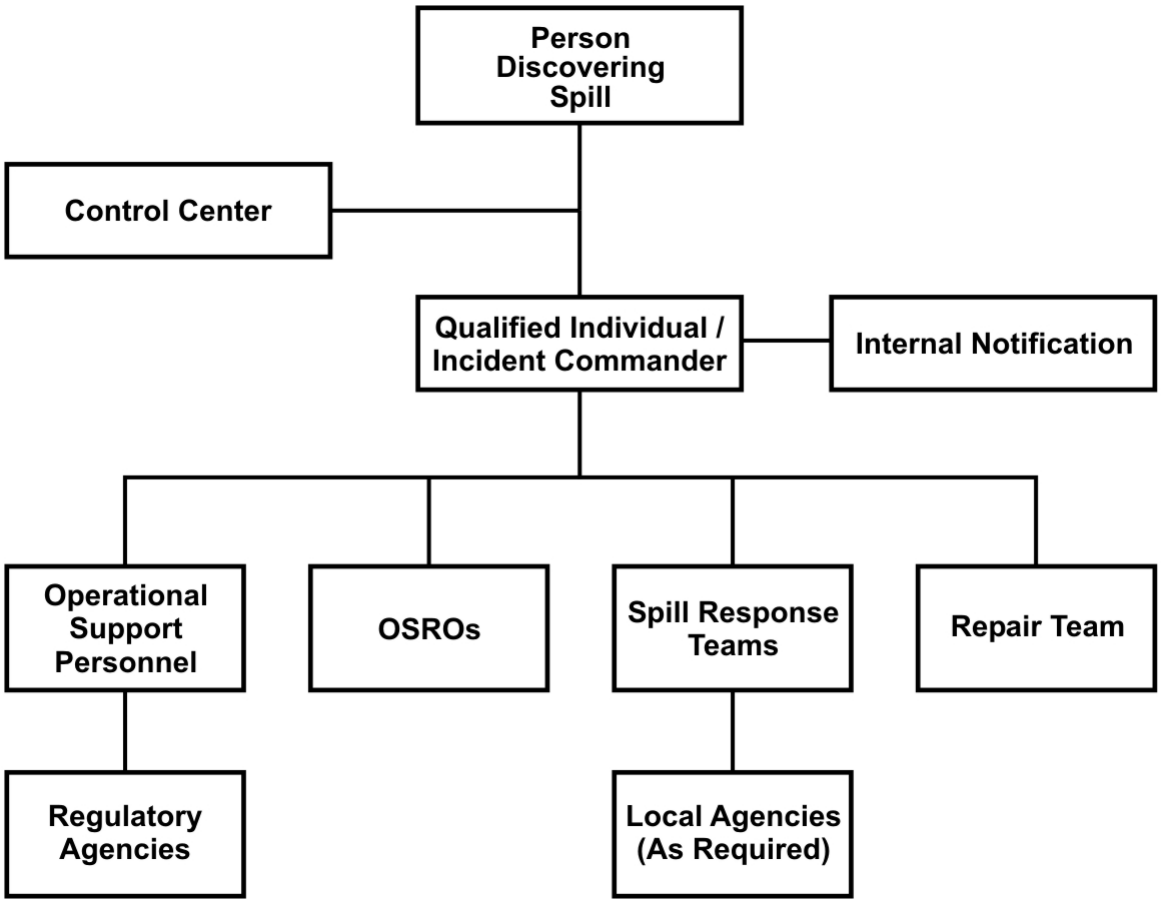
7 - Affected employee (if applicable)

8 - Has area been secured?

Note: Remember -

1) **Safety is our #1 concern**
2) **Report only the facts!**

FIGURE 3.1-1 - EMERGENCY NOTIFICATION FLOW CHART



This section also contains the following:

- FIGURE 3.1-2 provides a First Report of Incident Form. This form is utilized for initial internal reporting.
- FIGURE 3.1-3 provides a PHMSA Spill Report Form. This form is utilized for initial PHMSA external reporting.
- FIGURE 3.1-4 provides internal notification summary and documentation form to assist in documenting notifications.

FIGURE 3.1-2 - FIRST REPORT OF INCIDENT FORM

***This is a sample form. Actual documentation should be submitted as a First Report of Incident into the Lynx Database as required by KPL G120.010.**

Short Description:	
Responsible Dept. / Unit:	
Supervisor:	
Select a Level of Consequence and Check all that Apply: **Level of Consequence:** ☐ Near Miss ☐ Incident	
General:	

☐ Economic Loss	☐ Injury
☐ Environmental	☐ Property Damage
☐ Fire / Explosion	☐ Quality
☐ Health / Illness	☐ Security

Where did the incident occur? Location:		
Specific Location:		
When did the incident occur?	**Date Occurred:** / /20_____	**Time:** ☐ AM ☐ PM
	Date Reported: / /20_____	**Time:** ☐ AM ☐ PM
Enter a full description of the Incident:		
Weather:	**PSM Incident:**	
Incident Flags: ☐ Key Risk	☐ Right of Way Encroachment	☐ Third Party

Equipment Involved	Critical	Comment

Witness Name:	Address:	Phone:

Contractor	Involvment Type

Enter any Injury / Illness Information:

Patient	Class	Body Part	Position

Enter any Release Information:

Chemical Agent	Medium	Amount	Unit

Actual Risk Rating:	**Potential Risk Rating:**

FIGURE 3.1-3 - PHMSA SPILL REPORT FORM
(This is guidance for information to be supplied to PHMSA)

1. NAME AND ADDRESS OF COMPANY:

2. NAME OF PIPELINE:

3. TIME OF DISCHARGE:

4. LOCATION OF DISCHARGE:

5. TYPE OF OIL (INCLUDING PETROLEUM PRODUCTS) INVOLVED:

6. REASON FOR DISCHARGE (e.g., material failure, excavation damage, corrosion):

7. ESTIMATED VOLUME OF OIL (INCLUDING PETROLEUM PRODUCTS) DISCHARGED:

8. WEATHER CONDITIONS ON SCENE:

9 ACTION TAKEN OR PLANNED BY PERSONS ON SCENE:

FIGURE 3.1-4 - INTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS

Note: Notification Forms can only be printed from the Section File (not available in the Forms Navigator)

*24-Hour Number

SPILL MANAGEMENT TEAM						
NAME/TITLE	**PHONE NUMBER**	**RESPONSE TIME (hours)**	**RESPONSIBILITY DURING RESPONSE ACTION**	**RESPONSE TRAINING TYPE[1]**		
				1	**2**	**3**
*Emergency Number (24-Hour) - Refined Products Pipeline Control Center	(800) 666-0150* (Office)	NA	Emergency Communications #:			
*Emergency Number (24-Hour) - Crude Oil Pipeline Control Center	(800) 666-0051* - Manned 24/7 (Office)	NA	Emergency Communications #. Manned 24/7			
*Koch Special Situations Hotline	(800) 824-6149 (Office)	NA	Emergency Communications #:			
Wayne Brandl Maintenance Supervisor **Qualified Individual**	(361) 242-5548 (Office) (b) (6) [redacted] (361) 318-2463 *(Mobile)	1.0-3.0	Command: On-Scene Incident Commander, EOC - Director, Operations: Section Chief, UCS	x	x	x
Timothy Woodruff Operations Supervisor **Qualified Individual**	(361) 242-5511 (Office) (b) (6) [redacted] (361) 813-5124 *(Mobile), (512) 657-9440 (personal cell phone) *(Mobile)	1.0-4.0	Command: On-Scene Incident Commander, EOC - Liaison (FHR Refinery), Operations: Section Chief, UCS	x	x	x
Benito Rodriguez Operations Supervisor **Qualified Individual**	(361) 528-3219 (Office) (361) 877-6040 *(Mobile) (361) 881-0957 (Pager)	1.0-6.0	On-Scene Incident Commander, Operations Section Chief, EOC Liaison (City Representation)	x	x	x
Gerald Page Inspection Team Leader **Qualified Individual**	(512) 237-3371 (Office) (361) 543-6010 *(Mobile)	3.0 - 6.0	On-Scene Incident Commander, EOC Director Operations: Repair Group Supervisor,	x	x	x
Wade Parrott Assistant Division Manager	(361) 242-5593 (Office) (b) (6) [redacted] (612) 965-2438	1.0 - 4.0	Chief of Staff (EOC Director), On-Scene Incident Commander, Crisis	x	x	x

Qualified Individual	*(Mobile)		Manager			
Thomas Calvez Pipeline Operator	(361) 348-3551 (Office) (361) 318-3085 *(Mobile)	1.0-3.0	Initial Responder, Operations Unit	x	x	
Refugio Gonzalez Measurement Technician	(361) 242-5538 (Office) (361) 815-2309 *(Mobile)	1.0-3.0	First Responder, Staging Area Branch Director, Staging Area Manager, Division / Group Supervisor, Branch Director	x	x	

EMERGENCY RESPONSE TRAINING TYPE[1]	
There are three different types of training described below including HAZWOPER, OPA, and Qualified Individual/Incident Command Training. An "x" has been placed in the applicable columns (type 1, 2, or 3) in the table above for the type of training completed by each individual.	
TYPE[1]	**DESCRIPTION**
1	29 CFR 1910.120 HAZWOPER
2	OPA (Training Reference for Oil Spill Response) All Facility Personnel, IMT, QI Components
3	Qualified Individual/Incident Command Training

NOTE: Training records will be maintained in accordance with the Company Records Retention Schedule.

FIGURE 3.1-4 - INTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS

Note: Notification Forms can only be printed from the Section File (not available in the Forms Navigator)

*24-Hour Number

SPILL MANAGEMENT TEAM						
NAME/TITLE	**PHONE NUMBER**	**RESPONSE TIME (hours)**	**RESPONSIBILITY DURING RESPONSE ACTION**	**RESPONSE TRAINING TYPE[1]**		
				1	**2**	**3**
Mark Parker Corrosion Technician	(361) 242-5520 (Office) (361) 815-1206 *(Mobile)	1.0-3.0	First Responder, Strike Team / Task Force Leader or Single Resource Boss, Security Manager	x	x	
Ronald Perez Project Operations	(361) 242-5537 (Office) (361) 816-9170	1.0-3.0	Operations Section Chief, Division / Group Supervisor,	x	x	

Coordinator	*(Mobile)		Branch Director, Demobilization Unit Leader			
Rocky Pursley Pipeline Operator	(956) 481-3395 (Office) (956) 849-5371 *(Mobile)	1.0-3.0	First Responder, Operations: Strike Team / Task Force Leader or Single Resource Boss, Operations: Staging Area Manager	x	x	
Cody Cruthirds Project Engineer	361-242-5524 (Office) 361-290-2696 *(Mobile)	1.0-3.0	Repair Group; Operations, Planning, Logistics Section Chief	x	x	
Steven Ostrom Director of Engineering and Construction	(361) 242-5501 (Office) (361) 215-3890 *(Mobile)	1.0-3.0	FHR Refinery Crisis Team Liaison, EOC Liaison (City Representation), Crisis Manager	x	x	
Benjamin Mumme IMP Preventive Measure Capability Leader	(361) 242-5506 (Office) (361) 877-2590 *(Mobile)	1.0-3.0	Technical Specialist, Integrity Specialist Unit, Operations Section Chief, Planning Section Chief	x	x	
James Lee Measurement Capability Leader	(361) 242-5525 (Office) (361) 877-2876 *(Mobile)	1.0-3.0	Technical Specialist, Measurement Unit Leader	x		
Jerry Edwards Work Management Process Coordinator	(361) 242-5552 (Office) (361) 816-6598 *(Mobile)	1.0-3.0	Documentation Unit Leader, Resource Unit Leader, Situation Unit Leader	x	x	
Stacey Kanak DOT Capability Leader	(361) 242-5528 (Office) (361) 877-2587 *(Mobile)	1.0-3.0	Liaison Officer, PIO Assistant: KCPS Liaison, Technical Specialist; DOT Compiance Unit Leader	x	x	
Amanda Miles Cost Analyst	(361) 242-5509 (Office) (361) 813-9381 *(Mobile)	1.0-3.0	Finance / Admin Section Chief, Resource Unit Leader, Service Branch Director		x	
EMERGENCY RESPONSE TRAINING TYPE[1]						
There are three different types of training described below including HAZWOPER, OPA, and						

Qualified Individual/Incident Command Training. An "x" has been placed in the applicable columns (type 1, 2, or 3) in the table above for the type of training completed by each individual.

TYPE[1]	DESCRIPTION
1	29 CFR 1910.120 HAZWOPER
2	OPA (Training Reference for Oil Spill Response) All Facility Personnel, IMT, QI Components
3	Qualified Individual/Incident Command Training

NOTE: Training records will be maintained in accordance with the Company Records Retention Schedule.

FIGURE 3.1-4 - INTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS

Note: Notification Forms can only be printed from the Section File (not available in the Forms Navigator)

*24-Hour Number

SPILL MANAGEMENT TEAM						
NAME/TITLE	PHONE NUMBER	RESPONSE TIME (hours)	RESPONSIBILITY DURING RESPONSE ACTION	RESPONSE TRAINING TYPE[1]		
				1	2	3
Roberto Marroquin Project Coordinator	(361) 242-5527 (Office) (361) 537-0957 *(Mobile)	1.0-3.0	First Responder, Repair Group Supervisor, Division / Group Supervisor, Branch Director	x	x	
Eulalio Orta Project Engineer	(361) 242-5546 (Office) (361) 215-0871 *(Mobile)	1.0-3.0	Planning Section Chief, Logistics Section Chief, Repair Group Supervisor	x	x	
Jessie Sifuentes Pipeline Operator	(361) 242-5541 (Office) (361) 290-7442 *(Mobile)	1.0-3.0	First Responder, Strike Team / Task Force Leader or Single Resource Boss, Demobilization Unit Leader	x	x	
Michelle Dillon Right of Way Manager	(361) 242-5562 (Office) (361) 290-3549 *(Mobile)	1.0-3.0	Planning: Technical Specialist, Right of Way Unit Leader Command: PIO Assistant: Local Emergency Responders	x	x	
	(361) 242-5526		First Responder, Pipeline Repair			

Rene Colon Pipeline Inspector	(Office) (361) 290-8995 *(Mobile)	1.0 - 3.0	Group supervisor, Strike Team / Task Force Leader or Single Resource Boss	x	x	
Allen Fox Operations Supervisor	(361) 242-5595 (Office) (361) 215-2391 *(Mobile)	1.0 - 3.0	Operations Section Chief, Division / Group Supervisor, Branch Director, On-Scene Incident Commander	x	x	
Ivan Jaskinia Corrosion Technician	(361) 543-6221 *(Mobile) (361) 224-3491 (Pager)	2.0 - 5.0	First Responder, Strike Team / Task Force Leader or Single Resource Boss, Staging Area Manager			
Corey Nelson Pipeline Inspector	(361) 242-5595 (Office) (361) 876-7036 *(Mobile)	2.0-4.0	First Responder, Pipeline Repair Group Supervisor, Strike Team / Task Force Leader or Single Resource Boss	x	x	
Matthew McCauley Environmental Coordinator	(361) 242-5580 (Office) (361) 290-9448 *(Mobile)	2.0	Command: On-Scene Incident Commander Command: Government Liaison Operations: Waste Management Group Supervisor	x	x	
Warren Lang Measurement Technician	(361) 242-5595 (Office) (361) 815-9304 *(Mobile)	2.0-4.0	First Responder, Demobilizaton Unit Leader, Division/Group Supervisor, Branch Director	x	x	

EMERGENCY RESPONSE TRAINING TYPE[1]

There are three different types of training described below including HAZWOPER, OPA, and Qualified Individual/Incident Command Training. An "x" has been placed in the applicable columns (type 1, 2, or 3) in the table above for the type of training completed by each individual.

TYPE[1]	DESCRIPTION
1	29 CFR 1910.120 HAZWOPER
2	OPA (Training Reference for Oil Spill Response) All Facility Personnel, IMT, QI Components
3	Qualified Individual/Incident Command Training

NOTE: Training records will be maintained in accordance with the Company Records Retention Schedule.

FIGURE 3.1-4 - INTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS

Note: Notification Forms can only be printed from the Section File (not available in the Forms Navigator)

*24-Hour Number

SPILL MANAGEMENT TEAM						
NAME/TITLE	**PHONE NUMBER**	**RESPONSE TIME (hours)**	**RESPONSIBILITY DURING RESPONSE ACTION**	**RESPONSE TRAINING TYPE[1]**		
				1	**2**	**3**
Richard Merchant Electrical Technician	(361) 242-5595 (Office) (361) 215-3419 *(Mobile)	2.0-4.0	First Responder, Strike Team / Task Force Leader or Single Resource Boss, Security Manager	x	x	
Paul (Stacey) Strong I/E Technician	361-242-5559 (Office) 361-816-5836 *(Mobile)	2.0-4.0	First Responder, Strike Team / Task Force Leader or Single Resource Boss, Security Manager	x	x	
Robert Sanger Operations Supervisor	(361) 242-5599 (Office) (361) 215-5410 *(Mobile)	2.0-4.0	Operations Section Chief, Division / Group Supervisor, Branch Director, Deputy On-Scene Incident Commander	x	x	
John Fort Health & Safety Specialist	(361) 876-5416 *(Mobile)	2.0 - 6.0	Safety Officer	x	x	
Jon Donlon Reliability Engineer	(361) 242-5533 (Office) (361) 215-7323 *(Mobile)	1.0 - 4. 0	Service Branch Director, Resource Unit Leader, Planning Section Chief, UCS	x	x	
Gilbert Garcia Pipeline Inspector	(361) 242-5595 (Office) (361) 816-7133 *(Mobile)	1.0 - 4.0	First Responder, Pipeline Repair Group Supervisor, Strike Team / Task Force Leader or Single Resource Boss	x	x	
	(361) 526-2532		First Responder, Strike Team / Task			

Robert Fairly Mechanical Technician	(Office) (361) 876-3967 *(Mobile)	1.0 - 4.0	Force Leader or Single Resource Boss, Staging Area Manager	x	x	
Christopher Payne Automation Technician	(361) 242-5595 (Office) (361) 813-7376 *(Mobile)	1.0 - 4.0	First Responder, Strike Team / Task Force Leader or Single Resource Boss, Staging Area Manager	x	x	
Rex Ulrich II Project Manager	(361) 242-5555 (Office) (361) 290-6569 *(Mobile)	1.0 - 4.0	Repair Group Supervisor, Division / Group Supervisor, Branch Director, Demobilization Unit Leader	x	x	
David Gatchel EH&S Manager	(361) 242-5505 (Office) (361) 215-2238 *(Mobile)	1.0 - 4.0	Liaison Officer, Environmental Unit Leader, EOC Liaison (City Representation)	x	x	

EMERGENCY RESPONSE TRAINING TYPE[1]

There are three different types of training described below including HAZWOPER, OPA, and Qualified Individual/Incident Command Training. An "x" has been placed in the applicable columns (type 1, 2, or 3) in the table above for the type of training completed by each individual.

TYPE[1]	DESCRIPTION
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NOTE: Training records will be maintained in accordance with the Company Records Retention Schedule.

FIGURE 3.1-4 - INTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS

Note: Notification Forms can only be printed from the Section File (not available in the Forms Navigator)

*24-Hour Number

SPILL MANAGEMENT TEAM						
NAME/TITLE	PHONE NUMBER	RESPONSE TIME (hours)	RESPONSIBILITY DURING RESPONSE ACTION	RESPONSE TRAINING TYPE[1]		
				1	2	3
Nikki DeLong	(361) 242-5578 (Office)		Situation Unit Leader, Resource			

Project Engineer	(361) 816-9436 *(Mobile)	1.0 - 4.0	Unit Leader, Planning Section Chief	x	x	
David Pearrell Damage Prevention Coordinator	(361) 543-6514 *(Mobile)	1.0 - 6.0	First Responder, Strike Team / Task force Leader or Single Resource Boss, Security Manager	x	x	
Miller (Emilo) Flores, Jr. Instumentation / Electrical Technician	(361) 242-5595 (Office) (361) 215-2856 *(Mobile)	1.0 - 4.0	First Responder, Stike Team / Task Force Leader or Single Resource Boss	x	x	
David Lopez III Instrumentation / Electrical Technician	(361) 944-8296 (Office) (361) 944-8296 *(Mobile)	1.0 - 4.0	First Responder, Strike Team / Tasak Force Leader or Single Resource Boss, Demobilization Unit Leader	x	x	
Denzel Gore Instrumentation / Electrical Technician	(361) 816-7691 *(Mobile)	1.5 - 5.5	First Responder, Strike Team / Task Force Leader or Single Resource Boss, Demobilization Unit Leader	x	x	
Jed Bougouneau Instrumentation / Electrical Technician	(361) 242-5595 (Office) (361) 331-0779 *(Mobile)	1.0 - 4.0	First Responder, Stike Team / Task Force Leader or Single Reousource Boss, Staging Area Manager	x	x	
Jason Taylor Pipeline Operator	(361) 242-5595 (Office) (361) 944-8297 *(Mobile)	1.0 - 4.0	First Responder, Strike Team / Task Force Leader or Single Resource Boss, Staging Area Manager	x	x	
Marcos Alaniz Pipeline Operator	(361) 242-5595 (Office) (361) 290-0371 *(Mobile)	In Training	First Responder, Strike Team / Task Force Leader or Single Resource Boss, Staging Area Manager	x	x	
Neal Goings Pipeline Inspector	(830) 780-3266 X306 (Office) (361) 816-7642	In Training	First Responder, Pipeline Repair Group Supervisor, Strike Team / Task	x	x	

	*(Mobile)		Force Leader or Single Resource Boss			
Jessica Canales Project Administrative Assistant	(361) 242-5519 (Office)	In Training	Planning: Resource Unit Leader Logistics: Service Branch Director Finance / Admin: Section Chief		x	

EMERGENCY RESPONSE TRAINING TYPE[1]	
There are three different types of training described below including HAZWOPER, OPA, and Qualified Individual/Incident Command Training. An "x" has been placed in the applicable columns (type 1, 2, or 3) in the table above for the type of training completed by each individual.	
TYPE[1]	**DESCRIPTION**
1	29 CFR 1910.120 HAZWOPER
2	OPA (Training Reference for Oil Spill Response) All Facility Personnel, IMT, QI Components
3	Qualified Individual/Incident Command Training

NOTE: Training records will be maintained in accordance with the Company Records Retention Schedule.

FIGURE 3.1-4 - INTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS

Note: Notification Forms can only be printed from the Section File (not available in the Forms Navigator)

*24-Hour Number

SPILL MANAGEMENT TEAM						
NAME/TITLE	**PHONE NUMBER**	**RESPONSE TIME (hours)**	**RESPONSIBILITY DURING RESPONSE ACTION**	**RESPONSE TRAINING TYPE[1]**		
				1	**2**	**3**
Jacob Garcia Pipeline Operator	(361) 242-5588 (Office) (361) 537-9045 *(Mobile)	In Training	First Responder, Strike Team / Task Force Leader or Single Resource Boss, Security Manager	x	x	
Michael Volmer I/E Technician	(361) 215-9381 *(Mobile)	In Training	First Responder, Strike Team / Task Force Leader or Single Resource Boss, Demobilization Unit Leader	x	x	
Pete Mata	(361) 242-5545 (Office)		Support Branch Director, Service			

Warehouse and Inventory Manager	(361) 331-0012 *(Mobile)	In Training	Branch Director, Demobilization Unit Leader	x	x	
Ronald Henne Mechanical Technician	(361) 215-8662 *(Mobile)	In Training	First Responder, Strike Team / Task Force Leader or Single Resource Boss, Security Manger	x	x	
Rebecca Buskirk EH&S ADMINISTRATIVE ASSISTANT	361-242-5597 (Office)	In Training	Planning: Documentation Unit Leader, Planning Situation Unit Leader, Planning Resources Unit Leader		x	
Brandon Seay Project Manager	(361) 242-5566 (Office) (361) 290-6395 *(Mobile)	In Training	Demobilization Unit Leader, Service Branch Director, Support Branch Director	x	x	

EMERGENCY RESPONSE TRAINING TYPE[1]

There are three different types of training described below including HAZWOPER, OPA, and Qualified Individual/Incident Command Training. An "x" has been placed in the applicable columns (type 1, 2, or 3) in the table above for the type of training completed by each individual.

TYPE[1]	DESCRIPTION
1	29 CFR 1910.120 HAZWOPER
2	OPA (Training Reference for Oil Spill Response) All Facility Personnel, IMT, QI Components
3	Qualified Individual/Incident Command Training

NOTE: Training records will be maintained in accordance with the Company Records Retention Schedule.

FIGURE 3.1-5 - EXTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS

Note: Notification Forms can only be printed from the Section File (not available in the Forms Navigator)

*24-Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Initial		
National Response Center (NRC) c/o USCG 2100 2nd Street, Southwest Room 2111-B Washington, DC 20593-0001 For online reporting http://nrc.uscg.mil/	(800) 424-8802* (202) 267-2675* (202) 267-1322 (Fax) TDD: (202) 267-4477	

Recommended		
State Agencies - Texas		
Regional Director: Susan Clewis NRC Building Ste. 1200 6300 Ocean Drive Unit 5839 Corpus Christi, Texas 78412-5839	(361) 825-3100 (361) 825-3101	
State Emergency Response Commission (SERC) Texas Division of Emergency Management PO BOX 4087, MSC 0223 Austin, TX 78733 (You must inform SERC what agency to contact: TCEQ / TGLO / RRC)	(800) 832-8224 (800) 452-2791 (512) 424-5677	
Texas 811 11880 Greenville Avenue Suite 120 Dallas, TX 75243	(800) 344-8377 (DIG TESS) (866) 402-8544 (972) 231-5497	
Texas Commission on Environmental Quality 15 - Harlingen Regional Director: Jaime A. Garza 1804 West Jefferson Avenue Harlingen, Texas 78550-5247	(956) 425-6010 (956) 412-5059	
Texas Railroad Commission District 4 Oil & Gas Office PO Box 10307 Corpus Christi, TX 78460	(361) 242-3113 (24-hrs)	
County Agencies - Texas		
Brooks County		
Brooks Co. LEPC 217 East Miller PO Box 515 Falfurrias, TX 78355	(361) 325-5604	
Brooks Co. Sheriff Department 801 CR 201 PO Box 558 Falfurrias, TX 78355	(361) 325-3696	
Falfurrias Fire Department 220 South Highway 281 Falfurrias, TX 78355	(361) 325-2422?	
Hidalgo County		
McAllen Medical Center 301 West Expressway 83 McAllen, TX 78503	(956) 632-4000 (956) 632-4100	

Jim Wells County		
Alice - Christus Spohn Hospital 2500 East Main Alice, TX 78332	(361) 661-8000	
Alice Fire Department 601 East 3rd Street Alice, TX 78332	(361) 664-3111 (361) 664-0186	
Alice Police Department 415 East Main Alice, TX 78332	(361) 664-0186 (361) 664-0187 (361) 664-0188	
Jim Wells Co. LEPC 200 North Almond Alice, TX 78332	(361) 668-5706	

FIGURE 3.1-5 - EXTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS

Note: Notification Forms can only be printed from the Section File (not available in the Forms Navigator)

*24-Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Recommended , Continued		
County Agencies - Texas		
Jim Wells County		
Jim Wells Co. Sheriff Department 300 North Cameron Alice, TX 78332	(361) 668-0341	
Premont Police Department 200 Southwest 1st St Premont, TX 78375	(361) 348-3231	
Premont Volunteer Fire Department 215 Southwest 1st Street Premont, TX 78375	(361) 348-2022 Dial 911 for emergencies	
Kleberg County		
Kingsville Fire Department 119 North 10th Street Kingsville, TX 78363	911 (361) 592-6445	
Kingsville Police Department 200 E. Kleberg Kingsville, TX 78363	(361) 592-4311	
Kleberg Co. LEPC 7621 Beau Terre	(361) 595-8527 (361) 595-8500	

Corpus Christi, Texas 78414		
Kleberg Co. Sheriff Department 1500 East King Ave Kingsville, TX 78363	(361) 595-8500	
Nueces County		
Corpus Christi - Christus Spohn Memorial Hospital 2606 Hospital Boulevard Corpus Christi, TX 78405	(361) 902-4000	
Corpus Christi Fire Department 2406 Leopard Corpus Christi, TX 78408	(361) 880-3000 (361) 886-2600	
Corpus Christi Police Department 321 John Sartain Corpus Christi, TX 78401	(361) 886-2600	
Corpus Christi Port Police Department 1002 EastPort Corpus Christi, TX 78401	(361) 882-1182 (361) 885-6197 (361) 885-6200	
Nueces Co. LEPC 2406 Leopard Street Suite # 30 Corpus Christi, TX 78408	(361) 826-4333	
Nueces Co. Sheriff Department 901 Leopard Street Corpus Christi, TX 78401	(361) 887-2219 (361) 826-2900	
San Patricio County		
San Patricio Co. LEPC c/o Coastal Plain 300 North Rachal Street Sinton, TX 78387	(361) 364-9650 (361) 364-6194	

FIGURE 3.1-5 - EXTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS

Note: Notification Forms can only be printed from the Section File (not available in the Forms Navigator)

*24-Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Recommended , Continued		
County Agencies - Texas		
San Patricio County		
San Patricio Co. Sheriff Department 300 North Rachal Sinton, TX 78387	(361) 364-2251	
Starr County		
San Isidro (Rio Grande) Police	(956) 487-8892	

Department 402 East Main Rio Grande City, TX 78582		
San Isidro Fire Department 5379 FM 1017 San Isidro, TX 78588	(956) 481-3277	
Starr Co. LEPC & Emergency Manager PO Box 496 Rio Grande City , TX 78582	(956) 487-2522	
Starr Co. Sheriff Department 100 East 6th Street Rio Grande City, TX	(956) 487-5571	
Webb County		
Laredo Fire Department 1 Guadalupe Street Laredo, TX 78040	(956) 795-2150	
Laredo Medical Center 1700 East Sanders Laredo, TX 78041	(956) 796-5000	
Laredo Police Department 4712 Maher Ave Laredo, TX 78041	(956) 795-2800	

FIGURE 3.1-6 - OIL SPILL RESPONSE CONTRACTOR RESOURCES AND TELEPHONE NUMBERS

*24-Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
USCG Classified OSRO's		
Eagle Construction and Environmental Services, Inc. (Houston) La Porte, TX	(281) 867-9131 (281) 867-9131 (281) 897-9150 (Fax)	
Eagle Construction and Environmental Services, L.P. (Corporate Office) Eastland, TX	(800) 336-0909* (254) 629-1718 (281) 867-9131 LaPorte Number	
Eagle SWS, (Fort Worth) Fort Worth, TX	(800) 336-0909* (817) 847-1333 (817) 306-8086 (Fax)	
Eagle SWS, (San Antonio) Cibolo, TX	(210) 566-8366 (210) 566-6247 (Fax)	

	(877)-742-4215 (24 Hour)	
Garner Environmental Services, Inc. (Houston Operations) Deer Park, Texas	800-424-1716 (281) 930-1200 (281) 478-0296 (Fax)	
Miller Environmental Services, Inc. Corpus Christi, TX	(361) 289-9800 (24-hr) (361) 289-6363 (Fax)	
TAS Environmental Services (Dallas) Dallas, TX	1-888-654-0111 (972) 638-9700 (972) 638-9702 (Fax)	
TAS Environmental Services, (Austin) Austin , TX	888--654-0111 (512) 990-9903 (512) 990-0033 (Fax)	
TAS Environmental Services, (Fort Worth) Fort Worth, TX	1-888-654-0111 (817) 535-7222 (817) 535-8187 (Fax)	
TAS Environmental Services, LP (San Antonio) San Antonio, Texas	888-654-0111 (210) 496-5310 (210) 496-5312 (Fax)	

FIGURE 3.1-7 - ADDITIONAL RESOURCES, NOTIFICATIONS, AND TELEPHONE NUMBERS

*24-Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Additional Services		
Cardno Entrix 5252 Westchester Suite 250 Houston, TX 77005	(800) 368-7511 (713) 666-6223 (Office)	
REISS Remediation 20 Greenway Plaza Houston, TX 77046 Attn. Michael Christopher	(713) 544-3016 (Office) (832) 264-3654 (Cell)	
Aviation Companies		
Guardian Air Patrol 1050 East 2nd Street #225 Edmond, OK 73034	405-708-1911	

Laboratories		
AnalySys, Inc. 2209 North Padre Island Drive, Suite K Corpus Christi, TX 78408	(361) 289-6384 (361) 289-0875 (Fax)	
AnalySys, Inc. 3512 Montopolis Drive Austin, TX 78744	(512) 385-5886 (512) 385-7411 (Fax)	
TestAmerica Laboratories 1733 North Padre Island Drive Corpus Christi, TX 78408	(361) 289-2673 (361) 289-2471 (Fax)	
Radio Rentals		
Total Safety 6810 Leopard Corpus Christi, TX 78409	(361) 289-5995 (361) 289-6797 fax (361) 442-4224 Sales Rep	
Pipeline Repair Companies		
H & S Constructors, Inc. 1001 Flournoy Alice, TX 78332	(361) 668-8674 (361) 668-1865	
Spill Management Technical Advisors		
Bill Oswald Government Affairs (Austin TX) KCPS, LLC	(512) 476-4795 (office) (b) (6) [redacted] (512) 917-1429 (cell)	
Jim Andrew KPL Compliance Director Koch Pipeline Company, L.P.	(316) 828-5511 (office) (316) 250-5226 (cell) (888) 732-1764 (pager) (316) 828-7887 (fax)	
Joel Davidson Emergency Response Capability Leader Koch Pipeline Company, L.P.	(316) 828-6604 (office) (316) 206-3652 (cell) (316) 828-7199 (fax)	
Katie Stavinoha Director, Public Affairs KCPS, LLC	(281) 363-7260 (office) (713) 459-7340 (cell) (316) 828-6997 (fax)	
Tom Harwell Director, Compliance & Community, Public Affairs KCPS, LLC	(316) 828-7082 (office) (b) (6) [redacted] (316) 992-2750 (cell)	

Storage Tanks Rentals and RORO's		
Bakercorp 533 McBride Lane Corpus Christi, TX 78408- Corpus Christi 459 Cargill Road Kilgore,TX 75662- Kilgore 22345 IH 35 South New Braunfels, TX 78132- San Antonio 7818 South Cooper Street Arlington, TX 76001- Dallas	(361) 289-7708 (Corpus Christi) (903) 983-2916 (Kilgore) (830) 606-7788 (San Antonio) (817) 608-0576 (Dallas)	

FIGURE 3.1-7 - ADDITIONAL RESOURCES, NOTIFICATIONS, AND TELEPHONE NUMBERS, CONTINUED

*24-Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Storage Tanks Rentals and RORO's		
NES 1745 North Padre Island Drive Corpus Christi, TX 78408	(361) 289-5061	
Rain 4 Rent 8515 Up River Road Corpus Christi, Texas 78409 3744 Southeast Route 410 San Antonio, TX 78222- San Antonio 837 109th Street Arlington, TX 76011- Dallas 6401 Gulf Way Drive Grove, TX 77619- Port Arthur	(361) 241-2339 (Corpus Christi) (210) 648-4006 (San Antonio) (817) 652-1079 (Dallas) (409) 962-3121 (Port Arthur)	
Television Stations		
KIII (ABC) - Channel 3 5002 South Padre Island Drive Corpus Christi, TX 78411	(361) 855-6397	
McAllen - KNVO (Univision) 801 North Jackson Road McAllen, TX 78501	(956) 687-4848	
Transport Companies		
Union Pacific Railroad 1400 Douglas Street Omaha, NE 68179 1-888-UPRRCOP (877-7267) to report hazardous materials releases, personal injuries, criminal activities, illegal dumping, or other environmental incidents.	UP Main Number: 402-544-5000 UP Operator: 888-870-8777	

To report emergency grade crossing blockages or damage, please call 1-800-848-8715.		
Vacuum Truck Services		
H & K Vacuum Trucks Inc 1010 Sodville Street Sinton, TX 78387 P.O. Box 1340 Sinton, TX 78387	(361) 364-4311 (361) 364-5920 (Fax) (800) 456-9430	
Miller Environmental Services 600 Flato Road Corpus Christi, TX 78465	(361) 289-9800* (361) 289-6363 (Fax)	
Process Solutions 1218 Southern Minerals Road Corpus Christi, TX 78409	(361) 299-2898 (361) 289-7437 (Fax)	
TAS Environmental 3929 E. California Pkwy Fort Worth, TX 76119	(817) 535-7222 (817) 532-2202	
Weather		
Corpus Christi National Weather Service 300 Pinson Drive Corpus Christi, TX 78406	(361) 289-1861	
Wildlife Rehabilitation		
Animal Rehabilitation Keep (ARK) 750 Channel View Drive Port Aransas, Texas 78373	361-749-6793	
Wildlife Rehabilitation and Education 7007 Katy Road Houston, TX 77024 (Federal License # PRT673173 & State License SPH090-090)	(281) 731-8823 (Upper Coast Cell) (713) 861-9453 (b) (6) [redacted] (281) 992-8080 (Lower Coast)	
Wildlife Resonse Service, LLC PO BOX 842 Seabrook, TX 77586	713-705-5897 281-266-0054 (pager)	

FIGURE 3.1-8 - ADJOINING NEIGHBORS

KPL	Entity /	Emergency	Emergency	Type of	Special

Pipeline Facilities	Business Name	Contact Name or Title	Contact Phone Number	Entity	Instructions
Southern Zone					
Agua Dulce Pump Station	DCP Midstream-Gulf Plains Plant	Control Room	361-584-8506		
Agua Dulce Pump Station	DCP Midstream-Gulf Plains Plant	Ray Guajardo-Plant Manager	361-675-0693 cell 361-584-8522 office		
Viola Pump Station	Dorado	Ronnie Kullman (Field Supervisor)	361-533-0739		
Sunfield Pump Station	Dorado	Ronnie Kullman	361-241-3200		Will contact on duty person
Seeligson Pump Station	Dorado Oil Company	Ronnie Kullman (Operations Manager)	361-533-0739		
Seeligson Pump Station	Dorado Oil Company	Jim Schuchardt (Co-Owner)	361-241-3200		
Viola Pump Station	Exxon Mobil	Carl Clayton (Field Supervisor)	361-289-7028		
Corpus Christi Pump Station	Flint Hills Resources	PLC	361-877-0050	Refinery	
Corpus Christi Pump Station	Flint Hills Resources	RC5 Pump House	361-242-8457	Refinery	
Viola Pump Station	Flint Hills Resources-West Plant	Production Leader	361-877-0050		
Viola Pump Station	Genesis	Cliff Chaney (Regional Manager)	361-960-3072		
Sunfield Pump Station	GulfMark Energy	Dispatcher-Gus Pappas	1-800-340-1495		Will contact on duty person
Viola Pump Station	GulfMark Energy	Earl Snelling (District Supervisor)	281-761-5797		
Seeligson Pump Station	GulfMark Energy	Earl Snelling (District Supervisor)	281-761-5797		

Seeligson Pump Station	GulfMark Energy	Gene Woodson (Regional Manager)	281-382-6053		
Agua Dulce Pump Station	Harvest Pipeline	Rick Edwards (Area Supervisor)	361-877-3377		
Agua Dulce Pump Station	Harvest Pipeline	Control Center	979-215-7909		
Sunfield Pump Station	Jag	Jim Brann	713-705-6717		Will contact on duty person
Viola Pump Station	Mission	David Lewis (Terminal Manager)	361-813-5295		
Seeligson Pump Station	Mission Petroleum	Roel Arce (Field Supervisor)	956-367-0768		
Seeligson Pump Station	Mission Petroleum	Bruce Fletcher (Area Supervisor)	956-227-0626		
Sunfield Pump Station	Mission Petroleum	Dispatcher	956-421-4543		Will contact on duty person
Sunfield Pump Station	Plains	Dispatcher	1-800-708-5071		Will contact on duty person
Viola Pump Station	Plains Energy	Kevin Seavers (Supervisor)	281-830-9568		alt contact: Ramon Cancino 361-290-0279
Sunfield Pump Station	Taylor	Dispatcher	1-866-687-1034		Will contact on duty person

SECTION 4 Last revised:

RESPONSE TEAM ORGANIZATION

4.1 DESCRIPTION

The Incident Management Team (IMT) has been created and organized to plan for and manage emergencies. The IMT is composed of Company personnel from offices within the Area. Additional personnel from outlying offices can be used (if needed). The IMT will develop strategies and priorities for a response, then will supervise contractors, handle safety and security matters, and will provide logistical support for contractor personnel. The IMT will handle all communications with the media and the public (**SECTION 7.2**). Job descriptions for each IMT member are provided in **SECTION 4.6**. The IMT will train by participating in exercises as noted in APPENDIX A.1.

4.2 ACTIVATION PROCEDURES

Activation of the IMT may be accomplished in stages. Initially, the First Responder assumes the role of Incident Commander (IC). During an incident, the initial IC may be able to respond without assistance from the IMT. If the situation requires more resources, the First Responder having assumed the role of the IC, may request additional personnel or management support from the IMT through the QI and the notification process. Depending on the situation, the QI may assume the role of Incident Commander. Having adopted the ICS/UCS protocols as the company response management system, the QI/IC can call out the other IMT members to expand or contract as needed by the requirements of the specific incident. The IMT activation procedure is provided in FIGURE 4.5-1.

4.3 TEAM MEMBER RESPONSE TIMES

See **FIGURE 3.1-4** for each team member's response time "EPA Facilities only".

4.4 INCIDENT COMMAND SYSTEM / UNIFIED COMMAND STRUCTURE

The Incident Command System (ICS) will be used by the Company IMT for managing emergencies. The IMT organization chart is provided in FIGURE 4.5-2. The organization can be expanded or contracted as necessary for any specific incident. Not all sections or jobs need to be established. The Incident Commander and General Staff will decide on the components to be activated.

The Unified Command Structure (UCS) is the accepted method of organizing key emergency management entities within the Incident Command System. The primary entities include:

- Federal On-Scene Coordinator (FOSC)
- State On-Scene Coordinator (SOSC)
- Company Incident Commander (may also be the QI)

These three people share decision-making authority within the Incident Command System and are each responsible for coordinating other federal, state, and company personnel to form an effective integrated Incident Management Team. Refer to **SECTION 4.6** for detailed checklists of the IMT roles and responsibilities as well as organizational interfaces with external parties.

4.5 QUALIFIED INDIVIDUAL (QI)

Authority and Responsibilities

The Qualified Individual (QI) is an English-speaking representative available on a 24-hour basis and capable of arriving at the facility in a reasonable time.

As required by the Oil Pollution Act of 1990, the QI(s) identified have full authority to:

- Activate and contract with oil spill removal organization(s),
- Activate personnel and equipment maintained by the operator,
- Act as a liaison with the pre-designated Federal On-Scene Coordinator (OSC), and
- Obligate funds necessary to carry out required or directed response actions

Each QI identified is:

- Located in the United States,
- Familiar with the implementation of the response plan, and
- Trained in the responsibilities of the qualified individual under the response plan.

QI responsibilities include:

- Activate internal alarms and hazard communication systems to notify facility personnel;
- Notify 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, State Emergency Response Commission, and Local Emergency Planning Committee;
- Assess the interaction of the discharged substance with water and/or other substances stored at the facility and notify response personnel at the scene of that assessment;
- Assess the possible hazards to human health and the environment due to the release. This assessment must consider both the direct and indirect effects of the release (i.e., the effects of any toxic, irritating, or asphyxiating gases that may be generated, or the effects of any hazardous surface water runoffs from water or chemical agents used to control fire and heat-induced explosion;
- Assess and implement prompt removal actions to contain and remove the substance released;
- Coordinate rescue and response actions as previously arranged with all response personnel;
- Use authority to immediately access company funding to initiate cleanup activities; and
- Direct cleanup activities until properly relieved of this responsibility.

4.5 QUALIFIED INDIVIDUAL (QI), CONTINUED

If off-site, the QI will coordinate with Incident Commander to ensure company response plan is implemented for the emergency response; ensure a response is occurring.

Once on-site, the QI may assume the responsibilities of the Incident Commander and assume overall command of the response operations as described in **SECTION 4.6**.

For further information on Qualified Individual's training, refer to **APPENDIX A.2**. Phone numbers for Qualified Individuals are provided in **FIGURES 1-2 and 3.1-4**.

For the purposes of 40 CFR 265 the QI is assumed to be the Emergency Coordinator.

FIGURE 4.5-1 - INCIDENT MANAGEMENT TEAM (IMT) ACTIVATION PROCEDURE

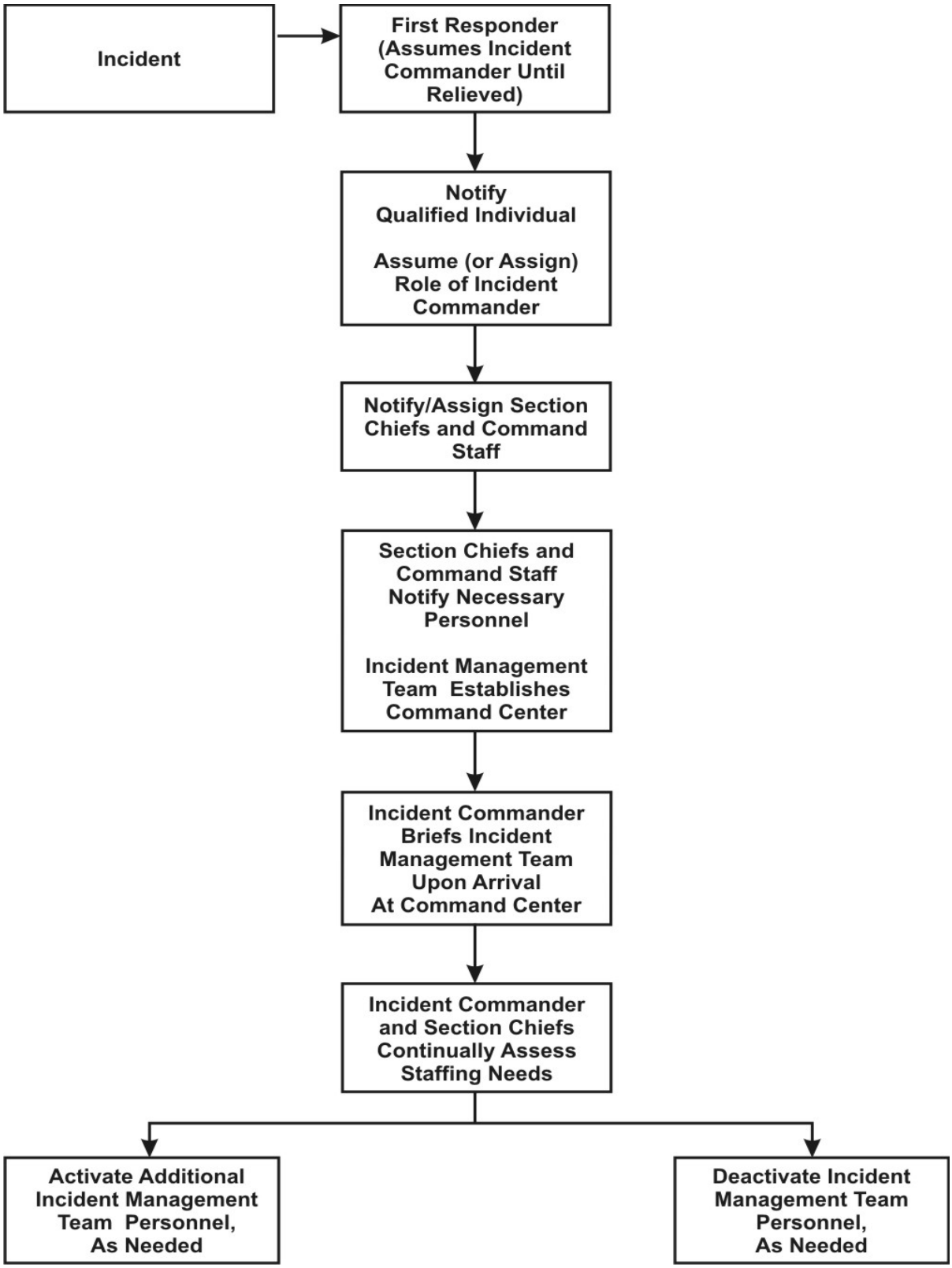
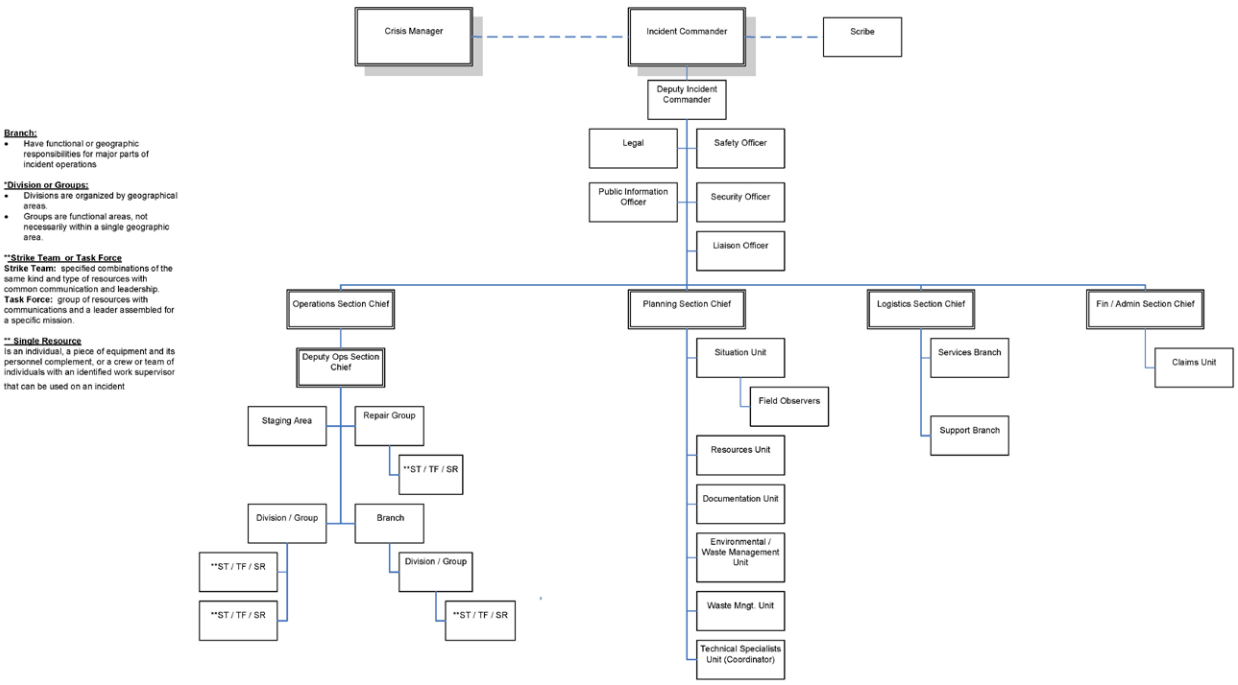


FIGURE 4.5-2 - INCIDENT MANAGEMENT TEAM (IMT) ORGANIZATION CHART

(Click here for larger view)



4.6 INCIDENT MANAGEMENT TEAM (IMT) JOB DESCRIPTIONS AND GUIDELINES

The following job descriptions and guidelines are intended to be used as a tool to assist IMT members in their particular positions within the Incident Command System (ICS).

- Common Responsibilities
- Incident Commander (IC)
- Safety Officer (SOFR)
- Public Information Officer (PIO)
- Security Manager (SECM)
- Liaison Officer (LNO)
- Operations Section Chief (OSC)
- Staging Area Manager (STAM)
- Branch Director (OPBD)
- Division Supervisor (DIVS)
- Planning Section Chief (PSC)
- Situation Unit Leader (SITL)
- Resource Unit Leader (RESL)
- Documentation Unit Leader (DOCL)
- Environmental Unit Leader (ENVL)
- Logistics Section Chief (LSC)
- Finance Section Chief (FSC)

COMMON RESPONSIBILITIES

The following responsibilities are applicable to all personnel in an ICS organization:

Responsibilities:

- ☐ Receive your job assignment (position, designation), including:
  - ☐ Brief overview of type and magnitude of incident.
  - ☐ Travel instructions including reporting location and reporting time.
  - ☐ Any special communications instructions (e.g. travel, radio frequency).
- ☐ Upon arrival at the incident, check in at the designated check-in location.
- ☐ Receive briefing from immediate supervisor and/or person you are relieving.
- ☐ Acquire work materials; ensure all equipment is operational prior to each work period.
- ☐ Participate in IMT meetings and briefings as appropriate.
- ☐ Ensure compliance with all safety practices and procedures. Report unsafe conditions to the Safety Officer.
- ☐ Supervisors shall maintain accountability for their assigned personnel; Organize and brief subordinates.
- ☐ Know your assigned communication methods; Use clear text and ICS terminology (no codes) in all radio communications.
- ☐ Complete Incident ISC forms and reports required of the assigned position and ensure proper disposition of incident documentation as directed by the Documentation Unit.
- ☐ Brief shift replacement on ongoing operations when relieved at operational periods or rotation out.
- ☐ Respond to demobilization orders and return all assigned equipment to appropriate location.
- ☐ Complete Demobilization Check-out process before returning to home base.
- ☐ Participate in After-Action activities as directed.

INCIDENT COMMANDER (IC)

The IC's have responsibility for management of the incident. On many incidents, the command activity is carried out by a single IC.

The IC may have Deputy IC's, who may be from the same company or from an assisting mutual aid group. The Deputy IC must have the same qualifications as the person for whom they work, as they must be ready to take over that position at any time. When span of control becomes an issue for the IC, a Deputy IC/Chief of Staff may be assigned to manage the Command Staff.

The major responsibilities of the IC are:

Responsibilities:

- ☐ Review Common Responsibilities.
- ☐ Obtain a briefing from the prior IC (201 Briefing).
- ☐ Set Incident Objectives, establish incident priorities and give general direction for managing the incident. (This is done in concert with Unified Command, if applicable)
- ☐ Establish an Incident Command Post.
- ☐ Brief Command Staff and Section Chiefs.
- ☐ Establish an appropriate response organization.
- ☐ Ensure planning meetings are scheduled as required or delegate to Planning Section Chief.
- ☐ Approve and authorize the implementation of an Incident Action Plan.
- ☐ Ensure that adequate safety measures are in place.
- ☐ Coordinate activity for Command and General Staff.
- ☐ Ensure adequate resources are being made available to the response effort.
- ☐ Approve requests for additional resources or for the demobilization of resources.
- ☐ Maintain clear and effective communications, plus ensure incident information is shared with key stakeholders on incident status.
- ☐ Approve the use of third party resources.
- ☐ Authorize release of information to the news media.
- ☐ Ensure Incident Status Summary (ICS 209) is completed and forwarded to appropriate individuals.
- ☐ Approve demobilization of the incident when appropriate.
- ☐ Maintain Unit Log (ICS 214).

SAFETY OFFICER (SOFR)

The SOFR function is to develop and recommend measures for assuring personnel safety and to assess and/or anticipate hazardous and unsafe situations. Only one primary SOFR will be assigned for each incident.

The SOFR may have assistants, as necessary, and the assistants may also represent assisting agencies or jurisdictions. Safety assistants may have specific responsibilities, such as potential hazardous material exposures, air monitoring operations, etc.

The major responsibilities of the SOFR are:

Responsibilities:

- ☐ Review Common Responsibilities.
- ☐ Ensure hazardous situations associated with the incident are identified.
- ☐ Develop the Site Safety Plan and publish Site Safety Plan Summary (ICS 208) as required.
- ☐ Exercise emergency authority to stop and prevent unsafe acts.

- ☐ Develop the Work Safety Analysis Worksheet (ICS-215a) as required.
- ☐ Review the IAP for health and safety hazard mitigation strategies.
- ☐ Provide health and safety technical support for assigned responders.
- ☐ Participate in tactics and planning meetings, and other meetings and briefings as required.
- ☐ Ensure accidents that have occurred within the incident area are investigated.
- ☐ Review and approve the Medical Plan (ICS 206).
- ☐ Ensure that all applicable health and safety agency forms, reports and documents are completed prior to demobilization.
- ☐ Brief Command on safety issues and concerns.
- ☐ Have debriefing session with the IC prior to demobilization.
- ☐ Maintain Unit Log (ICS 214).

PUBLIC INFORMATION OFFICER (PIO)

The PIO is responsible for developing and releasing information about the incident to the news media, to incident personnel, and to other appropriate agencies and organizations.

Only one primary PIO will be assigned for each incident, including incidents operating under Unified Command and multi-jurisdiction incidents. The PIO may have assistants as necessary, and the assistants may also represent assisting agencies or jurisdictions.

The following are the major responsibilities of the PIO, which would generally apply on any incident.

The major responsibilities of the PIO are:

Responsibilities:

- ☐ Review Common Responsibilities.
- ☐ Determine if there are any limits on information release ? consult with IC and Legal.
- ☐ Develop material for use in media briefings media releases and review with IC. Coordinate with Legal.
- ☐ Receive authorization from IC and conduct media briefings.
- ☐ Obtain media information that may be useful to incident planning.
- ☐ Arrange for tours and other interviews or briefings that may be required.
- ☐ Manage a Joint Information Center (JIC) if established.
- ☐ Brief Command on PIO issues and concerns.
- ☐ Maintain Unit Log (ICS 214).

SECURITY MANAGER (SECM)

The SECM is responsible for providing safeguards needed to prevent unauthorized access and protect personnel and property from loss or damage.

The major responsibilities of the SECM are:

Responsibilities:

- ☐ Review Common Responsibilities.
- ☐ Establish contacts with local/state/federal law enforcement agencies, as required. NOTE: The extent of this interaction will change extensively if the cause of the incident is a security breach and the role may be elevated to a command staff position.
- ☐ Request required personnel support to accomplish work assignments.
- ☐ Ensure that support personnel are qualified to manage assigned responsibilities.
- ☐ Develop Security Plan and adjust as needed.
- ☐ Coordinate security activities with appropriate incident personnel.
- ☐ Control access to response site.
- ☐ Prevent theft of property and maintain order at the response site.
- ☐ Maintain Unit Log (ICS 214).

LIAISON OFFICER (LNO)

Incidents that are multijurisdictional, or have several agencies involved, may require the establishment of the LNO position on the Command Staff. Only one primary LNO will be assigned for each incident, including incidents operating under Unified Command and multi-jurisdiction incidents.

The LNO may have assistants as necessary, and the assistants may also represent assisting agencies or jurisdictions. The LNO is assigned to the incident to be the contact for assisting and/or cooperating Agency Representatives.

The major responsibilities of the LNO are:

Responsibilities:

- ☐ Review Common Responsibilities.
- ☐ Be a contact point for Agency Representatives ? maintain a list, including name and contact information.
- ☐ Assist in establishing and coordinating interagency contacts.
- ☐ Maintain list of Agency Representatives that are on site each day.
- ☐ Brief Incident Commander on agency issues and concerns.
- ☐ Keep agencies supporting the incident aware of incident status (NOTE: This applies even if agency is not on site).
- ☐ Coordinate activities of visiting dignitaries.
- ☐ Participate in planning meetings, providing limitations and capability of assisting

agency resources.

- ☐ Coordinate response resource needs of Agency Representatives for incident investigation activities with the Operations Section Chief.
- ☐ Maintain Unit Log (ICS 214).

OPERATIONS SECTION CHIEF (OSC)

The OSC, a member of the General Staff, is responsible for the management of tactical operations applicable to the primary objectives.

The OSC activates and supervises operational elements in accordance with the Incident Action Plan (IAP) and directs its execution. The OSC directs the preparation of operational plans, requests or releases resources, monitors operational progress, and makes expedient changes to the IAP as necessary, and reports such to the IC.

The OSC is responsible for the major duties described for each Branch, Division/Group, Strike Team/Task Force or Single Resources Unit within the Operations Section. The OSC may assign Deputy OSC's, to supervise on-scene operations (major responsibilities (d) through (k) listed below). The Deputy OSC must be capable to takeover as the OSC, if the situation warrants.

The major responsibilities of the OSC are:

Responsibilities:

- ☐ Review Common Responsibilities.
- ☐ Obtain briefing from IC.
- ☐ Request sufficient personnel for supervisory staffing of each Branch, Division/Group, Strike Team/Task Force or Single Resources Unit identified within the Operations Section.
- ☐ Initially, develop work assignments and allocate tactical resources based on strategic requirements.
- ☐ Coordinate planned activities with the SOFR to ensure compliance with safety practices.
- ☐ Subdivide work areas into manageable units.
- ☐ Supervise operations field personnel or assign to Deputy OSC.
- ☐ Coordinate and consult with the PSC, SOFR technical specialists, modeling scenarios, trajectories, etc., on selection of appropriate strategies and tactics to accomplish objectives.
- ☐ Participate in the planning process and the development of the tactical portions of the IAP.
- ☐ Convert operational incident objectives into strategic and tactical options. These options may be documented on a Work Analysis Matrix (ICS-234).
- ☐ Identify kind and number of resources required to support Incident Strategies; develop operations portion of the IAP and complete Operational Planning Worksheet (ICS 215).
- ☐ Participate in the development of the Incident Action Plan Safety Analysis (ICS 215a).

- ☐ Continually communicate, coordinate and share information with General and Command Staff throughout the Incident Response (Planning Cycle).
- ☐ Participate in incident planning meetings and briefings as required.
- ☐ Implement the IAP for the Operations Section.
- ☐ Evaluate on-scene operations and make adjustments to Operational organization, strategies, tactics, and resources, as necessary.
- ☐ Evaluate and monitor current situation for use in next operational period planning; coordinate information with Situation Unit Leader.

OPERATIONS SECTION CHIEF (OSC), CONTINUED

Responsibilities, Continued:

- ☐ Ensure the Resources Unit is advised of changes in the status of resources assigned to the section.
- ☐ Assist with development of long-range strategic, contingency, and demobilization plans.
- ☐ Receive and implement applicable portions of the incident Demobilization Plan.
- ☐ Participate in operational briefings to IMT members.
- ☐ Maintain Unit Log (ICS 214).

STAGING AREA MANAGER (STAM)

The STAM is under the direction of the Operations Section Chief and is responsible for managing all activities within a Staging Area.

The major responsibilities of the STAM are:

Responsibilities:

- ☐ Review Common Responsibilities.
- ☐ Proceed to Staging Area.
- ☐ Determine any support needs for equipment, materials, supplies, feeding, sanitation and security for staging area.
- ☐ Establish Staging Area layout and post areas for identification and traffic control.
- ☐ Establish check-in function as appropriate.
- ☐ Maintain Staging Area in orderly condition.
- ☐ Ensure security of staged resources.
- ☐ Obtain and issue receipts for equipment and other supplies distributed and received at Staging Area.
- ☐ Request maintenance service for equipment at Staging Area as appropriate.

- ☐ Respond to request for resource assignments.
- ☐ Advise the OSC when reserve levels reach minimums.
- ☐ Maintain and provide status to Resource Unit of all resources in Staging Area, especially when being relieved of position.
- ☐ Demobilize Staging Area in accordance with the Incident Demobilization Plan.
- ☐ Participate in meetings and briefings as required,
- ☐ Maintain Unit Log (ICS 214).

BRANCH DIRECTOR (OPBD)

The OPBD's when activated, are under the direction of the Operations Section Chief and are responsible for the implementation portion of the Incident Action Plan appropriate to the Branches.

The major responsibilities of the OPBD are:

Responsibilities:

- ☐ Review Common Responsibilities.
- ☐ Identify Divisions, Groups, and resources assigned to the Branch.
- ☐ Implement IAP for the Branch; ensure that Division and/or Group Supervisors (DIVS) assigned to the Branch have a copy of the relevant portions IAP.
- ☐ Review Division/Group Assignment Lists (ICS 204) for Divisions/Groups within the Branch. Modify assignments where necessary, based on effectiveness of current operation plan.
- ☐ Report to OSC when: the IAP is to be modified; additional resources are needed; surplus resources are available; or hazardous situations or significant events occur.
- ☐ Resolve logistic problems reported by subordinates.
- ☐ Attend planning meetings as requested by the OSC.
- ☐ Ensure through chain of command that Resources Unit is advised of changes in the status of resources assigned to the Branch.
- ☐ Demobilize in accordance with the Incident Demobilization Plan.
- ☐ Participate in meetings and briefings as required.
- ☐ Debrief with OSC and/or as directed at the end of each shift.
- ☐ Maintain Unit Log (ICS 214).

DIVISION SUPERVISOR (DIVS)

The DIVS reports to the OSC (or OPBD when activated). The DIVS is responsible for the implementation of the assigned portion of the IAP, assignment of resources within the Division/Group, and reporting on the progress of control operations and status of resources within the Division/Group.

The major responsibilities of the DIVS are:

Responsibilities:

- ☐ Review Common Responsibilities.
- ☐ Receive briefing from Operations Section Chief and obtain briefing from person relieving.
- ☐ Provide the IAP to Division/Group members, as needed.
- ☐ Review Division/Group assigned tasks and incident activities with subordinates and Identify resources assigned to the Division/Group.
- ☐ Implement IAP for Division/Group.
- ☐ Supervise Division/Group resources and make changes as appropriate.
- ☐ Ensure through chain of command that 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 OSC as directed.
- ☐ Report hazardous situations, special occurrences, or significant events, e.g., accidents, sickness, discovery of unanticipated sensitive resources, to the Safety Officer.
- ☐ 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, as requested.
- ☐ Consider demobilization well in advance.
- ☐ Debrief as directed at the end of each shift.
- ☐ Maintain Unit Log (ICS 214).

PLANNING SECTION CHIEF (PSC)

The PSC, a member of the General Staff, is responsible for the collection, evaluation, dissemination and use of incident information and maintaining status of assigned resources.

The PSC must obtain Information to:

1. Understand the current situation;
2. Predict the probable course of incident events;
3. Prepare strategies, plans and alternative strategies and plans for the incident; and
4. Submit required incident status reports.

The PSC is responsible for the major duties described for each Unit within the Planning Section. The PSC may have Deputy PSC's, The Deputy PSC must be capable to takeover as the PSC, if the situation warrants.

The major duties of the PSC are:

Responsibilities:

- ☐ Review Common Responsibilities.
- ☐ Obtain briefing from IC.
- ☐ Assist the OSC in the development of response strategies.
- ☐ Determine need for any specialized resources in support of the incident.
- ☐ Supervise preparation of the IAP.
- ☐ Facilitate the Operational Period Planning Cycle meetings and briefings (ICS 230).
- ☐ Continually communicate, coordinate and share information with General and Command Staff throughout the Incident Response (Planning Cycle).
- ☐ Participate in incident planning meetings and briefings as required.
- ☐ Keep Incident Management Team apprised of any significant changes in incident status.
- ☐ Establish information requirements and reporting schedules for Planning Section Units (e.g., Resources, Situation, Environmental, and Waste Management).
- ☐ Establish special information collection activities as necessary (e.g., maps, weather, environmental, toxics, etc.).
- ☐ Assemble information on alternative strategies (in-situ burn, bioremediation, etc).
- ☐ Incorporate documents and plans (e.g., ICS 202 Incident Objectives, ICS 232 Resources at Risk, Medical, Communications, Security and Site Safety) into the IAP.
- ☐ Incorporate other incident technical and supporting plans (e.g., salvage, integrity, volume estimation) into IAP.
- ☐ Oversee preparation, distribution and implementation of the Demobilization Plan.
- ☐ Maintain Unit Log (ICS 214).

SITUATION UNIT LEADER (SITL)

The Situation Unit Leader is responsible for collecting, processing and organizing information relating to the growth and/or mitigation activities taking place in response to the incident. The SITL reports to the PSC and supervises Field Observers, Data Management Specialists, GIS Specialists, Display Processors, and other Technical Specialists (e.g. Weather Observers, Report Writer) as needed.

The major responsibilities of the SITL are:

Responsibilities:

- ☐ Review Common Responsibilities.
- ☐ Verify response activities and status of work locations (may be assigned to a field observer if needed),
  - ☐ Progress of operations resources.

- ☐ Locations of trouble spots or hazards
- ☐ Conditions likely to impact response activities (e.g. weather, road conditions, and access routes);
- ☐ Incident perimeter changes

☐ Collect, compile, and manage overall incident data, establish data quality objectives, implement the QA/QC process for incident data.

☐ Prepare, display, or disseminate resource and situation status information as required, including special requests.

- ☐ Number, types and locations of displays required
- ☐ Information posted in the Incident displays
- ☐ Time limits / update frequency for information on the displays

☐ Develop and maintain master chart(s)/map(s) of the incident and provide charts/maps in the common area of the Incident Command Post as needed.

☐ Prepare the Incident Status Summary Form (ICS 209-CG).

☐ Coordinate photographic services; plus weather, tidal and current information, as needed.

☐ Coordinate situation briefings at meetings and briefings as required by the PSC.

☐ Maintain Unit Log (ICS 214).

RESOURCE UNIT LEADER (RESL)

The RESL is responsible for maintaining status of tactical resources and personnel at an incident. This is accomplished by maintaining a status-keeping system indicating current location and status of these resources.

The major responsibilities of the RESL are:

Responsibilities:

☐ Review Common Responsibilities.

☐ Establish the check-in/check-out function of tactical resources/personnel at incident locations (note this is not security check-in)

☐ Prepare Organizational Assignment List (ICS 203) & Organizational Chart (ISC 207).

☐ Prepare appropriate parts of Division Assignment Lists (ICS 204).

☐ Maintain and post current status and location of tactical resources.

☐ Attend meetings and briefings as required by PSC.

☐ Maintain Unit Log (ICS 214).

DOCUMENTATION UNIT LEADER (DOCL)

The DOCL is responsible for the maintenance of accurate, up-to-date incident files. The DOCL shall ensure each section is maintaining and providing appropriate documents. The Documentation Unit will ensure appropriate storage incident files.

The major responsibilities of the DOCL are:

Responsibilities:

- ☐ Review Common Responsibilities.
- ☐ Organize incident files.
- ☐ Assist in preparation of documents as appropriate.
- ☐ Arrange for copying and other printing services as needed.
- ☐ Review records for accuracy and completeness ? provide feedback, when appropriate, to document preparers.
- ☐ Provide incident documentation as requested.
- ☐ Maintain Unit Log (ICS 214).

ENVIRONMENTAL UNIT LEADER (ENVL)

The ENVL is responsible for environmental matters associated with the response, including strategic assessment, modeling, surveillance and environmental monitoring and permitting.

The major responsibilities of the ENVL are:

Responsibilities:

- ☐ Review Common Responsibilities.
- ☐ Identify sensitive areas including historical/cultural resources to ensure protection of wildlife and other resources (consult with local, state and federal natural resource trustees as appropriate). See ICS 232.
- ☐ Monitor the impact of response actions and make appropriate recommendations to protect resources at risk.
- ☐ Develop environmental cleanup and assessment plans and evaluate alternatives.
- ☐ Request technical support to accomplish work assignments, if needed.
- ☐ Develop disposal plan (consider sampling protocols, transportation regulations, etc.) and adjust as needed.
- ☐ Assign the Disposal Group Supervisor to ensure waste management plan is implemented appropriately if needed.
- ☐ Attend meetings and briefings as required by PSC.
- ☐ Maintain Unit Log (ICS 214).

LOGISTICS SECTION CHIEF (LSC)

The LSC, a member of the General Staff, is responsible for providing facilities, services, and material in support of the incident. The LSC participates in the development and implementation of the IAP and activates and supervises the Branches and Units within the Logistics Section.

The LSC is responsible for the major duties described for each Branch and Unit within the Logistic Section. The LSC may have Deputy LSC's. The Deputy LSC must be capable to takeover as the OSC, if the situation warrants.

The major responsibilities of the LSC are:

Responsibilities:

- ☐ Review Common Responsibilities.
- ☐ Obtain briefing from IC.
- ☐ Determine and supply immediate incident resource and facility needs.
- ☐ Identify Branch Directors and Unit Leaders, assigning work locations and preliminary work tasks to the Logistic Section personnel.
- ☐ Assemble and brief Logistics Branch Directors and Unit Leaders.
- ☐ Notify the Resources Unit of the Logistics Section Units activated, including names and locations of assigned personnel.
- ☐ Set up an ordering process as appropriate to support the incident.
- ☐ In conjunction with IC, develop and advise Sections of the Incident Management Team resource approval and requesting process.
- ☐ Continually communicate, coordinate and share information with General and Command Staff throughout the Incident Response (Planning Cycle).
- ☐ Participate in incident planning meetings and briefings as required.
- ☐ Review proposed tactics for upcoming operational period for ability to provide resources and logistical support.
- ☐ Advise IC and other Section Chiefs on resource availability to support incident needs.
- ☐ Ensure the Communications Plan (ICS 205); Medical Plan (ICS 206), and Traffic Plan are created for the IAP.
- ☐ Identify long-term service and support requirements for planned and expected operations.
- ☐ Identify resource needs for incident contingencies.
- ☐ Track resource effectiveness and make necessary adjustments.
- ☐ Set up Release Process for demobilization plan.
- ☐ Ensure the general welfare and safety of Logistics Section personnel.
- ☐ Maintain Unit Log (ICS 214).

FINANCE/ADMINISTRATION SECTION CHIEF (FSC)

The FSC, a member of the General Staff, is responsible for financial, administrative and cost

analysis aspects of the incident and for supervising members of the Finance/Admin Section.

The FSC may have Deputy FSC's. The Deputy FSC must meet the same qualification requirements as the person for whom they work, as they must be ready to take over that position at any time.

The major responsibilities of the FSC are:

Responsibilities:

- ☐ Review Common Responsibilities.
- ☐ Participate in incident planning meetings and briefings as required.
- ☐ Manage financial aspects of an incident.
- ☐ Provide financial and cost analysis information as requested.
- ☐ Gather pertinent information from briefings.
- ☐ Develop an operating plan for the Finance/ Admin Section; fill supply and support needs.
- ☐ Meet with other Section Chiefs, as needed.
- ☐ Provide financial input to demobilization planning.
- ☐ Ensure that obligation documents initiated at the incident are properly prepared and completed.
- ☐ Brief personnel on incident-related financial issues needing attention or follow-up prior to leaving incident.
- ☐ Develop recommended list of Section resources to be demobilized and initial recommendation for release when appropriate.
- ☐ Receive and implement applicable portions of the incident Demobilization Plan.
- ☐ Establish a process or activate a Claims Group to accept claim submission as a result of incident.
- ☐ Maintain Unit Log (ICS 214).

SECTION 5 Last revised: February 2006

INCIDENT PLANNING

SECTION 5 Last revised: January 2005

INCIDENT PLANNING, CONTINUED

5.1 DOCUMENTATION PROCEDURES

Documentation of an emergency response provides a historical record, keeps management informed, serves as a legal instrument, and is a means to account for the cleanup activities.

Documentation should begin immediately upon discovery of incident and continue until termination of operations. Documentation may include the following:

- Description of Incident (origin and characteristics)
- MSDS
- Notifications (external and internal)
- Sampling surveys
- Photographs
- Climatological data
- Labor and equipment accounting
- Copies of logs, contracts, contacts, and plans prepared for incident

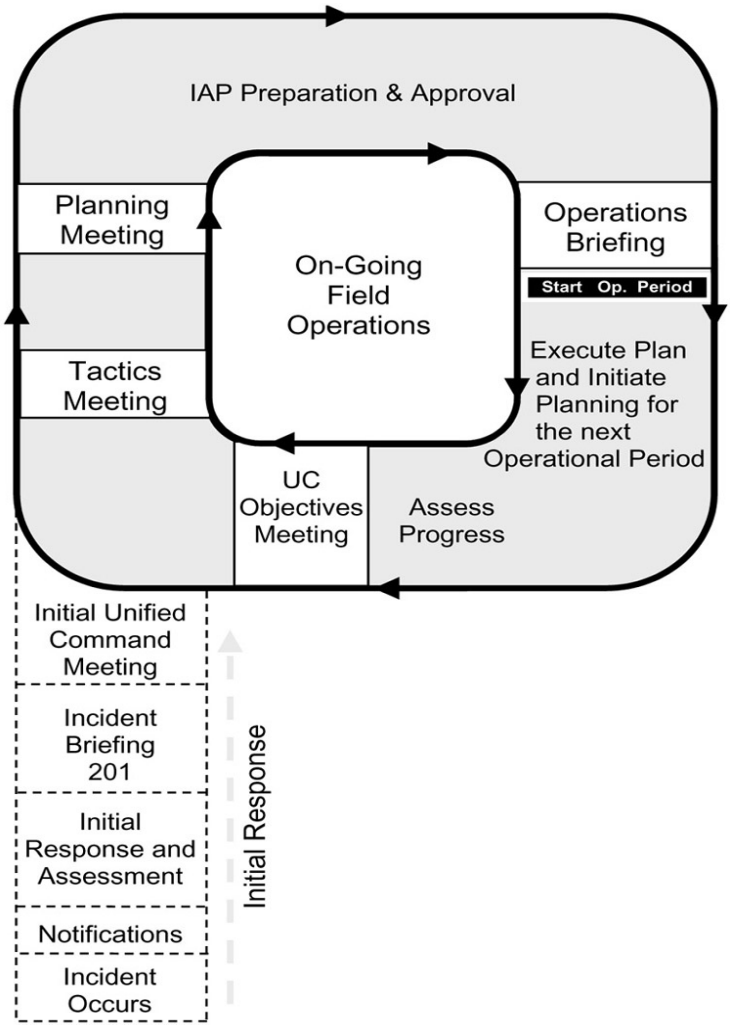
5.2 INCIDENT ACTION PLAN (IAP) PROCESS AND MEETINGS

The period of INITIAL RESPONSE AND ASSESSMENT occurs in most incidents. Short-term responses (small in scope and/or duration, e.g., few resources working one operational period) can often be coordinated by the initial responder utilizing procedures and forms described in this Plan (suggested ICS Form 201, Incident Briefing).

Longer-term, more complex responses, will likely require a dedicated Incident Commander (IC) / Unified Command (UC) who will assign members of the Command and General Staff as needed (e.g., Planning Section Chief (PSC) arranges for transition into the OPERATIONAL PERIOD PLANNING CYCLE). Certain meetings, briefings, and information-gathering during the Cycle lead to the Incident Action Plan (IAP) that guides operations of the next operational period. The IC/UC specifies objectives and the operational periods (e.g., 12-hour shifts, sunrise to sunset, 24-hour shifts, etc.) to engage the cleanup activities.

SPECIAL PURPOSE meetings are most applicable to larger incidents requiring an OPERATIONAL PERIOD PLANNING CYCLE, but may have utility during INITIAL RESPONSE AND ASSESSMENT. The UNIFIED COMMAND MEETING and other special purpose meetings are briefly noted.

FIGURE 5.2-1 OPERATIONAL PERIOD PLANNING CYCLE



5.2.1 Incident Occurs / Notifications

When an incident occurs, an initial assessment and response actions will begin (**FIGURE 3.1-2**, Incident Report Form). Notifications will be made internally and to the appropriate federal, state, and local agencies (**FIGURE 3.1-5**).

5.2.2 Initial Response and Assessment

INCIDENT BRIEFING

During the transfer of command process, a briefing provides the incoming IC/UC with basic information regarding the incident situation and the resources allotted to the incident (Incident Briefing ICS 201-OS). This briefing is the beginning of the Incident Action Plan (IAP) for the initial response and remains in force and continues to develop until the response ends or the Planning Section generates the incident's first IAP. It is also suitable for briefing individuals newly assigned to Command and General Staff, as well as for needed assessment briefings for the staff.

When: New IC/UC; staff briefing, as required
Briefer: Current IC/UC
Attendees: Prospective IC/UC; Command, and General Staff, as required
Agenda: Using ICS 201 as an outline, included:

1. Situation (note territory, exposures, safety concerns, etc; use map/charts).
2. Objectives and priorities.
3. Strategies and tactics.
4. Current organization.
5. Resource assignments.
6. Resources enroute and/or ordered.
7. Facilities established.

OPERATIONAL PERIOD PLANNING CYCLE
(Events most related to assembling IAP)

5.2.3 Unified Command Objectives Meeting

The IC/UC will review/identify and prioritize objectives for the next operational period (Incident Objectives ICS 202-OS). Objectives from the previous operational period are reviewed and any new objectives are identified.

When: Prior to Tactics Meeting
Facilitator: UC Member
Attendees: UC Members; Command and General Staff, as appropriate
Agenda:

1. Review/identify objectives for the next operational period (clearly stated and attainable with the resources available, yet flexible enough to allow Operations Section Chief to choose tactics).
2. Review any open agenda items from initial/previous meetings.

5.2.4 Tactics Meeting

This meeting creates the blueprint for tactical deployment during the next operational period. In preparation for the Tactics Meeting, the Planning Section Chief and Operations Section Chief review the current IAP and situation status information, as provided through the Situation Unit, to assess work progress against IAP objectives. The Operations Section Chief/Planning Section Chief will jointly develop primary and alternate strategies to meet objectives for consideration at the next Planning Meeting.

When: Prior to Planning Meeting
Facilitator: Planning Section Chief
Attendees: Planning Section Chief, Operations Section Chief, Logistics Section Chief, Resources Unit Leader, Situation Unit Leader, and Environmental Unit Leader
Agenda:

1. Review the objectives for the next operational period.
2. Develop strategies (primary and alternative).
3. May prepare a draft of ICS 215 to identify resources that should be ordered through Logistics.

5.2.5 Planning Meeting

This meeting defines incident objectives, strategies, and tactics and identifies resource needs for the next operational period. This meeting fine-tunes objectives and priorities, identifies and

solves problems, and defines work assignments and responsibilities (suggested ICS Form 215, Operations Planning Worksheet). Meeting preparations include conducting a Tactics Meeting. Displays in the meeting room may include Objectives (ICS 202) for the next period; large sketch maps or charts clearly dated and timed; poster-size Operational Planning Worksheet (ICS 215); current resource inventory prepared by Resources Unit; and current situation status displays prepared by Situation Unit. After the meeting, the Logistics Section Chief prepares the off-incident tactical and logistical resource orders which are used by Planning Section Chief to develop IAP assignment lists (suggested ICS Form 215).

When: After the Tactics Meeting
Facilitator: Planning Section Chief
Attendees: Determined by IC/UC, generally IC/UC, Command Staff, General Staff, Air Operations Section Chief, Resources Unit Leader, Situation Unit Leader, Environmental Unit Leader, and Technical Specialists, as required
Agenda: Primary Responsibility:

5.2.5 Planning Meeting, Continued

1. State incident objectives and policy issues. IC/UC
2. Briefing of situation, critical and sensitive areas, weather/sea forecast, resource status/availability. Planning Section Chief w/Situation Unit Leader, Resources Unit Leader
3. State primary and alternative strategies to meet objectives. Operations Section Chief w/Planning Section Chief, Logistics Section Chief
4. Designate Branch, Division, Group boundaries and functions, as appropriate; use maps and ICS 215. Operations Section Chief
5. Specify tactics for each Division, note limitations. Operations Section Chief, Situation Unit Leader assist
6. Specify resources needed by Divisions/Groups. Operations Section Chief, w/Planning Section Chief, Logistics Section Chief
7. Specify operations facilities and reporting locations (plot on map). Operations Section Chief, Logistics Section Chief assist
8. Develop resources, support, and overhead order(s). Planning Section Chief, Logistics Section Chief
9. Consider support issues and agree on plans: communications, traffic, safety, medical, etc. Logistics Section Chief, Planning Section Chief assist
10. Assisting or cooperating agency and stakeholder group considerations regarding Incident Action Plan. Liaison Officer
11. Safety considerations regarding Incident Action Plan. Safety Officer
12. News media/public considerations regarding Incident Action Plan. Information Officer
13. Finalize, approve Incident Action Plan for next operational period. IC/UC

5.2.6 Incident Action Plan (IAP) Preparation and Approval

Immediately following the Planning Meeting, the attendees prepare their assignments for the IAP to meet the Planning Section Chief deadline for assembling the IAP components. The deadline will be early enough to permit timely IC/UC approval and duplication of sufficient copies for the Operations Briefing and for overheads.

When: Immediately following Planning Meeting, Planning Section Chief assigns deadline
Facilitator: Planning Section Chief

Common Components:		Responsible to Prepare
1.	Incident Objectives (ICS 202)	[Resources Unit Leader]
2.	Organization List (ICS 203)	[Resources Unit Leader]
3.	Assignment List (ICS 204)	[Resources Unit Leader/Planning Section Chief]
4.	Communications Plan (ICS 205)	[Communications Unit Leader]
5.	Medical Plan (ICS 205)	[Medical Unit Leader/Safety Officer]
6.	Incident Map	[Situation Unit Leader]

Optional Components (use as pertinent):

Optional Components (use as pertinent):		Responsible to Prepare
1.	Air Operations Summary (ICS 220)	[Air Operations Branch Director]
2.	Traffic Plan	[Ground Support Unit Leader]
3.	Demobilization Plan	[Demobilization Unit Leader]

5.2.7 Operations Briefing

This meeting conveys the IAP for the oncoming shift to the response organization. After this meeting, off-going field supervisors should be interviewed by their reliefs and by Operations Section Chief in order to further confirm or adjust the course of the new shift's IAP. Shifts in tactics may be made by the operations section supervisors. Similarly, a supervisor may reallocate resources within a Division or Group to adapt to changing conditions.

When: About an hour prior to each shift
Facilitator: Planning Section Chief
Attendees: IC/UC, Command Staff, General Staff, Branch Directors, Division/Group Supervisors, Task Force/Strike Team Leaders (if possible), Unit Leaders, others as appropriate

Agenda:		Responsible to Present
1.	Review of IC/UC Objectives, changes to IAP.	[Planning Section Chief]
2.	Current response actions and last shift's accomplishments.	[Operations Section Chief]
3.	Weather and sea conditions forecast.	[Situation Unit Leader]
4.	Division/Group and Air Operations assignment.	[Operations Section Chief]
5.	Trajectory analysis.	[Situation Unit Leader]
6.	Transport, communications, supply updates.	[Logistics Section Chief]
7.	Safety message.	[Safety Officer]
8.	Financial report (e.g. Claims Number set-up).	[Finance/Administration Section Chief]
9.	News Media report.	[Information Officer]

10.	Assisting/cooperating organization/agency reports of concern.	[Liaison Officer]
11.	Incident Action Plan endorsement and motivational remarks.	[IC/UC]

5.2.8 Assess Progress

The Operations and Planning Sections will review the incident response progress and make recommendations to the IC/UC in preparation for reviewing/identifying objectives for the next operational period. This feedback/information is gathered from various sources including Field Observers, responder debriefs, stakeholders, etc.

SPECIAL PURPOSE MEETINGS

5.2.9 Initial Unified Command Meeting

Provides UC officials with an opportunity to discuss and concur on important issues prior to joint incident action planning. The meeting should be brief and important points should be documented. Prior to the meeting, parties should review and prepare to address the agenda items. Planning Meeting participants will use the results of this meeting to guide the response efforts.

5.2.9 Initial Unified Command Meeting, Continued

When: When UC is formed, prior to the first operational period Planning Meeting
Facilitator: UC member
Attendees: Only ICs who will comprise UC

Agenda:

1. Identify jurisdictional priorities and objectives.
2. Present jurisdictional limitations, concerns, restrictions.
3. Develop collective set of incident objectives.
4. Establish and agree on acceptable priorities.
5. Adopt an overall strategy to accomplish objectives.
6. Agree on basic organizational structure and size.
7. Designate the best-qualified and acceptable Operations Section Chief.
8. Agree on General Staff personnel designations and planning, logistical, and finance agreements and procedures.
9. Agree on resource ordering procedures.
10. Agree on cost-sharing procedures.
11. Agree on informational matters.
12. Designate a Unified Command spokesperson.

5.2.10 Command Staff Meeting

The purpose of this meeting is to coordinate Command Staff functions responsibilities, and objectives. It is scheduled as necessary by the IC/UC. Command Staff (IC/UC, Safety Officer, Liaison Officer, and the Information Officer) attend.

5.2.11 Command and General Staff Breakfast/Supper

An opportunity for the Command (IC/UC, Safety Officer, Liaison Officer, Information Officer) and General Staff (Operations Section Chief, Planning Section Chief, Logistics Section Chief, Finance/Administration Section Chief) to gather under informal and relaxing conditions to share and update each other on developing issues.

5.2.12 Business Management Meeting

This meeting is for participants to develop and update the Crisis Manager on the status, progress, and forecast of the IAP. The agenda could include: finance requirements and criteria imposed by contributing organizations, business operating plan for resource procurement and incident funding, cost analysis, and financial summary data. Attendees include: Incident Commander, Operations, Planning, Logistics, and Finance/Administration Section Chiefs, Cost Unit Leader, Supply Unit Leader, Situation Unit Leader, Environmental Unit Leader, and Demobilization Unit Leader. This meeting is generally conducted outside of the ICS Structure allowing exchange of information between Company Management Liaison (Crisis Manager) and the Response effort. It is suggested this meeting is held before the ICS PLANNING MEETING.

5.2.13 Agency Representative Meeting

The purpose of this meeting is to update agency representatives and to ensure that they can support IAP. Conducted by Liaison Officer, attended by Agency Representatives. Most appropriately held after the PLANNING MEETING in order to announce plans for next operational period, yet flexible enough to allow for changes should the plan's expectations be unattainable by an agency.

5.2.14 News Briefing

Refer to **SECTION 7.2** for Public Affairs information and policies.

5.3 ICS FORMS

ICS Forms are available electronically via this Plan's Forms Navigator.

Note: These forms are alternate or suggested forms to be used as appropriate.

- INCIDENT BRIEFING FORM - ICS 201 (Initial Report Only)

  For use by the Command Staff to gather information on the Incident Management Team?s (IMT) efforts to implement applicable response plans. It is prepared by the initial Incident Commander (IC) for providing documentation of the initial response.

- INCIDENT ACTION PLAN

  For use by the Planning Section to plan each day?s response actions. This plan consists of the portions identified on the IAP cover page and needs to be approved by the Incident Commander, Federal On-Scene Coordinator (FOSC), and State On-Scene Coordinator (SOSC).

  In addition, these Incident Command System (ICS) forms may be found on the U.S. Coast Guard web page: http://www.uscg.mil/pacarea/pm/icsforms/ics.htm

  - **INCIDENT ACTION PLAN (IAP) COVER SHEET**

For use in presenting initial information, signature approval, and table of contents of forms contained in the IAP.

- INCIDENT OBJECTIVES - ICS 202

  Describes the basic incident strategy, control objectives, provides weather, tide and current information, and safety considerations for use during the next operational period.

- **ORGANIZATION ASSIGNMENT LIST - ICS 203**

  Provides ICS personnel with information on the units that are currently activated and the names of personnel staffing each position/unit.

- ASSIGNMENT LIST - ICS 204

  Submits assignments at the Division/Group level.

- COMMUNICATIONS PLAN - ICS 205

  Is used to provide, in location, information on radio frequency assignments down to Division/Group level for each operation period.

- MEDICAL PLAN - ICS 206

  Provides information on incident medical aid stations, transportation services, hospitals, and medical emergency procedures.

5.3 ICS FORMS, CONTINUED

ICS Forms are available electronically via this Plan's Forms Navigator.

Note: These forms are alternate or suggested forms to be used as appropriate.

- **INCIDENT STATUS SUMMARY - ICS 209**

  Used to inform personnel about the status of response efforts. It is not included in the IAP.

- **UNIT LOG - ICS 214**

  Used to log activities for an entire unit.

- **INDIVIDUAL LOG - ICS 214a**

  Used to log activities for an individual.

5.3.1 Incident Briefing ICS 201-OS

1. Incident Name	2. Prepared By: (name) Date: Time:	INCIDENT BRIEFING ICS 201-OS
3. Map/Sketch (Include maps drawn here or attached, showing the total area of operations, the incident site/area, overflight results, trajectories, impacted shorelines or other graphics depicting situational and response status)		
INCIDENT BRIEFING	March, 2000	ICS 201-OS (pg 1 of 4)

5.3.1 Incident Briefing ICS 201-OS, Continued

1. Incident Name	2. Prepared By: (name) Date: Time:	INCIDENT BRIEFING ICS 201-OS
4. Initial Incident Objectives		
5. Summary of Current Actions		

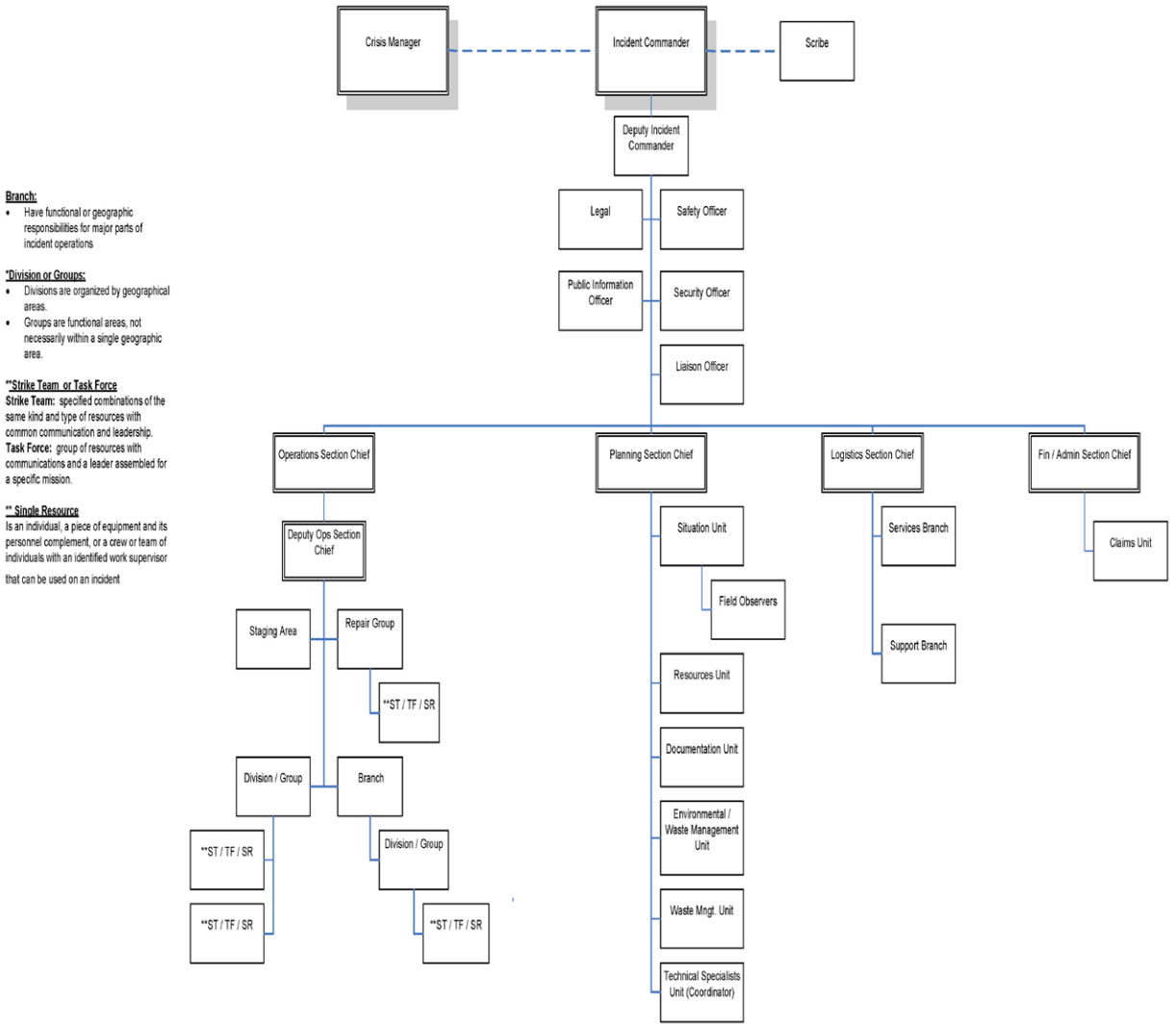
Time	Action/Note

INCIDENT BRIEFING	March, 2000	ICS 201-OS (pg 2 of 4)

5.3.1 Incident Briefing ICS 201-OS, Continued

1. Incident Name	2. Prepared By: (name) Date: Time:	INCIDENT BRIEFING ICS 201-OS

6. Current Organization



INCIDENT BRIEFING	March, 2000	ICS 201-OS (pg 3 of 4)

5.3.1 Incident Briefing ICS 201-OS, Continued

1. Incident Name	2. Prepared By: (name) Date: Time:	INCIDENT BRIEFING ICS 201-OS

7. Resources Summary

Resources Needed	Time Ordered	Resource Identifier	ETA	On Scene? (X)	Notes: (Location/Assignment/Status)

INCIDENT BRIEFING	March, 2000	ICS 201-OS (pg 4 of 4)

5.3.2 Incident Action Plan (IAP) Cover Sheet

1. Incident Name	2. Operational Period to be covered by IAP (Date/Time)		IAP COVER SHEET
	From:	To:	

3. Approved by:

FOSC

SOSC

IC

INCIDENT ACTION PLAN

The items checked below are included in this Incident Action Plan:

- ☐ ICS 202-OS (Incident Objectives)
- ☐ ICS 203-OS (Organization Assignment List)
- ☐ ICS 204-OS (Assignment List)
- ☐ ICS 205-OS (Communications Plan)
- ☐ ICS 206-OS (Medical Plan)
- ☐ ICS 209-OS (Incident Status Summary)
- ☐ ICS 214-OS (Unit Log)
- ☐ ICS 214a-OS (Individual Log)
- ☐
- ☐

4. Prepared By: (Planning Section Chief)	**Date/Time:**
IAP COVER SHEET	March, 2000

5.3.3 Incident Objectives ICS 202-OS

1. Incident Name	2. Operational Period (Date/Time) From: To:	INCIDENT OBJECTIVES ICS 202-OS
3. Overall Incident Objective(s)		
4. Objectives for Specified Operational Period		
5. Safety Message for Specified Operational Period Approved Site Safety Plan Located at:		
6. Weather: See Attached Weather Sheet		
7. Tides/Currents: See Attached Tide/Current Data		
8. Time of Sunrise:	**Time of Sunset:**	

9. Attachments (check if attached)

☐ Organization List (ICS 203-OS) ☐ Assignment List (ICS 204-OS) ☐ Communications Plan (ICS 205-OS)

☐ Medical Plan (ICS 206-OS) ☐ Weather

10. Prepared By: (Planning Section Chief)	**Date/Time:**

INCIDENT OBJECTIVES	March, 2000	ICS 202-OS

5.3.4 Organization Assignment List ICS 203-OS

1. Incident Name	2. Operational Period (Date/Time) From: To:	ORGANIZATION ASSIGNMENT LIST ICS 203-OS

3. Incident Commander and Staff

	Primary	Deputy
Federal:		
State:		
IC:		

Safety Officer :	
Information Officer:	
Liaison Officer:	

4. Agency Representatives

Agency	Name

5. Planning Section

Chief	
Deputy	
Resources Unit	
Situation Unit	
Environmental Unit	
Documentation Unit	
Demobilization Unit	
Technical Specialists	

6. Logistics Section

Chief	
Deputy	
Time Unit	
Procurement Unit	
Compensation Unit	
Cost Unit	

7. Operations Section

Chief		
Deputy		
a. Branch I - Division/Groups		
Branch Director		
Deputy		
Division / Group		
Division / Group		
Division / Group		
Division / Group		
Division / Group		
b. Branch II - Division/Groups		
Branch Director		
Deputy		
Division / Group		
Division / Group		
Division / Group		
Division / Group		
Division / Group		
c. Branch III - Division/Groups		
Branch Director		
Deputy		
Division / Group		
Division / Group		
Division / Group		
Division / Group		
Division / Group		
d. Air Operations Branch		
Air Operations Br. Dir.		
Air Tactical Supervisor		
Air Support Supervisor		

a. Support Branch		Helicopter Coordinator	
Director		Fixed-wing Coordinator	
Supply Unit		8. Finance Section	
Facilities Unit		Chief	
Transportation Unit		Deputy	
Vessel Support Unit		Time Unit	
Ground Support Unit		Procurement Unit	
b. Service Branch		Compensation Unit	
Director		Cost Unit	
Communications Unit			
Medical Unit			
Food Unit			

9. Prepared by: (Resources Unit)	Date/Time	
ORGANIZATION ASSIGNMENT LIST	March, 2000	ICS 203-OS

5.3.5 Assignment List ICS 204-OS

1. Incident Name	2. Operational Period (Date/Time) From: To:	ASSIGNMENT LIST ICS 204-OS
3. Branch	4. Division/Group	

5. Operations Personnel	**Name**	**Affiliation**	**Contact # (s)**
Operations Section Chief:			
Branch Director:			
Division/Croup Supervisor:			

6. Resources Assigned This Period	?X? indicates 204a attachment with special instructions			
Strike Team/Task Force/ Resource Identifier	**Leader**	**Contact Info. #**	**# of Persons**	**Notes/Remarks**

7. Assignments

8. Special Instruction for Division/Group

9. Communications (radio and/or phone contact numbers needed for this assignment)

Name/Function	Radio: Freq./System/ Channel	Phone	Pager
Emergency Communications			
Medical	Evacuation	Other	

10. Prepared By (Resources Unit Leader)	Date/Time	**11. Approved By** (Planning Section Chief)	Date/Time

ASSIGNMENT LIST June, 2000 ICS 204-OS

5.3.6 Communications Plan ICS 205-OS

1. Incident Name	2. Operational Period (Date/Time) From: To:	COMMUNICATIONS PLAN ICS 205-OS

3. Basic Radio Channel Use

SYSTEM/CACHE	CHANNEL	FUNCTION	FREQUENCY	ASSIGNMENT	REMARKS

4. Prepared By (Communications Unit)	Date/Time
COMMUNICATIONS PLAN March, 2000 ICS 205-OS	

5.3.7 Medical Plan ICS 206-OS

1. Incident Name	2. Operational Period (Date/Time) From: To:	MEDICAL PLAN ICS 206-OS

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)	Date/Time

MEDICAL PLAN March, 2000 ICS 206-OS

5.3.8 Incident Status Summary ICS 209-OS

1. Incident Name	2. Period Covered By Report From: To:	Time of Report	INCIDENT STATUS SUMMARY ICS 209-OS

3. Spill Status (Estimated, in Barrels)		[OPS/EUL/SSC]	
Source Status:	Remaining Potential (bbl):		
	Rate of Spillage (bbl/hr):		
Secured	☐	Unsecured	☐

	Since Last Report	Total
Volume Spilled		
Mass Balance/Oil Budget		
Recovered Oil		

7. Safety Status	[Safety Officer]
Since Last Report	Total
Responder Injury	
Public Injury	

8. Equipment Resources				[RUL]
Description	Ordered	Available / Staged	Assigned	Out of Service
Spill Resp.				

Evaporation		
Natural Dispersion		
Chemical Dispersion		
Burned		
Floating, Contained		
Floating, Uncontained		
Onshore		
Total Spilled Oil Accounted For:		

4. Waste Management (Estimated)			[OPS/Disposal]
	Recovered	Stored	Disposed
Oil (bbl)			
Oily Liquids (bbl)			
Liquids (bbl)			
Oily Solids (tons)			
Solids (tons)			

5. Shoreline Impacts (Estimated, in miles)			[PSC/EUL/SSC]
Degree of Oiling	Affected	Cleaned	To Be Cleaned
Light			
Medium			
Heavy			
Total			

6. Wildlife Impacts						[OPS/Wildlife Br.]
Numbers in ( ) indicate subtotal that are threatened / endangered species.					Died in Facility	
	Captured	Cleaned	Released	DOA	Euth.	Other
Birds						
Mammals						
Reptiles						
Fish						
Total						

Vsls				
Fishing Vessels				
Tugs				
Barges				
Other Vessels				
Skimmers				
Boom (ft.)				
Sbnt/Snr Bm. (ft.)				
Vacuum Trucks				
Helicopters				
Fixed Wing				

9. Personnel Resources			[RUL]
Description	People in Cmd. Post	People in the Field	Total People On Scene
Federal			
State			
Local			
RP			
Contract Personnel			
Volunteers			
Total Response Personnel From All Organizations:			

10. Special Notes

11. Prepared By (Situation Unit Leader)	Date/Time

INCIDENT STATUS SUMMARY	March, 2000	ICS 209-OS

5.3.9 Unit Log ICS 214-OS

1. Incident Name	2. Operational Period (Date / Time) From: To:	UNIT LOG ICS 214-OS
3. Unit Name	4. Unit Leader (Name and ICS Position)	

5. Personnel Assigned

Name	ICS Position	Home Base

6. Activity Log (Continue on Reverse)

Time	Major events

7. Prepared by:	Date / Time

UNIT LOG	June 2000	ICS 214-OS

5.3.9 Unit Log ICS 214-OS, Continued

1. Incident Name	2. Operational Period (Date / Time) From: To:	UNIT LOG(Cont) ICS 214-OS
3. Unit Name	4. Unit Leader (Name and ICS Position)	

5. Personnel Assigned

Name	ICS Position	Home Base

6. Activity Log (Continue on Reverse)

Time	Major events

7. Prepared by:	Date / Time

5.3.10 Individual Log ICS 214a-OS

1. Incident Name	2. Operational Period (Date / Time) From: To:	INDIVIDUAL LOG **ICS 214a-OS**

3. Individual Name	**4. ICS Section**	**5. Assignment / Location**

6. Activity Log	Page	of

TIME	MAJOR EVENTS

7. Prepared by:	**Date / Time**

		ICS

INDIVIDUAL LOG	June 2000	214a-OS

5.4 SITE SAFETY AND HEALTH PLAN

5.4.1 Safety Introduction and Overview

Responding to incidents can be very hazardous. Critical areas deserving special attention are **Prevention of Incidental Ignition** and **Personnel Safety**. The following safety considerations shall be followed:

Prevention of Incidental Ignition

- Establish a safe working area.
- Monitor for LEL with appropriate air monitoring equipment.
- Utilize EH&S Work Permit during the Incident.
- Use non-sparking tools as applicable.

Personnel Safety

- Utilize the appropriate air monitoring equipment to protect yourselves from the vapors or fumes of petroleum products and crude oils. High concentrations of these vapors may be toxic and can be an asphyxiate.
- Work using the "buddy system" (that is, two people working as a team).
- Use proper respiratory protection equipment (APRs or SCABA) and other applicable PPE when necessary.

The Site Safety Plan in conjunction with the EH&S Work Permit System provides a comprehensive framework for initiating and maintaining quality safety practices. All personnel are responsible for promoting a safe and healthy environment during the incident response. The following Site Safety Plan is designed to provide a consistent, comprehensive process to meet this objective.

For small, minor incidents, the Safety Plan may consist of a EH&S Work Permit and the Safety Plan Checklist or equivalent company Work Permit.

5.4.2 Initial Site Safety and Health Plan

SAFETY PLAN CHECKLIST

ASSIGN SITE SAFETY RESPONSIBILITY
Name:
ESTABLISH PERIMETER AND RESTRICT ACCESS (Compile sketch as necessary)
CHARACTERIZE SITE HAZARDS
• Identify pollutant:
• Obtain Material Safety Data Sheets

• Conduct air monitoring as necessary:
• Identify physical and biological hazards, i.e.: slips, trips, falls, confined spaces, noise, weather conditions, poisonous insects, reptiles, plants, and biological waste:
ESTABLISH CONTROL ZONES
• Exclusion zone:
• Contamination reduction zone:
• Support zone:
ASSESS TRAINING REQUIREMENTS
• Ensure only authorized persons are allowed access
UTILIZE EH&S SAFE WORK PERMITS AS INITIAL SITE SAFETY PLAN
• Ensure safety briefings
• Select Personal Protective Equipment
• Level A, B, C, or D:
ESTABLISH DECONTAMINATION STATION(S)
ESTABLISH EMERGENCY MEDICAL PLAN
• Locate hospital, EMT, and first aid stations:
• List emergency numbers:
Fire:
Police:
Ambulance:
For other spills of significance, the Site Safety Plan is designed to meet the Safety Objectives.

5.4.3 Site Safety and Health Plan

Incident Name:	
Date:	Site Safety Officer:
Scope	
This Site Safety Plan is for use on the specified above incident and response to a spill of _____ estimated to be approximately _____ in volume. This incident is being managed by designated Company personnel integrated with on-site	

Federal, State, and/or Local response representatives along with the use of commercial HAZWOPER-accepted qualified contractors.

This plan is based on the regulations and recommendations of Federal Agencies such as OSHA, EPA, DOT, and USCG and the Company.

Company personnel or contractors will be on site to address safety concerns, site safety plans, conduct Industrial Hygiene monitoring, and for special assistance; however, the day-to-day safe operation of the site and project is the responsibility of trained site supervisors. Every site employee shall comply with provisions of this plan and focus constant attention on preventing loss or damage to any person, property, process, or the environment.

Site Description
Location:
This incident is at _____, in the state of _____, and in the vicinity of _____. The Command Post is currently located at _____. The Incident Base and Staging Area are located at _____.

5.4.3 Site Safety and Health Plan, Continued

On-Site Control Boundaries:	**Marking:**
Exclusion Zone - Hotline	As designated by:
Contamination Reduction Zone	As designated by:
Support Zone	As designated by:
Hazards:	
Area Affected:	
The area is _____and is identified as the Hot Zone.	
Surrounding Population:	
Topography:	
Weather Conditions:	

The weather is _____, temp. is _____, and there is a _____ % chance of precipitation. The prevailing wind is from the _____ at _____ mph throughout the day.
Environmental and Archeological Concerns:
Initial Entry Objectives:

5.4.3 Site Safety and Health Plan, Continued

Additional Information:
Identified sources of ignition within or adjacent to the spill or contained liquid will be shut down, secured, isolated or monitored, as appropriate. Electrical equipment shall be in compliance with regulatory requirements. Note: Smoking is not allowed on Company property.
Site Access
Personnel shall notify the Site Safety Officer or designee prior to entering or leaving the site. _____ has been designated to control access. A sign-in log will be maintained at the incident base. Persons entering the area shall sign in/out. Entry into spill area will be by trained personnel only. Training documentation shall be provided to the Site Safety Officer prior to entry.
Hazard Evaluation
Chemical Hazards:
The following substance is known to be at the Spill site.

Substance:	**Primary Hazard:**
☐ Crude Oil	Flammable/Skin, Eye, Nose, Throat, & Lung Irritant
☐ Gasoline	Flammable/Slightly Toxic/Skin, Eye, Nose, Throat, & Lung Irritant
☐ Diesel Fuel	Flammable/Slightly Toxic/Skin, Eye, Nose, Throat, & Lung Irritant
☐ Jet Fuel	Flammable/Moderately Toxic/Skin, Eye, Nose, Throat, & Lung Irritant
☐ Additive	Flammable/Slightly-Moderately Toxic/Skin, Eye, Nose, Throat, and Lung Irritant
☐ Butane	Flammable/Asphyxiant/Prolonged contact may cause frostbite

☐ Kerosene	Flammable/Skin, Eye, Nose, Throat, & Lung Irritant
☐ Propane	Flammable/Asphyxiant/Prolonged contact may cause frostbite/Explosive mixtures with air
☐ Benzene	Flammable/Skin and Eye Irritant/May be toxic if inhaled or ingested
☐ Hydrogen	Flammable gas/Asphyxiant/Colorless and odorless
☐ Toluene	Flammable/Skin and Eye Irritant/may be toxic if inhaled or ingested
☐ Xylene	Flammable/Skin and Eye Irritant/may be toxic if inhaled or ingested
☐ Natural Gas	Flammable gas/Asphyxiant/Colorless and odorless
☐ Fuel Gas	Flammable/Poisonous Gas/Skin and Eye Irritant/Prolonged contact may cause frostbite/Harmful or fatal is swallowed

5.4.3 Site Safety and Health Plan, Continued

Material Safety Data Sheets
Material Safety Data Sheets for Company Products are located on the company intranet. Employees involved in an emergency response are trained to read Company MSDS and to know where they are located. MSDS for material released/spilled during this incident can be found at the following locations:

Personal Protective Equipment		
The following Personal Protective Equipment (PPE) shall be required for entry into the Spill Area during the cleanup process.		
Level B	Level C	Level D
1. Hard Hat 2. Self Contained Breathing Apparatus 3. Latex inner gloves, Neoprene outer gloves 4. Flame retardant clothing, such as Nomex suits, with cuffs and pant legs duct tape sealed 5. Radios will be provided to the entry team, backup team, and command staff. These radios shall be intrinsically safe and tested prior to entry	1. Hard Hat 2. Safety glasses with side shields, splash goggles, or safety glasses with full face shield 3. Neoprene gloves 4. Tyvek disposable suit with cuffs and pant legs duct tape sealed 5. If monitoring results indicate the continued need for respiratory protection, SCABAs or SARs may be used. If a half mask or a full face respirator is allowed, it must be NIOSH-approved and use the correct type of cartridge	1. Hard Hat 2. Safety Glasses 3. Long sleeved shirt - tank tops will not be allowed 4. Long legged pants or overalls - shorts will not be allowed 5. Hand protection as needed 6. Additional items as required by Safety Officer

5.4.3 Site Safety and Health Plan, Continued

Decontamination
A Decon Site Layout (**SECTION 5.5**) shall be used to construct the Decon area. Personnel involved in the response and entering the Hot Zone area shall be trained and equipped to meet the requirements of Emergency Response. Decon Site(s) should be constructed at the point of entry to the Hot Zone. Multiple Decon Sites may be necessary for multiple cleanup areas or when an area has multiple entry points.
Communications
Only intrinsically safe electronic devices will be allowed within the Hot Zone. Verbal and hand signal communication is allowed in the Hot Zone. Cellular phones, pagers, lamps, or flare devices shall not be allowed into Hot Zone unless intrinsically safe and approved by the Safety Office or designee. Other non-sparking methods which cannot produce ignition may be allowed in the Hot Zone, but must be approved by the Safety Officer. Cellular phones, pagers, stationary telephones, and any other communication devices shall be allowed by the Safety Officer into other support areas of the incident.
Personal Identification
As available, Incident Command position personnel shall wear vests with the position label on the vest (Incident Commander, Planning, Logistics, Operations, Safety, etc.) If vests are not available, the IC personnel shall ensure they are recognized by personnel they are supervising.
First Aid
First aid kits are located at _____. Serious injuries will be treated by 911 EMS response systems as needed. Injuries, no matter how slight, shall be reported to a Safety Officer immediately.

5.4.3 Site Safety and Health Plan, Continued

Emergency Eye Wash Station:
Portable emergency eyewash stations are located at _____.
Potable Water:
Potable water is available at _____.
Toilet Facilities:
Toilet facilities are available at _____.

Air Monitoring:
Air monitoring shall be conducted by _____, who will utilize _____ to monitor the levels of _____. Other sampling devices or media must be approved by the Safety Officer prior to being allowed into the area. A log sheet shall be maintained for gas monitoring data to be logged on _____ minute interval. Readings shall be collected from the perimeter of the cleanup area on a _____ interval. Air monitoring shall continue until the Safety Officer determines that it is no longer necessary.

5.4.3 Site Safety and Health Plan, Continued

Additional Health/Hygiene Sampling
Additional testing of atmosphere, personnel, or equipment may be conducted at the discretion of the Safety Officer or Incident Commander.
Emergency Procedures
The following standard emergency procedures will be used by the on-site personnel. The Incident Commander, Operations Chief, and Safety Supervisor shall be made aware of any on-site emergencies and be responsible for ensuring that the appropriate procedures are followed: **Injury/Illness in the area:** An injury or illness occurring in the response area shall be immediately communicated through the Command Staff to the Safety Officer in order that it may be responded to in the degree necessary. This includes everything from minor first aid treatment to the more serious injuries involving the 911 EMS system. A medical emergency shall receive immediate attention and appropriate response. Company notification by the on-site personnel shall be in the following order until contact is made with one of the following: the Site Safety Officer, Operations Section Chief, Incident Commander, or Operations Manager.
911 EMS Response Service:
Refer to **SECTION 3** for the appropriate notifications.
Personal Protective Equipment Failure:
If worker experiences a failure or alteration of protective equipment that affects the protection factor, that person shall immediately evacuate to a safe area. Decon procedures shall be followed. The Safety Officer shall be notified immediately. Return to the area shall not be permitted until the equipment has been properly and effectively repaired or replaced.

Other Equipment Failure:
If other equipment fails to operate properly, the Operations Chief shall be notified and then

determine the effect of this failure on continuing the operations. If the failure affects the safety of personnel or prevents completion of the planned tasks, personnel shall leave the area until the situation is corrected.		
Plan Prepared By:		
Safety Officer:		
Printed Name	Signature	Date
Plan Reviewed By:		
Operations Chief:		
Printed Name	Signature	Date
Plan Approved By:		
Incident Commander:		
Printed Name	Signature	Date

5.5 DECONTAMINATION PLAN

Incident Name:	Location:
Effective Date of Plan:	Effective Time Period of Plan:
Spill Location:	Plan Prepared By:

- Work Zones:

    - Support (cold) zone
    - Contamination reduction (warm) zone
    - Exclusion (hot) zone

    These zones are identified by signs, barrier tape, or other means. Decontamination is performed in the contamination reduction zone. When responders exit the exclusion zone, they must be decontaminated.

    Crews are available to assist in decontamination procedures as needed. The crews shall wear appropriate Personal Protective Equipment (PPE) and are responsible for packaging and labeling of contaminated PPE.

- Decontamination Stations:

    Decontamination is performed within the contamination reduction zones or where otherwise designated. Decontamination stations are to be equipped and manned to assist personnel leaving a contaminated zone to remove, package, and label soiled or contaminated response equipment, thus preventing the spread of contaminants.

Listed below are recommended stations for a Decontamination Plan.

Note 1: Not all of these stations may be necessary. The actual type and number of stations will be decided by the Decontamination Group in conjunction with the Safety Officer based on the type of material released and the hazards of the material.

Note 2: Can sizes of 10 and 32 gallon in Minimum Decontamination Layout are recommended sizes. Actual container size used will depend upon availability (i.e. using a 55 gallon drum in lieu of a 32 gallon trash can).

5.5 DECONTAMINATION PLAN, CONTINUED

MAXIMUM MEASURES FOR DECONTAMINATION		
STATION 1	Segregated equipment drop	Deposit equipment used on site (tools, sampling devices and containers, monitoring instruments, radios, clipboards, etc.) on plastic drop cloths or in different containers with plastic liners. Segregation at the drop reduces the probability of cross contamination. During hot weather operations, a cool down station may be set up within this area.
STATION 2	Boot cover and glove wash	Scrub outer boot cover and gloves with decontamination solution or detergent and water.
STATION 3	Boot cover and glove rinse	Rinse off decontamination solution from Station 2 using copious amounts of water.
STATION 4	Tape removal	Remove tape around boots and gloves and deposit in container with plastic liner.
STATION 5	Boot cover removal	Remove boot covers and deposit in containers with plastic liner.
STATION 6	Outer glove removal	Remove outer gloves and deposit in container with plastic liner.
STATION 7	Suit and boot wash	Wash splash suit, gloves, and safety boots. Scrub with a scrub brush and decontamination solution.
STATION 8	Suit, boot and glove rinse	Rinse off decontamination solution using water. Repeat as many times as necessary.
STATION 9	Canister or mask change	If worker leaves exclusion zone to change canister or this is the last step in the decontamination procedure, worker?s canister is exchanged, new outer gloves and boot covers are donned, joints are taped, and the worker returns to duty.
STATION 10	Safety boot removal	Remove safety boots and deposit in container with plastic liner.
STATION 11	Suit removal	With assistance of helper, remove outer suit (Tyvek suits). Deposit in container with plastic liner.
STATION 12	Inner glove wash	Wash inner gloves with decontamination solution.
STATION 13	Inner glove rinse	Rinse inner gloves with water.
STATION 14	Face piece removal	Remove face piece. Deposit in container with

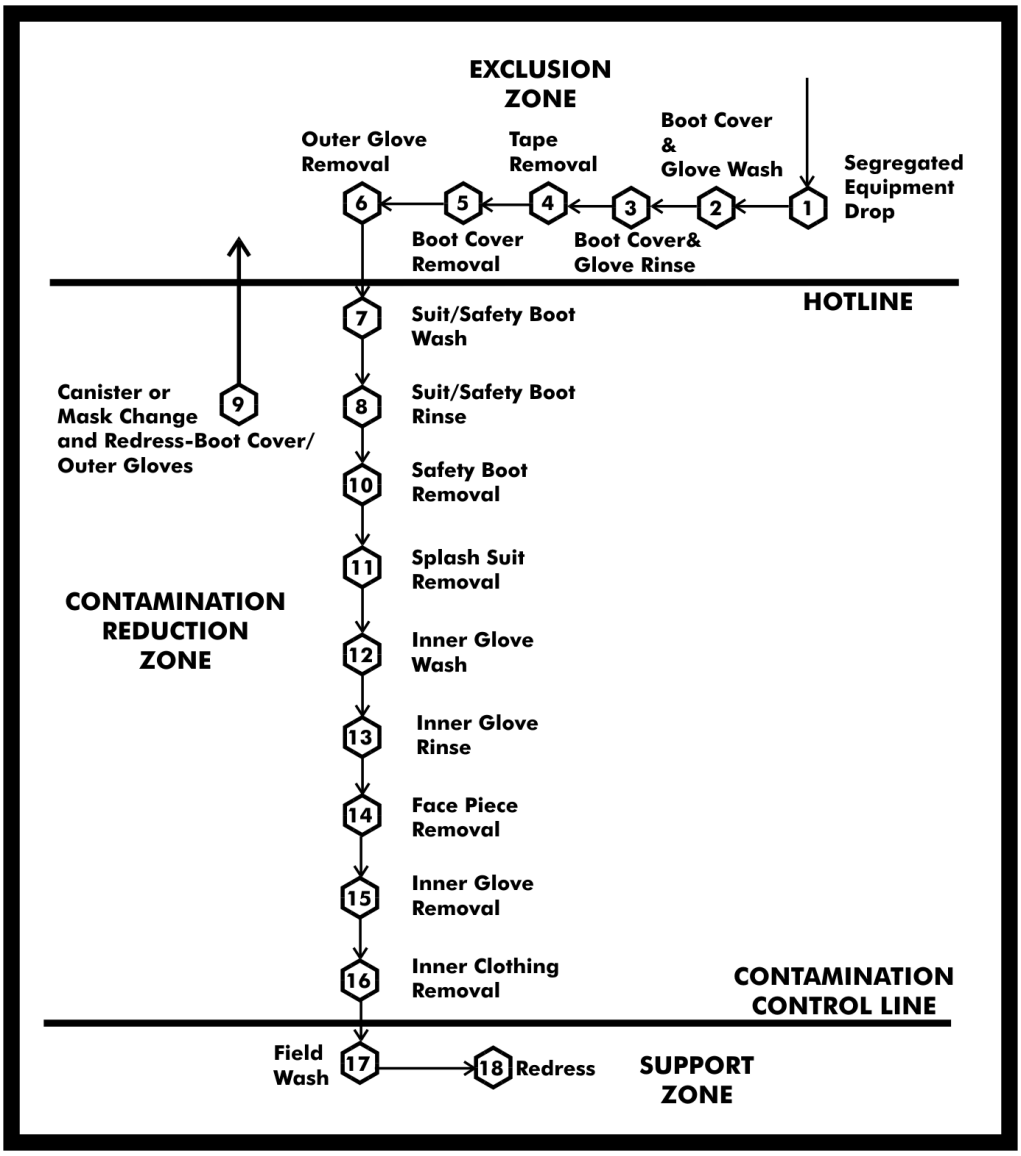
		plastic liner. Avoid touching face with fingers.
STATION 15	Inner glove removal	Remove inner gloves and deposit in lined container.

5.5 DECONTAMINATION PLAN, CONTINUED

MAXIMUM MEASURES FOR DECONTAMINATION, CONTINUED		
STATION 16	Inner clothing removal	Remove clothing soaked with perspiration and place in lined container. Do not wear inner clothing off-site since there is a possibility that small amounts of contamination might have been transferred in removing the protective suit.
STATION 17	Field wash	If highly toxic, skin-corrosive, or skin-absorbable materials are known or suspected to be present, work with safety; an on-site shower may be necessary. Wash hands and face if shower is not available.
STATION 18	Re-dress	Put on clean clothes. Exit point of the Decontamination Site.

5.5 DECONTAMINATION PLAN, CONTINUED

DECONTAMINATION PROCEDURES, MAXIMUM DECONTAMINATION LAYOUT



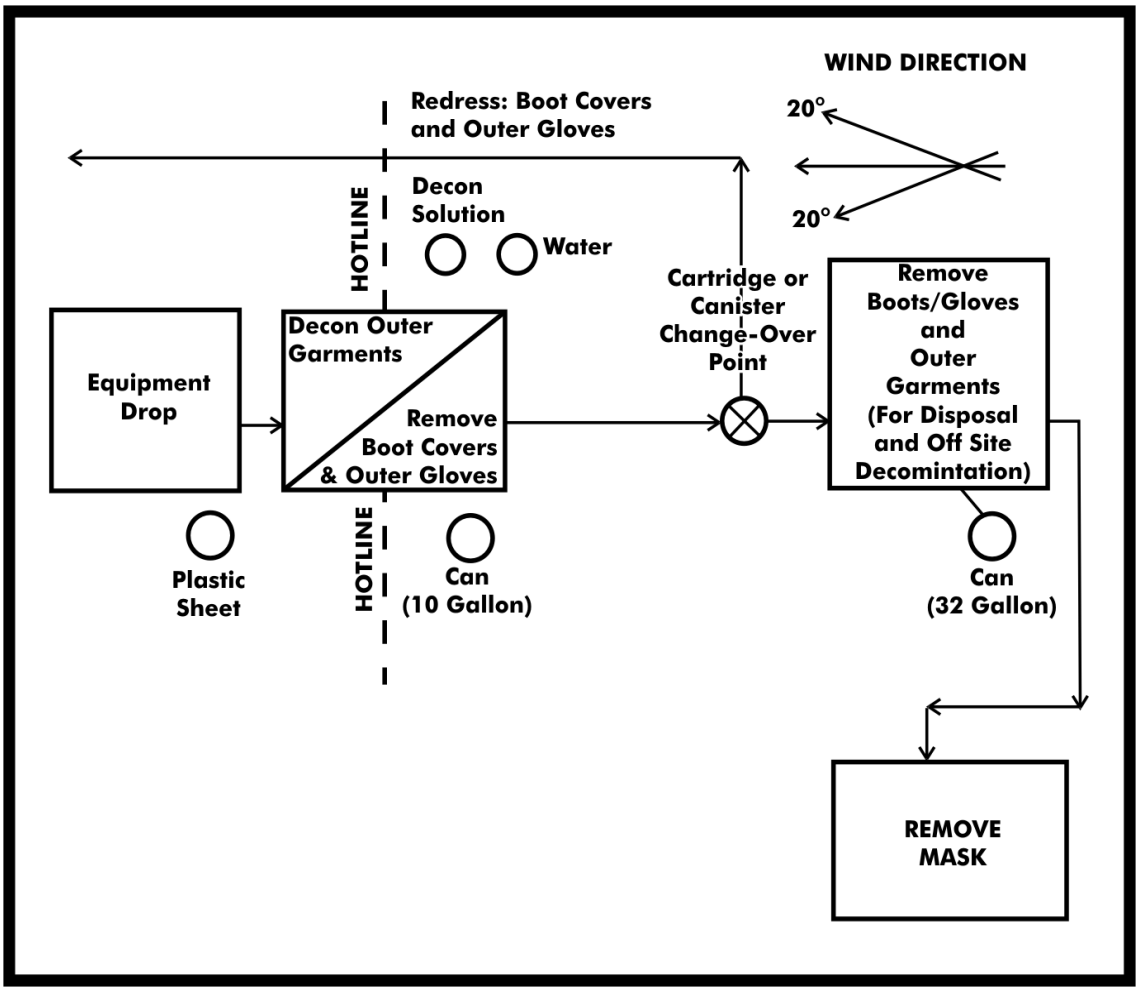
5.5 DECONTAMINATION PLAN, CONTINUED

MINIMUM MEASURES FOR DECONTAMINATION		
STATION 1	Equipment drop	Deposit equipment used on site (tools, sampling devices and containers, monitoring instruments, radios, clipboards, etc.) on plastic drop cloths. Segregation at the drop reduces the probability of cross contamination. During hot weather operations, a cool down station may be set up within this area.
STATION 2	Outer garment, boots, and gloves wash and rinse	Scrub outer boots, outer gloves, and splash suit with decontamination solution or detergent and water. Rinse off using copious amounts of water.
STATION 3	Outer boot and glove removal	Remove outer boots and gloves. Deposit in container with plastic liner.
STATION 4	Canister or mask	If worker leaves exclusion zone to change canister

	change	(or mask) or this is the last step in the decontamination procedures, worker's canister is exchanged, new outer gloves and boot covers are donned, joints are taped, and the worker returns to duty.
STATION 5	Boot, gloves, and outer garment removal	Boots, chemical-resistant splash suit, inner gloves removed and deposited in separate containers lined with plastic.
STATION 6	Face piece removal	Face piece is removed. Avoid touching face with fingers. Face piece deposited on plastic sheet.
STATION 7	Field wash	Hands and face are thoroughly washed. Shower as soon as possible. Exit point of the Decontamination Site.

5.5 DECONTAMINATION PLAN, CONTINUED

DECONTAMINATION PROCEDURES, MINIMUM DECONTAMINATION LAYOUT



5.6 DISPOSAL PLAN

This Disposal Plan is to be completed after a discharge has taken place in and accordance with guidance presented in **SECTION 7.4**, "Waste Management".

Date:	Location:
Source of release:	
Amount of release:	
Incident name:	
State On-Scene Coordinator:	
Federal On-Scene Coordinator:	
Time required for temporary storage:	
Proposed storage method:	

Disposal priorities:

Sample date:	Sample ID:
Analysis required (type):	
Laboratory performing analysis:	

Disposal options:

	Available	Likely	Possible	Unlikely
Landfill:				
In situ/ bio-remediation:				
In situ burn:				
Pit burning:				
Hydrocyclone:				
Off site incineration:				
Reclaim:				
Recycle:				

Resources required for disposal options:

General information:

Generator name:	US EPA ID#:
Waste properties:	Waste name:
US EPA waste code:	State waste code:
EPA hazardous waste:	
Waste storage and transportation:	

Proposed storage method:
Proposed transportation method:

5.6 DISPOSAL PLAN, CONTINUED

Permits required for storage:
Permits required for transportation:
Estimated storage capacity:
Number and type of storage required:
Local storage available for temporary storage of recovered oil:

PPE required for waste handling:	
Waste coordinator:	Date:

Resources required for disposal options:

Incident name:	
Sample number:	Date sent:
Source of sample:	
Date sample data received:	
Waste hazardous:	Non-hazardous:
Permits/variances requested:	
Approval received on waste profile:	
Date disposal can begin:	
Disposal facilities:	
Profile number:	
Storage contractors:	

Waste transporters:
PPE designated and agrees with Site Safety and Health Plan:

5.6 DISPOSAL PLAN, CONTINUED

Additional information:
Waste coordinator:

5.7 INCIDENT SECURITY PLAN

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

[redacted]

5.8 DEMOBILIZATION PLAN

Incident name:	**Location:**
Effective date of plan:	**Effective time period of plan:**
Incident location:	**Plan prepared by:**

Demobilization procedures:

- Each incident will require a Decontamination Area or designate where larger equipment may be sent for decontamination
- Operations Section will send resources not in use at a specific collection site to a designated decontamination sites for re-assignment or release
- Decontaminated equipment will be returned to appropriate staging area for release or re-deployment at other locations
- Long term information maintained by the Planning and Operations Section Chiefs may be utilized to assist in the prioritization of releasing equipment versus placing it on stand-

by

- Each Planning Section (Decontamination Site, Staging Area, and Logistics) will document the demobilization, decontamination, re-deployment, or release of equipment at each stage
- The Staging Group Leader will provide Demobilization Plan detailing re-deployment strategies on equipment, plus priorities on demobilization and release recommendations for equipment at the staging areas
- The Demobilization Plan is to be incorporated into the Incident Action Plan (IAP) for ICS Approval. As assigned by the Demobilization Plan within the IAP, equipment designated for re-assignment will be mobilized to the appropriate staging area
- The Operations Section will ensure that re-deployed personnel receive proper rest prior to returning to duty
- The Planning Section Chief will monitor personnel re-deployment activities to ensure number of hours worked is within acceptable guidelines
- Staging Group Leader will release equipment designated for release. Transports may be required for equipment if in remote staging area
- Once equipment is released and removed from staging areas, Logistics and the Finance Unit shall be informed to ensure invoicing reflects the dates released

SECTION 6 Last revised: April 17, 2013

SENSITIVE AREAS / RESPONSE TACTICS

6.1 AREA DESCRIPTION

Description of shoreline types and specific shoreline protection and cleanup techniques are presented in **FIGURE 6.2-1 and FIGURE 6.3-2.** The strategies and response examples are guidelines and should be evaluated during the response to ensure that the selected response methods are appropriate for the situation.

Sensitivity maps are provided in **SECTION 6.6**.

6.2 SPILL CONTAINMENT / RECOVERY

Containment and recovery refer to techniques that can be employed to contain and recover terrestrial and aquatic petroleum spills.

Terrestrial spills typically result from pipeline or tank leaks. The Company is equipped with secondary containment systems for areas with non-pressurized breakout tanks. Spills occurring within the secondary containment area or along the pipeline areas should be contained at or near their source to minimize the size of the cleanup area and quantity of soil affected.

Containment is most effective when conducted near the source of the spill, where the oil has not spread over a large area and the contained oil is of sufficient thickness to allow effective recovery and/or cleanup. The feasibility of effectively implementing containment and recovery techniques is generally dependent upon the size of the spill, available logistical resources, implementation time, and environmental conditions or nature of the terrain in the spill area.

For terrestrial spills, trenches, earthen berms, or other dams are most often used to contain oil migration on the ground surface. Recovery of free oil is best achieved by using pumps, vacuum sources, and/or sorbents. Forming collection ponds for containing free product may be considered when attempting to recover free oil. Absorbents such as hay, straw, dry dirt or sand, and other commercial products (such as peat moss) may be considered as alternative methods of containment.

Spills that reach water spread faster than those on land. They also have greater potential to contaminate water supplies, to affect wildlife and populated areas, and to impact manmade structures and human activities. Responses on water should therefore emphasize stopping the spill, containing the oil near its source, and protecting sensitive areas before they are impacted.

Sorbents are used to remove minor on-water spills. For larger spills, booming is used to protect sensitive areas and to position oil so it can be removed with skimmers or vacuum trucks.

Due to entrainment, booming is not effective when the water moves faster than one knot or waves exceed 1.5 feet in height. Angling a boom will minimize entrainment. Using multiple, parallel booms will also improve recovery in adverse conditions. A summary of booming techniques is provided below.

Containment/Diversion Berming	• Berms are constructed ahead of advancing surface spills to contain spill or divert spill to a containment area • May cause disturbance of soils and some increased soil

	penetration
Blocking/Flow-Through Dams	• Construct dam in drainage course/stream bed to block and contain flow of spill. Cover with plastic sheeting. If water is flowing, install inclined pipes during dam construction to pass water underneath dam • May increase soil penetration
Culvert Blocking	• Block culvert with plywood, sandbags, sediments, etc. to prevent oil from entering culvert
Interception Trench	• Excavate ahead of advancing surface spill to contain spill and prevent further advancement; cover bottom and gradients with plastic • May cause disturbance of soils and increased soil penetration
Containment booming	• Boom is deployed around free oil • Boom may be anchored or left to move with the oil
Diversion booming	• Boom is deployed at an angle to the approaching oil • Oil is diverted to a less sensitive area • Diverted oil may cause heavy oil contamination to the shoreline downwind and down current • Anchor points may cause minor disturbance to the environment
Exclusion booming	• Boom is placed around a sensitive area or across an inlet, a river mouth, a creek mouth, or a small bay • Approaching oil is contained or deflected (diverted) by the boom • Anchor points may cause minor disturbance to the environment

Sorbent booming

- Used only on quiet water with minor oil contamination
- Boom is anchored along a shoreline or small areas of surface water (e.g. ponds, rivers, and creeks) and may be used in a manner which allows boom to work with the fluctuating water currents
- May use boom made of sorbent material or may pack sorbent material between multiple booms placed parallel to each other

Other cleanup methods include: natural recovery, manual removal/scraping, low-pressure flushing, warm water washing, and burning. Berms and dams are also used in shallow waterways to protect areas.

Cleanup methods are provided in the appropriate Area Contingency Plan (ACP), NOAA's "Shoreline Assessment Manual," and NOAA's "Options for Minimizing Environmental Impacts of Freshwater Spill Response." (See http://www.response.restoration.noaa.gov for the latter two.)

FIGURE 6.2-1 - RESPONSE TACTICS FOR VARIOUS SHORELINES

TYPES	DESCRIPTION	PREDICTED OIL IMPACT	RECOMMENDED CLEANUP ACTIVITY

Developed/ Unforested Land	• This class includes towns, cities, farms, pastures, fields, reclaimed wetlands, and other altered areas
	• Organisms and algae may be common in riprap structures and on pilings
		• Oil would percolate easily between the gravel and boulders of riprap structures
		• Oil would coat the intertidal areas of solid structures
		• Biota would be damaged or killed under heavy accumulations
			• May require high pressure spraying:
			  • To remove oil
			  • To prepare substrate for recolonization of barnacle and oyster communities
			  • For aesthetic reasons

Freshwater Flat	• Mud or organic deposits located along the shore or in shallow portions of nontidal freshwater lakes and ponds • They are exposed to low wave and current energy • They are often areas of heavy bird use	• Oil is expected to be deposited along the shoreline • Penetration of spilled oil into the water-saturated sediments of the flat will not occur • When sediments are contaminated, oil may persist for years	• These areas require high priority for protection against oil contamination • Cleanup of freshwater flats is nearly impossible because of soft substrate • Cleanup is usually not even considered because of the likelihood of mixing oil deeper into the

			sediments during the cleanup effort • Passive efforts, such as sorbent boom can be used to retain oil as it is naturally removed

Fresh Marsh	• Found along freshwater ponds and lakes
	• These marshes have various types of vegetative cover, including floating aquatic mats, vascular submerged vegetation, needle and broad-leaved deciduous scrubs and shrubs, and broad-leaved evergreen scrubs and shrubs
	• Birds and mammals extensively use fresh marshes for feeding and breeding purposes
		• Small amounts of oil will contaminate the outer marsh fringe only; natural removal by wave action can occur within months
		• Large spills will cover more area and may persist for decades
		• Oil, particularly the heavy fuel oils, tends to adhere readily to marsh grasses
			• Marshes require the highest priority for shoreline protection
			• Natural recovery is recommended when:
			  • A small extent of marsh is affected
			  • A small amount of oil impacts the marsh fringe
			• The preferred cleanup method is a combination of low-pressure flushing, sorption, and vacuum pumping performed from boats
			• Any cleanup activities should be supervised closely to avoid excessive disturbances of the marsh surface or roots
			• Oil wrack and other debris may be removed by hand

Swamp	• Swamps are freshwater wetlands having varying water depths with vegetation types ranging from shrubs and scrubs to poorly drained forested wetlands. Major vegetative types include: scrubs, shrubs, evergreen trees, and hardwood	• Even small amounts of spilled oil can spread through the swamp • Large spills will cover more area and may persist for decades since water-flushing rates are low • Oil, particularly the heavy fuel oils, will adhere to swamp vegetation • Unlike mangroves,	• No cleanup recommended under light conditions • Under moderate to heavy accumulations, to prevent chronic oil pollution of surrounding areas placement of sorbent along fringe swamp forest (to absorb oil as it is slowly released) may be effective under close scientific supervision

	forested woodlands • Birds and mammals use swamps during feeding and breeding activities	the roots of swamp forest trees are not exposed; thus, little damage to trees is expected. Any underbrush vegetation, however, would be severely impacted	• Proper strategic boom placement may be highly effective in trapping large quantities of oil, thus reducing oil impact to interior swamp forests • Oil trapped by boom can be reclaimed through the use of skimmers and vacuums

FIGURE 6.2-1 - RESPONSE TACTICS FOR VARIOUS SHORELINES, CONTINUED

TYPES	DESCRIPTION	PREDICTED OIL IMPACT	RECOMMENDED CLEANUP ACTIVITY
Salt and Brackish Water Marshes	• Marshes are intertidal wetlands containing emergent, herbaceous vegetation. • Width of the marsh can vary widely, from a narrow fringe to extensive areas. • They are relatively sheltered from waves and strong currents. • Sediments are composed of organic muds except on the margins of barrier islands where sand is abundant. • Resident flora and fauna are abundant, with numerous species with high utilization by birds.	• Oil adheres readily to marsh 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 water-level changes and coat the entire stem from the high-water 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 inundation. • Medium to heavy oils do not readily adhere to or penetrate the fine	• Under light oiling, the best practice is to let the area recover naturally. • 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 are at great risk from leaving oiled

		sediments, but can pool on the surface or in burrows. • Light oils can penetrate the top few centimeters of sediment and deeply into burrows and cracks (up to one meter).	vegetation in place.
Open Water	• Have ocean like waves and currents • Weather changes effect on-water conditions • River mouths present problems • Thermal stratification occurs	• Most organisms are mobile enough to move out of the spill area • Aquatic birds are vulnerable to oiling • Human usage (such as transportation, water intakes, and recreational activities) may be restricted	• Booming, skimming, vacuuming, and natural recovery are the preferred cleanup methods • Should not use sorbents, containment booming, skimming, and vacuuming on gasoline spills • Cleanup options include physical herding, sorbents, and debris/vegetation removal
Large Rivers	• May have varying salinities, meandering channels, and high flow rates • May include manmade structures (such as dams and locks) • Water levels vary seasonally • Floods generate high suspended sediment and debris loads	• Fish and migratory birds are of great concern • Under flood conditions, may impact highly sensitive areas in floodplains • Human usage may be high • When sediments are contaminated, oil may persist for years	• Booming, skimming, and vacuuming are the preferred cleanup methods • Should not use sorbents, containment booming, skimming, and vacuuming on gasoline spills • Cleanup options include natural recovery, physical herding, sorbents, and debris/vegetation removal
Small Lakes and Ponds	• Water surface can be choppy • Water levels can fluctuate widely • May completely freeze in winter • Bottom sediments near the shore can be soft and muddy • Surrounding area	• Wildlife and socioeconomic areas likely to be impacted • Wind will control the oil's distribution	• Booming, skimming, vacuuming, and sorbents are the preferred cleanup methods • Should not use containment booming, vacuuming, sorbents, and skimming on gasoline

	may include wet meadows and marshes		spills • Cleanup options include physical herding, sorbents, and debris/vegetation removal

FIGURE 6.2-1 - RESPONSE TACTICS FOR VARIOUS SHORELINES, CONTINUED

TYPES	DESCRIPTION	PREDICTED OIL IMPACT	RECOMMENDED CLEANUP ACTIVITY
Small Rivers and Streams	• Wide range of water bodies - fast flowing streams to slow moving bayous with low muddy banks and fringed with vegetation • May include waterfalls, rapids, log jams, mid-channel bars, and islands • Weathering rates may be slower because spreading and evaporation are restricted	• Usually contaminate both banks and the water column, exposing a large number of biota to being oiled • Water intakes for drinking water, irrigation, and industrial use likely to be impacted	• Booming, skimming, vacuuming, sorbents, barriers, and berms are the preferred cleanup methods • Should not use containment booming, sorbents, vacuuming, and skimming on gasoline spills • Cleanup options include physical herding, natural recovery, debris removal, vegetation removal, and in-situ burn

6.3 SENSITIVE AREA PROTECTION

Protection refers to the implementation of techniques or methods to prevent oil from making contact with an area that is determined to be sensitive for aquatic, environmental, economic, cultural, or human use reasons. Implementation of sensitive area protection techniques should consider a number of factors such as sensitive features, priorities for areas to be protected, and potential degree of impact. In the event a product spill reaches a major area waterway, it may be necessary to protect downstream sensitive areas if it appears that local containment and recovery efforts will not be sufficient to control the entire spill. Major waterways and specific sensitive areas located downstream of the Facility are provided in SECTION 6.7.

FIGURE 6.3-1 - SENSITIVE AREA PROTECTION IMPLEMENT SEQUENCE

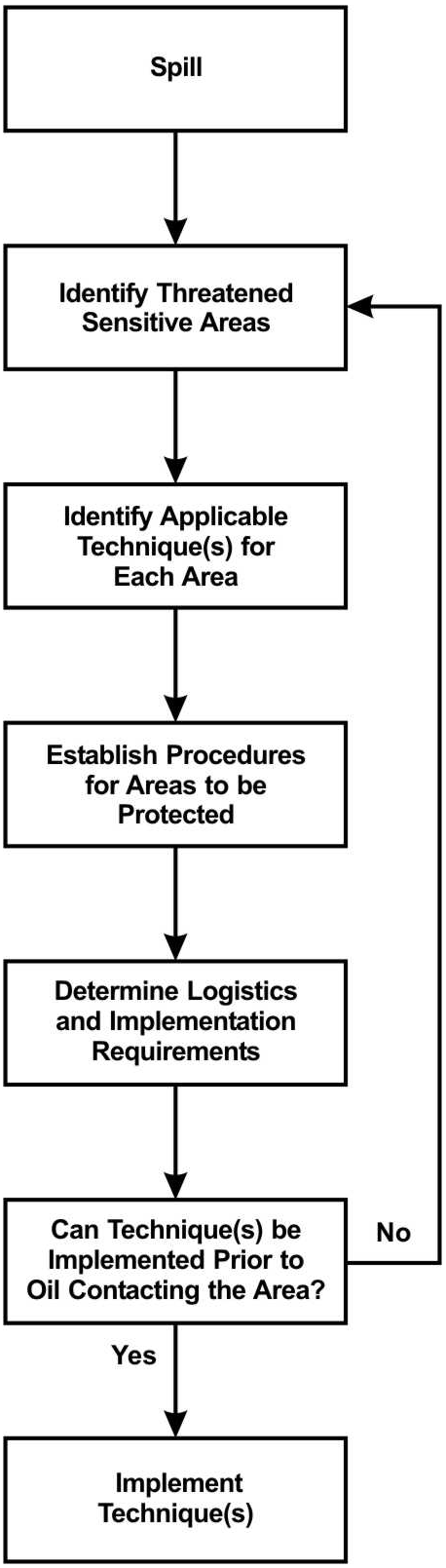


FIGURE 6.3-2 - SUMMARY OF SHORELINE AND TERRESTRIAL CLEANUP TECHNIQUES

TECHNIQUE	DESCRIPTION	RECOMMENDED EQUIPMENT	APPLICABILITY	POTENTIAL ENVIRONMENTAL

				EFFECTS
Removal				
1. Manual Removal	Hand tool (scrapers, wire brushes, shovels, cutting tools, wheel barrows, etc.) are used to scrape oil off surfaces or recover oiled sediments, vegetation, or debris where oil conditions are light or sporadic and/or access is limited.	Equipment misc. hand tools Personnel 10-20 workers	• Can be used on all habitat types • Light to moderate oiling conditions for stranded oil or heavy oils that have formed semi-solid to solid masses • In areas where roosting or birthing animals cannot or should not be disturbed	• Sediment disturbance and erosion potential
2. Mechanical Removal	Mechanical earthmoving equipment is used to remove oiled sediments and debris from heavily impacted areas with suitable access.	Equipment motor grader, backhoe, dump truck elevating scrapers Personnel 2-4 workers plus equipment operators	• On land, wherever surface sediments are accessible to heavy equipment • Large amounts of oiled materials	• Removes upper 2 to 12 inches of sediments
3. Sorbent Use	Sorbents are applied manually to oil accumulations, coatings, sheens, etc. to remove and recover the oil.	Equipment misc. hand tools misc. sorbents Personnel 2-10 workers	• Can be used on all habitat types • Free-floating oil close to shore or stranded on shore, secondary treatment method after gross oil removal • Sensitive areas where access is	• Sediment disturbance and erosion potential • Trampling of vegetation and organisms • Foot traffic can work oil deeper into soft sediments

			restricted	
4. Vacuum / Pumps / Skimmers	Pumps, vacuum trucks, skimmers are used to remove oil accumulations from land or relatively thick floating layers from the water.	Equipment 1-2 50- to 100-bbl vacuum trucks w/hoses 1-2 nozzle screens or skimmer heads Personnel 2-6 workers plus truck operators	• Can be used on all habitat types • Stranded oil on the substrate • Shoreline access points	• Typically does not remove all oil • Can remove some surface organisms, sediments, and vegetation
Washing				
5. Flooding	High volumes of water at low pressure are used to flood the oiled area to float oil off and out of sediments and back into the water or to a containment area where it can be recovered.? Frequently used with flushing.	Equipment 1-5 100- to 200-gpm pumping systems 1 100-ft perforated header hose per system 1-2 200-ft containment booms per system 1 oil recovery device per system Personnel 6-8 workers per system	• All shoreline types except steep intertidal areas • Heavily oiled areas where the oil is still fluid and adheres loosely to the substrate • Where oil has penetrated into gravel sediments • Used with other washing techniques	• Can impact clean downgradient areas • Can displace some surface organisms if present • Sediments transported into water can affect water quality

FIGURE 6.3-2 - SUMMARY OF SHORELINE AND TERRESTRIAL CLEANUP TECHNIQUES, CONTINUED

TECHNIQUE	DESCRIPTION	RECOMMENDED EQUIPMENT	APPLICABILITY	POTENTIAL ENVIRONMENTAL EFFECTS
Washing, Continued				
6. Flushing	Water streams at low to moderate pressure, and possibly elevated temperatures, are used to remove	Equipment 1-5 50- to 100-gpm/ 100-psi pumping systems with manifold 1-4 100-ft hoses	• Substrates, riprap, and solid man-made structures • Oil stranded	• Can impact clean downgradient areas • Will displace many surface

	oil from surface or near-surface sediments through agitation and direct contact.? Oil is flushed back into the water or a collection point for subsequent recovery.? May also be used to flush out oil trapped by shoreline or aquatic vegetation.	and nozzles per system 1-2 200-ft containment booms per system 1 oil recovery device per system Personnel 8-10 workers per system	• onshore • Floating oil on shallow intertidal areas	organisms if present • Sediments transported into water can affect water quality • Hot water can be lethal to many organisms • Can increase oil penetration depth
7. Spot (High Pressure Washing)	High pressure water streams are used to remove oil coatings from hard surfaces in small areas where flushing is ineffective.? Oil is directed back into water or collection point for subsequent recovery.	Equipment 1-5 1,200- to 4,000-psi units with hose and spray wand 1-2 100-ft containment booms per unit 1 oil recovery device per unit Personnel 2-4 workers per unit	• Bedrock, man-made structures, and gravel substrates • When low-pressure flushing is not effective • Directed water jet can remove oil from hard to reach sites	• Will remove most organisms if present • Can damage surface being cleaned • Can affect clean downgradient or nearby areas
In Situ				
8. Passive Collection	Sorbent/snare booms or other sorbent materials are anchored at the waterline adjacent to heavily oiled areas to contain and recover oil as it leaches from the sediments.	Equipment 1,000-2,000 ft sorbent/snare boom 200-400 stakes or anchor systems Personnel 4-10 workers	• All shoreline types • Calm wave action • Slow removal process	• Significant amounts of oil can remain on the shoreline for extended periods of time
9. Sediment Tilling	Mechanical equipment or hand tools are used to till lightly to moderately oiled surface	Equipment 1 tractor fitted with tines, dicer, ripper blades, etc. or 1-4 rototillers or 1 set of hand tools Personnel	• Any sedimentary substrate that can support heavy equipment • Sand and	• Significant amounts of oil can remain on the shoreline for extended periods of time • Disturbs surface

	sediments to maximize natural degradation processes.	2-10 workers	gravel beaches with subsurface oil • Where sediment is stained or lightly oiled • Were oil is stranded above normal high waterline	sediments and organisms

FIGURE 6.3-2 - SUMMARY OF SHORELINE AND TERRESTRIAL CLEANUP TECHNIQUES, CONTINUED

TECHNIQUE	DESCRIPTION	RECOMMENDED EQUIPMENT	APPLICABILITY	POTENTIAL ENVIRONMENTAL EFFECTS
In Situ, Continued				
10. In Situ Bioremediation	Fertilizer is applied to lightly to moderately oiled areas to enhance microbial growth and subsequent biodegradation of oil.	Equipment 1-2 fertilizer applicators 1 tilling device if required Personnel 2-4 workers	• Any shoreline habitat type where nutrients are deficient Moderate to heavily oiled substrates After other techniques have been used to remove free product on lightly oiled shorelines Where other techniques are destructive or ineffective	• Significant amounts of oil can remain on the shoreline for extended periods of time • Can disturb surface sediments and organisms
11. Log/Debris?? Burning	Oiled logs, driftwood, vegetation, and debris are	Equipment 1 set of fire control equipment 2-4 fans	• On most habitats except dry muddy	• Heat may impact local near-surface organisms

	burned to minimize material handling and disposal requirements.? Material should be stacked in tall piles and fans used to ensure a hot, clean burn.	1 supply of combustion promoter Personnel 2-4 workers	substrates where heat may impact the biological productivity of the habitat • Where heavily oiled items are difficult or impossible to move • Many potential applications on ice	• Substantial smoke may be generated • Heat may impact adjacent vegetation
12. Natural Recovery	No action is taken and oil is allowed to degrade naturally.	None required	• All habitat types • When natural removal rates are fast • Degree of oiling is light • Access is severely restricted or dangerous to cleanup crews • When cleanup actions will do more harm than natural removal	• Oil may persist for significant periods of time • Remobilized oil or sheens may impact other areas • Higher probability of impacting wildlife
13. Dispersants (use of dispersants requires Federal or State approval)	Dispersants are used to reduce the oil/water interfacial tension thereby decreasing the energy needed for the slick to break into small particles and mix into the water column. ? Specially formulated	Dispersants Boat or aircraft	• Water bodies with sufficient depth and volume for mixing and dilution • When the impact of the floating oil has been determined to be greater than the	• Use in shallow water could affect benthic resources • May adversely impact organisms in the upper 30 feet of the water column • Some water-surface and shoreline impacts could

	products containing surface-active agents are sprayed from aircraft or boats onto the slick.		impact of dispersed oil on the water-column community	occur
1 - Per 1000 feet of shoreline or oiled area				

Cleanup methods are provided in the appropriate Area Contingency Plan (ACP), NOAA's "Shoreline Assessment Manual," and NOAA's "Options for Minimizing Environmental Impacts of Freshwater Spill Response." (See http://response.restoration.noaa.gov for the latter two).

6.4 WILDLIFE PROTECTION AND REHABILITATION

- The Company will support wildlife protection and rehabilitation efforts during the response but will not typically directly manage these efforts.
- Domestic Animal Specialists such as veterinarians may be utilized to rescue or clean oiled animals such as livestock, dogs, horses, etc. **FIGURE 3.1-7**, Additional Resources and Telephone Numbers.
- Company personnel will not attempt to rescue or clean affected wildlife, because such actions may cause harm to the individuals or may place the animals at further risk.
- Federal and state agencies responsible for wildlife capture and rehabilitation will typically coordinate capturing and rehabilitating oiled wildlife; a list of these agencies are included in **FIGURE 3.1-5**.
- Wildlife rehabilitation specialists may be utilized to assist in capturing and rehabilitating oiled wildlife as well as deterring unaffected animals away from the spill site. **FIGURE 3.1-7**, Additional Resources and Telephone Numbers.

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Adelia, Vasey's	*Adelia vaseyi*	mostly subtropical evergreen/deciduous woodlands on loamy soils of Rio Grande Delta, but occasionally in shrublands on more xeric sandy to gravelly upland sites; flowering January-June		Texas	Starr County
Ambrosia,	*Ambrosia*	Grasslands and various			Kleberg

South Texas	*cheiranthifolia*	mesquite-dominated shrublands		Texas	County
Ambrosia, South Texas	*Ambrosia cheiranthifolia*	Grasslands and various mesquite-dominated shrublands		Texas	Nueces County
Ambrosia, South Texas	*Ambrosia cheiranthifolia*	Grasslands and various mesquite-dominated shrublands		Texas	Jim Wells County
Ballmoss, Bailey's	*Tillandsia baileyi*	epiphytic on various trees and tall shrubs, perhaps most common in mottes of Live oak on vegetated dunes and flats in coastal portions of the South Texas Sand Sheet, but also on evergreen sub-tropical woodlands along resacas in the Lower Rio Grande Valley; flowering (February-)April-May, but conspicuous throughout the year		Texas	Kleberg County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Ballmoss, Bailey's	*Tillandsia baileyi*	epiphytic on various trees and tall shrubs, perhaps most common in mottes of Live oak on vegetated dunes and flats in coastal portions of the South Texas Sand Sheet, but also on evergreen sub-tropical woodlands along resacas in the Lower Rio Grande Valley; flowering (February-)April-May, but conspicuous throughout the year		Texas	Jim Wells County
		epiphytic on various trees and tall shrubs, perhaps most common in mottes of Live oak on vegetated dunes and flats in coastal			

Ballmoss, Bailey's	*Tillandsia baileyi*	portions of the South Texas Sand Sheet, but also on evergreen sub-tropical woodlands along resacas in the Lower Rio Grande Valley; flowering (February-)April-May, but conspicuous throughout the year		Texas	Brooks County
Balloon-vine, Chihuahua	*Cardiospermum dissectum*	Thorn shrublands or low woodlands on well to excessively well drained, calcareous, sandy to gravelly soils in drier uplands of the Lower Rio Grande Valley, in areas underlain by the Goliad formation, Catahoula and Frio formations undivided, Jackson Group, and other Eocene formations; during drought conditions the normally inconspicuous slender twining vine turns a more conspicuous deep reddish-purple; flowering (April-) July-September, probably throughout the growing season in response to rainfall.		Texas	Starr County
Bat, Cave Myotis	*Myotis velifer*	colonial and cave-dwelling; also roosts in rock crevices, old buildings, carports, under bridges, and even in abandoned Cliff Swallow (Hirundo pyrrhonota) nests; roosts in clusters of up to thousands of individuals; hibernates in limestone caves of Edwards Plateau and gypsum cave of Panhandle during winter; opportunistic insectivore		Texas	Jim Wells County
		colonial and cave-dwelling; also roosts in rock crevices, old buildings, carports, under bridges, and even in abandoned Cliff Swallow			

Bat, Cave Myotis	*Myotis velifer*	(Hirundo pyrrhonota) nests; roosts in clusters of up to thousands of individuals; hibernates in limestone caves of Edwards Plateau and gypsum cave of Panhandle during winter; opportunistic insectivore		Texas	Starr County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Bat, Ghost-faced	*Mormoops megalophylla*	colonially roosts in caves, crevices, abandoned mines, and buildings; insectivorous; breeds late winter-early spring; single offspring born per year		Texas	Starr County
Bat, Mexican Long-tongued	*Choeronycteris mexicana*	deep canyons where uses caves and mine tunnels as day roosts; also found in buildings and often associated with big-eared bats (Plecotus spp.); single TX record from Santa Ana NWR		Texas	Starr County
Bat, Southern Yellow	*Lasiurus ega*	associated with trees, such as palm trees (Sabal mexicana) in Brownsville, which provide them with daytime roosts; insectivorous; breeding in late winter	T (State)	Texas	Nueces County
Bat, Southern Yellow	*Lasiurus ega*	associated with trees, such as palm trees (Sabal mexicana) in Brownsville, which provide them with daytime roosts; insectivorous; breeding in late winter	T (State)	Texas	Brooks County
Bat, Southern	*Lasiurus ega*	associated with trees, such as palm trees (Sabal mexicana) in Brownsville, which provide them with	T (State)	Texas	San Patricio

Yellow		daytime roosts; insectivorous; breeding in late winter			County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Bat, Southern Yellow	*Lasiurus ega*	associated with trees, such as palm trees (Sabal mexicana) in Brownsville, which provide them with daytime roosts; insectivorous; breeding in late winter	T (State)	Texas	Kleberg County
Bat, Yuma Myotis	*Myotis yumanensis*	desert regions; most commonly found in lowland habitats near open water, where forages; roosts in caves, abandoned mine tunnels, and buildings; season of partus is May to early July; usually only one young born to each female		Texas	Starr County
Beardless-Tyrannulet, Northern	*Camptostoma imberbe*	mesquite woodlands; near Rio Grande frequents cottonwood, willow, elm, and great leadtree; breeding April to July	T (State)	Texas	Kleberg County
Beardless-Tyrannulet, Northern	*Camptostoma imberbe*	mesquite woodlands; near Rio Grande frequents cottonwood, willow, elm, and great leadtree; breeding April to July	T (State)	Texas	Brooks County
Beardless-Tyrannulet, Northern	*Camptostoma imberbe*	mesquite woodlands; near Rio Grande frequents cottonwood, willow, elm, and great leadtree; breeding April to July	T (State)	Texas	Starr County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Becard, Rose-throated	*Pachyramphus aglaiae*	riparian trees, woodlands, open forest, scrub, and mangroves; breeding April to July	T (State)	Texas	Starr County
Beetle, A Tiger	*Tetracha affinis angustata*	most tiger beetles diurnal, open sandy areas, beaches, open paths or lanes, or on mudflats; larvae in hard-packed ground in vertical burrows		Texas	Starr County
Beetle, Cazier's Tiger	*Cicindela cazieri*	most tiger beetles are active, usually brightly colored, and found in open, sunny areas; adult tiger beetles are predaceous and feed on a variety of small insects; larvae of tiger beetles are also predaceous and live in vertical burrows in soil of dry paths, fields, or sandy beaches		Texas	Starr County
Beetle, Los Olmos Tiger	*Cicindela nevadica olmosa*	most tiger beetles are active, usually brightly colored, and found in open, sunny areas; adult tiger beetles are predaceous and feed on a variety of small insects; larvae of tiger beetles are also predaceous and live in vertical burrows in soil of dry paths, fields, or sandy beaches		Texas	Brooks County
Beetle, Neojuvenile Tiger	*Cicindela obsoleta neojuvenilis*	bare or sparsely vegetated, dry, hard-packed soil; typically in previously disturbed areas; peak adult activity in Jul		Texas	Starr County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON	SCIENTIFIC	HABITAT	STATUS	STATE	COUNTY

NAME	NAME				
Black-Hawk, Common	*Buteogallus anthracinus*	cottonwood-lined rivers and streams; willow tree groves on the lower Rio Grande floodplain; formerly bred in south Texas	T (State)	Texas	Starr County
Bladderpod, Zapata	*Lesquerella thamnophila*	Open, evergreen thorn shrublands on gravelly to sandy loams		Texas	Starr County
Broomweed, Threeflower	*Thurovia triflora*	Texas endemic; near coast in sparse, low vegetation on a veneer of light colored silt or fine sand over saline clay along drier upper margins of ecotone between salty prairies and tidal flats; further inland associated with vegetated slick spots on prairie mima mounds; flowering September-November		Texas	San Patricio County
Cactus, Black Lace	*Echinocereus reichenbachii var. albertii*	Texas endemic; grasslands, thorn shrublands, mesquite woodlands on sandy, somewhat saline soils on coastal prairie, most frequently in naturally open areas sparsely covered with brush of a low stature not resulting from disturbance or along creeks in ecotonal areas between this upland type and lower areas dominated by halophytic grasses and forbs; flowering April-June	E	Texas	Jim Wells County
Cactus, Black Lace	*Echinocereus reichenbachii var. albertii*	Texas endemic; grasslands, thorn shrublands, mesquite woodlands on sandy, somewhat saline soils on coastal prairie, most frequently in naturally open areas sparsely covered with brush of a low stature not resulting from disturbance or along creeks in ecotonal areas between this upland type and lower areas dominated	E	Texas	Kleberg County

		by halophytic grasses and forbs; flowering April-June			

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Cactus, Runyon's Cory	*Coryphantha macromeris var runyonii*	gravelly to sandy or clayey, calcareous, sometimes gypsiferous or saline soils, often over the Catahoula and Frio formations, on gentle hills and slopes to the flats between, at elevations ranging from 10 to 150 m (30 to 500 ft); ? late spring or early summer, November, fruit has been collected in August		Texas	Starr County
Cactus, Star	*Astrophytum asterias*	gravelly clays or loams, possibly of the Catarina Series (deep, droughty, saline clays), over the Catahoula and Frio formations, on gentle slopes and flats in sparsely vegetated openings between shrub thickets within mesquite grasslands or mesquite-blackbrush thorn shrublands; plants sink into or below ground during dry periods; flowering from mid March-May, may also flower in warmer months after sufficient rainfall, flowers most reliably in early April; fruiting mid April-June	E	Texas	Starr County
Coati, White-nosed	*Nasua narica*	woodlands, riparian corridors and canyons; most individuals in Texas probably transients from Mexico; diurnal and crepuscular; very sociable;	T (State)	Texas	Starr County

		forages on ground and in trees; omnivorous; may be susceptible to hunting, trapping, and pet trade			
Coati, White-nosed	*Nasua narica*	woodlands, riparian corridors and canyons; most individuals in Texas probably transients from Mexico; diurnal and crepuscular; very sociable; forages on ground and in trees; omnivorous; may be susceptible to hunting, trapping, and pet trade	T (State)	Texas	Brooks County
Coati, White-nosed	*Nasua narica*	woodlands, riparian corridors and canyons; most individuals in Texas probably transients from Mexico; diurnal and crepuscular; very sociable; forages on ground and in trees; omnivorous; may be susceptible to hunting, trapping, and pet trade	T (State)	Texas	Jim Wells County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Coati, White-nosed	*Nasua narica*	woodlands, riparian corridors and canyons; most individuals in Texas probably transients from Mexico; diurnal and crepuscular; very sociable; forages on ground and in trees; omnivorous; may be susceptible to hunting, trapping, and pet trade	T (State)	Texas	Kleberg County
Coati, White-nosed	*Nasua narica*	woodlands, riparian corridors and canyons; most individuals in Texas probably transients from Mexico; diurnal and crepuscular; very sociable; forages on ground and in	T (State)	Texas	Nueces County

		trees; omnivorous; may be susceptible to hunting, trapping, and pet trade			
Coati, White-nosed	*Nasua narica*	woodlands, riparian corridors and canyons; most individuals in Texas probably transients from Mexico; diurnal and crepuscular; very sociable; forages on ground and in trees; omnivorous; may be susceptible to hunting, trapping, and pet trade	T (State)	Texas	San Patricio County
Crane, Whooping	*Grus americana*	potential migrant via plains throughout most of state to coast; winters in coastal marshes of Aransas, Calhoun, and Refugio counties	E	Texas	Jim Wells County
Crane, Whooping	*Grus americana*	potential migrant via plains throughout most of state to coast; winters in coastal marshes of Aransas, Calhoun, and Refugio counties	E	Texas	Nueces County

T - Threatened
E - Endangered

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6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Crane, Whooping	*Grus americana*	potential migrant via plains throughout most of state to coast; winters in coastal marshes of Aransas, Calhoun, and Refugio counties	E	Texas	San Patricio County
Crane, Whooping	*Grus americana*	potential migrant via plains throughout most of state to coast; winters in coastal marshes of Aransas, Calhoun, and Refugio counties	E	Texas	Kleberg County
Curlew, Eskimo	*Numenius borealis*	historic; nonbreeding: grasslands, pastures, plowed fields, and less	E	Texas	Kleberg County

		frequently, marshes and mudflats			
Curlew, Eskimo	*Numenius borealis*	historic; nonbreeding: grasslands, pastures, plowed fields, and less frequently, marshes and mudflats	E	Texas	Nueces County
Curlew, Eskimo	*Numenius borealis*	historic; nonbreeding: grasslands, pastures, plowed fields, and less frequently, marshes and mudflats	E	Texas	San Patricio County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Damselfly, Leonora's dancer	*Argia leonorae*	south central and western Texas; small streams and seepages		Texas	Brooks County
Dogweed, Ashy	*Thymophylla tephroleuca*	Texas endemic; grasslands with scattered shrubs; most sites on sands or sandy loams on level or very gently rolling topography over Eocene strata of the Laredo Formation; flowering March-May depending to some extent on rainfall	E	Texas	Starr County
Eel, American	*Anguilla rostrata*	coastal waterways below reservoirs to gulf; spawns January to February in ocean, larva move to coastal waters, metamorphose, then females move into freshwater; most aquatic habitats with access to ocean, muddy bottoms, still waters, large streams, lakes; can travel overland in wet areas; males in brackish estuaries; diet varies widely, geographically, and seasonally		Texas	Jim Wells County

Eel, American	*Anguilla rostrata*	coastal waterways below reservoirs to gulf; spawns January to February in ocean, larva move to coastal waters, metamorphose, then females move into freshwater; most aquatic habitats with access to ocean, muddy bottoms, still waters, large streams, lakes; can travel overland in wet areas; males in brackish estuaries; diet varies widely, geographically, and seasonally		Texas	Kleberg County
Eel, American	*Anguilla rostrata*	coastal waterways below reservoirs to gulf; spawns January to February in ocean, larva move to coastal waters, metamorphose, then females move into freshwater; most aquatic habitats with access to ocean, muddy bottoms, still waters, large streams, lakes; can travel overland in wet areas; males in brackish estuaries; diet varies widely, geographically, and seasonally		Texas	Nueces County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Eel, American	*Anguilla rostrata*	coastal waterways below reservoirs to gulf; spawns January to February in ocean, larva move to coastal waters, metamorphose, then females move into freshwater; most aquatic habitats with access to		Texas	San Patricio County

		ocean, muddy bottoms, still waters, large streams, lakes; can travel overland in wet areas; males in brackish estuaries; diet varies widely, geographically, and seasonally			
Egret, Reddish	*Egretta rufescens*	resident of the Texas Gulf Coast; brackish marshes and shallow salt ponds and tidal flats; nests on ground or in trees or bushes, on dry coastal islands in brushy thickets of yucca and prickly pear	T (State)	Texas	Kleberg County
Egret, Reddish	*Egretta rufescens*	resident of the Texas Gulf Coast; brackish marshes and shallow salt ponds and tidal flats; nests on ground or in trees or bushes, on dry coastal islands in brushy thickets of yucca and prickly pear	T (State)	Texas	San Patricio County
Egret, Reddish	*Egretta rufescens*	resident of the Texas Gulf Coast; brackish marshes and shallow salt ponds and tidal flats; nests on ground or in trees or bushes, on dry coastal islands in brushy thickets of yucca and prickly pear	T (State)	Texas	Nueces County
Falcon, American Peregrine	*Falco peregrinus anatum*	year-round resident and local breeder in west Texas, nests in tall cliff eyries; also, migrant across state from more northern breeding areas in US and Canada, winters along coast and farther south; occupies wide range of habitats during migration, including urban, concentrations along coast and barrier islands; low-altitude migrant, stopovers at leading landscape edges such as lake shores, coastlines, and barrier islands.	Delisted (Federal) T (State)	Texas	Brooks County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Falcon, American Peregrine	*Falco peregrinus anatum*	year-round resident and local breeder in west Texas, nests in tall cliff eyries; also, migrant across state from more northern breeding areas in US and Canada, winters along coast and farther south; occupies wide range of habitats during migration, including urban, concentrations along coast and barrier islands; low-altitude migrant, stopovers at leading landscape edges such as lake shores, coastlines, and barrier islands.	Delisted (Federal) T (State)	Texas	Kleberg County
Falcon, American Peregrine	*Falco peregrinus anatum*	year-round resident and local breeder in west Texas, nests in tall cliff eyries; also, migrant across state from more northern breeding areas in US and Canada, winters along coast and farther south; occupies wide range of habitats during migration, including urban, concentrations along coast and barrier islands; low-altitude migrant, stopovers at leading landscape edges such as lake shores, coastlines, and barrier islands.	Delisted (Federal) T (State)	Texas	Nueces County
Falcon, American Peregrine	*Plagopterus argentissimus*	year-round resident and local breeder in west Texas, nests in tall cliff eyries; also, migrant across state from more northern breeding areas in US and Canada, winters along coast and farther south; occupies wide range of habitats during migration, including urban, concentrations along coast and barrier islands;	Delisted (Federal) T (State)	Texas	Jim Wells County

		low-altitude migrant, stopovers at leading landscape edges such as lake shores, coastlines, and barrier islands.			
Falcon, American Peregrine	*Falco peregrinus anatum*	year-round resident and local breeder in west Texas, nests in tall cliff eyries; also, migrant across state from more northern breeding areas in US and Canada, winters along coast and farther south; occupies wide range of habitats during migration, including urban, concentrations along coast and barrier islands; low-altitude migrant, stopovers at leading landscape edges such as lake shores, coastlines, and barrier islands.	Delisted (Federal) T (State)	Texas	San Patricio County
Falcon, American Peregrine	*Falco peregrinus anatum*	year-round resident and local breeder in west Texas, nests in tall cliff eyries; also, migrant across state from more northern breeding areas in US and Canada, winters along coast and farther south; occupies wide range of habitats during migration, including urban, concentrations along coast and barrier islands; low-altitude migrant, stopovers at leading landscape edges such as lake shores, coastlines, and barrier islands.	Delisted (Federal) T (State)	Texas	Starr County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
		migrant throughout state from subspecies? far			

Falcon, Arctic Peregrine	*Falco peregrinus tundrius*	northern breeding range, winters along coast and farther south; occupies wide range of habitats during migration, including urban, concentrations along coast and barrier islands; low-altitude migrant, stopovers at leading landscape edges such as lake shores, coastlines, and barrier islands.	Delisted (Federal)	Texas	Brooks County
Falcon, Arctic Peregrine	*Falco peregrinus tundrius*	migrant throughout state from subspecies? far northern breeding range, winters along coast and farther south; occupies wide range of habitats during migration, including urban, concentrations along coast and barrier islands; low-altitude migrant, stopovers at leading landscape edges such as lake shores, coastlines, and barrier islands.	Delisted (Federal)	Texas	Jim Wells County
Falcon, Arctic Peregrine	*Falco peregrinus tundrius*	migrant throughout state from subspecies? far northern breeding range, winters along coast and farther south; occupies wide range of habitats during migration, including urban, concentrations along coast and barrier islands; low-altitude migrant, stopovers at leading landscape edges such as lake shores, coastlines, and barrier islands.	Delisted (Federal)	Texas	Kleberg County
Falcon, Arctic Peregrine	*Falco peregrinus tundrius*	migrant throughout state from subspecies? far northern breeding range, winters along coast and farther south; occupies wide range of habitats during migration, including urban, concentrations along coast and barrier islands; low-altitude migrant, stopovers at leading landscape edges such as lake shores,	Delisted (Federal)	Texas	Nueces County

		coastlines, and barrier islands.			
Falcon, Arctic Peregrine	*Falco peregrinus tundrius*	migrant throughout state from subspecies? far northern breeding range, winters along coast and farther south; occupies wide range of habitats during migration, including urban, concentrations along coast and barrier islands; low-altitude migrant, stopovers at leading landscape edges such as lake shores, coastlines, and barrier islands.	Delisted (Federal)	Texas	San Patricio County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Falcon, Arctic Peregrine	*Falco peregrinus tundrius*	migrant throughout state from subspecies? far northern breeding range, winters along coast and farther south; occupies wide range of habitats during migration, including urban, concentrations along coast and barrier islands; low-altitude migrant, stopovers at leading landscape edges such as lake shores, coastlines, and barrier islands.	Delisted (Federal)	Texas	Starr County
Falcon, Northern Aplomado	*Falco femoralis septentrionalis*	open country, especially savanna and open woodland, and sometimes in very barren areas; grassy plains and valleys with scattered mesquite, yucca, and cactus; nests in old stick nests of other bird species	E	Texas	San Patricio County
		open country, especially			

Falcon, Northern Aplomado	*Falco femoralis septentrionalis*	savanna and open woodland, and sometimes in very barren areas; grassy plains and valleys with scattered mesquite, yucca, and cactus; nests in old stick nests of other bird species	E	Texas	Brooks County
Falcon, Northern Aplomado	*Falco femoralis septentrionalis*	open country, especially savanna and open woodland, and sometimes in very barren areas; grassy plains and valleys with scattered mesquite, yucca, and cactus; nests in old stick nests of other bird species	E	Texas	Jim Wells County
Falcon, Northern Aplomado	*Falco femoralis septentrionalis*	open country, especially savanna and open woodland, and sometimes in very barren areas; grassy plains and valleys with scattered mesquite, yucca, and cactus; nests in old stick nests of other bird species	E	Texas	Kleberg County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Falcon, Northern Aplomado	*Falco femoralis septentrionalis*	open country, especially savanna and open woodland, and sometimes in very barren areas; grassy plains and valleys with scattered mesquite, yucca, and cactus; nests in old stick nests of other bird species	E	Texas	Nueces County
		both subspecies migrate across the state from more northern breeding areas in US and Canada to winter along coast and farther south; subspecies (F. p.			

Falcon, Peregrine	*Falco peregrinus*	anatum) is also a resident breeder in west Texas; the two subspecies? listing statuses differ, F.p. tundrius is no longer listed in Texas; but because the subspecies are not easily distinguishable at a distance, reference is generally made only to the species level; see subspecies for habitat.	Delisted (Federal) T (State)	Texas	Starr County
Falcon, Peregrine	*Falco peregrinus*	both subspecies migrate across the state from more northern breeding areas in US and Canada to winter along coast and farther south; subspecies (F. p. anatum) is also a resident breeder in west Texas; the two subspecies? listing statuses differ, F.p. tundrius is no longer listed in Texas; but because the subspecies are not easily distinguishable at a distance, reference is generally made only to the species level; see subspecies for habitat.	Delisted (Federal) T (State)	Texas	Brooks County
Falcon, Peregrine	*Falco peregrinus*	both subspecies migrate across the state from more northern breeding areas in US and Canada to winter along coast and farther south; subspecies (F. p. anatum) is also a resident breeder in west Texas; the two subspecies? listing statuses differ, F.p. tundrius is no longer listed in Texas; but because the subspecies are not easily distinguishable at a distance, reference is generally made only to the species level; see subspecies for habitat.	Delisted (Federal) T (State)	Texas	Jim Wells County
		both subspecies migrate across the state from more northern breeding areas in US and Canada to winter			

Falcon, Peregrine	*Falco peregrinus*	along coast and farther south; subspecies (F. p. anatum) is also a resident breeder in west Texas; the two subspecies? listing statuses differ, F.p. tundrius is no longer listed in Texas; but because the subspecies are not easily distinguishable at a distance, reference is generally made only to the species level; see subspecies for habitat.	Delisted (Federal) T (State)	Texas	Kleberg County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Falcon, Peregrine	*Falco peregrinus*	both subspecies migrate across the state from more northern breeding areas in US and Canada to winter along coast and farther south; subspecies (F. p. anatum) is also a resident breeder in west Texas; the two subspecies? listing statuses differ, F.p. tundrius is no longer listed in Texas; but because the subspecies are not easily distinguishable at a distance, reference is generally made only to the species level; see subspecies for habitat.	Delisted (Federal) T (State)	Texas	Nueces County
Falcon, Peregrine	*Falco peregrinus*	both subspecies migrate across the state from more northern breeding areas in US and Canada to winter along coast and farther south; subspecies (F. p. anatum) is also a resident breeder in west Texas; the two subspecies? listing statuses differ, F.p. tundrius	Delisted (Federal)	Texas	San Patricio

		is no longer listed in Texas; but because the subspecies are not easily distinguishable at a distance, reference is generally made only to the species level; see subspecies for habitat.	T (State)		County
Frankenia, Johnston's	*Frankenia johnstonii*	dwarf shrublands on strongly saline, highly alkaline, calcareous or gypseous, clayey to sandy soils of valley flats or rocky slopes; mapped soils at many sites are of the Catarina and/or Maverick Series, other mapped soils include Copita, Brennan, Zapata, and Montell series; most sites are underlain by Eocene sandstones and clays of the Jackson Group or the Yegua and Laredo formations; a few are underlain by El Pico clay or the Catahoula and Frio formations shrublands; flowering throughout the growing season depending upon rainfall	E, Proposed for Federal Delisting	Texas	Starr County
Frog, Sheep	*Hypopachus variolosus*	predominantly grassland and savanna; moist sites in arid areas	T (State)	Texas	Jim Wells County
Frog, Sheep	*Hypopachus variolosus*	predominantly grassland and savanna; moist sites in arid areas	T (State)	Texas	Brooks County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Frog, Sheep	*Hypopachus variolosus*	predominantly grassland and savanna; moist sites in arid areas	T (State)	Texas	Starr County
Frog,	*Hypopachus*	predominantly grassland			Kleberg

Sheep	*variolosus*	and savanna; moist sites in arid areas	T (State)	Texas	County
Frog, Sheep	*Hypopachus variolosus*	predominantly grassland and savanna; moist sites in arid areas	T (State)	Texas	Nueces County
Frog, Sheep	*Hypopachus variolosus*	predominantly grassland and savanna; moist sites in arid areas	T (State)	Texas	San Patricio County
Frog, White-lipped	*Leptodactylus fragilis*	grasslands, cultivated fields, roadside ditches, and a wide variety of other habitats; often hides under rocks or in burrows under clumps of grass; species requirements incompatible with widespread habitat alteration and pesticide use in south Texas	T (State)	Texas	Starr County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Gay-feather, Coastal	*Liatris bracteata*	Texas endemic; coastal prairie grasslands of various types, from salty prairie on low- lying somewhat saline clay loams to upland prairie on nonsaline clayey to sandy loams; flowering in fall		Texas	San Patricio County
Giant-skipper, Manfreda	*Stallingsia maculosus*	most skippers are small and stout-bodied; name derives from fast, erratic flight; at rest most skippers hold front and hind wings at different angles; skipper larvae are smooth, with the head and neck constricted; skipper larvae usually feed inside a leaf shelter and pupate in a cocoon made of leaves fastened together with silk		Texas	Nueces County
		most skippers are small and			

Giant-skipper, Manfreda	*Stallingsia maculosus*	stout-bodied; name derives from fast, erratic flight; at rest most skippers hold front and hind wings at different angles; skipper larvae are smooth, with the head and neck constricted; skipper larvae usually feed inside a leaf shelter and pupate in a cocoon made of leaves fastened together with silk		Texas	Jim Wells County
Giant-skipper, Manfreda	*Stallingsia maculosus*	most skippers are small and stout-bodied; name derives from fast, erratic flight; at rest most skippers hold front and hind wings at different angles; skipper larvae are smooth, with the head and neck constricted; skipper larvae usually feed inside a leaf shelter and pupate in a cocoon made of leaves fastened together with silk		Texas	San Patricio County
Gopher, Maritime Pocket	*Geomys personatus maritimus*	fossorial, in deep sandy soils; feeds mostly from within burrow on roots and other plant parts, especially grasses; ecologically important as prey species and in influencing soils, microtopography, habitat heterogeneity, and plant diversity		Texas	Nueces County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Gopher, Maritime Pocket	*Geomys personatus maritimus*	fossorial, in deep sandy soils; feeds mostly from within burrow on roots and other plant parts, especially grasses; ecologically important as prey species		Texas	Kleberg County

		and in influencing soils, microtopography, habitat heterogeneity, and plant diversity			
Grasshopper, Superb	*Eximacris superbum*	collected in south Texas, but repeated efforts to collect not successful; may over-winter in adult stage		Texas	Brooks County
Gumweed, Plains	*Grindelia oolepis*	coastal prairies on heavy clay (blackland) soils, often in depressional areas, sometimes persisting in areas where management (mowing) may maintain or mimic natural prairie disturbance regimes; 'crawfish lands'; on nearly level Victoria clay, Edroy clay, claypan, possibly Greta within Orelia fine sandy loam over the Beaumont Formation, and Harlingen clay; roadsides, railroad rights-of-ways, vacant lots in urban areas, cemeteries; flowering April-December		Texas	Nueces County
Gumweed, Plains	*Grindelia oolepis*	coastal prairies on heavy clay (blackland) soils, often in depressional areas, sometimes persisting in areas where management (mowing) may maintain or mimic natural prairie disturbance regimes; 'crawfish lands'; on nearly level Victoria clay, Edroy clay, claypan, possibly Greta within Orelia fine sandy loam over the Beaumont Formation, and Harlingen clay; roadsides, railroad rights-of-ways, vacant lots in urban areas, cemeteries; flowering April-December		Texas	San Patricio County
Hawk, Gray	*Asturina nitida*	locally and irregularly along U.S.-Mexico border; mature riparian woodlands and nearby semiarid mesquite and scrub grasslands; breeding range	T (State)	Texas	Starr County

		formerly extended north to southernmost Rio Grande floodplain of Texas			

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Hawk, White-tailed	*Buteo albicaudatus*	near coast on prairies, cordgrass flats, and scrub-live oak; further inland on prairies, mesquite and oak savannas, and mixed savanna-chaparral; breeding March-May	T (State)	Texas	Kleberg County
Hawk, White-tailed	*Buteo albicaudatus*	near coast on prairies, cordgrass flats, and scrub-live oak; further inland on prairies, mesquite and oak savannas, and mixed savanna-chaparral; breeding March-May	T (State)	Texas	San Patricio County
Hawk, White-tailed	*Buteo albicaudatus*	near coast on prairies, cordgrass flats, and scrub-live oak; further inland on prairies, mesquite and oak savannas, and mixed savanna-chaparral; breeding March-May	T (State)	Texas	Brooks County
Hawk, White-tailed	*Buteo albicaudatus*	near coast on prairies, cordgrass flats, and scrub-live oak; further inland on prairies, mesquite and oak savannas, and mixed savanna-chaparral; breeding March-May	T (State)	Texas	Jim Wells County
Hawk, White-tailed	*Buteo albicaudatus*	near coast on prairies, cordgrass flats, and scrub-live oak; further inland on prairies, mesquite and oak savannas, and mixed savanna-chaparral; breeding March-May	T (State)	Texas	Nueces County

T - Threatened

E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Hawk, White-tailed	*Buteo albicaudatus*	near coast on prairies, cordgrass flats, and scrub-live oak; further inland on prairies, mesquite and oak savannas, and mixed savanna-chaparral; breeding March-May	T (State)	Texas	Starr County
Hawk, Zone-tailed	*Buteo albonotatus*	arid open country, including open deciduous or pine-oak woodland, mesa or mountain county, often near watercourses, and wooded canyons and tree-lined rivers along middle-slopes of desert mountains; nests in various habitats and sites, ranging from small trees in lower desert, giant cottonwoods in riparian areas, to mature conifers in high mountain regions	T (State)	Texas	Starr County
Hornshell, Texas	*Popenaias popeii*	both ends of narrow shallow runs over bedrock, in areas where small-grained materials collect in crevices, along river banks, and at the base of boulders; not known from impoundments; Rio Grande Basin and several rivers in Mexico	T (State), Candidate for Federal Listing	Texas	Starr County
Ibis, White-faced	*Plegadis chihi*	prefers freshwater marshes, sloughs, and irrigated rice fields, but will attend brackish and saltwater habitats; nests in marshes, in low trees, on the ground in bulrushes or reeds, or on floating mats	T (State)	Texas	Kleberg County
		prefers freshwater marshes, sloughs, and irrigated rice fields, but will attend			

Ibis, White-faced	*Plegadis chihi*	brackish and saltwater habitats; nests in marshes, in low trees, on the ground in bulrushes or reeds, or on floating mats	T (State)	Texas	San Patricio County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Ibis, White-faced	*Plegadis chihi*	prefers freshwater marshes, sloughs, and irrigated rice fields, but will attend brackish and saltwater habitats; nests in marshes, in low trees, on the ground in bulrushes or reeds, or on floating mats	T (State)	Texas	Jim Wells County
Ibis, White-faced	*Plegadis chihi*	prefers freshwater marshes, sloughs, and irrigated rice fields, but will attend brackish and saltwater habitats; nests in marshes, in low trees, on the ground in bulrushes or reeds, or on floating mats	T (State)	Texas	Nueces County
Jaguar	*Panthera onca*	extirpated; dense chaparral; no reliable TX sightings since 1952	E	Texas	Kleberg County
Jaguar	*Panthera onca*	extirpated; dense chaparral; no reliable TX sightings since 1952	E	Texas	Brooks County
Jaguarundi	*Herpailurus yaguarondi*	thick brush lands, near water favored; 60 to 75 day gestation, young born sometimes twice per year in March and August, elsewhere the beginning of the rainy season and end of the dry season	E	Texas	Brooks County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Jaguarundi	*Herpailurus yaguarondi*	thick brushlands, near water favored; 60 to 75 day gestation, young born sometimes twice per year in March and August, elsewhere the beginning of the rainy season and end of the dry season	E	Texas	San Patricio County
Jaguarundi	*Herpailurus yaguarondi*	thick brushlands, near water favored; 60 to 75 day gestation, young born sometimes twice per year in March and August, elsewhere the beginning of the rainy season and end of the dry season	E	Texas	Starr County
Jaguarundi	*Herpailurus yaguarondi*	thick brushlands, near water favored; 60 to 75 day gestation, young born sometimes twice per year in March and August, elsewhere the beginning of the rainy season and end of the dry season	E	Texas	Kleberg County
Jay, Brown	*Cyanocorax morio*	woodlands and mesquite along the Rio Grande; dense brushy woods, open woods, forest edge, second-growth woodland, clearings, plantation; nests in tree or shrub often far out on limb, usually 7-21 meters above ground		Texas	Starr County
Kite, Hook-billed	*Chondrohierax uncinatus*	dense tropical and subtropical forests, but does occur in open woodlands; uncommon to rare in most of range; accidental in south Texas		Texas	Starr County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Lila de los llanos	*Echeandia chandleri*	most commonly encountered among shrubs or in grassy openings in subtropical thorn shrublands on somewhat saline clays of lomas along Gulf Coast near mouth of Rio Grande; also observed in a few upland coastal prairie remnants on clay soils over the Beaumont Formation at inland sites well to the north and along railroad right-of-ways and cemeteries; flowering (May-) September-December, fruiting October-December		Texas	Kleberg County
Lila de los llanos	*Echeandia chandleri*	most commonly encountered among shrubs or in grassy openings in subtropical thorn shrublands on somewhat saline clays of lomas along Gulf Coast near mouth of Rio Grande; also observed in a few upland coastal prairie remnants on clay soils over the Beaumont Formation at inland sites well to the north and along railroad right-of-ways and cemeteries; flowering (May-) September-December, fruiting October-December		Texas	Nueces County
Lizard, Keeled Earless	*Holbrookia propinqua*	coastal dunes, barrier islands, and other sandy areas; eats insects and likely other small invertebrates; eggs laid underground March-September (most May-August)		Texas	Kleberg County
Lizard,	*Holbrookia*	coastal dunes, barrier islands, and other sandy areas; eats insects and likely other small			Nueces

Keeled Earless	*propinqua*	invertebrates; eggs laid underground March-September (most May-August)		Texas	County
Lizard, Keeled Earless	*Holbrookia propinqua*	coastal dunes, barrier islands, and other sandy areas; eats insects and likely other small invertebrates; eggs laid underground March-September (most May-August)		Texas	Brooks County

T - Threatened
E - Endangered

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6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Lizard, Reticulate collared	*Crotaphytus reticulatus*	requires open brush-grasslands; thorn-scrub vegetation, usually on well-drained rolling terrain of shallow gravel, caliche, or sandy soils; often on scattered flat rocks below escarpments or isolated rock outcrops among scattered clumps of prickly pear and mesquite	T (State)	Texas	Starr County
Lizard, Reticulate collared	*Crotaphytus reticulatus*	requires open brush-grasslands; thorn-scrub vegetation, usually on well-drained rolling terrain of shallow gravel, caliche, or sandy soils; often on scattered flat rocks below escarpments or isolated rock outcrops among scattered clumps of prickly pear and mesquite	T (State)	Texas	Jim Wells County
Lizard, Spot-tailed Earless	*Holbrookia lacerata*	central and southern Texas and adjacent Mexico; moderately open prairie-brushland; fairly flat areas free of vegetation or other obstructions, including disturbed areas; eats small		Texas	Brooks County

		invertebrates; eggs laid underground			
Lizard, Spot-tailed Earless	*Holbrookia lacerata*	central and southern Texas and adjacent Mexico; moderately open prairie-brushland; fairly flat areas free of vegetation or other obstructions, including disturbed areas; eats small invertebrates; eggs laid underground		Texas	Jim Wells County
Lizard, Spot-tailed Earless	*Holbrookia lacerata*	central and southern Texas and adjacent Mexico; moderately open prairie-brushland; fairly flat areas free of vegetation or other obstructions, including disturbed areas; eats small invertebrates; eggs laid underground		Texas	Kleberg County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Lizard, Spot-tailed Earless	*Holbrookia lacerata*	central and southern Texas and adjacent Mexico; moderately open prairie-brushland; fairly flat areas free of vegetation or other obstructions, including disturbed areas; eats small invertebrates; eggs laid underground		Texas	Nueces County
Lizard, Spot-tailed Earless	*Holbrookia lacerata*	central and southern Texas and adjacent Mexico; moderately open prairie-brushland; fairly flat areas free of vegetation or other obstructions, including disturbed areas; eats small invertebrates; eggs laid underground		Texas	San Patricio County
		central and southern Texas and adjacent Mexico; moderately open prairie-			

Lizard, Spot-tailed Earless	*Holbrookia lacerata*	brushland; fairly flat areas free of vegetation or other obstructions, including disturbed areas; eats small invertebrates; eggs laid underground		Texas	Starr County
Lizard, Texas Horned	*Phrynosoma cornutum*	open, arid and semi-arid regions with sparse vegetation, including grass, cactus, scattered brush or scrubby trees; soil may vary in texture from sandy to rocky; burrows into soil, enters rodent burrows, or hides under rock when inactive; breeds March-September	T (State)	Texas	Brooks County
Lizard, Texas Horned	*Phrynosoma cornutum*	open, arid and semi-arid regions with sparse vegetation, including grass, cactus, scattered brush or scrubby trees; soil may vary in texture from sandy to rocky; burrows into soil, enters rodent burrows, or hides under rock when inactive; breeds March-September	T (State)	Texas	Jim Wells County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Lizard, Texas Horned	*Phrynosoma cornutum*	open, arid and semi-arid regions with sparse vegetation, including grass, cactus, scattered brush or scrubby trees; soil may vary in texture from sandy to rocky; burrows into soil, enters rodent burrows, or hides under rock when inactive; breeds March-September	T (State)	Texas	Kleberg County

Lizard, Texas Horned	*Phrynosoma cornutum*	open, arid and semi-arid regions with sparse vegetation, including grass, cactus, scattered brush or scrubby trees; soil may vary in texture from sandy to rocky; burrows into soil, enters rodent burrows, or hides under rock when inactive; breeds March-September	T (State)	Texas	Nueces County
Lizard, Texas Horned	*Phrynosoma cornutum*	open, arid and semi-arid regions with sparse vegetation, including grass, cactus, scattered brush or scrubby trees; soil may vary in texture from sandy to rocky; burrows into soil, enters rodent burrows, or hides under rock when inactive; breeds March-September	T (State)	Texas	San Patricio County
Lizard, Texas Horned	*Phrynosoma cornutum*	open, arid and semi-arid regions with sparse vegetation, including grass, cactus, scattered brush or scrubby trees; soil may vary in texture from sandy to rocky; burrows into soil, enters rodent burrows, or hides under rock when inactive; breeds March-September	T (State)	Texas	Starr County
Machaeranthera, Welder	*Psilactis heterocarpa*	Texas endemic; grasslands, varying from midgrass coastal prairies, and open mesquite-huisache woodlands on nearly level, gray to dark gray clayey to silty soils; known locations mapped on Victoria clay, Edroy clay, Dacosta sandy clay loam over Beaumont		Texas	San Patricio County

		and Lissie formations; flowering September-November			

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Machaeranthera, Welder	*Psilactis heterocarpa*	Texas endemic; grasslands, varying from midgrass coastal prairies, and open mesquite-huisache woodlands on nearly level, gray to dark gray clayey to silty soils; known locations mapped on Victoria clay, Edroy clay, Dacosta sandy clay loam over Beaumont and Lissie formations; flowering September-November		Texas	Kleberg County
Machaeranthera, Welder	*Psilactis heterocarpa*	Texas endemic; grasslands, varying from midgrass coastal prairies, and open mesquite-huisache woodlands on nearly level, gray to dark gray clayey to silty soils; known locations mapped on Victoria clay, Edroy clay, Dacosta sandy clay loam over Beaumont and Lissie formations; flowering September-November		Texas	Nueces County
Manatee, West Indian	*Trichechus manatus*	Gulf and bay system; opportunistic, aquatic herbivore	E	Texas	San Patricio County
Manatee, West Indian	*Trichechus manatus*	Gulf and bay system; opportunistic, aquatic herbivore	E	Texas	Kleberg County

Manatee, West Indian	*Trichechus manatus*	Gulf and bay system; opportunistic, aquatic herbivore	E	Texas	Nueces County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Manioc, Walker's	*Manihot walkerae*	periphery of native brush in sandy loam; also on caliche cuestas?; flowering April-September (following rains?)	E	Texas	Starr County
Metalmark, Rawson's	*Calephelis rawsoni*	moist areas in shaded limestone outcrops in central Texas, desert scrub or oak woodland in foothills, or along rivers elsewhere; larval hosts are Eupatorium havanense, E. greggii.		Texas	Kleberg County
Milkvine, Falfurrias	*Matelea radiata*	Texas endemic; uncertain, only two known specimens; one from clay soil on dry gravel hills at altitude of approximately 45 m (150 ft); other from Falfurrias, no habitat description; probably flowering May-June		Texas	Brooks County
Milkweed, Prostrate	*Asclepias prostrata*	grasslands or openings in shrublands on loamy fine sands and fine sandy loams of the Copita, Hebbronville, and possibly other soil series occurring over the Laredo, Yegua, and other Eocene formations; also in Loreto caliche sand plain in Tamaulipas; flowering April-October, but may be sporadic and dependent on rainfall		Texas	Starr County
		extirpated; historically Rio Grande and Pecos River systems and canals;			

Minnow, Rio Grande Silvery	*Hybognathus amarus*	reintroduced in Big Bend area; pools and backwaters of medium to large streams with low or moderate gradient in mud, sand, or gravel bottom; ingests mud and bottom ooze for algae and other organic matter; probably spawns on silt substrates of quiet coves	E	Texas	Starr County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Mucket, Salina	*Potamilus metnecktayi*	lotic waters; submerged soft sediment (clay and silt) along river bank; other habitat requirements are poorly understood; Rio Grande Basin	T (State)	Texas	Starr County
Mud-plantain, Mexican	*Heteranthera mexicana*	wet clayey soils of resacas and ephemeral wetlands in South Texas and along margins of playas in the Panhandle; flowering June-December, only after sufficient rainfall		Texas	Nueces County
Mussel, False Spike	*Quadrula mitchelli*	possibly extirpated in Texas; probably medium to large rivers; substrates varying from mud through mixtures of sand, gravel and cobble; one study indicated water lilies were present at the site; Rio Grande, Brazos, Colorado, and Guadalupe (historic) river basins	T (State)	Texas	Starr County
Newt, Black-spotted	*Notophthalmus meridionalis*	can be found in wet or sometimes wet areas, such as arroyos, canals, ditches, or even shallow depressions; aestivates in the ground during dry periods; Gulf Coastal Plain	T (State)	Texas	Starr County

		south of the San Antonio River			
Newt, Black-spotted	*Notophthalmus meridionalis*	can be found in wet or sometimes wet areas, such as arroyos, canals, ditches, or even shallow depressions; aestivates in the ground during dry periods; Gulf Coastal Plain south of the San Antonio River	T (State)	Texas	Brooks County

T - Threatened
E - Endangered

Southern Zone 6 - 44

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Newt, Black-spotted	*Notophthalmus meridionalis*	can be found in wet or sometimes wet areas, such as arroyos, canals, ditches, or even shallow depressions; aestivates in the ground during dry periods; Gulf Coastal Plain south of the San Antonio River	T (State)	Texas	Jim Wells County
Newt, Black-spotted	*Notophthalmus meridionalis*	can be found in wet or sometimes wet areas, such as arroyos, canals, ditches, or even shallow depressions; aestivates in the ground during dry periods; Gulf Coastal Plain south of the San Antonio River	T (State)	Texas	Kleberg County
Newt, Black-spotted	*Notophthalmus meridionalis*	can be found in wet or sometimes wet areas, such as arroyos, canals, ditches, or even shallow depressions; aestivates in the ground during dry periods; Gulf Coastal Plain south of the San Antonio River	T (State)	Texas	Nueces County
		can be found in wet or sometimes wet areas, such as arroyos, canals, ditches,			

Newt, Black-spotted	*Notophthalmus meridionalis*	or even shallow depressions; aestivates in the ground during dry periods; Gulf Coastal Plain south of the San Antonio River	T (State)	Texas	San Patricio County
Ocelot	*Leopardus pardalis*	dense chaparral thickets; mesquite-thorn scrub and live oak mottes; avoids open areas; breeds and raises young June-November	E	Texas	Brooks County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Ocelot	*Leopardus pardalis*	dense chaparral thickets; mesquite-thorn scrub and live oak mottes; avoids open areas; breeds and raises young June-November	E	Texas	Jim Wells County
Ocelot	*Leopardus pardalis*	dense chaparral thickets; mesquite-thorn scrub and live oak mottes; avoids open areas; breeds and raises young June-November	E	Texas	Kleberg County
Ocelot	*Leopardus pardalis*	dense chaparral thickets; mesquite-thorn scrub and live oak mottes; avoids open areas; breeds and raises young June-November	E	Texas	Nueces County
Ocelot	*Leopardus pardalis*	dense chaparral thickets; mesquite-thorn scrub and live oak mottes; avoids open areas; breeds and raises young June-November	E	Texas	San Patricio County
Ocelot	*Leopardus pardalis*	dense chaparral thickets; mesquite-thorn scrub and live oak mottes; avoids open areas;	E	Texas	Starr County

		breeds and raises young June-November			

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Onion, Elmendorf's	*Allium elmendorfii*	Texas endemic; grassland openings in oak woodlands on deep, loose, well-drained sands; in Coastal Bend, on Pleistocene barrier island ridges and Holocene Sand Sheet that support live oak woodlands; to the north it occurs in post oak-black hickory-live oak woodlands over Queen City and similar Eocene formations; one anomalous specimen found on Llano Uplift in wet pockets of granitic loam; flowering March-April, May		Texas	Nueces County
Onion, Elmendorf's	*Allium elmendorfii*	Texas endemic; grassland openings in oak woodlands on deep, loose, well-drained sands; in Coastal Bend, on Pleistocene barrier island ridges and Holocene Sand Sheet that support live oak woodlands; to the north it occurs in post oak-black hickory-live oak woodlands over Queen City and similar Eocene formations; one anomalous specimen found on Llano Uplift in wet pockets of granitic loam; flowering March-April, May		Texas	San Patricio County
Orb,	*Quadrula*	sand and gravel in some locations and mud at others; found in lentic and			San

Golden	*aurea*	lotic; Guadalupe, San Antonio, Lower San Marcos, and Nueces River basins	T (State)	Texas	Patricio County
Oriole, Audubon's	*Icterus graduacauda audubonii*	scrub, mesquite; nests in dense trees, or thickets, usually along water courses		Texas	Brooks County
Oriole, Audubon's	*Icterus graduacauda audubonii*	scrub, mesquite; nests in dense trees, or thickets, usually along water courses		Texas	Jim Wells County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Oriole, Audubon's	*Icterus graduacauda audubonii*	scrub, mesquite; nests in dense trees, or thickets, usually along water courses		Texas	Starr County
Oriole, Audubon's	*Icterus graduacauda audubonii*	scrub, mesquite; nests in dense trees, or thickets, usually along water courses		Texas	Kleberg County
Oriole, Mexican Hooded	*Icterus cucullatus cucullatus*	scrub, mesquite; nests in dense trees, or thickets, usually along water courses		Texas	Starr County
Oriole, Sennett's Hooded	*Icterus cucullatus sennetti*	often builds nests in and of Spanish moss (Tillandsia unioides); feeds on invertebrates, fruit, and nectar; breeding March to August		Texas	Brooks County
Oriole, Sennett's Hooded	*Icterus cucullatus sennetti*	often builds nests in and of Spanish moss (Tillandsia unioides); feeds on invertebrates, fruit, and nectar; breeding March to August		Texas	San Patricio County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Oriole, Sennett's Hooded	*Icterus cucullatus sennetti*	often builds nests in and of Spanish moss (Tillandsia unioides); feeds on invertebrates, fruit, and nectar; breeding March to August		Texas	Kleberg County
Oriole, Sennett's Hooded	*Icterus cucullatus sennetti*	often builds nests in and of Spanish moss (Tillandsia unioides); feeds on invertebrates, fruit, and nectar; breeding March to August		Texas	Nueces County
Oriole, Sennett's Hooded	*Icterus cucullatus sennetti*	often builds nests in and of Spanish moss (Tillandsia unioides); feeds on invertebrates, fruit, and nectar; breeding March to August		Texas	Starr County
Owl, Western Burrowing	*Athene cunicularia hypugaea*	open grasslands, especially prairie, plains, and savanna, sometimes in open areas such as vacant lots near human habitation or airports; nests and roosts in abandoned burrows		Texas	Starr County
Owl, Western Burrowing	*Athene cunicularia hypugaea*	open grasslands, especially prairie, plains, and savanna, sometimes in open areas such as vacant lots near human habitation or airports; nests and roosts in abandoned burrows		Texas	Brooks County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Owl, Western	*Athene cunicularia*	open grasslands, especially prairie, plains, and savanna, sometimes in open areas such as vacant lots near		Texas	Jim Wells

Burrowing	*hypugaea*	human habitation or airports; nests and roosts in abandoned burrows			County
Owl, Western Burrowing	*Athene cunicularia hypugaea*	open grasslands, especially prairie, plains, and savanna, sometimes in open areas such as vacant lots near human habitation or airports; nests and roosts in abandoned burrows		Texas	Kleberg County
Owl, Western Burrowing	*Athene cunicularia hypugaea*	open grasslands, especially prairie, plains, and savanna, sometimes in open areas such as vacant lots near human habitation or airports; nests and roosts in abandoned burrows		Texas	Nueces County
Owl, Western Burrowing	*Athene cunicularia hypugaea*	open grasslands, especially prairie, plains, and savanna, sometimes in open areas such as vacant lots near human habitation or airports; nests and roosts in abandoned burrows		Texas	San Patricio County
Parula, Tropical	*Parula pitiayumi*	dense or open woods, undergrowth, brush, and trees along edges of rivers and resacas; breeding April to July	T (State)	Texas	Starr County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Pelican, Brown	*Pelecanus occidentalis*	largely coastal and near shore areas, where it roosts and nests on islands and spoil banks	Delisted (Federal) E (State)	Texas	Nueces County
Pelican, Brown	*Pelecanus occidentalis*	largely coastal and near shore areas, where it roosts and nests on islands and spoil banks	Delisted (Federal) E (State)	Texas	Kleberg County
Pelican,	*Pelecanus*	largely coastal and near shore areas, where it roosts	Delisted (Federal)	Texas	San Patricio

Brown	*occidentalis*	and nests on islands and spoil banks	E (State)		County
Pipefish, Opossum	*Microphis brachyurus*	brooding adults found in fresh or low salinity waters and young move or are carried into more saline waters after birth; southern coastal areas	T (State)	Texas	San Patricio County
Pipefish, Opossum	*Microphis brachyurus*	brooding adults found in fresh or low salinity waters and young move or are carried into more saline waters after birth; southern coastal areas	T (State)	Texas	Kleberg County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Pipefish, Opossum	*Microphis brachyurus*	brooding adults found in fresh or low salinity waters and young move or are carried into more saline waters after birth; southern coastal areas	T (State)	Texas	Nueces County
Pipefish, Texas	*Syngnathus affinis*	Corpus Christi Bay; seagrass beds		Texas	Nueces County
Pipefish, Texas	*Syngnathus affinis*	Corpus Christi Bay; seagrass beds		Texas	San Patricio County
Pipit, Sprague's	*Anthus spragueii*	only in Texas during migration and winter, mid September to early April; short to medium distance, diurnal migrant; strongly tied to native upland prairie, can be locally common in coastal grasslands, uncommon to rare further west; sensitive to patch size and avoids edges.	Candidate for Federal Listing	Texas	Jim Wells County
		only in Texas during migration and winter, mid September to early April;			

Pipit, Sprague's	*Anthus spragueii*	short to medium distance, diurnal migrant; strongly tied to native upland prairie, can be locally common in coastal grasslands, uncommon to rare further west; sensitive to patch size and avoids edges.	Candidate for Federal Listing	Texas	Nueces County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Pipit, Sprague's	*Anthus spragueii*	only in Texas during migration and winter, mid September to early April; short to medium distance, diurnal migrant; strongly tied to native upland prairie, can be locally common in coastal grasslands, uncommon to rare further west; sensitive to patch size and avoids edges.	Candidate for Federal Listing	Texas	Starr County
Pipit, Sprague's	*Anthus spragueii*	only in Texas during migration and winter, mid September to early April; short to medium distance, diurnal migrant; strongly tied to native upland prairie, can be locally common in coastal grasslands, uncommon to rare further west; sensitive to patch size and avoids edges.	Candidate for Federal Listing	Texas	Kleberg County
Pipit, Sprague's	*Anthus spragueii*	only in Texas during migration and winter, mid September to early April; short to medium distance, diurnal migrant; strongly tied to native upland prairie, can be locally common in coastal	Candidate for Federal Listing	Texas	San Patricio County

		grasslands, uncommon to rare further west; sensitive to patch size and avoids edges.			
Pipit, Sprague's	*Anthus spragueii*	only in Texas during migration and winter, mid September to early April; short to medium distance, diurnal migrant; strongly tied to native upland prairie, can be locally common in coastal grasslands, uncommon to rare further west; sensitive to patch size and avoids edges.	Candidate for Federal Listing	Texas	Brooks County
Plover, Mountain	*Charadrius montanus*	breeding: nests on high plains or shortgrass prairie, on ground in shallow depression; nonbreeding: shortgrass plains and bare, dirt (plowed) fields; primarily insectivorous	Proposed Threatened (Federal)	Texas	San Patricio County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Plover, Mountain	*Charadrius montanus*	breeding: nests on high plains or shortgrass prairie, on ground in shallow depression; nonbreeding: shortgrass plains and bare, dirt (plowed) fields; primarily insectivorous	Proposed Threatened (Federal)	Texas	Jim Wells County
Plover, Mountain	*Charadrius montanus*	breeding: nests on high plains or shortgrass prairie, on ground in shallow depression; nonbreeding: shortgrass plains and bare, dirt (plowed) fields; primarily insectivorous	Proposed Threatened (Federal)	Texas	Kleberg County
		breeding: nests on high			

Plover, Mountain	*Charadrius montanus*	plains or shortgrass prairie, on ground in shallow depression; nonbreeding: shortgrass plains and bare, dirt (plowed) fields; primarily insectivorous	Proposed Threatened (Federal)	Texas	Nueces County
Plover, Mountain	*Charadrius montanus*	breeding: nests on high plains or shortgrass prairie, on ground in shallow depression; nonbreeding: shortgrass plains and bare, dirt (plowed) fields; primarily insectivorous	Proposed Threatened (Federal)	Texas	Brooks County
Plover, Piping	*Charadrius melodus*	wintering migrant along the Texas Gulf Coast; beaches and bayside mud or salt flats	T	Texas	Kleberg County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Plover, Piping	*Charadrius melodus*	wintering migrant along the Texas Gulf Coast; beaches and bayside mud or salt flats	T	Texas	Nueces County
Plover, Piping	*Charadrius melodus*	wintering migrant along the Texas Gulf Coast; beaches and bayside mud or salt flats	T	Texas	San Patricio County
Plover, Snowy	*Charadrius alexandrinus*	formerly an uncommon breeder in the Panhandle; potential migrant; winter along coast		Texas	Kleberg County
Plover, Snowy	*Charadrius alexandrinus*	formerly an uncommon breeder in the Panhandle; potential migrant; winter along coast		Texas	Nueces County
Plover, Snowy	*Charadrius*	formerly an uncommon breeder in the Panhandle; potential		Texas	San Patricio

	alexandrinus	migrant; winter along coast			County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Plover, Southeastern Snowy	*Charadrius alexandrinus tenuirostris*	wintering migrant along the Texas Gulf Coast beaches and bayside mud or salt flats		Texas	Kleberg County
Plover, Southeastern Snowy	*Charadrius alexandrinus tenuirostris*	wintering migrant along the Texas Gulf Coast beaches and bayside mud or salt flats		Texas	Nueces County
Plover, Southeastern Snowy	*Charadrius alexandrinus tenuirostris*	wintering migrant along the Texas Gulf Coast beaches and bayside mud or salt flats		Texas	San Patricio County
Plover, Western Snowy	*Charadrius alexandrinus nivosus*	uncommon breeder in the Panhandle; potential migrant; winter along coast		Texas	Kleberg County
Plover, Western Snowy	*Charadrius alexandrinus nivosus*	uncommon breeder in the Panhandle; potential migrant; winter along coast		Texas	San Patricio County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Pygmy-Owl, Cactus Ferruginous	*Glaucidium brasilianum cactorum*	riparian trees, brush, palm, and mesquite thickets; during day also roosts in small caves and recesses on slopes of low hills; breeding April	T (State)	Texas	Starr County

		to June			
Pygmy-Owl, Cactus Ferruginous	*Glaucidium brasilianum cactorum*	riparian trees, brush, palm, and mesquite thickets; during day also roosts in small caves and recesses on slopes of low hills; breeding April to June	T (State)	Texas	Brooks County
Rat, Coues' Rice	*Oryzomys couesi*	cattail-bulrush marsh with shallower zone of aquatic grasses near the shoreline; shade trees around the shoreline are important features; prefers salt and freshwater, as well as grassy areas near water; breeds April-August	T (State)	Texas	Starr County
Rattlesnake, Timber/Canebrake	*Crotalus horridus*	swamps, floodplains, upland pine and deciduous woodlands, riparian zones, abandoned farmland; limestone bluffs, sandy soil or black clay; prefers dense ground cover, i.e. grapevines or palmetto	T (State)	Texas	San Patricio County
Rocket, Shinners'	*Thelypodiopsis shinnersii*	mostly along margins of Tamaulipan thornscrub on clay soils of the Rio Grande Delta, including lomas near the mouth of the river; Tamaulipas, Mexico specimens are from mountains, with no further detail; flowering mostly March-April, with one collection in December		Texas	Starr County

T - Threatened

E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Rushpea, Slender	*Hoffmannseggia tenella*	Texas endemic; coastal prairie grasslands on level uplands and on gentle slopes along drainages, usually in areas of shorter or sparse vegetation; soils often described as Blackland clay, but at some of these sites soils are coarser textured and lighter in color than the typical heavy clay of the coastal prairies; flowering April-November	E	Texas	Kleberg County
Rushpea, Slender	*Hoffmannseggia tenella*	Texas endemic; coastal prairie grasslands on level uplands and on gentle slopes along drainages, usually in areas of shorter or sparse vegetation; soils often described as Blackland clay, but at some of these sites soils are coarser textured and lighter in color than the typical heavy clay of the coastal prairies; flowering April-November	E	Texas	Nueces County
Rushpea, South Texas	*Caesalpinia phyllanthoides*	Tamaulipan thorn shrublands or grasslands on very shallow sandy to clayey soils over calcareous sandstone and caliche; flowering in spring, sometimes later in growing season, perhaps in response to rainfall		Texas	Jim Wells County
		Texas endemic; usually occurs in sparsely vegetated saline areas, including flats and draws; in light sandy or clayey loam soils with other			

Saltbush, Kleberg	*Atriplex klebergorum*	halophytes; occasionally observed on scraped oil pad sites; observed flowering in late August-early September, but may vary with rainfall, fruits are usually present in fall; because of its annual nature, populations fluctuate widely from year to year		Texas	Starr County
Saltbush, Kleberg	*Atriplex klebergorum*	Texas endemic; usually occurs in sparsely vegetated saline areas, including flats and draws; in light sandy or clayey loam soils with other halophytes; occasionally observed on scraped oil pad sites; observed flowering in late August-early September, but may vary with rainfall, fruits are usually present in fall; because of its annual nature, populations fluctuate widely from year to year		Texas	Kleberg County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Sawfish, Smalltooth	*Pristis pectinata*	different life history stages have different patterns of habitat use; young found very close to shore in muddy and sandy bottoms, seldom descending to depths greater than 32 ft (10 m); in sheltered bays, on shallow banks, and in estuaries or river mouths; adult sawfish are encountered in various habitat types (mangrove, reef, seagrass, and coral), in	E	Texas	Nueces County

		varying salinity regimes and temperatures, and at various water depths, feed on a variety of fish species and crustaceans			
Sawfish, Smalltooth	*Pristis pectinata*	different life history stages have different patterns of habitat use; young found very close to shore in muddy and sandy bottoms, seldom descending to depths greater than 32 ft (10 m); in sheltered bays, on shallow banks, and in estuaries or river mouths; adult sawfish are encountered in various habitat types (mangrove, reef, seagrass, and coral), in varying salinity regimes and temperatures, and at various water depths, feed on a variety of fish species and crustaceans	E	Texas	San Patricio County
Scarab, Tibial	*Anomala tibialis*	sandy soils		Texas	Kleberg County
Shiner, Rio Grande	*Notropis jemezanus*	Rio Grande and upper Pecos River basins; large, open, weedless rivers or large creeks with bottom of rubble, gravel and sand, often overlain with silt		Texas	Starr County
Siren (large form), South Texas	*Siren sp 1*	wet or sometimes wet areas, such as arroyos, canals, ditches, or even shallow depressions; aestivates in the ground during dry periods, but does require some moisture to remain; southern Texas south of Balcones Escarpment; breeds February-June	T (State)	Texas	Jim Wells County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Siren (large form), South Texas	*Siren sp 1*	wet or sometimes wet areas, such as arroyos, canals, ditches, or even shallow depressions; aestivates in the ground during dry periods, but does require some moisture to remain; southern Texas south of Balcones Escarpment; breeds February-June	T (State)	Texas	San Patricio County
Siren (large form), South Texas	*Siren sp 1*	wet or sometimes wet areas, such as arroyos, canals, ditches, or even shallow depressions; aestivates in the ground during dry periods, but does require some moisture to remain; southern Texas south of Balcones Escarpment; breeds February-June	T (State)	Texas	Kleberg County
Siren (large form), South Texas	*Siren sp 1*	wet or sometimes wet areas, such as arroyos, canals, ditches, or even shallow depressions; aestivates in the ground during dry periods, but does require some moisture to remain; southern Texas south of Balcones Escarpment; breeds February-June	T (State)	Texas	Starr County
Skunk, Plains Spotted	*Spilogale putorius interrupta*	catholic; open fields, prairies, croplands, fence rows, farmyards, forest edges, and woodlands; prefers wooded, brushy areas and tallgrass prairie		Texas	Jim Wells County
Skunk, Plains Spotted	*Spilogale putorius interrupta*	catholic; open fields, prairies, croplands, fence rows, farmyards, forest edges, and woodlands; prefers wooded, brushy areas and tallgrass prairie		Texas	Nueces County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Skunk, Plains Spotted	*Spilogale putorius interrupta*	catholic; open fields, prairies, croplands, fence rows, farmyards, forest edges, and woodlands; prefers wooded, brushy areas and tallgrass prairie		Texas	Brooks County
Skunk, Plains Spotted	*Spilogale putorius interrupta*	catholic; open fields, prairies, croplands, fence rows, farmyards, forest edges, and woodlands; prefers wooded, brushy areas and tallgrass prairie		Texas	Kleberg County
Skunk, Plains Spotted	*Spilogale putorius interrupta*	catholic; open fields, prairies, croplands, fence rows, farmyards, forest edges, and woodlands; prefers wooded, brushy areas and tallgrass prairie		Texas	San Patricio County
Skunk, Plains Spotted	*Spilogale putorius interrupta*	catholic; open fields, prairies, croplands, fence rows, farmyards, forest edges, and woodlands; prefers wooded, brushy areas and tallgrass prairie		Texas	Starr County
Smalltooth sawfish	*Pristis pectinata*	different life history stages have different patterns of habitat use; young found very close to shore in muddy and sandy bottoms, seldom descending to depths greater than 32 ft (10 m); in sheltered bays, on shallow banks, and in estuaries or river mouths; adult sawfish are encountered in various habitat types (mangrove, reef, seagrass, and coral), in varying salinity regimes and temperatures, and at various water depths, feed on a variety of fish species and crustaceans	E	Texas	Kleberg

T - Threatened

E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Snake, Gulf Saltmarsh	*Nerodia clarkii*	saline flats, coastal bays, and brackish river mouths		Texas	Nueces County
Snake, Gulf Saltmarsh	*Nerodia clarkii*	saline flats, coastal bays, and brackish river mouths		Texas	San Patricio County
Snake, Mexican Blackhead	*Tantilla atriceps*	southern Texas and northeastern Mexico; shrubland savanna; nocturnal; lays clutch of probably 1-3 eggs		Texas	Kleberg County
Snake, Mexican Blackhead	*Tantilla atriceps*	southern Texas and northeastern Mexico; shrubland savanna; nocturnal; lays clutch of probably 1-3 eggs		Texas	Jim Wells County
Snake, Northern Cat-eyed	*Leptodeira septentrionalis septentrionalis*	Gulf Coastal Plain south of the Nueces River; thorn brush woodland; dense thickets bordering ponds and streams; semi-arboreal; nocturnal	T (State)	Texas	Starr County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Snake, Northern Cat-eyed	*Leptodeira septentrionalis septentrionalis*	Gulf Coastal Plain south of the Nueces River; thorn brush woodland; dense thickets bordering ponds and streams; semi-arboreal; nocturnal	T (State)	Texas	Kleberg County
Snake, Northern Cat-eyed	*Leptodeira septentrionalis septentrionalis*	Gulf Coastal Plain south of the Nueces River; thorn brush woodland; dense thickets bordering ponds	T (State)	Texas	Brooks County

		and streams; semi-arboreal; nocturnal			
Snake, Texas Indigo	*Drymarchon melanurus erebennus*	Texas south of the Guadalupe River and Balcones Escarpment; thornbush-chaparral woodlands of south Texas, in particular dense riparian corridors; can do well in suburban and irrigated croplands if not molested or indirectly poisoned; requires moist microhabitats, such as rodent burrows, for shelter	T (State)	Texas	Jim Wells County
Snake, Texas Indigo	*Drymarchon melanurus erebennus*	Texas south of the Guadalupe River and Balcones Escarpment; thornbush-chaparral woodlands of south Texas, in particular dense riparian corridors; can do well in suburban and irrigated croplands if not molested or indirectly poisoned; requires moist microhabitats, such as rodent burrows, for shelter	T (State)	Texas	Nueces County
Snake, Texas Indigo	*Drymarchon melanurus erebennus*	Texas south of the Guadalupe River and Balcones Escarpment; thornbush-chaparral woodlands of south Texas, in particular dense riparian corridors; can do well in suburban and irrigated croplands if not molested or indirectly poisoned; requires moist microhabitats, such as rodent burrows, for shelter	T (State)	Texas	Brooks County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY

Snake, Texas Indigo	*Drymarchon melanurus erebennus*	Texas south of the Guadalupe River and Balcones Escarpment; thornbush-chaparral woodlands of south Texas, in particular dense riparian corridors; can do well in suburban and irrigated croplands if not molested or indirectly poisoned; requires moist microhabitats, such as rodent burrows, for shelter	T (State)	Texas	Kleberg County
Snake, Texas Indigo	*Drymarchon melanurus erebennus*	Texas south of the Guadalupe River and Balcones Escarpment; thornbush-chaparral woodlands of south Texas, in particular dense riparian corridors; can do well in suburban and irrigated croplands if not molested or indirectly poisoned; requires moist microhabitats, such as rodent burrows, for shelter	T (State)	Texas	San Patricio County
Snake, Texas Indigo	*Drymarchon melanurus erebennus*	Texas south of the Guadalupe River and Balcones Escarpment; thornbush-chaparral woodlands of south Texas, in particular dense riparian corridors; can do well in suburban and irrigated croplands if not molested or indirectly poisoned; requires moist microhabitats, such as rodent burrows, for shelter	T (State)	Texas	Starr County
Snake, Texas Scarlet	*Cemophora coccinea lineri*	mixed hardwood scrub on sandy soils; feeds on reptile eggs; semi-fossorial; active April-September	T (State)	Texas	San Patricio County
Snake, Texas Scarlet	*Cemophora coccinea lineri*	mixed hardwood scrub on sandy soils; feeds on reptile eggs; semi-fossorial; active April-September	T (State)	Texas	Jim Wells County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Snake, Texas Scarlet	*Cemophora coccinea lineri*	mixed hardwood scrub on sandy soils; feeds on reptile eggs; semi-fossorial; active April-September	T (State)	Texas	Brooks County
Snake, Texas Scarlet	*Cemophora coccinea lineri*	mixed hardwood scrub on sandy soils; feeds on reptile eggs; semi-fossorial; active April-September	T (State)	Texas	Kleberg County
Snake, Texas Scarlet	*Cemophora coccinea lineri*	mixed hardwood scrub on sandy soils; feeds on reptile eggs; semi-fossorial; active April-September	T (State)	Texas	Nueces County
Sparrow, Henslow's	*Ammodramus henslowii*	wintering individuals (not flocks) found in weedy fields or cut-over areas where lots of bunch grasses occur along with vines and brambles; a key component is bare ground for running/walking		Texas	San Patricio County
Sparrow, Texas Botteri's	*Aimophila botterii texana*	grassland and short-grass plains with scattered bushes or shrubs, sagebrush, mesquite, or yucca; nests on ground of low clump of grasses	T (State)	Texas	Jim Wells County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Sparrow, Texas Botteri's	*Aimophila botterii texana*	grassland and short-grass plains with scattered bushes or shrubs, sagebrush, mesquite, or yucca; nests on ground of low clump of grasses	T (State)	Texas	Nueces County
		grassland and short-grass			

Sparrow, Texas Botteri's	*Aimophila botterii texana*	plains with scattered bushes or shrubs, sagebrush, mesquite, or yucca; nests on ground of low clump of grasses	T (State)	Texas	Brooks County
Sparrow, Texas Botteri's	*Aimophila botterii texana*	grassland and short-grass plains with scattered bushes or shrubs, sagebrush, mesquite, or yucca; nests on ground of low clump of grasses	T (State)	Texas	Kleberg County
Staff, St. Joseph's	*Manfreda longiflora*	thorn shrublands on clays and loams with various concentrations of salt, caliche, sand, and gravel; rossettes are often obscured by low shrubs; flowering September-October		Texas	Starr County
Stork, Wood	*Mycteria americana*	forages in prairie ponds, flooded pastures or fields, ditches, and other shallow standing water, including salt-water; usually roosts communally in tall snags, sometimes in association with other wading birds (i.e. active heronries); breeds in Mexico and birds move into Gulf States in search of mud flats and other wetlands, even those associated with forested areas; formerly nested in Texas, but no breeding records since 1960	T (State)	Texas	Brooks County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
		forages in prairie ponds, flooded pastures or fields, ditches, and other shallow standing water, including salt-water; usually roosts			

Stork, Wood	*Mycteria americana*	communally in tall snags, sometimes in association with other wading birds (i.e. active heronries); breeds in Mexico and birds move into Gulf States in search of mud flats and other wetlands, even those associated with forested areas; formerly nested in Texas, but no breeding records since 1960	T (State)	Texas	Jim Wells County
Stork, Wood	*Mycteria americana*	forages in prairie ponds, flooded pastures or fields, ditches, and other shallow standing water, including salt-water; usually roosts communally in tall snags, sometimes in association with other wading birds (i.e. active heronries); breeds in Mexico and birds move into Gulf States in search of mud flats and other wetlands, even those associated with forested areas; formerly nested in Texas, but no breeding records since 1960	T (State)	Texas	Kleberg County
Stork, Wood	*Mycteria americana*	forages in prairie ponds, flooded pastures or fields, ditches, and other shallow standing water, including salt-water; usually roosts communally in tall snags, sometimes in association with other wading birds (i.e. active heronries); breeds in Mexico and birds move into Gulf States in search of mud flats and other wetlands, even those associated with forested areas; formerly nested in Texas, but no breeding records since	T (State)	Texas	Nueces County

		1960			
Stork, Wood	*Mycteria americana*	forages in prairie ponds, flooded pastures or fields, ditches, and other shallow standing water, including salt-water; usually roosts communally in tall snags, sometimes in association with other wading birds (i.e. active heronries); breeds in Mexico and birds move into Gulf States in search of mud flats and other wetlands, even those associated with forested areas; formerly nested in Texas, but no breeding records since 1960	T (State)	Texas	San Patricio County
Stork, Wood	*Mycteria americana*	forages in prairie ponds, flooded pastures or fields, ditches, and other shallow standing water, including salt-water; usually roosts communally in tall snags, sometimes in association with other wading birds (i.e. active heronries); breeds in Mexico and birds move into Gulf States in search of mud flats and other wetlands, even those associated with forested areas; formerly nested in Texas, but no breeding records since 1960	T (State)	Texas	Starr County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY

Tern, Interior Least	*Sterna antillarum athalassos*	subspecies is listed only when inland (more than 50 miles from a coastline); nests along sand and gravel bars within braided streams, rivers; also know to nest on man-made structures (inland beaches, wastewater treatment plants, gravel mines, etc); eats small fish and crustaceans, when breeding forages within a few hundred feet of colony	E	Texas	Starr County
Tern, Sooty	*Sterna fuscata*	predominately 'on the wing'; does not dive, but snatches small fish and squid with bill as it flies or hovers over water; breeding April-July	T (State)	Texas	San Patricio County
Tern, Sooty	*Sterna fuscata*	predominately 'on the wing'; does not dive, but snatches small fish and squid with bill as it flies or hovers over water; breeding April-July	T (State)	Texas	Kleberg County
Tern, Sooty	*Sterna fuscata*	predominately 'on the wing'; does not dive, but snatches small fish and squid with bill as it flies or hovers over water; breeding April-July	T (State)	Texas	Nueces County
Terrapin, Texas Diamondback	*Malaclemys terrapin littoralis*	coastal marshes, tidal flats, coves, estuaries, and lagoons behind barrier beaches; brackish and salt water; burrows into mud when inactive; may venture into lowlands at high tide		Texas	San Patricio County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON	SCIENTIFIC	HABITAT	STATUS	STATE	COUNTY

NAME	NAME				
Terrapin, Texas Diamondback	*Malaclemys terrapin littoralis*	coastal marshes, tidal flats, coves, estuaries, and lagoons behind barrier beaches; brackish and salt water; burrows into mud when inactive; may venture into lowlands at high tide		Texas	Nueces County
Toad, Mexican Burrowing	*Rhinophrynus dorsalis*	roadside ditches, temporary ponds, arroyos, or wherever loose friable soils are present in which to burrow; generally underground emerging only to breed or during rainy periods	T (State)	Texas	Starr County
Tortoise, Texas	*Gopherus berlandieri*	open brush with a grass understory is preferred; open grass and bare ground are avoided; when inactive occupies shallow depressions at base of bush or cactus, sometimes in underground burrows or under objects; longevity greater than 50 years; active March-November; breeds April-November	T (State)	Texas	Brooks County
Tortoise, Texas	*Gopherus berlandieri*	open brush with a grass understory is preferred; open grass and bare ground are avoided; when inactive occupies shallow depressions at base of bush or cactus, sometimes in underground burrows or under objects; longevity greater than 50 years; active March-November; breeds April-November	T (State)	Texas	Jim Wells County
Tortoise, Texas	*Gopherus berlandieri*	open brush with a grass understory is preferred; open grass and bare ground are avoided; when inactive occupies shallow depressions at base of bush or cactus,	T (State)	Texas	Kleberg County

		sometimes in underground burrows or under objects; longevity greater than 50 years; active March-November; breeds April-November			

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Tortoise, Texas	*Gopherus berlandieri*	open brush with a grass understory is preferred; open grass and bare ground are avoided; when inactive occupies shallow depressions at base of bush or cactus, sometimes in underground burrows or under objects; longevity greater than 50 years; active March-November; breeds April-November	T (State)	Texas	Nueces County
Tortoise, Texas	*Gopherus berlandieri*	open brush with a grass understory is preferred; open grass and bare ground are avoided; when inactive occupies shallow depressions at base of bush or cactus, sometimes in underground burrows or under objects; longevity greater than 50 years; active March-November; breeds April-November	T (State)	Texas	San Patricio County
Tortoise, Texas	*Gopherus berlandieri*	open brush with a grass understory is preferred; open grass and bare ground are avoided; when inactive occupies shallow depressions at base of bush or cactus, sometimes in underground burrows or under objects; longevity greater than 50 years; active March-November; breeds	T (State)	Texas	Starr County

		April-November			
Treefrog, Mexican	*Smilisca baudinii*	subtropical region of extreme southern Texas; breeds May-October coinciding with rainfall, eggs laid in temporary rain pools	T (State)	Texas	Starr County
Turtle, Atlantic Hawksbill Sea	*Eretmochelys imbricata*	Gulf and bay system, warm shallow waters especially in rocky marine environments, such as coral reefs and jetties, juveniles found in floating mats of sea plants; feed on sponges, jellyfish, sea urchins, molluscs, and crustaceans, nests April through November	E	Texas	Nueces County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Turtle, Atlantic Hawksbill Sea	*Eretmochelys imbricata*	Gulf and bay system, warm shallow waters especially in rocky marine environments, such as coral reefs and jetties, juveniles found in floating mats of sea plants; feed on sponges, jellyfish, sea urchins, molluscs, and crustaceans, nests April through November	E	Texas	San Patricio County
Turtle, Atlantic Hawksbill Sea	*Eretmochelys imbricata*	Gulf and bay system, warm shallow waters especially in rocky marine environments, such as coral reefs and jetties, juveniles found in floating mats of sea plants; feed on sponges, jellyfish, sea urchins, molluscs, and crustaceans, nests April through November	E	Texas	Kleberg County
		Gulf and bay system; shallow water seagrass beds, open water between feeding and nesting areas,			

Turtle, Green Sea	*Chelonia mydas*	barrier island beaches; adults are herbivorous feeding on sea grass and seaweed; juveniles are omnivorous feeding initially on marine invertebrates, then increasingly on sea grasses and seaweeds; nesting behavior extends from March to October, with peak activity in May and June	T	Texas	Kleberg County
Turtle, Green Sea	*Chelonia mydas*	Gulf and bay system; shallow water seagrass beds, open water between feeding and nesting areas, barrier island beaches; adults are herbivorous feeding on sea grass and seaweed; juveniles are omnivorous feeding initially on marine invertebrates, then increasingly on sea grasses and seaweeds; nesting behavior extends from March to October, with peak activity in May and June	T	Texas	Nueces County
Turtle, Green Sea	*Chelonia mydas*	Gulf and bay system; shallow water seagrass beds, open water between feeding and nesting areas, barrier island beaches; adults are herbivorous feeding on sea grass and seaweed; juveniles are omnivorous feeding initially on marine invertebrates, then increasingly on sea grasses and seaweeds; nesting behavior extends from March to October, with peak activity in May and June	T	Texas	San Patricio County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Turtle, Kemp's Ridley Sea	*Lepidochelys kempii*	Gulf and bay system, adults stay within the shallow waters of the Gulf of Mexico; feed primarily on crabs, but also snails, clams, other crustaceans and plants, juveniles feed on sargassum and its associated fauna; nests April through August	E	Texas	Kleberg County
Turtle, Kemp's Ridley Sea	*Lepidochelys kempii*	Gulf and bay system, adults stay within the shallow waters of the Gulf of Mexico; feed primarily on crabs, but also snails, clams, other crustaceans and plants, juveniles feed on sargassum and its associated fauna; nests April through August	E	Texas	Nueces County
Turtle, Kemp's Ridley Sea	*Lepidochelys kempii*	Gulf and bay system, adults stay within the shallow waters of the Gulf of Mexico; feed primarily on crabs, but also snails, clams, other crustaceans and plants, juveniles feed on sargassum and its associated fauna; nests April through August	E	Texas	San Patricio County
Turtle, Leatherback Sea	*Dermochelys coriacea*	Gulf and bay systems, and widest ranging open water reptile; omnivorous, shows a preference for jellyfish; in the US portion of their western Atlantic nesting territories, nesting season ranges from March to August	E	Texas	Kleberg County
Turtle, Leatherback Sea	*Dermochelys coriacea*	Gulf and bay systems, and widest ranging open water reptile; omnivorous, shows a preference for jellyfish; in the US portion of their western Atlantic nesting territories, nesting season ranges from March to August	E	Texas	Nueces County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Turtle, Leatherback Sea	*Dermochelys coriacea*	Gulf and bay systems, and widest ranging open water reptile; omnivorous, shows a preference for jellyfish; in the US portion of their western Atlantic nesting territories, nesting season ranges from March to August	E	Texas	San Patricio County
Turtle, Loggerhead Sea	*Caretta caretta*	Gulf and bay system primarily for juveniles, adults are most pelagic of the sea turtles; omnivorous, shows a preference for mollusks, crustaceans, and coral; nests from April through November	T	Texas	Kleberg County
Turtle, Loggerhead Sea	*Caretta caretta*	Gulf and bay system primarily for juveniles, adults are most pelagic of the sea turtles; omnivorous, shows a preference for mollusks, crustaceans, and coral; nests from April through November	T	Texas	Nueces County
Turtle, Loggerhead Sea	*Caretta caretta*	Gulf and bay system primarily for juveniles, adults are most pelagic of the sea turtles; omnivorous, shows a preference for mollusks, crustaceans, and coral; nests from April through November	T	Texas	San Patricio County
Whitlow-wort,	*Paronychia lundellorum*	Texas endemic; the Sand Sheet of eastern South Texas, in tight sandy soils over saline clay on microhighs within salty prairie grasslands, and in upper portions of saline flats surrounding short drainages and brackish		Texas	Brooks County

Lundell's		basins typical of the South Texas Sand Sheet; flowering April through at least October, probably intermittently throughout the year depending on rainfall			

T - Threatened
E - Endangered

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6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Whitlow-wort, Lundell's	*Paronychia lundellorum*	Texas endemic; the Sand Sheet of eastern South Texas, in tight sandy soils over saline clay on microhighs within salty prairie grasslands, and in upper portions of saline flats surrounding short drainages and brackish basins typical of the South Texas Sand Sheet; flowering April through at least October, probably intermittently throughout the year depending on rainfall		Texas	Kleberg County
Wild-buckwheat, Gregg's	*Eriogonum greggii*	sparingly vegetated openings in thorn shrublands in shallow soils on xeric ridges along the Rio Grande; also on excessively drained, sandy soil over caliche and calcareous sandstone of the Goliad Formation and over sandstone or fossiliferous layers of the Jackson Group; flowering February-July, probably opportunistically during the growing season		Texas	Starr County
		Texas endemic; sandy to sandy loam soils in relatively bare areas in			

Windmill-grass, Texas	*Chloris texensis*	coastal prairie grassland remnants, often on roadsides where regular mowing may mimic natural prairie fire regimes; flowering in fall		Texas	Nueces County
Wolf, Red	*Canis rufus*	extirpated; formerly known throughout eastern half of Texas in brushy and forested areas, as well as coastal prairies	E	Texas	Kleberg County
Wolf, Red	*Canis rufus*	extirpated; formerly known throughout eastern half of Texas in brushy and forested areas, as well as coastal prairies	E	Texas	Nueces County

T - Threatened
E - Endangered

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE	COUNTY
Wolf, Red	*Canis rufus*	extirpated; formerly known throughout eastern half of Texas in brushy and forested areas, as well as coastal prairies	E	Texas	San Patricio County
Wolf, Red	*Canis rufus*	extirpated; formerly known throughout eastern half of Texas in brushy and forested areas, as well as coastal prairies	E	Texas	Jim Wells County
Yellowthroat, Brownsville Common	*Geothlypis trichas insperata*	tall grasses and bushes near ponds, marshes, and swamps; breeding April to July		Texas	Starr County

T - Threatened
E - Endangered

Reference:
- Texas Parks & Wildlife Dept. - Annotated County Lists of Rare Species

6.6 SENSITIVITY MAPS

Click here for Southern Zone Overview Map

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 60101030 - P3 (Interconnect P-3, 8in.), B-1

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 60101040 - P-4 (Interconnect P-4, 8in.), B-1

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 60101060 - P-6 (Interconnect P-6, 6in.), B-1

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 60101100 - P10 (Interconnect P-10, 8in.), B-1

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 60102010 - P17 (FHR Gaso Cargo 14in.), B-1

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 60102011 - P-17A (FHR, Gaso Cargo Spur), B-1

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 60103030 - FHR, Kerosene, 8in., B-1

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 60109010 - P-6 (FHR, P-7 / Turkey Creek, 6in.), B-1

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 60109010 - P-6 (FHR, P-7 / Turkey Creek, 6in.), B-2

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 60110010 - P-15 EAST (FHR, Burner Cargo, 14in.), B-1

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 60110011 -P-16A (FHR, Burner Cargo Spur), B-1

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 60110020 - P-16 WEST (FHR, Burner Cargo, 14in.), B-1

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 60112010 - P18 (FHR, Jet, 10in.), B-1

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 60113010 - FHR, Turkey Creek - Inactive, 6in., B-1

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 60402010 - Seeligson To Mayo, 10in., B-1

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 60402010 - Seeligson To Mayo, 10in., B-2

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 60402010 - Seeligson To Mayo, 10in., B-3

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 60402010 - Seeligson To Mayo, 10in., B-4

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 60402020 - Pontiac to Viola, 8in., B-1

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 60402020 - Pontiac to Viola, 8in., B-2

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 60403010 - Sunfield To Kelsey_ 6in., B-1

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 60410010 - Viola To FHR East_ 10in., B-1

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 60403020 - Kelsey To Seeligson_ 8in., B-1

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 60403020 - Kelsey To Seeligson_ 8in., B-2

6.6 SENSITIVITY MAPS, CONTINUED

Click here for 60410020 - Plains to Viola, 16in., B-1

6.7 TACTICAL PLAN INDEX

SITE #	SITE NAME
Tule Lake	
Site 1	Bridge Southside
Site 2	Bridge North side
Viola Station	
Site 1	Southern Fence Line
Site 2	Eastern Fence Line
Site 3	Culvert

6.8 TACTICAL MAPS

Click here for Environmental Impact - Tule Lake

6.8 TACTICAL MAPS, CONTINUED

Click here for 60101030 - P-3 (Interconnect P-3, 8in.) Overview Map

6.8 TACTICAL MAPS, CONTINUED

Click here for 60101040 - P-4 (Interconnect P-4, 8in.), Overview Map

6.8 TACTICAL MAPS, CONTINUED

Click here for 60101060 - P-6 (Interconnect P-6, 6in.), Overview Map

6.8 TACTICAL MAPS, CONTINUED

Click here for 60101100 - P-10 (Interconnect P-10, 8in.), River Overview

6.8 TACTICAL MAPS, CONTINUED

Click here for 60102010 - P-17 (FHR, Gaso Cargo, 14in.) Overview Map

6.8 TACTICAL MAPS, CONTINUED

Click here for 60102011 - P-17A (FHR, Gaso Spur), Overview Map

6.8 TACTICAL MAPS, CONTINUED

Click here for 60103030 - FHR, KEROSONE, 8in. Overview Map

6.8 TACTICAL MAPS, CONTINUED

Click here for 60109010 - P-6 (FHR, P-7 / Turkey Creek, 6in.) Overview Map

6.8 TACTICAL MAPS, CONTINUED

Click here for 60110010 - P-15 EAST (FHR, Burner Cargo, 14in.), Overview Map

6.8 TACTICAL MAPS, CONTINUED

Click here for 60110011 - FP-16A (FHR, Burner Cargo Spur), Overview Map

6.8 TACTICAL MAPS, CONTINUED

Click here for 60110020 - P-16 WEST (FHR, Burner Cargo, 14in.) Overview Map

6.8 TACTICAL MAPS, CONTINUED

Click here for 60112010 - P-18 (FHR, Jet, 10in.) Overview Map

6.8 TACTICAL MAPS, CONTINUED

Click here for 60113010 - FHR, Turkey Creek - Inactive, 6in., River Overview

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6.8 TACTICAL MAPS, CONTINUED

Click here for 60402010 - Seeligson To Mayo, 10in. Overview Map

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6.8 TACTICAL MAPS, CONTINUED

Click here for 60402010 - Seeligson To Mayo, 10in. (Nueces River Detail)

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6.8 TACTICAL MAPS, CONTINUED

Click here for 60402020 - Pontiac to Viola, 8in. Overview Map

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6.8 TACTICAL MAPS, CONTINUED

Click here for 60402020 - Pontiac to Viola, 8in. (Nueces River Detail)

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6.8 TACTICAL MAPS, CONTINUED

Click here for 60403010 - Sunfield To Kelsey, 6in. Overview Map

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6.8 TACTICAL MAPS, CONTINUED

Click here for 60403020 - Kelsey To Seeligson, 8in. Overview Map

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6.8 TACTICAL MAPS, CONTINUED

Click here for 60410010 - Viola To FHR East, 10in. Overview Map

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6.8 TACTICAL MAPS, CONTINUED

Click here for 60110010 - P-15 EAST (FHR, Burner Cargo, 14in.) Overview Map

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6.8 TACTICAL MAPS, CONTINUED

Click here for 60110020 - P-16 WEST (FHR, Burner Cargo, 14in.) Overview Map

6.9 TACTICAL PLANS

Click here for Tule Lake - Site 1 - Bridge Southside

6.9 TACTICAL PLANS , CONTINUED

Click here for Tule Lake - Site 2 - Bridge North side

6.9 TACTICAL PLANS , CONTINUED

Click here for Viola Station - Site 1 - Southern Fence Line

6.9 TACTICAL PLANS , CONTINUED

Click here for Viola Station - Site 2 - Eastern Fence Line

6.9 TACTICAL PLANS , CONTINUED

Click here for Viola Station - Site 3 - Culvert

6.10 AREAS OF CONCERN

AREA NAME	COUNTY	LOCATION	GPS LOCATION / COMMENTS
Southern Zone			
Southern Pacific Railroad	Brooks	Kelsey To Seeligson, 8in.	(b) (7)(F), (b) (3) [redacted]
U 281	Brooks	Kelsey To Seeligson, 8in.	

			(b) (7)(F), (b) (3)
S 285	Brooks	Kelsey To Seeligson, 8in.	
S 141	Kleberg	Seeligson To Mayo 10in.	
Railroad	Nueces	FHR, Coastal Origin - Sinclair 8in	
MP Railroad	Nueces	FHR, Kerosene, 8in.	
Railroad	Nueces	FHR, Gaso Cargo, 14in.	
Railroad	Nueces	Viola To FHR East, 10in.	
TM Railroad	Nueces	Viola To FHR East, 10in.	
TM Railroad	Nueces	FHR, P-7 / Turkey Creek, 6in.	
UNKNOWN	Nueces	FHR, Burner Cargo, 14in.	
MP Railroad	Nueces	FHR, Burner Cargo, 14in.	
Railroad	Nueces	FHR, Burner Cargo, 14in.	
Railroad	Nueces	FHR, Burner Cargo, 14in.	
Railroad	Nueces	FHR, Burner Cargo, 14in.	
Railroad	Nueces	Interconnect P-3, 8in.	
TM Railroad	Nueces	Interconnect P-3, 8in.	
Railroad	Nueces	Interconnect P-6 6in.	
TM Railroad	Nueces	Interconnect P-6 6in.	
UNKNOWN	Nueces	Seeligson To Mayo 10in.	
Railroad	Nueces	Pontiac to Viola, 8in.	
MP Railroad	Nueces	FHR Gaso Spur	
UNKNOWN	Nueces	FHR, Gaso Cargo, 14in.	
MP Railroad	Nueces	FHR, Gaso Cargo, 14in.	
Railroad	Nueces	FHR, Gaso Cargo, 14in.	
Railroad	Nueces	FHR, Gaso Cargo, 14in.	

			(b) (7)(F), (b) (3)
Railroad	Nueces	FHR, Gaso Cargo, 14in.	
MP Railroad	Nueces	FHR Burner Spur	
UNK	Nueces	FHR, P-7 / Turkey Creek, 6in.	
UNK	Nueces	FHR, P-7 / Turkey Creek, 6in.	

6.10 AREAS OF CONCERN

AREA NAME	COUNTY	LOCATION	GPS LOCATION / COMMENTS
Southern Zone			
I 37	Nueces	FHR, P-7 / Turkey Creek, 6in.	(b) (7)(F), (b) (3)
I 37	Nueces	FHR, P-7 / Turkey Creek, 6in.	
S 44	Nueces	Seeligson To Mayo 10in.	
Nueces River	Nueces	Seeligson To Mayo 10in.	
Nueces River	Nueces	Pontiac to Viola, 8in.	
Railroad	San Patricio	Seeligson To Mayo 10in.	
I 37	San Patricio	Seeligson To Mayo 10in.	
I 37	San Patricio	Seeligson To Mayo 10in.	

SECTION 7 Last revised: December 16, 2012

SUSTAINED RESPONSE ACTIONS

SECTION 7
SUSTAINED RESPONSE ACTIONS, CONTINUED

7.1 RESPONSE RESOURCES

7.1.1 Response Equipment

CATEGORY	TYPE/MODEL	QUANTITY	SIZE	YEAR PURCHASED	OPERATIONAL STATUS	LOCATION AT FACILITY
Koch Pipeline Compnay (KPL) does not own or operate Oil Spill Response Equipment. KPL relies on OSRO's for emergency response equipment and personnel. See Figure 7.1-1.						

***Note:** Response equipment is tested and deployed as described in **FIGURE A.1-2**, **FIGURE A.1-4**, and **FIGURE A.1-5** of the Spill Response Plan.

FIGURE 7.1-1 - REGIONAL COMPANY AND RESPONSE CONTRACTOR'S EQUIPMENT LIST / RESPONSE TIME

* USCG Classified OSRO for facility

COMPANY/CONTRACTOR	EQUIPMENT	RESPONSE TIME
*Miller Environmental Services, Inc. Corpus Christi, TX	Full Oil and Hazardous Materials response capabilities	1 hours
*TAS Environmental Services, (Austin) Austin , TX	Full Oil and Hazardous Materials response capabilities	3 hours
*TAS Environmental Services, LP (San Antonio) San Antonio, Texas	Full Oil and Hazardous Materials response capabilities	3 hours
*TAS Environmental Services (Dallas) Dallas, TX	Full Oil and Hazardous Materials response capabilities	4 hours
*Eagle SWS, (San Antonio) Cibolo, TX	Full Oil and Hazardous Materials response capabilities	4 hours
*Garner Environmental Services, Inc. (Houston Operations) Deer Park, Texas	Full Oil and Hazardous Materials response capabilities	4 hours
*TAS Environmental Services, (Fort Worth) Fort Worth, TX	Full Oil and Hazardous Materials response capabilities	5 hours
*Eagle Construction and Environmental Services, Inc. (Houston) La Porte, TX	Full Oil and Hazardous Materials response capabilities	5 hours
*Eagle Construction and Environmental Services, L.P. (Corporate Office) Eastland, TX	Full response capabilities	6 hours
*Eagle SWS, (Fort Worth) Fort Worth, TX	Full Oil and Hazardous Materials response capabilities	8 hours

7.1.2 Response Equipment Inspection and Maintenance

Response Equipment Inspection and Maintenance
Company response equipment is tested and inspected as noted below. The Operations Manager is responsible for ensuring that the following response equipment and testing procedures are implemented. These consist of:
Containment boom
During boom deployment exercises, boom will be inspected for signs of structural deficiencies. If tears in fabric or rotting is observed, boom will be repaired or replaced. In addition, end connectors will be inspected for evidence of corrosion. If severe corrosion is detected, equipment will be repaired or replaced.
Miscellaneous equipment
Other response equipment identified in this Plan will be inventoried and tested on a semiannual basis to ensure that the stated quantities are in inventory and in proper working order. The equipment inspections and records are retained for a period of five years. Exercise requirements are listed in **APPENDIX A.1**. A Spill/Exercise Documentation form is in **FIGURE A.1-4**. **FIGURE A.1-5** provides a log for response equipment testing and deployment drills

7.1.3 Contractors, Contractor Equipment, and Labor

- The Company's primary response contractors' names and phone numbers as well as contact information of other companies who can provide spill response services are provided in **FIGURE 3.1-6** or **FIGURE 3.1-7**.
- The Company has ensured by contract or formal agreements the availability of private personnel and equipment necessary to respond, to the maximum extent practicable, to the Worst Case Discharge or the substantial threat of such discharge.
- Contractors deploy and inspect boom to meet PREP guidelines. Company requires that these exercises be completed annually.
- **APPENDIX B** contains evidence of contracts for the Company's primary response contractors and equipment lists of contractors without USCG classification.

7.1.4 Command Post

In the event of a major spill or other emergency, both an off-site Emergency Operations Center (EOC) and a Command Post may be established. For a minor emergency, only a Command Post may be established. Refer to **FIGURE 7.1-2** for guidelines in establishing a Command Post.

FIGURE 7.1-2 - COMMAND POST CHECKLIST

COMMAND POST CHECKLIST	

Positioned outside of the present and potential Hazard Zone.	☐
Positioned away from the general activities such as traffic, noise, and confusion associated with an incident.	☐
Have ability to provide security and to control access to the ICP as necessary.	☐
Adequate space for size of staff.	☐
24-hour accessibility.	☐
Personal hygiene facilities.	☐
Suitability of existing communications resources (phone/fax/radio).	☐
Suitability of private conference and briefing rooms.	☐
Location or building has capability to grow, as necessary.	☐
Notify other parties of Command Post location; provide maps/driving directions.	☐
Determine staging areas and incident base locations.	☐
Identify future need to move or upgrade facilities.	☐

Command Posts for this facility are located at:

7.1.5 Staging Area

A Staging Area is a temporary location at an incident where personnel and equipment are kept while awaiting tactical assignments. Staging Areas should be located relatively close to the incident, yet located sufficiently away to provide a safe location for personnel and equipment to await assignments. In an emergency response, numerous staging areas may be required to support containment and cleanup operations.

In selecting a suitable staging area, the following items should be considered:

- Accessibility to impacted areas.
- Proximity to secure parking, airports, docks, pier, or boat launches.
- Accessibility to large trucks and trailers which may be used to transfer equipment.
- Be in a large open area in order to provide storage for equipment and not interfere with equipment loading and offloading operations.
- Have different access routes for incoming and outgoing resources from the direct traffic of the incident response, whenever possible.

7.1.5 Staging Area, Continued

- Be conducive for loading and offloading of personnel; consider having moorage available

if vessels are required to aid the loading/offloading of personnel.

- Consider the need to incorporate specialty equipment such as ambulance, fire equipment, police cars, etc.

FIGURE 7.1-3 - STAGING AREA CHECKLIST

STAGING AREA CHECKLIST	
Positioned outside of the present and potential Hazard Zone.	☐
Positioned away from the general activities such as traffic, noise, and confusion associated with an incident; whenever possible, identify different access routes.	☐
Have ability to provide security and to control access to the staging area as necessary.	☐
Adequate space for size, amount, and type of equipment being assigned to the area (e.g., boom trailers, skimmers, vacuum trucks, back hoes, frac tanks).	☐
24-hour accessibility, but establish control and assist with check-in/check-out process for equipment and personnel arriving and leaving the Staging Area.	☐
Personal hygiene facilities necessary and available.	☐
Communication process established for calling for and returning equipment; prevent resources from freelancing or “doing their own thing”.	☐
Suitability of existing communications resources (phone/fax/radio).	☐
Staging Area may need to provide a temporary means for fueling; ensure safety and environmental requirements are reviewed.	☐
Notify Command Post of Staging Area location; provide maps/driving directions.	☐
Provide area to form operational units, such as Task Forces or Strike Teams.	☐
Designated areas to avoid confusion between incoming and outgoing equipment versus equipment ready for deployment.	☐

Staging areas for this facility are located at:

7.1.6 Communications Plan

Communications include:

- The "hardware" systems that transfer information.
- Planning for the use of all available communications frequencies and resources.
- The processes and procedures for transferring information.
- Computers
- Land Lines
- Cell Phones
- Fax

Company communications for small incidents will be conducted via telephone lines, cellular telephones, PDA's, two way radios, e-mail, and fax machines.

Additional communications equipment (two way radios, VHF portable radios with chargers and accessories, command post with UHF, VHF, single sideband, marine, aeronautical, telephone, and hard-line capability) may be purchased or leased from a communications company in the area. Use of communications equipment, whether purchased or leased, must comply with FCC requirements prior to operation. Communications with government agencies, state police, and contractors will be conducted via telephone lines or cellular phones. As deemed necessary, government agencies responding to an incident on-site will be incorporated into the communications plan. Refer to **FIGURE 7.1-4** for guidelines to setup communications.

The Communications Group Leader is responsible for ensuring that the Incident Command and emergency responders have reliable and effective means of communication by establishing processes and procedures for transferring information. Several communication networks may be considered depending upon the size and complexity of the incident. These may include:

- **Command Net** - Established to link supervisory personnel from Incident Commander down to and including Division and Group supervisors.
- **Tactical Nets** - Established in a variety of ways, e.g., by agency, department, geographical area, or function. Tactical nets may be established for each Branch, or for Divisions and Groups, depending upon hardware and frequency availability and specific incident needs.
- **Support Nets** - Established on larger incidents to handle logistics traffic and resource status changes.
- **Ground-to-Air** - Established to coordinate ground-to-air traffic.
- **Air-to-Air** - Assigned for coordination between aircraft assigned to an incident

This may also involve activation of multiple types of communications equipment and coordination among multiple responding agencies and contractors.

The Communications Plan (if necessary, written at the time of an incident) will identify system, network, channel, telephone numbers, radio frequencies, and assignments to the responders.

FIGURE 7.1-4 - COMMUNICATIONS CHECKLIST

COMMUNICATIONS CHECKLIST	
Develop a Communications Plan; consider communication levels needed.	☐
Phone lines available, consider lines per staff element - contact local provider.	☐
Fax lines available, consider lines per group or unit requirements - contact local provider.	☐
Cell phone coverage providing means to maintain communications.	☐
Company and resource phone list available and being maintained.	
Recharging stations for cellular phones.	☐
VHF radio communications: • Establish frequencies • Assign call signs • Distribute radios	☐

• Establish communications schedule	
Recharging stations for VHF radios.	☐
Determine need for VHF repeaters.	☐
Copy machine available.	☐
Internet access available; necessary?	☐
Responders have capability to communicate with aircraft.	☐

Note: Actions on this checklist may not be applicable or may be continuous activities.

7.2 PUBLIC AFFAIRS

Company Spokesperson

The Incident Commander shall designate a company spokesperson at the scene and identify the spokesperson to Management and Public Affairs. Such person shall retain spokesperson's duties until relieved of those duties by the Incident Commander. The designated company spokesperson's duties shall include:

- Interaction with the company's Public Affairs Group about the incident and the progress of the Company's response;
- Interaction with the Incident Commander regarding requests for information from media and/or public;
- Interaction with media and/or public, including those who may be directly affected (through evacuation or otherwise) by the incident and/or the Company's response to the incident;
- Dissemination of truthful, complete, and appropriate information in response to requests and/or needs of media and/or public.

Unless designated by the Incident Commander, the Company spokesperson shall not be the principal contact between the company and responding or other appropriate governmental agencies.

The designated Company spokesperson shall have been trained on this section of the Integrated Contingency Plan and shall have received other training regarding the responsibilities of a Company spokesperson prior to his/her appointment as Company spokesperson. Any person who has not received such training shall not be qualified to serve as Company spokesperson.

The designated spokesperson shall notify appropriate personnel from the responding company, contractual responder, and necessary governmental agencies that he/she has been designated by the Incident Commander as the on-scene Company spokesperson and that as the designated spokesperson, he/she is the one and only spokesperson for the Company until advised otherwise. The spokesperson shall also advise responding company and contractual personnel that only the designated on-scene spokesperson should speak with the media and/or public.

Message Verification

Prior to providing any information regarding an incident to the media and/or public in any form, the Company spokesperson must clear the message both factually and contextually with

the Incident Commander. If practical and feasible, the Company spokesperson should also consult with the Legal Department and Public Affairs prior to providing any information to the media and/or public.

If consultation with Public Affairs is not feasible prior to the required release of information, then the Incident Commander and spokesperson shall use the approved media statement example listed below. **This statement is only to be used if a briefing with Legal and Public Affairs is not available.**

Media Statement

This statement is to be used only in the following situations:

- **By the on-scene Company spokesperson designated by the Incident Commander**
- **When Legal Department and Public Affairs consultation is unavailable**

We had an event (*describe incident type/location*). At this time we're working to manage the (*release, fire, etc., OR it is under control*). While we are still checking in with all our employees and others in the area, we believe (*acknowledge whether there are injuries or not*). We have notified local officials, including (*identify responding agencies*) and they are (*offering help or assisting*) as needed. Along with these agencies, we are monitoring the situation closely and will advise of any needed actions (*or, describe advised actions, if any*). As I'm sure you can understand, I must now return to my duties here. We'll have updates as information becomes available through (*identify response spokesperson if known, internal or outside*). Thank you for your patience.

Interviews

The Company spokesperson should refrain from granting on-camera interviews, where practical. If the spokesperson must provide an on-camera interview without a representative of Public Affairs present, then the spokesperson should consult with the Company's Public Affairs Group in preparation for the interview.

7.3 SITE SECURITY MEASURES

(b) (7)(F), (b) (3) [redacted]

(b) (7)(F), (b) (3) [redacted]

(b) (7)(F), (b) (3)

[redacted]

7.4 WASTE MANAGEMENT

The management of the wastes generated in cleanup and recovery activities must be conducted with the overall objectives of ensuring:

- Worker safety
- Waste minimization
- Minimization of environmental impacts
- Proper management of the recovered materials compliant with regulatory requirements

During the emergency phase of a response, it is important to quickly engage the company waste specialists (Environmental Specialist) or activate a Disposal Group to address potential waste issues.

Depending on the size and complexity of the response, the following action items may be conducted initially during a spill response:

- Development of a Site Safety and Health Plan (**SECTION 5.4**) addressing the proper PPE and waste handling procedures

- Development of a Disposal Plan (**SECTION 5.6**) in accordance with any federal, state, and/or local regulations. Facility-specific disposal locations for different types of materials are listed in **FIGURE 7.4-4**.

Potential waste management issues to consider:

- Type of waste being generated and collected

- Organization of waste collection, segregation, and storage

- Available storage to hold waste being generated

- Handling and storage requirements of recovered product

- Labeling and inspection of temporary storage areas and waste containers
- Continuous tracking of recoverable materials versus non-recoverable to better estimate amount of waste that could be generated over the short and long-term
- Review requirements for secondary containment for waste collection containers
- Regulatory review of applicable laws to ensure compliance and (if appropriate) provide agency notification or obtain permits associated with short and long term storage of generated waste
- Regulatory review of applicable laws to ensure compliance and (if appropriate) obtain permits associated with the transportation of generated waste
- Registered transportation resources along with approved treatment, storage, or disposal facilities
- Disposal of all waste in a safe and approved manner
- Documentation of all waste handling, testing, inspection, and disposal activities

Activities associated with waste minimization during cleanup and recovery are:

- Reusing materials when possible
- Recycling or reclaiming waste
- Segregating waste (hazardous versus non-hazardous or heavily impacted versus slightly impacted)
- Treating waste, in accordance with the regulations and permits, to reduce hazards or reducing amount of waste generated

Solid wastes such as sorbents, PPE, debris, and equipment will typically be transported from the collection site to a designated facility for:

- Storage
- Waste segregation
- Packaging
- Transportation

A general flow chart for waste management guidelines is provided in **FIGURE 7.4-1**. An overall checklist for containment and disposal is provided in **FIGURE 7.4-2**.

FIGURE 7.4-1 - WASTE MANAGEMENT FLOW CHART

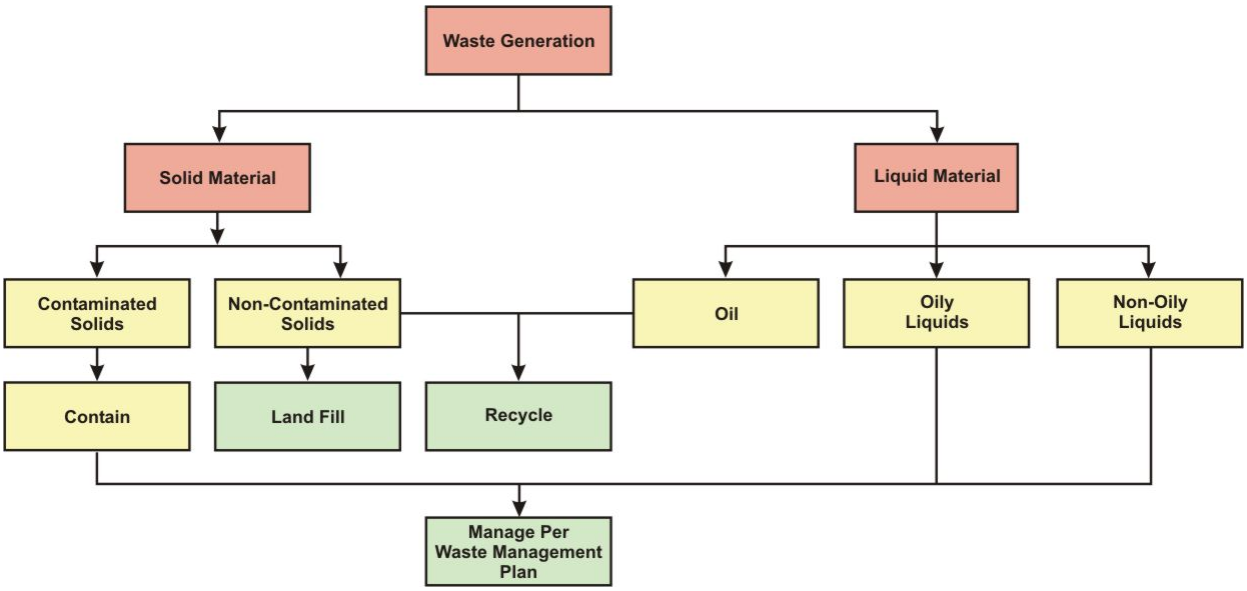

FIGURE 7.4-2 - GENERAL WASTE CONTAINMENT AND DISPOSAL CHECKLIST

CONSIDERATION	
Has the appropriate waste manager been contacted?	☐
Has each container been labeled?	☐
Waste handling process implement are based on the material being recovered (e.g., whether a waste or reusable product)?	☐
Has recovered material been containerized and secured?	☐
Has each of the discrete waste streams been identified?	☐
Has a representative sample of each waste stream requiring analysis been collected?	☐
Has the sample been sent to a laboratory for the appropriate analysis, (i.e. hazardous waste determination)?	☐
Has the appropriate waste classification and waste code number(s) for the individual waste streams been received?	☐
Has a temporary EPA identification number and generator number(s) been received, if they are not already registered with EPA?	☐
Have the services of a registered hazardous waste transporter been contracted, if waste is hazardous?	☐
The transporter(s) being used to transport hazardous or nonhazardous waste are properly registered as required by Federal, State, or Local requirements?	☐
Local requirements?	☐
Is the waste being taken to an approved disposal site?	☐
Is the manifest/Bill of Lading properly Completed?	☐

Consider if permits are required?	☐

7.4.1 Waste Storage

During an oil spill, the volume of oil that can be recovered depends on the storage capacity available. Typical short-term (temporary) storage methods are provided in FIGURE 7.4-3. If storage containers such as drums are used, the container should be clearly marked and labeled to indicate the type of material or waste contained. All on-site accumulation or storage activities shall be conducted by permitted facilities in accordance with applicable state and EPA requirements.

Use of an off-site storage may depend on the approval of State and Local authorities. Consider the following elements affecting the choice of a potential storage site:

- Geology
- Soil
- Surface water
- Covered materials
- Climatic factor
- Emissions
- Odor concerns
- Access
- Ground water
- Flooding
- Slope
- Capacity
- Land use
- Security
- Public contact

FIGURE 7.4-3 - TEMPORARY STORAGE METHODS

CONTAINMENT	PRODUCT						
	OIL	OIL/WATER	OIL/SOIL	OIL/DEBRIS (Small)	OIL/DEBRIS (Medium)	OIL/DEBRIS (Large)	CAPACITY
Drums	X	X	X	X			0.2-0.5 yd^3
Bags			X	X			1.0-2.0 yd^3
Boxes			X	X			1-5 yd^3
Roll top rolloff	X		X	X	X	X	15-25 yd^3
Vacuum box	X	X					15-25 yd^3
Frac tank	X	X					500-20,000 gal
Poly tank	X	X					200-4,000 gal
Vacuum truck	X	X	X				2,000-5,000 gal
Tank trailer	X	X					2,000-4,000 gal

Barge	X	X					3,000+ gal
Berm, 4 ft			X	X	X	X	1 yd^3
Bladders	X	X					25-1,500 gal

7.4.2 Waste Transfer

In most oil spill response operations, it may be necessary to transfer recovered oil and oil debris from one point to another several times before the oil and oily debris are ultimately disposed of at a state approved disposal site. Depending on the location of response operations, any or all of the following transfer operations may occur:

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

There are two general classes of transfer systems that could be employed for effective oily waste transfer operations. The following is a brief description of some transfer systems:

Vacuum Systems
Vacuum systems, such as air conveyors, vacuum trucks, and portable vacuum units, may be used to transfer viscous oils and debris but they usually pick up a very high water/oil ratio.

Wheeled Vehicles
Wheeled vehicles may be used to transfer liquid waste of oily debris to storage or disposal sites. These vehicles are readily available but have a limited rate (i.e., 100 bbls) and require good site access. All waste transfer activities shall be conducted by licensed transporter and carriers in accordance with applicable EPA and DOT requirements.

7.4.3 Waste Disposal

Waste must be disposed of in accordance with Federal and State requirements. Each incident

should be reviewed carefully to ensure that appropriate disposal techniques are employed.

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

Recycling
Recycling involves processing discarded materials for another use.

Incineration
This technique entails the destruction of the recovered oil by high temperature thermal oxidation reactions. There are licensed incineration facilities as well as portable incinerators that may be brought to a spill site. Incineration may require the approval of the local Air Pollution Control Authority.

In Situ Burning/Open Burning
Burning techniques entail igniting oil or oiled debris allowing it to burn under ambient conditions. These disposal techniques are subject to restrictions and permit requirements established by Federal, State, and Local laws.

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

Landfill Disposal
This technique entails burying the recovered oil in an approved landfill in accordance with regulatory procedures. Landfill disposal of free liquids is prohibited by Federal Law in the United States. All disposal activities shall be conducted by permitted disposal facilities in accordance with applicable state and EPA requirements.

FIGURE 7.4-4 - FACILITY SPECIFIC DISPOSAL VENDORS

MATERIAL	DISPOSAL FACILITY	LOCATION
Recovered Product	KPL M260.010 Waste Management Program Manual outlines the processes for managing compliance requirements triggered by the generation of Waste at KPL Owned and / or Operated assets.	KPL M260.010 Waste Management Program Manual Section 6 Treatment, Storage, and Disposal Facility (TSDF) outlines the process for selecting and vetting TSDF's for KPL Owned and/or operated assets.
Contaminated Soil	Same as Recovered Product.	Same as Recovered Product.
Contaminated Equipment	Same as Recovered Product.	Same as Recovered Product.
Personnel Protective Equipment	Same as Recovered Product.	Same as Recovered Product.

Decontamination Solutions	Same as Recovered Product.	Same as Recovered Product.
Adsorbents and Spent Chemicals	Same as Recovered Product.	Same as Recovered Product.

SECTION 8 Last revised: February 2006

DEMOBILIZATION / POST-INCIDENT REVIEW

8.1 CLOSURE AND TERMINATION OF THE RESPONSE

In these stages, the cleanup may have reached a level of resolve satisfactory to the ICS or UCS (Unified Incident Command comprising of Federal, State, and Local agencies). However, considering the size and complexity of the event, it is possible for the cleanup to reach closure, but termination may require follow-up actions.

Closure and termination issues to consider:

- The IMT (ICS / UCS) determine each area is clean before halting cleanup operations.
- Demobilization Plan, entering final stages prioritizing the removal of equipment and personnel.
- Equipment may need both maintenance and decontamination before being demobilized.
- Facilities (staging area, Command Post, etc.) are being shut down anticipating termination of operations.
- Determine what documentation should be maintained, where, and for how long.
- Safety Plans and safety equipment are being adjusted; heightened awareness is required as the event approaches closure and termination.
- If employed, utilize the IAP to document and demonstrate agreement between the ICS / UCS (RP and Agencies) and any conditions established for the closure or termination of the event.
- Document activities that will continue after the cleanup ends; examples include incident debriefing, bioremediation, NRDA studies, claims, and legal actions.
- Consider expressing gratitude to the community, police department, fire department, and emergency crews for their work during the response.

8.2 DEMOBILIZATION

Developing a Demobilization Plan may considerably improve the efficiency and effectiveness of the demobilization process (**SECTION 5.8**). A Demobilization Checklist is provided in **FIGURE 8.2-1**.

FIGURE 8.2-1 - DEMOBILIZATION CHECKLIST

DEMOBILIZATION CHECKLIST	
Assign personnel to identify surplus resources and probable release times.	☐
Work with Operational and Planning Group leaders to establish demobilization priorities.	☐
Develop decontamination procedures.	☐

Initiate equipment repair and maintenance.	☐
Develop a Disposal Plan.	☐
Identify shipping needs.	☐
Identify personnel travel needs.	☐
Develop impact assessment and statements.	☐
Obtain concurrence of Planning and Operations Group Leaders before release of personnel or equipment.	☐

8.3 POST-INCIDENT REVIEW

A Post-Incident review will be conducted for significant Incidents. The review shall be scaled to fit the seriousness and complexity of the incident and conducted in a timely manner. The purpose of the review is to thoroughly and objectively examine the incident based on the known facts and to determine a potential root cause using a systematic process to identify the cause of the incident.

The review must be conducted with the overall objectives of ensuring:

- Information Collection
- Team review, scaled to the complexity of the event
- Root Cause Analysis, (one member of the team must be knowledgeable in RCA methods)
- Identified and assigned action items
- Analysis and corrective action acceptance

Based on the size, seriousness, and complexity of the event, the Post-Incident Review may include or schedule a separate review to evaluate the Company's ability to:

- Follow notification procedures
- Employ staff mobilization procedures
- Operate within the response management system described in the Plan
- Follow response methods described in the Plan
- Contact and effectively utilize response equipment or contractors listed in the Plan
- Document the response actions taken

The purpose of the review is to review the efficiency and effectiveness of the response as well as identify actual or potential deficiencies in the Plan (**FIGURE A.1-4**). Appropriate changes to programs, procedures, and operations will be made based on the results of the review.

The Compliance Manager or designee is responsible for reviewing and incorporating post-drill evaluation improvements into the Plan when these improvements materially affect the Plan.

In the event of a PHMSA reportable incident, complete the Post-Accident Review Form (KPL0120).

8.3.1 Final Spill Cleanup Report

A final incident report may be prepared by the Incident Commander or designee after completion of spill cleanup activities for internal use. The report may be written in the narrative form, captured by a company form, and/or stored in a company database. It may include PREP documentation (**APPENDIX A.1**) or other agency documents, plus other information as listed below (as appropriate):

- Time, location, and date of discharge
- Type of material discharged
- Quantity discharged (indicate volume, color, length and width of slick, and rate of release if continuous)
- Source of spill (tank, flowline, etc.) in which the oil was originally contained, path of discharge, and impact area
- Detailed description of potential cause of the discharge and actions taken to control or stop the discharge
- Description of damage to the environment
- Steps taken to clean up the spilled oil along with dates and times steps were taken
- The equipment used to remove the spilled oil; dates and number of hours equipment was used
- The number of persons employed in the removal of oil from each location, including their identity, employer, and the number of hours worked at that location
- Actions by the Company or contractors to mitigate damage to the environment
- Measures taken by the Company or contractors to prevent future spills
- The Federal and State agencies to which the Company or contractors reported the discharge; show the agency, its location, the date and time of notification, and the official contacted
- Description of the effectiveness of equipment and cleanup techniques and recommendations for improvement
- The names, addresses, and titles of people who played a significant role in responding to the event
- A section identifying problems and deficiencies noted during the response event; a follow-up section should include recommended procedure modifications to make a future response more effective and efficient

Southern Zone

APPENDICES

A. **TRAINING / EXERCISES**

B. **CONTRACTOR RESPONSE EQUIPMENT**

C. **HAZARD EVALUATION AND RISK ANALYSIS**

D. **CROSS-REFERENCES**

E. **ACRONYMS AND DEFINITIONS**

F. **ADDITIONAL INFORMATION**

APPENDIX A Last revised: March 28, 2013

TRAINING / EXERCISES

A.1 EXERCISE REQUIREMENTS AND SCHEDULES

The Company participates in the National Preparedness for Response Exercise Program (PREP). **FIGURE A.1-1** provides a description of the various required PREP Exercise requirements (not all exercises are necessarily required for each facility).

As prescribed in PREP, the company will test their response plan in its entirety every three years. As allowed by PREP, the company has identified individual plan components (**FIGURE A.1-2**) to be exercised in portions within the triennial cycle rather than conducting one major exercise every three years. The components (**FIGURE A.1-2**) correspond with PREP "Exercise" objectives to ensure the plan is adequate to respond to a spill event.

During each triennial cycle, components of the Plan (**FIGURE A.1-2**) are be exercised at least once. Responding to actual event can be credited for an exercise.

The Compliance Manager or designee is responsible for the following aspects:

- Scheduling
- Maintaining records
- Implementing
- Evaluation of the Company's training and exercise program
- Post-drill evaluation improvements

- **FIGURE A.1-3** provides a documentation form which may be used for a Qualified Individual Notification exercise. **FIGURE A.1-4** provides a Spill/Exercise Documentation form. **FIGURE A.1-5** provides an Equipment Testing and Deployment Exercise documentation form. **FIGURE A.1-6** provides an Incident Management Team Staffing Exercise documentation form. Please note, other comparable company forms may be used instead of these specific forms.

FIGURE A.1-1 - EXERCISE REQUIREMENTS

EXERCISE TYPE	EXERCISE CHARACTERISTICS
Facility/QI Notification	• Conducted quarterly (one per year must be performed during non-business hours • The facility initiates mock spill notification to QI • The Qualified Individual documents time/date of notification, name, and phone number of individual contacted • Document using **FIGURE A.1-3** or comparable form
Emergency Procedures	• Optional exercise for EPA regulated facilities • Review of facility procedures established to mitigate or prevent any discharge or substantial threat of a discharge from operational activities • An emergency procedures conducted unannounced would satisfy the facilities requirement for the annual unannounced

Spill Management Teams / Table Top Exercise	
IMT (Incident Management Team)	• Conducted annually • Tests IMT's (SMT) response activities/responsibilities • Documents Plan's effectiveness • Must exercise worst case discharge scenario once every three years • Must test all Plan components at least once every three years • Document using **FIGURE A.1-4** or comparable form
Corporate Incident Management Team (If Applicable)	• Conducted annually • Conduct one IMT (spill management exercise or table top) on the core response management procedures • Ensure familiarization with each response plan they are responsible for • Document using **FIGURE A.1-4** or comparable form
Mutual aid SMT (If Applicable)	• Conducted annually • Conduct one IMT (spill management exercise or table top) on the plan holder (or industry type) response management procedures • One or more of the plan holder organization must participate • Ensure familiarization with each response plan they are responsible for • Document using **FIGURE A.1-4** or comparable form
Equipment Deployment Exercise: **Note:** Where OSRO and Company owned equipment are cited, both type of equipment exercises are incorporated.	

Company Owned	• Facilities with company owned and operated equipment:
	  • Semi-annually deploy the:
	  • Minimum amount of equipment for deployment as described in PREP (1,000 ft of each tye of boom and one each type of skimming system), or
	  • Amount of Equipment necessary to respond to an average most probable at the facility, which ever is less
	• Pipelines with operator owned and operated equipment:
	  • Annually deploy the:
	  • Minimum amount of equipment for deployment as described in PREP (1,000 ft of each tye of boom and one each type of skimming system), or
	  • Amount of Equipment necessary to respond to an average most probable at the facility, which ever is less
	• Document using **FIGURE A.1-5** or comparable form

FIGURE A.1-1 - EXERCISE REQUIREMENTS, CONTINUED

EXERCISE TYPE	EXERCISE CHARACTERISTICS
OSRO Owned (Oil Spill Removal Organization)	• Annually for facilities and pipelines, • Company to acquire documentation from the OSRO demonstrating the completion of exercise requirements
Co-op	• OSRO based Co-ops to follow OSRO deployment requirements • Facility equipment and personnel Co-op considered an OSRO in PREP and follow the OSRO deployment requirements for facilities • Co-op personnel responsible for deploying response equipment to be involved in a training program that prepares tem for operating the response equipment
Unannounced (Internal)	• Company will either participate in unannounced tabletop exercise or equipment deployment exercise on an annual basis, • If selected, company may take credit for participation in government initiated unannounced drill in lieu of drill required by PREP guidelines • Plan holders who have participated in a PREP government-initiated unannounced exercise will not be required to participate in another one for at least 36 months from the date of the exercise • Document using **FIGURE A.1-4** or comparable form
Area	• An industry plan holder that participates in an Area Exercise would not be required to participate in another Area Exercise for a minimum of six years
OTHER EXERCISE CONSIDERATIONS	
Drill Program Evaluation Procedures	• Company conducts post-exercise meetings to discuss positive items, areas for improvement, and to develop action item checklist to be implemented later
Credit for Spill Response	• Credit may be taken for internal exercises in response to actual spills • Spill response must be evaluated • Determination for credit made on which exercise were completed during the spill response. • Determination should be based on whether the response would meet the objectives of the exercise listed in PREP • Credit for Unannounced should be evaluated • Document in accordance with appropriate Exercise documentation form

Records of Drills	• Company will maintain exercise records for five years following completion of each exercise • Company will verify appropriate records are kept for each spill response contractor listed in Plan as required by PREP guidelines (annual equipment deployment drill, triennial unannounced drill, etc.)

FIGURE A.1-2 - PREP RESPONSE PLAN CORE COMPONENTS

CORE COMPONENTS	DESCRIPTION
1. Notifications	Test the notifications procedures identified in the Area Contingency Plan (ACP) and the Spill Response Plan.
2. Staff mobilization	Demonstrate the ability to assemble the spill response organization identified in the ACP and the Spill Response Plan.
3. Ability to operate within the response management system described in the Plan: • Unified Command • Response management system	Demonstrate the ability of the spill response organization to work within a unified command. Demonstrate the ability of the response organization to operate within the framework of the response management system identified in their respective plans.
4. Discharge control	Demonstrate the ability of the spill response organization to control and stop the discharge at the source.
5. Assessment	Demonstrate the ability of the spill response organization to provide initial assessment of the discharge and provide continuing assessments of the effectiveness of the tactical operations.
6. Containment	Demonstrate the ability of the spill response organization to contain the discharge at the source or in various locations for recovery operations.
7. Recovery	Demonstrate the ability of the spill response organization to recover the discharged product.
8. Protection	Demonstrate the ability of the spill response organization to protect the environmentally and economically sensitive areas identified in the ACP and the respective industry response plan.
9. Disposal	Demonstrate the ability of the spill response organization to dispose of the recovered material and contaminated debris.

10. Communications	Demonstrate the ability to establish an effective communications system for the spill response organization.
11. Transportation	Demonstrate the ability to establish multi-mode transportation both for execution of the discharge and support functions.
12. Personnel support	Demonstrate the ability to provide the necessary support of all personnel associated with response.
13. Equipment maintenance and support	Demonstrate the ability to maintain and support all equipment associated with the response.
14. Procurement	Demonstrate the ability to establish and effective procurement system.
15. Documentation	Demonstrate the ability of the spill response organization to document all operational and support aspects of the response and provide detailed records of decisions and actions taken.

FIGURE A.1-3 - QUALIFIED INDIVIDUAL NOTIFICATION EXERCISE

1. Date(s) QI Exercise performed:			
2. Exercise Name:			
☐ QI Exercise (☐ Announced ☐ Unannounced) ☐ Actual Spill			
Exercised frequency:			
☐ Quarter ☐ 1st ☐ 2nd ☐ 3rd ☐ 4th			
3. Description of Notification Exercise / Event:			
a. Location (Facility, Pipeline, Zones):			
b. Time initiated:			
c. Time ended:			
d. Notification Procedure:			
4. Notification results:			
Person performing exercise:	Method of contact: Telephone, Pager, Radio, other		
Qualified Individual Name	**Time Notified**	**Time Responded**	**Method of Contact**

5. Exercise objective met (contacted made between the facility and qualified individual(s))? _Yes___No
   If no, Lessons learned must be completed.

6. Lessons learned description and persons responsible for follow-up:

Description of Lessons Learned	Responsible corrective measures	Time Table for corrective measures

Print Name:	Signature:
Position:	

FIGURE A.1-4 - SPILL / EXERCISE DOCUMENTATION FORM

1. Date(s) performed:

2. Exercise Name:

Type of Exercise ☐ Exercise (☐ Announced ☐ Unannounced) ☐ Actual Spill

Exercise, credit for:

☐ Emergency Procedures ☐ Spill Management Team ☐ Tabletop

Exercise, frequency:

☐ Quarter (☐ 1st ☐ 2nd ☐ 3rd ☐ 4th) ☐ Semi-Annual ☐ Annual

Response plan discharge scenario used:

☐ Average most probable

☐ Maximum most probable ☐ Worst case		
3. Description of Exercise / Event:		
a. Location:		
b. Time initiated:		
c. Time ended:		
d. Product:		
e. How discovered:		
f. Quantity released :		
g. Affected area(s):		
h. Injuries or Hazards:		
i. Weather:		
4. **Plan Objectives** exercised (may be exercised at different times):		
a. Spill Management Team's Knowledge of Oil-Spill Response Plan		
	Yes	**No**
General Order of Response described in the Plan:		
• Discovery and Assessment (Spill Detection) Phase	☐	☐
• Detection methods identified	☐	☐
• Emergency Type (Event “Class”) identified	☐	☐
• Spill assessment (classifying discharge size & course of action) identified	☐	☐
Security and Response Phases		
• Initial Response	☐	☐
• General site assessment, detail to safety, environment, & public	☐	☐
• Elimination of ignition sources	☐	☐
• Isolation / Confirmation Source was stopped	☐	☐
• Establish Incident Command / field command post (ICS Structure)	☐	☐
• Briefing Meeting, (incident description, objectives, resources needed)	☐	☐
• Develop Site Safety Plan (including evacuations of necessary)	☐	☐
• Established Work Zones and Perimeter Security	☐	☐

• Initial Incident reports completed (company forms or others e.g. ICS 201)	☐	☐

FIGURE A.1-4 - SPILL / EXERCISE DOCUMENTATION FORM, CONTINUED

4. **Plan Objectives** exercised (may be exercised at different times), Continued:		
a. Spill Management Team's Knowledge of Oil-Spill Response Plan, Continued		
	Yes	**No**
• Sustained Response	☐	☐
• Objectives and priorities established with responsibilities assigned	☐	☐
• ICS Center established; transitioned from initial response activities	☐	☐
• IAP – Incident Action Plan, (Short and Long Range tactical objectives)	☐	☐
• Identify / provide clean-up and support resources and services	☐	☐
• Monitor cost; provide accounting, procurement, time recording	☐	☐
• Documentation of event to be recorded and / or maintained	☐	☐
• Coordinate Federal State and Local entities into ICS/ UCS units	☐	☐
• Containment and response methods established	☐	☐
• Closure / Termination Phases	☐	☐
• Closure plan / checklist to finalize ongoing clean-up and removal activities	☐	☐
• Demobilization plan for demobilizing resources	☐	☐
• Develop IAP (Incident Action Plan) for any follow-up actions	☐	☐
• Conduct a post incident review & document (e.g. post incident review form)	☐	☐
b. Proper Notification:	☐	☐
• Internal notifications completed (attach any available logs)	☐	☐

• Qualified Individual contacted and responded (attached OI Drill form)	☐	☐
• External (Agency) Notifications completed (attach any available logs) ▪ Federal Agencies (e.g. NRC, USCG, DOT) ▪ Agency _____ Date / Time _____, NRC #: _____, ▪ Agency _____ Date / Time _____, NRC #: _____, ▪ State (e.g. Texas General Land Office / Report Number) ▪ Agency _____ Date / Time _____, Report #: _____, ▪ Agency _____ Date / Time _____, Report #: _____, ▪ Agency _____ Date / Time _____, Report #: _____, ▪ Agency _____ Date / Time _____, Report #: _____, ▪ Local (e.g. LEPC, Sheriff, 911) ▪ Agency _____ Date / Time _____, Report #: _____, ▪ Agency _____ Date / Time _____, Report #: _____, ▪ Agency _____ Date / Time _____, Report #: _____, ▪ Agency _____ Date / Time _____, Report #: _____,	☐	☐
c. Communication systems:	☐	☐
Establish Primary/Secondary Communication System?	☐	☐
☐ Primary: (Cellular Phone ☐ Two Way Radio ☐ Land Telephone Line ☐) ☐ Secondary: (Cellular Phone ☐ Two Way Radio ☐ Land Telephoen Line ☐) ☐ Other:		

FIGURE A.1-4 - SPILL / EXERCISE DOCUMENTATION FORM, CONTINUED

d. Ability to Access Contracted Oil Spill Removal Organizations (OSROs):	☐	☐
Were OSRO identified and contacted?	☐	☐
Who contacted (Name of individual at OSRO):		
When contacted:		
Response time projection for deployment:		

Type and amount of equipment requested:		
e. Ability to Coordinate Response with On-Scene Coordinator, and applicable Agencies:	☐	☐
Was regulatory on-scene coordinator(s) contacted?	☐	☐
List person and agency represented:		
f. Ability to Access Sensitive Site & Resource Information in the Area Contingency Plan:	☐	☐
Was Area Contingency Plan available in the exercise?	☐	☐
Were environmental sensitive environments identified in the ACP?	☐	☐
Was spill response equipment identified in the ACP?	☐	☐

Identify which of the 15 core components of your response plan were exercised:

Organizational Design components:

☐ Notifications ☐ Staff Mobilization

☐ Ability to operate within the response management system described in the plan

Operational Response components:

☐ Discharge control ☐ Assessment of discharge

☐ Containment of the discharge ☐ Recovery of spilled material

☐ Protection of sensitive areas ☐ Disposal of recovered material and contaminated debris

Response support components:

☐ Communications ☐ Transportation

☐ Personnel support ☐ Equipment maintenance

☐ Procurement ☐ Documentation

5. Lessons learned description and persons responsible for follow-up:

Description of Lessons Learned	Responsible corrective measures	Time Table for corrective measures

Print Name:	Signature:
Position:	

FIGURE A.1-5 - EQUIPMENT TESTING AND DEPLOYMENT EXERCISE FORM

1. Date(s) performed:
2. Exercise Name:
Type of Equipment Deployment Exercise:
☐ Exercise (☐ Announced ☐ Unannounced) ☐ Actual Spill

EQUIPMENT DEPLOYMENT EXERCISE	
Equipment deployed is	☐ Company owned ☐ OSRO owned ☐ Both
Deployment of equipment was	☐ Exercise (☐ Announced ☐ Unannounced) ☐ Actual Spill
If facility - owned, was Equipment deployed sufficient for average most probable release?	☐ yes ☐ no ☐ na
If OSRO - owned, was Equipment deployed a representative sample (at least 1000 ft boom and at least on type of skimmer)?	☐ yes ☐ no ☐ na
Was equipment deployed in its intended operating environment?	☐ yes ☐ no ☐ na
Are facility personnel responsible for response operations involved in a comprehensive training program?	☐ yes ☐ no ☐ na
Is facility response equipment involved in a comprehensive maintenance program	☐ yes ☐ no ☐ na
Date of equipment deployment:	

ACTIVITY	**INFORMATION**
Item Type (e.g. boom or skimmer):	
Amount of equipment deployed:	
Number of support personnel to deploy equipment:	
Describe goal of equipment deployed	
Describe strategies listed for equipment deployed (as listed in ACP or responders plan)	
Was all deployed equipment operational? (If no, explain)	

ACTIVITY	INFORMATION
Item Type (e.g. boom or skimmer):	
Amount of equipment deployed:	
Number of support personnel to deploy equipment:	
Describe goal of equipment deployed	
Describe strategies for equipment deployed (Listed in ACP or responders plan)	
Was all deployed equipment operational? (If no, explain)	
OSRO Certification (if applicable)	

FIGURE A.1-5 - EQUIPMENT TESTING AND DEPLOYMENT EXERCISE FORM, CONTINUED

ACTIVITY	INFORMATION
Item Type (e.g. boom or skimmer):	
Amount of equipment deployed:	
Number of support personnel to deploy equipment:	
Describe goal of equipment deployed	
Describe strategies for equipment deployed (Listed in ACP or responders plan)	
Was all deployed equipment operational? (If no, explain)	

ACTIVITY	INFORMATION
Item Type (e.g. boom or skimmer):	
Amount of equipment deployed:	
Number of support personnel to deploy equipment:	
Describe goal of equipment deployed	
Describe strategies for equipment deployed (Listed in ACP or responders plan)	
Was all deployed equipment operational? (If no, explain)	

ACTIVITY	INFORMATION
Item Type (e.g. boom or skimmer):	
Amount of equipment deployed:	
Number of support personnel to deploy equipment:	

Describe goal of equipment deployed	
Describe strategies for equipment deployed (Listed in ACP or responders plan)	
Was all deployed equipment operational? (If no, explain)	

2. Lessons learned description and persons responsible for follow-up:

Description of Lessons Learned	Responsible corrective measures	Time Table for corrective measures
Print Name:	Signature:	
Position:		

FIGURE A.1-6 - INCIDENT MANAGEMENT TEAM STAFFING EXERCISE FORM

Company:	Date:
Exercise Name:	Exercise Type:

* Duties Must include: IC, Ops. Logistics, Planning Admin. Section Chiefs, Safety, Public Affairs, Liaison, etc.
Note: This is an optional form which can be used form staffing documentation in a simulated exercise.

ACTIVITY INFORMATION (Duties*)	Name	Time Contacted	Time to Respond	Comments

STAFF MOBILIZATION ACTIVITY	SUMMARY
Evaluation: *(Able to assemble the spill response organization identified in the responder plan and the ACP for the scenario?)*	
Changes to be Implemented	
Time Table for Implementation	
Print Name:	Signature:
Position:	

A.2 TRAINING PROGRAM

FIGURE A.2-1 provides training requirements for spill responders. **FIGURE A.2-2** provides the program matrix.

Training records for company personnel will be maintained per company policy.

FIGURE A.2-1 - TRAINING REQUIREMENTS

TRAINING TYPE	TRAINING CHARACTERISTICS
Training in use of spill response plan	• Company employees will be trained to properly report and respond to spills. • Appropriate company employees are trained and drilled on the Plan.
OSHA training requirements	• Company responders designated in Plan will have 24 hours of initial spill response training (Haz Mat Technician level) with annual refresher. • Contract responders will be required to meet OSHA requirements under 29 CFR 1910.120

Training for casual laborers or volunteers	• Company will not use casual laborers/volunteers for operations requiring HAZWOPER training
Wildlife	• Only appropriately trained and approved wildlife handlers, as found in the specialized support services section of this Plan, will be used to treat oiled wildlife
Training documentation and record maintenance	• Training records will be maintained in accordance with the Company Records Retention Schedule.
Facility Personnel	• Are trained to enable them to respond effectively to hazardous waste emergencies by familiarizing them with emergency procedures, emergency equipment, and emergency systems.

FIGURE A.2-2 - PREP TRAINING PROGRAM MATRIX

TRAINING ELEMENT	QUALIFIED INDIVIDUAL (QI)	INCIDENT MANAGEMENT TEAM (IMT)	FACILITY PERSONNEL
Captain of the Port (COTP) Zones or Environmental Protection Agency (EPA) Regions in which the facility is located	x	x	x
Notification procedures and requirements for facility owners or operators; internal response organizations; federal and state agencies; and contracted oil spill removal organizations (OSROs) and the information required for those organizations	x	x	x
Communication system used for the notifications	x	x	x
Information on the products stored, used, or transferred by the facility, including familiarity with the material safety data sheets (MSDS), special handling procedures, health and safety hazards, spill and fire fighting procedures	x	x	x
Procedures the facility personnel may use to mitigate or prevent any discharge or a substantial threat of a discharge of oil resulting from facility operational activities associated with internal or external cargo transfers, storage, or use	x		
Facility personnel responsibilities and procedures for use of facility equipment	x	x	x

which may be available to mitigate or prevent an oil discharge			
Operational capabilities of the contracted OSRO?s to respond small, medium, and large discharges	x	x	x
Responsibilities and authority of the Qualified Individual (QI) as described in the Spill Response Plan and Company response organization	x	x	x
The organization structure that will be used to manage the response actions including: • Command and control • Public information • Safety • Liaison with government agencies • Spill response operations • Planning • Logistics support • Finance	x	x	x
The responsibilities and duties of each Incident Management Team (IMT) within the organization structure	x	x	
The drill and exercise program to meet federal and state regulations as required under Oil Pollution Act of 1990 (OPA 90)	x	x	x
The role of the QI in the post discharge review of the Plan to evaluate and validate its effectiveness	x		
The Area Contingency Plan (ACP) for the area in which the facility is located	x	x	x
The National Contingency Plan (NCP)	x	x	x
Roles and responsibilities of federal and state agencies in pollution response	x	x	x

FIGURE A.2-2 - PREP TRAINING PROGRAM MATRIX, CONTINUED

TRAINING ELEMENT	QUALIFIED INDIVIDUAL (QI)	INCIDENT MANAGEMENT TEAM (IMT)	FACILITY PERSONNEL
Available response resources identified in the Plan	x	x	
Contracting and ordering procedures to	x	x	

acquire OSRO resources identified in the Plan			
OSHA requirements for worker health and safety (29 CFR 1910.120)	x	x	x
Incident Command System/Unified Command System	x	x	
Public affairs	x	x	
Crisis management	x	x	
Procedures for obtaining approval for dispersant use or insitu burning of the spill	x		
Oil spill trajectory analyses	x		
Sensitive biological areas	x	x	
This training procedure as described in the Plan for members of the IMT		x	
Procedures for the post discharge review of the plan to evaluate and validate its effectiveness		x	
Basic information on spill operations and oil spill clean-up technology including: • Oil containment • Oil recovery methods and devices • Equipment limitations and uses • Shoreline cleanup and protection • Spill trajectory analysis • Use of dispersants, insitu burning, bioremediation • Waste storage and disposal considerations		x	
Hazard recognition and evaluation		x	
Site safety and security procedures		x	
Personnel management, as applicable to designated job responsibilities		x	
Procedures for directing the deployment and use of spill response equipment, as applicable to designated job responsibilities		x	x
Specific procedures to shut down effected operations			x
Procedures to follow in the event of discharge, potential discharge, or emergency involving the following equipment or scenarios: • Tank overfill • Tank rupture • Piping or pipeline rupture			x

• Piping or pipeline leak, both under pressure or not under pressure, if applicable • Explosion or fire • Equipment failure • Failure of secondary containment system			
QI's name and how to contact him or her			x

APPENDIX B Last revised: January 25, 2012

COOPERATIVE AND CONTRACTOR DOCUMENTS

Southern Zone B - 2

B.1 COOPERATIVES AND CONTRACTORS

The Company has contracted with Oil Spill Removal Organizations (OSROs) to provide personnel and equipment in the event of a spill. The classification, response capabilities, and equipment are described below.

B.1.1 OSRO Classification

The OSRO classification process was developed by the U.S. Coast Guard (USCG) to provide guidelines to enable USCG and plan preparers to evaluate an OSRO?s potential to respond to oil spills. Plan holders that utilize USCG classified OSRO services are not required to list response resources in their plans.

The following is a listing of the USCG classified OSROs that may respond to incidents for areas listed in this Plan.

COMPANY / CONTRACTOR	APPLICABLE COTP ZONE (S)	USCG CLASSIFICATIONS	RESPONSE TIME
Miller Environmental Services, Inc. 600 Flato Road Corpus Christi TX 78405	CORPUS CHRISTI	Facilities: MM, W1, W2, W3 / Vessels: MM, W1, W2, W3 River/Canal: ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ Inland: ✓ ✓ ✓ ✓ Open Ocean: Offshore: Nearshore: Great Lakes:	1 hours
TAS Environmental Services, (Austin) 13720 Immanuel Road Austin TX 78660	HOUSTON-GALVESTON	Facilities: MM, W1, W2, W3 / Vessels: MM, W1, W2, W3 River/Canal: ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ Inland: ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ Open Ocean: ✓ ✓ Offshore: ✓ ✓ Nearshore: ✓ ✓ Great Lakes:	3 hours
TAS Environmental Services, LP (San Antonio) 14350 Lookout Road San Antonio Texas	HOUSTON-GALVESTON	Facilities: MM, W1, W2, W3 / Vessels: MM, W1, W2, W3 River/Canal: ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ Inland: ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ Open Ocean: Offshore: Nearshore:	3 hours

78233										
		Great Lakes								
Eagle SWS, (San Antonio) 414 FM 1103 Cibolo TX 78108	CORPUS CHRISTI		Facilities				Vessels				4 hours
			MM	W1	W2	W3	MM	W1	W2	W3	
		River/Canal	✓	✓	✓	✓	✓	✓	✓	✓	
		Inland	✓		✓	✓	✓		✓	✓	
		Open Ocean									
		Offshore									
		Nearshore									
		Great Lakes									

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COMPANY / CONTRACTOR	APPLICABLE COTP ZONE (S)	USCG CLASSIFICATIONS									RESPONSE TIME
Garner Environmental Services, Inc. (Houston Operations) 1717 West 13th Street Deer Park Texas 77536	Houston / Galveston		Facilities				Vessels				4 hours
			MM	W1	W2	W3	MM	W1	W2	W3	
		River/Canal	✓	✓	✓	✓	✓	✓	✓	✓	
		Inland	✓	✓	✓	✓	✓	✓	✓	✓	
		Open Ocean									
		Offshore									
		Nearshore									
		Great Lakes									
TAS Environmental Services (Dallas) 17714 Bannister Street, Suite 4 Dallas TX 75252	HOUSTON-GALVESTON		Facilities				Vessels				4 hours
			MM	W1	W2	W3	MM	W1	W2	W3	
		River/Canal	✓	✓	✓	✓	✓	✓	✓	✓	
		Inland	✓	✓	✓	✓	✓	✓	✓	✓	
		Open Ocean			✓				✓		
		Offshore			✓				✓		
		Nearshore			✓				✓		
		Great Lakes									
Eagle Construction and Environmental Services, Inc. (Houston) 1700 North La Porte TX	HOUSTON-GALVESTON		Facilities				Vessels				5 hours
			MM	W1	W2	W3	MM	W1	W2	W3	
		River/Canal			✓	✓	✓	✓	✓	✓	
		Inland									
		Open Ocean									
		Offshore									
		Nearshore									

77571		Great Lakes									

TAS Environmental Services, (Fort Worth) 3929 E. California Parkway Fort Worth TX 76119	HOUSTON-GALVESTON		Facilities				Vessels				5 hours
			MM	W1	W2	W3	MM	W1	W2	W3	
		River/Canal	✓	✓	✓	✓	✓	✓	✓	✓	
		Inland	✓	✓	✓	✓	✓	✓	✓	✓	
		Open Ocean			✓				✓		
		Offshore			✓				✓		
		Nearshore			✓				✓		
		Great Lakes									

Southern Zone B - 4

COMPANY / CONTRACTOR	APPLICABLE COTP ZONE (S)	USCG CLASSIFICATIONS									RESPONSE TIME
Eagle Construction and Environmental Services, L.P. (Corporate Office) 9701 East I-20; P.O. Box 872 Eastland TX 76448	HOUSTON-GALVESTON		Facilities				Vessels				6 hours
			MM	W1	W2	W3	MM	W1	W2	W3	
		River/Canal			✓	✓	✓	✓	✓	✓	
		Inland									
		Open Ocean									
		Offshore									
		Nearshore									
		Great Lakes									
Eagle SWS, (Fort Worth) 9204 Highway 287 N.W. Fort Worth TX 76131	HOUSTON-GALVESTON		Facilities				Vessels				8 hours
			MM	W1	W2	W3	MM	W1	W2	W3	
		River/Canal			✓	✓	✓	✓	✓	✓	
		Inland									
		Open Ocean									
		Offshore									
		Nearshore									
		Great Lakes									

Southern Zone B - 5

The following contractors are retained by the Company but are not USCG classified OSROs within this Area, as follows:

FIGURE 7.1-1 provides both OSRO and non-OSRO summarized equipment lists and response

times.

FIGURE B.1-1 provides evidence of contracts with OSROs and equipment lists for contractors without USCG classification.

FIGURE B.1-1 - EVIDENCE OF CONTRACTS

- **Miller Environmental Services, Inc., Corpus Christi, TX**
- **TAS Environmental Services, (Austin), Austin , TX**
- **TAS Environmental Services, LP (San Antonio), San Antonio, Texas**
- **Eagle SWS, (San Antonio), Cibolo, TX**
- **Garner Environmental Services, Inc. (Houston Operations), Deer Park, Texas**
- **TAS Environmental Services (Dallas), Dallas, TX**
- **Eagle Construction and Environmental Services, Inc. (Houston), La Porte, TX**
- **TAS Environmental Services, (Fort Worth), Fort Worth, TX**
- **Eagle Construction and Environmental Services, L.P. (Corporate Office), Eastland, TX**
- **Eagle SWS, (Fort Worth) , Fort Worth, TX**

FIGURE B.1-2 - EQUIPMENT LISTS

- **Miller Environmental Services, Inc., Corpus Christi, TX**
- **TAS Environmental Services, (Austin), Austin , TX**
- **TAS Environmental Services, LP (San Antonio), San Antonio, Texas**
- **Eagle SWS, (San Antonio), Cibolo, TX**
- **Garner Environmental Services, Inc. (Houston Operations), Deer Park, Texas**
- **TAS Environmental Services (Dallas), Dallas, TX**
- **Eagle Construction and Environmental Services, Inc. (Houston), La Porte, TX**
- **TAS Environmental Services, (Fort Worth), Fort Worth, TX**
- **Eagle Construction and Environmental Services, L.P. (Corporate Office), Eastland, TX**
- **Eagle SWS, (Fort Worth) , Fort Worth, TX**

FIGURE B.1-3 - DRILL DEPLOYMENT EXERICSES

- **Miller Environmental Services, Inc., Corpus Christi, TX**
- **TAS Environmental Services, (Austin), Austin , TX**
- **TAS Environmental Services, LP (San Antonio), San Antonio, Texas**

Eagle SWS, (San Antonio), Cibolo, TX

- **Garner Environmental Services, Inc. (Houston Operations), Deer Park, Texas**
- **TAS Environmental Services (Dallas), Dallas, TX**
- **Eagle Construction and Environmental Services, Inc. (Houston), La Porte, TX**
- **TAS Environmental Services, (Fort Worth), Fort Worth, TX**
- **Eagle Construction and Environmental Services, L.P. (Corporate Office), Eastland, TX**
- **Eagle SWS, (Fort Worth) , Fort Worth, TX**

APPENDIX C Last revised: January 30, 2013

HAZARD EVALUATION AND RISK ANALYSIS

C.1 SPILL DETECTION

Detection

Detection of a release may occur in a number of ways including:

- Automated or manual detection by a leak detection method such as:
  - Computational Pipeline Monitoring system
  - Line Balance
  - Real-time transient model
  - Pressure/Flow monitoring
- Visual inspection
- Acoustic emission detectors
- Fixed air monitor

Alarm Response

In case of an alarm, Control Center personnel will take the appropriate actions in accordance with operating procedures.

- Trained and qualified personnel in Pipeline Control will monitor the leak detection systems that use SCADA.

Operations of the SCADA System

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

[redacted]

C.2 WORST CASE DISCHARGE (WCD) SCENARIO DISCUSSION

The equipment and personnel to respond to a spill are available from several sources and are provided with the equipment and contractors in **SECTION 7** and **APPENDIX B**.

APPENDIX C.4 provides Worst Case Discharge calculations. Discussion of this scenario is as follows:

Upon discovery of a spill, the following procedures would be followed:

1. The First Responder would notify Supervisory Personnel and notifications would be initiated in accordance with **FIGURE 3.1-1**.

2. The Area Supervisor/Manager of Operations would assume the role of Incident Commander until relieved and would initiate response actions and notifications in accordance with

SECTION 2. If this were a small spill, the local/company personnel may handle all aspects of the response. Among those actions would be to:

- Conduct safety assessment in accordance with **FIGURE 2.1-1** and evacuate personnel as needed in accordance with **SECTION 2.2**
- Direct facility responders to shut down ignition sources
- Ensure completion of spill report form in accordance with **FIGURE 3.1-3**
- Ensure regulatory agencies are notified (**FIGURE 3.1-5**)

3. If this were a small or medium spill, the Qualified Individual/Incident Commander may elect for the First Responder to remain the Incident Commander or to activate selected portions of the Incident Management Team. However, for a large spill, the Qualified Individual would assume the role of Incident Commander and would activate the entire Incident Management Team in accordance with activation procedures described in **SECTION 4.2**.

4. The Incident Commander would then initiate spill assessment procedures including surveillance operations, trajectory calculations, and spill volume estimating in accordance with **SECTION 2.1.3**.

5. The Incident Commander would then utilize checklists in **SECTION 4.6** as a reminder of ICS position responsibilities. The primary focus would be to establish incident priorities and objectives and to brief staff accordingly.

6. The Incident Management Team would develop the following plans, as appropriate (some of these plans may not be required during a small or medium spill):

- Site Safety and Health (**SECTION 5.4**)
- Site Security (**SECTION 5.7**)
- Incident Action (**SECTION 5.3.2**)
- Decontamination (**SECTION 5.5**)
- Disposal (**SECTION 5.6**)
- Demobilization **(SECTION 5.8)**

7. The response would continue until an appropriate level of cleanup is obtained.

C.3 PLANNING VOLUME CALCULATIONS

Once the Worst Case Discharge volume has been calculated, response resources must be identified to meet the requirements of 49 CFR 194.105(b). Calculations to determine sufficient amount of response equipment necessary to respond to a Worst Case Discharge is described below. A demonstration of the planning volume calculations is provided below.

C.4 SPILL VOLUME CALCULATION

DOT/PHMSA portion of pipeline/facilities

The Worst Case Discharge (WCD) for the DOT portion of the pipeline and facilities, is defined

in 49 CFR 194.105(b) as the largest volume of the following:

1. The pipeline's maximum shutdown response time in hours (based on historic discharge data or in the absence of such data, the operators best estimate), multiplied by the maximum flow rate expressed in barrels per hour (based on the maximum daily capacity of the pipeline), plus the largest drainage volume after shutdown of the line section(s) in the response zone expressed in barrels; or

2. The largest foreseeable discharge for the line section(s) within a response zone, expressed in barrels (cubic meters), based on the maximum historic discharge, if one exists, adjusted for any subsequent corrective or preventative action taken; or

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.

Under PHMSA's current policy, operators are allowed to reduce the Worst Case Discharge volume derived from 49 CFR 194.105(b)(3) by no more than 75% if an operator is taking certain spill prevention measures for breakout tanks and presents supporting information in the response plan. An operator can reduce the Worst Case Discharge volume based on breakout tanks in the response zones as follows:

SPILL PREVENTION MEASURES	PERCENT REDUCTION ALLOWED
Secondary containment capacity greater than 100% capacity of tank and designed according to NFPA 30	50%
Tank built, rebuilt, and repaired according to API Std 620/650/653	10%
Automatic high-level alarms/shutdowns designed according to NFPA/API RP 2350	5%
Testing/cathodic protection designed according to API Std 650/651/653	5%
Tertiary containment/drainage/treatment per NFPA 30	5%*
Maximum allowable credit or reduction	75%

* Note: The facilities do not have tertiary containment.

The Worst Case Discharge for each response zone was based on the largest volume of the three criteria given above.

The Company has determined the Worst Case Discharge volume to be a catastrophic line failure of the largest line section with the greatest drainage capacity in each response zone or 25% of the volume of the largest tank in each zone.

C.4 SPILL VOLUME CALCULATION, CONTINUED

The line sections with the highest throughput and largest drainage volume between block valves on pump stations were chosen to calculate the pipeline Worst Case Discharge. Although the entire discharge volume of each line was used for the Worst Case Discharge, in an actual spill event, it would take days to drain the line completely. The line would be sealed early in the response effort.

All of the breakout tanks in the pipeline system are within adequate secondary containment, therefore, the discharge volumes for the largest tank was determined by adjusting the total tank volume downward by 75% per the company guidelines.

Considering the volume of release from a line break compared to that of historic discharge in each zone and to the volumes released from a tank failure, the tank failure was found to represent the Worst Case Discharge scenario.

The maximum historic discharge is not applicable for WCD covered by this plan. Given below are the tank and pipeline WCD calculations for this plan.

The Worst Case Discharge for each pipeline segment is the largest breakout tank. These tank volumes are as follows:

LOCATION	VOLUME (BBLS)
Viola Station	(b) (7)(F), (b) (3)
Sunfield Station	
Seeligson Station	

C.4 SPILL VOLUME CALCULATION, CONTINUED

The worst case tank volume is calculated as follows:

Largest tank x Credit for containment tank standards = Tank standards credit

The Company has implemented all of the spill prevention measures, listed on the previous page, except tertiary containment. Therefore, the percent reduction allowed for credit equals 75% and the Worst Case Discharge volume is 25% of the total volume.

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

WCD = [(DT + ST) x MF] + DD

Where:

WCD = Worst Case Discharge (bbl)

DT + ST = maximum detection time + maximum shut down time in adverse weather (generally five minutes except where noted)

MF = maximum flow rate (bph) (using 1200 bph)

DD = drain down volume (bbl) (internal diameter)

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

C.5 PIPELINE - ABNORMAL CONDITIONS

Abnormal Operations? under 49 CFR 195.402(d) may be a "substantial threat" that could pose a threat to Worst Case Discharge. Procedures to identify Abnormal Operations and actions to take for preventing and mitigating such events and conditions, are described in the Operating, Maintenance, and Emergency Procedures for Hazardous Liquids Manual.

C.6 PRODUCT CHARACTERISTICS AND HAZARDS

This Facility may store various types of commodities including but not limited to:

- Benzene
- Crude Oil
- Diesel (#1 & #2)
- Gasoline
- Hydrogen
- Light Cycle Oil
- Naphtha
- Natural Gas
- Propane
- Propane - Propylene mix
- Xylene

MSDS can be obtained by the facility in the Employee Right To Know Stations, additionally MSDS may also be available electronically via intra and internet.

FIGURE C.6-1 describes primary oils handled.

FIGURE C.6-1 - SUMMARY OF COMMODITY CHARACTERISTICS

COMMON NAME	MSDS NAME	HEALTH HAZARD	FLASH POINT	SPECIAL HAZARD	REACTIVITY	HEALTH HAZARD WARNING STATEMENT
Benzene	Benzene	1	2	n/a	3	Contact may cause reddening, itching and inflammation. Skin contact may cause harmful effects in other parts of the body.
Crude Oil	Crude	3	3	C, H2S	0	May contain benzene, a carcinogen, or hydrogen sulfide, which is harmful if inhaled; flash point varies widely
Diesel (#1 & #2)	Diesel	1	2	C	0	Long term, repeated exposure may cause skin cancer.

Gasoline	Gasoline	1	3	C	0	Long term, repeated exposure may cause cancer, blood, kidney and nervous system damage, and contains benzene.
Hydrogen	Hydrogen	2	4	A & P	0	HIGH CONCENTRATIONS MAY REDUCE OXYGEN AVAILABLE FOR BREATHING AND CAUSE SUFFOCATION
Light Cycle Oil	LCO * Light Cat Cracked Distillate	2	2	C, H2S	0	May contain Benzene (Carcinogen), Hydrogen Sulfide ((IDLH at 100 ppm NIOSH), Naphthalene (Neurotoxicity), Polycyclic Aromatic Hydrocarbons (Carcinogen)
Naphtha	Naphtha	2	3	C	0	VAPORS MAY CAUSE EYE AND RESPIRATORY TRACT IRRITATIONBREATHING HIGH CONCENTRATIONS CAN CAUSE IRREGULAR HEARTBEATS WHICH MAY BE FATALMAY BE HARMFUL OR FATAL IF SWALLOWEDMAY CAUSE LUNG DAMAGEOVEREXPOSURE MAY CAUSE CNS DEPRESSIONDANGER-CONTAINS BENZENE-CANCER HAZARDCAN CAUSE LEUKEMIA AND OTHER BLOOD DISORDERS
Natural Gas	Natural Gas (Methane)	1	4	A	0	Avoid ignition sources, check for explosive atmosphere
Propane	Appropriate product name	1	1	n/a	4	Contact with liquefied materials may cause frostbite. Short term contact may result in tissue destruction and severe burns.
Propane - Propylene mix	Appropriate product name	1	1	A , P	4	Direct contact with compress gas may cause frostbite (cold burns) and skin damage.
Xylene	Crude Xylene*Dimethylbenzene* Xylene, 720XYL*XYLOL	2	3	C	0	Benzene (carcinogen), Cumene (respiratory Irritation), Ethylbenzene, Toluene, Xylenes, All Isomers
Health	**4 = Extremely Hazardous**			**Fire Hazard**	**4 = Below 73? F, 22? C**	

Hazard	**3 = Hazardous** **2 = Warning** **1 = Slightly Hazardous** **0 = No Unusual Hazard**	**(Flash Point)**	**3 = Below 100? F, 37? C** **2 = Below 200? F, 93? C** **1 = Above 200? F, 93? C** **0 = Will not burn**
Special Hazard	**A = Asphyxiant** **C = Contains Carcinogen** **W = Reacts with Water** **Y = Radiation Hazard** **COR = Corrosive** **OX = Oxidizer** **H_2S = Hydrogen Sulfide** **P = Contents under Pressure** **T = Hot Material**	**Reactivity Hazard**	**4 = May Detonate at Room Temperature** **3 = May Detonate with Heat or Shock** **2 = Violent Chemical Change with High Temperature and Pressure** **1 = Not Stable if Heated** **0 = Stable**

APPENDIX D
CROSS-REFERENCES

Last revised: January 2005

FIGURE D-1 - DOT / PHMSA CROSS-REFERENCE

OPA 90 REQUIREMENTS (49 CFR 194)	LOCATION
Information Summary	
• For the core plan:	
• Name and address of operator	Figure 1-2
• For each Response Zone which contains one or more line sections that meet the criteria for determining significant and substantial harm (?194.103), listing and description of Response Zones, including county(s) and state(s)	Figure 1-2
• For each Response Zone appendix:	
• Information summary for core plan	Section 1
• QI names and telephone numbers, available on 24-hr basis	Figure 1-2
• Description of Response Zone, including county(s) and state(s) in which a worst case discharge could cause substantial harm to the environment	Figure 1-2
• List of line sections contained in Response Zone, identified by milepost or survey station or other operator designation	Figure 1-2
• Basis for operator?s determination of significant and substantial harm	Figure 1-2
• The type of oil and volume of the worst case discharge	Appendix C
• Certification that the operator has obtained, through contract or other approved means, the necessary private personnel and equipment to respond, to the maximum extent practicable, to a worst case discharge or threat of such discharge	Section 1.2, Appendix B
Notification Procedures	
• Notification requirements that apply in each area of operation of pipelines covered by the plan, including applicable state or local requirements	Section 3
• Checklist of notifications the operator or Qualified Individual is required to make under the response plan, listed in the order of priority	Section 3.1

Name of persons (individuals or organizations) to be notified of discharge, indicating whether notification is to be performed by operating personnel or other personnel	Section 3.1, Figure 3.1-4
• Procedures for notifying Qualified Individuals	Figure 3.1-1, Section 4.5, Figure 4.5-1
• Primary and secondary communication methods by which notifications can be made	Section 7.1.6

FIGURE D-1 - DOT / PHMSA CROSS-REFERENCE, CONTINUED

OPA 90 REQUIREMENTS (49 CFR 194)	LOCATION
• Information to be provided in the initial and each follow-up notification, including the following: • Name of pipeline • Time of discharge • Location of discharge • Name of oil recovered • Reason for discharge (e.g. material failure, excavation damage, corrosion) • Estimated volume of oil discharged • Weather conditions on scene • Actions taken or planned by persons on scene	Figure 3.1-3
Spill Detection and On-Scene Spill Mitigation Procedures	
• Methods of initial discharge detection	Appendix C.1
• Procedures, listed in order of priority, that personnel are required to follow in responding to a pipeline emergency to mitigate or prevent any discharge from the pipeline	Section 2
• List of equipment that may be needed in response activities based on land and navigable waters including: • Transfer hoses and pumps • Portable pumps and ancillary equipment • Facilities available to transport and receive oil from a leaking pipeline	Section 7.1.1, Appendix B
• Identification of the availability, location, and contact phone numbers to obtain equipment for response activities on a 24-hour basis	Figure 3.1-6, Appendix B
• Identification of personnel and their location, telephone numbers, and responsibilities for use of equipment in response	Figure 3.1-4, Figure 3.1-6,

activities on a 24-hour basis	Appendix B
Response Activities	
• Responsibilities of, and actions to be taken by, operating personnel to initiate and supervise response actions pending the arrival of the Qualified Individual or other response resources identified in the response plan	Section 2, Section 4.5, Appendix B
• Qualified Individual?s responsibilities and authority, including notification of the response resources identified in the response plan	Section 4.5
• Procedures for coordinating the actions of the operator or Qualified Individual with the action of the OSC responsible for monitoring or directing those actions	Section 4.4, Section 4.5
• Oil spill response organizations (OSRO) available through contract or other approved means, to respond to a worst case discharge to the maximum extent practicable	Appendix B
• For each organization identified under paragraph (d), a listing of: ◦ Equipment and supplies available ◦ Trained personnel necessary to continue operation of the equipment and staff the oil spill removal organization for the first seven days of the response	Appendix B

FIGURE D-1 - DOT / PHMSA CROSS-REFERENCE, CONTINUED

OPA 90 REQUIREMENTS (49 CFR 194)	LOCATION
List of Contacts	
• List of persons the Plan requires the operator to contact	Figure 3.1-1
• Qualified individuals for the operator?s areas of operation	Figure 1-2
• Applicable insurance representatives or surveyors for the operator?s areas of operation	Figure 3.1-7
• Persons or organizations to notify for activation of response resources	Figure 3.1-1
Training Procedures	
• Description of training procedures and programs of the operations	Appendix A.2

Drill Procedures	
• Announced and unannounced drills	Appendix A.1

• Types of drills and their frequencies; for example:
  • Manned pipeline emergency procedures and qualified individual notification drills conducted quarterly
  • Drills involving emergency actions by assigned operating or maintenance personnel and notification of qualified individual on pipeline facilities which are normally unmanned, conducted quarterly
  • Shore-based spill management team (SMT) tabletop drills conducted yearly
  • Oil spill removal organization field equipment deployment drills conducted yearly
  • A drill that exercises entire response plan for each Response Zone, would be conducted at least once every three years
	Appendix A.1

Response Plan review and update procedures	
• Procedures to meet ?194.121	Section 1.2
• Procedures to review plan after a worst case discharge and to evaluate and record the plan?s effectiveness	Section 1.2, Appendix C
Response zone appendices	
Each response zone appendix would provide the following information:	
• Name and telephone number of the qualified individual	Figure 1-2
• Notification procedures	Section 3
• Spill detection and mitigation procedures	Section 2.1, Appendix C
• Name, address, and telephone number of oil spill response organization	Figure 3.1-6, Appendix B

• Response activities and response resources including:
  • Equipment and supplies necessary to meet ?194.115
  • Trained personnel necessary to sustain operation of the equipment and to staff the oil spill response organization and spill management team for the first seven days of the response
	Appendix A, Appendix B

FIGURE D-1 - DOT / PHMSA CROSS-REFERENCE, CONTINUED

OPA 90 REQUIREMENTS (49 CFR 194)	LOCATION
• Names and telephone numbers of federal, state, and local agencies which the operator expects to assume pollution response responsibilities	Figure 3.1-5
• Worst case discharge volume	Appendix C
• Method used to determine the worst case discharge volume, with calculations	Appendix C

• A map that clearly shows:
  • Location of worst case discharge
  • Distance between each line section in the Response Zone:
  • Each potentially affected public drinking water intake, lake, river, and stream within a radius of five miles of the line section
  • Each potentially affected environmentally sensitive area within a radius of one mile of the line section
	Figure 1-3, Section 6.6

• Piping diagram and plan-profile drawing of each line section; may be kept separate from the response plan if the location is identified	Figure 1-2

• For every oil transported by each pipeline in the response zone, emergency response data that:
  • Include name, description, physical and chemical characteristics, health and safety hazards, and initial spill-handling and firefighting methods
  • Meet 29 CFR 1910.1200 or 49 CFR 172.602
	Figure C.6-1

FIGURE D-2 - OSHA CROSS-REFERENCE

EAP REQUIREMENTS (29 CFR 1910.38 [a] [2])	LOCATION
• Emergency escape procedures and emergency escape route assignments	Section 2, Figure 1-4
• Procedures to be followed by employees who remain to operate critical plant operations before they evacuate	N/A
• Procedures to account for all employees after emergency	Section 2

evacuation has been completed	
• Rescue and medical duties for those employees who are to perform them	Section 2
• The preferred means of reporting fires and other emergencies	Section 2, Figure 3.1-1
• Names of regular job titles of persons or departments who can be contacted for further information or explanation of duties under the plan	Figure 3.1-4, Section 4.6

ERP REQUIREMENTS (29 CFR 1910.120 [l] [2])	LOCATION
• Pre-emergency planning	Appendix C
• Personnel roles, lines of authority, and communication	Section 4.4, Section 4.6, Section 7.1.6
• Emergency recognition and prevention	Section 2
• Safe distances and places of refuge	Section 2
• Site security and control	Section 5.7, Section 7.3
• Decontamination procedures which are not covered by the site safety and health plan	Section 5.5
• Emergency medical treatment and first aid	Section 2
• Emergency alerting and response procedures	Section 3
• Critique of response and follow-up	Section 8.3
• PPE and emergency equipment	Section 7, Appendix B

FIGURE D-3 - EPA / RCRA CROSS-REFERENCE

EPA / RCRA REQUIREMENTS (40 CFR PART 265.16)		LOCATION
§ 265.16	**Applicability**	
a	(1) Facility personnel must successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the requirements of this part. The owner or	Figure A.2-1

	operator must ensure that this program includes all the elements described in the document required under paragraph (d)(3) of this section.	
	(2) This program must be directed by a person trained in hazardous waste management procedures, and must include instruction which teaches facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed.	Figure A.2-1
	(3) At a minimum, the training program must be designed to ensure that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment, and emergency systems, including where applicable: (i) Procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment; (ii) Key parameters for automatic waste feed cut-off systems; (iii) Communications or alarm systems; (iv) Response to fires or explosions; (v) Response to ground-water contamination incidents; and (vi) Shutdown of operations.	Appendix A.1, Appendix A.2
	(4) For facility employees that receive emergency response training pursuant to Occupational Safety and Health Administration (OSHA) regulations 29 CFR 1910.120(p)(8) and 1910.120(q), the facility is not required to provide separate emergency response training pursuant to this section, provided that the overall facility training meets all the requirements of this section.	Appendix A.1, Appendix A.2
b	Facility personnel must successfully complete the program required in paragraph (a) of this section within six months after the effective date of these regulations or six months after the date of their employment or assignment to a facility, or to a new position at a facility, whichever is later. Employees hired after the effective date of these regulations must not work in unsupervised positions until they have completed the training requirements of paragraph (a) of this section.	Figure A.2-1
c	Facility personnel must take part in an annual review of the initial training required in paragraph (a) of this section.	Figure A.2-1

FIGURE D-3 - EPA / RCRA CROSS-REFERENCE, CONTINUED

EPA / RCRA REQUIREMENTS (40 CFR PART 265.16)		LOCATION
§ 265.16	**Applicability**	
d	The owner or operator must maintain the following documents and records at the facility: (1) The job title for each position at the facility related to hazardous waste management, and the name of the	 Figure 3.1-4

	employee filling each job; (2) A written job description for each position listed under paragraph (d)(1) of this Section. This description may be consistent in its degree of specificity with descriptions for other similar positions in the same company location or bargaining unit, but must include the requisite skill, education, or other qualifications, and duties of facility personnel assigned to each position; Facility Manager – (typically the terminal or station manager) responsible for the overall hazardous and non-hazardous waste management functions at the facility. Facility Hazardous Waste Technician – responsible for hazardous waste management functions at the facility as directed by the Facility Environmental Manager; typically performs physical hands-on waste activities including moving, storage and labeling of containers, collecting samples, performing weekly waste container inspections, and oversight of offsite waste shipments. (3) A written description of the type and amount of both introductory and continuing training that will be given to each person filling a position listed under paragraph (d)(1) of this section;(4) Records that document that the training or job experience required under paragraphs (a), (b), and (c) of this section has been given to, and completed by, facility personnel.	Figure D-3 Figure A.2-1
e	Training records on current personnel must be kept until closure of the facility. Training records on former employees must be kept for at least three years from the date the employee last worked at the facility. Personnel training records may accompany personnel transferred within the same company.	Figure A.2-1

FIGURE D-3 - EPA / RCRA CROSS-REFERENCE, CONTINUED

EPA / RCRA REQUIREMENTS (40 CFR PART 265.30 - 265.37)		LOCATION
§ 265.30	**Applicability**	
	The regulations in this subpart apply to owners and operators of all hazardous waste facilities, except as §265.1 provides otherwise.	

§ 265.31	**Maintenance and operation of facility.**	
	Facilities must be maintained and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.	
§ 265.32	**Required equipment.**	
	All facilities must be equipped with the following, unless none of the hazards posed by waste handled at the facility could require a particular kind of equipment specified below:	
a	An internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel;	Section 7.1.6
b	A device, such as a telephone (immediately available at the scene of operations) or a hand-held two-way radio, capable of summoning emergency assistance from local police departments, fire departments, or State or local emergency response teams;	Section 7.1.6
c	Portable fire extinguishers, fire control equipment (including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals), spill control equipment, and decontamination equipment; and	Section 7.1.1, Figure C-8
d	Water at adequate volume and pressure to supply water hose streams, or foam producing equipment, or automatic sprinklers, or water spray systems.	N/A
§ 265.33	**Testing and maintenance of equipment.**	
	All facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, must be tested and maintained as necessary to assure its proper operation in time of emergency.	Appendix A.1
§ 265.34	**Access to communications or alarm system.**	
a	Whenever hazardous waste is being poured, mixed, spread, or otherwise handled, all personnel involved in the operation must have immediate access to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee, unless such a device is not required under §265.32.	Not Applicable

FIGURE D-3 - EPA / RCRA CROSS-REFERENCE, CONTINUED

EPA / RCRA REQUIREMENTS (40 CFR PART 265.30 - 265.37)	LOCATION

§ 265.34	**Access to communications or alarm system.**	
b	If there is ever just one employee on the premises while the facility is operating, he must have immediate access to a device, such as a telephone (immediately available at the scene of operation) or a hand-held two-way radio, capable of summoning external emergency assistance, unless such a device is not required under §265.32.	Section 7.1.6
§ 265.35	**Required aisle space.**	
	The owner or operator must maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, unless aisle space is not needed for any of these purposes.	Figure 2.1-1
§ 265.37	**Arrangements with local authorities.**	
a	The owner or operator must attempt to make the following arrangements, as appropriate for the type of waste handled at his facility and the potential need for the services of these organizations:	
	(1) Arrangements to familiarize police, fire departments, and emergency response teams with the layout of the facility, properties of hazardous waste handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to roads inside the facility, and possible evacuation routes;	Section 1.1
	(2) Where more than one police and fire department might respond to an emergency, agreements designating primary emergency authority to a specific police and a specific fire department, and agreements with any others to provide support to the primary emergency authority;	Section 1.1
	(3) Agreements with State emergency response teams, emergency response contractors, and equipment suppliers; and	Appendix B
	(4) Arrangements to familiarize local hospitals with the properties of hazardous waste handled at the facility and the types of injuries or illnesses which could result from fires, explosions, or releases at the facility.	Section 1.1
b	Where State or local authorities decline to enter into such arrangements, the owner or operator must document the refusal in the operating record.	Section 1.1

FIGURE D-3 - EPA / RCRA CROSS-REFERENCE, CONTINUED

EPA / RCRA REQUIREMENTS (40 CFR PART 265.50 - 265.56)		LOCATION
§ 265.50	**Applicability**	
	The regulations in this subpart apply to owners and operators of all hazardous waste facilities, except as 265.1 provides otherwise.	Section 1.1
§ 265.51	Purpose and Implementation of Contingency Plan	
a	Each owner or operator must have a contingency plan for his facility. The contingency plan must be designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water.	Section 1.1
b	The provisions of the plan must be carried out immediately whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents that could threaten human health or the environment.	Section 1.1
§ 265.52	Content of Contingency Plan	
a	The contingency plan must describe the actions facility personnel must take to comply with 265.51 and 265.56 in response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water at the facility.	Section 2
b	If the owner or operator has already prepared a Spill Prevention, Control, and Countermeasure (SPCC) Plan in accordance with Part 112 of this chapter, or Part 1510 of Chapter V, or some other emergency or contingency plan, he need only amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements of this part.	Section 7.4
c	The plan must describe arrangements agreed to by local police departments, fire departments, hospitals, contractors, and State and local emergency response teams to coordinate emergency services, pursuant to 265.37.	Figure 3.1-3
d	The plan must list names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinator (see 265.55), and this list must be kept up to date. Where more than one person is listed, one must be named as primary emergency coordinator and others must be listed in the order in which they will assume responsibility as alternates.	Figure 1-2
e	The plan must include a list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external), and decontamination equipment), where this equipment is required. This list must be kept	Section 7.1

	up to date. In addition, the plan must include the location and a physical description of each item on the list, and a brief outline of its capabilities.	

FIGURE D-3 - EPA / RCRA CROSS-REFERENCE, CONTINUED

EPA / RCRA REQUIREMENTS (40 CFR PART 265.50 - 265.56)		LOCATION
§ 265.52	Content of Contingency Plan, Continued	
f	The plan must include an evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. This plan must describe signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes (in cases where the primary routes could be blocked by releases of hazardous waste or fires).	Section 2.2, Figure 1-4
§ 265.53	Copies of Contingency Plan	
	A copy of the contingency plan and all revisions to the plan must be:	-----
a	Maintained at the facility, and	Section 1.2
b	Submitted to all local police departments, fire departments, hospitals, and State and local emergency response teams that may be called upon to provide emergency services.	Section 1.2
§ 265.54	Amendment of Contingency Plan	
	The contingency plan must be reviewed, and immediately amended, if necessary, whenever:	-----
a	Applicable regulations are revised;	Section 1.2
b	The plan fails in an emergency;	Section 1.2
c	The facility changes in its design, construction, operation, maintenance, or other circumstances in a way that materially increases the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents, or changes the response necessary in an emergency;	Section 1.2
d	The list of emergency coordinators changes; or	Section 1.2
e	The list of emergency equipment changes.	Section 1.2
§ 265.55	Emergency Coordinator	
	At all times, there must be at least one employee either on the facility premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures. This emergency coordinator must be thoroughly familiar with all aspects of the facility's contingency plan, all	Figure 1-2, Section 4.5, Appendix A

	operations and activities at the facility, the location and characteristics of waste handled, the location of all records within the facility, and the facility layout. In addition, this person must have the authority to commit the resources needed to carry out the contingency plan. *[Comment: The emergency coordinator's responsibilities are more fully spelled out in 265.56. Applicable responsibilities for the emergency coordinator vary, depending on factors such as type and variety of waste(s) handled by the facility, and type and complexity of the facility].*	

FIGURE D-3 - EPA / RCRA CROSS-REFERENCE, CONTINUED

EPA / RCRA REQUIREMENTS (40 CFR PART 265.50 - 265.56)		LOCATION
§ 265.56	Emergency Procedures	
a	Whenever there is an imminent or actual emergency situation, the emergency coordinator (or his designee when the emergency coordinator is on call) must immediately:	Section 2.1.3, Figure 2.1-1, Section 4.5
a(1)	Activate internal facility alarms or communication systems, where applicable, to notify all facility personnel; and	Section 2.1.3, Figure 2.1-1, Section 4.5
a(2)	Notify appropriate State or local agencies with designated response roles if their help is needed.	Section 2.1.3, Figure 2.1-1, Section 4.5
b	Whenever there is a release, fire, or explosion, the emergency coordinator must immediately identify the character, exact source, amount, and a real extent of any released materials. He may do this by observation or review of facility records or manifests and, if necessary, by chemical analysis.	Section 2.1.3, Figure 2.1-1, Section 4.5
c	Concurrently, the emergency coordinator must assess possible hazards to human health or the environment that may result from the release, fire, or explosion. This assessment must consider both direct and indirect effects of the release, fire, or explosion (e.g., the effects of any toxic, irritating, or asphyxiating gases that are generated, or the effects of any hazardous surface water run-offs from water or chemical agents used to control fire and heat-induced explosions).	Section 2.1.3, Figure 2.1-1, Section 4.5
d	If the emergency coordinator determines that the facility has had a release, fire, or explosion which could threaten human health, or the environment, outside of the facility, he must report his findings as follows:	Section 2.1.3, Figure 2.1-1, Section 4.5
d(1)	**If his assessment indicates that evacuation of local areas may be advisable, he must**	Section 2.1.3, Figure 2.1-1, Section 4.5

	immediately notify appropriate local authorities. He must be available to help appropriate officials decide whether local areas should be evacuated; and	
d(2)	He must immediately notify either the government official designated as the on-scene coordinator for that geographical area (in the applicable regional contingency plan under Part 1510 of this Title), or the National Response Center (using their 24-hour toll free number 800/424-8802). The report must include:	Section 2.1.3, Figure 2.1-1, Section 4.5, Figure 3.1-2
d(2)(i)	Name and telephone number of reporter:	Figure 3.1-2, Figure 3.1-3
d(2)(ii)	Name and address of facility;	Figure 3.1-2, Figure 3.1-3
d(2)(iii)	Time and type of incident (e.g., release, fire);	Figure 3.1-2, Figure 3.1-3
d(2)(iv)	Name and quantity of material(s) involved, to the extent known;	Figure 3.1-2, Figure 3.1-3
d(2)(v)	The extent of injuries, if any; and	Figure 3.1-2, Figure 3.1-3
d(2)(vi)	The possible hazards to human health, or the environment, outside the facility.	Figure 3.1-2, Figure 3.1-3

FIGURE D-3 - EPA / RCRA CROSS-REFERENCE, CONTINUED

EPA / RCRA REQUIREMENTS (40 CFR PART 265.50 - 265.56)		LOCATION
§ 265.56	**Emergency Procedures (Cont'd)**	
e	During an emergency, the emergency coordinator must take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other hazardous waste at the facility. These measures must include, where applicable, stopping processes and operations, collecting and containing released waste, and removing or isolating containers.	Section 2, Figure 2.1-1
f	If the facility stops operations in response to a fire, explosion or release, the emergency coordinator must monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes or other equipment, wherever this is appropriate.	Section 2, Figure 2.1-1
g	Immediately after an emergency, the emergency coordinator must provide for treating, storing, or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a	Section 7.4, Section 5.5

	release, fire, or explosion at the facility. *[Comment: Unless the owner or operator can demonstrate, in accordance with § 261.3(c) or (d) of this chapter, that the recovered material is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements of Parts 262, 263, and 265 of this chapter].*	
h	The emergency coordinator must ensure that, in the affected areas(s) of the facility:	-----
h(1)	No waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed; and	Section 7.4, Section 5.5
h(2)	All emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.	Section 5.4, Section 7.1-2
i	The owner or operator must notify the Regional Administrator, and appropriate State and local authorities, that the facility is in compliance with paragraph (h) of this section before operations are resumed in the affected area(s) of the facility.	Figure 3.1-3
j	The owner or operator must note in the operating record the time, date, and details of any incident that requires implementing the contingency plan. Within 15 days after the incident, he must submit a written report on the incident to the Regional Administrator. The report must include:	Section 8.3
j(1)	Name, address, and telephone number of the owner or operator;	Section 8.3
j(2)	Name, address, and telephone number of the facility;	Section 8.3
j(3)	Date, time, and type of incident (e.g., fire, explosion);	Section 8.3

APPENDIX E

ACRONYMS AND DEFINITIONS

Last revised: January 2005

E.1 ACRONYMS

ACP	Area Contingency Plan
AFFF	Aqueous Film Forming Foam
ASTM	American Society of Testing Materials
BBL	Barrel(s)
BLM	Bureau of Land Management (USDOI)
BPD	Barrels Per Day
BPH	Barrels Per Hour
CERCLA	Comprehensive Environmental Response, Compensation & Liability Act of 1980, as amended
CFR	Code of Federal Regulations
CO_2	Carbon Dioxide
COTP	Captain of the Port (USCG)
CRZ	Contamination Reduction Zone
CWA	Clean Water Act of 1977 (Federal)
EAP	Emergency Action Plan
EMS	Emergency Medical Services
EOC	Emergency Operations Center
EPA	U. S. Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
ERAP	Emergency Response Action Plan
ERP	Emergency Response Plan
ERT	Emergency Response Team
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FOSC	Federal On-Scene Coordinator
FRP	Facility Response Plan
FRT	Facility Response Team
FWPCA	Federal Water Pollution Control Act of 1972
GIS	Geographic Information System
GPM	Gallons Per Minute
HAZMAT	Hazardous Materials
HMIS	Hazardous Material Information System
IC	Incident Commander
ICS	Incident Command System
JIC	Joint Information Center

LEL	Lower Explosive Limit
LEPC	Local Emergency Planning Committee

LEPD	Local Emergency Planning District
LNG	Liquid Natural Gas
LPG	Liquefied Petroleum Gas
MSDS	Material Safety Data Sheets
MTR	Marine Transportation Related
N/A	Not Applicable
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NIIMS	National Interagency Incident Management System
NM	Nautical Miles
NOAA	National Oceanic and Atmospheric Administration
NRC	National Response Center
NRDA	National Resource Damage Assessment
NRT	National Response Team
OBA	Oxygen Breathing Apparatus
OPA 90	Oil Pollution Act of 1990
OSC	On-Scene Coordinator/Commander
OSHA	Occupational Safety and Health Administration (USDL)
PHMSA	Pipeline and Hazardous Materials Safety Administration (DOT)
PPE	Personal Protective Equipment
PREP	(National) Preparedness for Response Exercise Program
QI	Qualified Individual
RCRA	Resource Conservation and Recovery Act of 1976
RQ	Reportable Quantity
SARA	Superfund Amendments and Reauthorization Act
SCADA	Supervisory Control and Data Acquisition (System)
SCBA	Self Contained Breathing Apparatus
SDWA	Safe Drinking Water Act of 1986
SERC	State Emergency Response Commission
SETS	Safety Environment and Training Services
SI	Surface Impoundment
SIC	Standard Industrial Classification (Code)
SMT	Spill Management Team
SOSC	State On-Scene Coordinator

SPCC	Spill Prevention, Control, and Countermeasures (Plan)
SSC	Scientific Support Coordinator (NOAA)
UCS	Unified Command System
UEL	Upper Explosive Limit
USACOE	U. S. Army Corps of Engineers

USCG	U. S. Coast Guard
USDOD	U. S. Department of Defense
USDL	U. S. Department of Labor
USDOE	U. S. Department of Energy
USDOI	U. S. Department of the Interior
USDOJ	U. S. Department of Justice
USDOT	U. S. Department of Transportation
USFWS	U. S. Fish and Wildlife Service (USDOI)
USGS	U. S. Geological Survey (USDOI)

E.2 DEFINITIONS

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 with the Captain of the Port (COTP) zone in which the systems or equipment are intended to function.

Aqueous Film Forming Foam
A fluoro-carbon surfactant that acts as an effective vapor securing agent due to its effect on the surface tension of the water. Its physical properties enable it to float and spread across surfaces of a hydrocarbon fuel with more density than protein foam.

Average Most Probable Discharge **(USCG)**
A discharge of the lesser of 50 barrels (2100 gallons) or one percent of the volume of the worst case discharge.

Barrel
Measure of space occupied by 42 U. S. gallons at 60 degrees Fahrenheit.

Bleve
A boiling liquid-expanding vapor explosion; failure of a liquefied flammable gas container caused by fire exposure. Pronounced "blevey." Boilover
Occurs when the heat from a fire in a tank travels down to the bottom of the tank causing water that is already there to boil and push part of the tank's contents over the side. Carbon Dioxide

A heavy, colorless, odorless, asphyxiating gas, that does not normally support combustion. It is one and one-half times heavier than air and when directed at the base of a fire its action is to dilute the fuel vapors to a lean mixture to extinguish the fire.

Class A Fire
A fire involving common combustible materials which can be extinguished by the use of water or water solutions. Materials in this category include wood and wood-based materials, cloth, paper, rubber and certain plastics.

Class B Fire
A fire involving flammable or combustible liquids, flammable gases, greases and similar products. Extinguishment is accomplished by cutting off the supply of oxygen to the fire or by preventing flammable vapors from being given off.

Class C Fire
A fire involving energized electrical equipment, conductors or appliances. Nonconducting extinguishing agents must be used for the protection of firefighters.

Class D Fire
A fire involving combustible metals, for example, sodium, potassium, magnesium, titanium and aluminum. Extinguishment is accomplished through the use of heat-absorbing extinguishing agents such as certain dry powders that do not react with the burning metals.

Cold (Support) Zone

An area free of contaminants so that Personal Protection Equipment (PPE) is not required for personnel working in this area. Command functions and supporting operations are carried out here.

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.

Communication Equipment
Equipment that will be utilized during response operations to maintain communication between employees, contractors, federal/state/local agencies.

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.

Contamination Reduction Zone
Same as the warm zone, a buffer between the hot and cold zones. Decontamination activities take place there. Equipment needed to support the primary response operation may be staged in the warm zone.

Contingency Plan
A document used by: (1) federal, state, and local agencies to guide planning and response procedures regarding spill of oil, hazardous substances, or other emergencies; (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
Includes:

- A written contractual agreement with a response contractor. The agreement should identify and ensure the availability of the specified personnel and equipment described under U.S.C.G. Regulations within stipulated response times in the specified geographic areas

- Certification by the facility owner or operator that the specified personnel and equipment described under USCG Regulations are owned, operated, or under the direct control of the facility owner or operator, and are available within stipulated times in the specified geographic areas

- Active membership in a local or regional oil spill removal organization that has identified specified personnel and equipment described under USCG Regulations that are available to respond to a discharge within stipulated times in the specified geographic areas

- A document which:

    - Identifies the personnel, equipment, services, capable of being provided by the response contractor within stipulated response times in specified geographic areas
    - Sets out the parties' acknowledgment that the response contractor intends to commit the resources in the event of a response
    - Permits the Coast Guard to verify the availability of the response resources identified through tests, inspections, drills
    - Is incorporated by reference in the Response Plan

- For a facility that could reasonably be expected to cause substantial harm to the environment, with the consent of the response contractor or oil spill removal organization, the identification of a response contractor or oil spill removal organization with specified equipment and personnel which are available within stipulated response times in specific geographic areas.

Demand Breathing Apparatus
A type of self-contained breathing apparatus that provides air or oxygen from a supply carried by the user.

Dispersants
Those chemical agents that emulsify, disperse, or solublize 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 flotation/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.

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.

Exclusion Zone
Same as hot zone, the area where a hazard exists. This is the hazardous location on site, therefore entry requires personal protective equipment (PPE). It must be big enough for both mitigation activities and protection of personnel in the warm zone should an explosion, fire, change of wind direction, or an unexpected release occur during response activities.

Explosive Range
Flammable range; the range of the mixture of air and flammable gas or flammable vapor of liquids that must be present in the proper proportions for the mixture to be ignited. The range has upper and lower limits; any mixture above the upper explosive limit or below the lower explosive limit will not burn.

Facility
Any pipeline, structure, equipment, or device used for handling oil including, but not limited to, underground and aboveground storage tanks, impoundments, mobile or portable drilling or workover rigs, barge mounted drilling or workover rigs, and portable fueling facilities located offshore or on or adjacent to coastal waters or any place where a discharge of oil from the facility could enter coastal waters or threaten to enter the coastal waters.

Federal Fund
The oil spill liability trust fund established under OPA.

First Responders, First Response Agency
A public health or safety agency (i.e., 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.

Flashover
The ignition of combustibles in an area heated by convection, radiation, or a combination of the two. The action may be a sudden ignition in a particular location followed by rapid spread or a "flash" of the entire area.

Flash Point
The temperature at which a liquid fuel gives off sufficient vapor to form an ignitable mixture near its surface.

Foam
A blanket of bubbles that extinguishes fire mainly by smothering. The blanket prevents flammable vapors from leaving the surface of the fire and prevents oxygen from reaching the fuel. The water in the foam also has a cooling effect.

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 designed as such by the Administrator of EPA pursuant to the Comprehensive

Environmental Response, Compensation, and Liability Act; regulated pursuant to Section 311 of the Federal Water Pollution Control Act.

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 Resources 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.

Higher Volume Port Area
Ports of:

- Boston, MA
- New York, NY
- Delaware Bay and River to Philadelphia, PA
- St. Croix, VI
- Pascagoula, MS
- Mississippi River from Southwest Pass, LA to Baton Rouge, LA
- Louisiana Offshore Oil Port (LOOP), LA
- Lake Charles, LA
- Sabine-Nachez River, TX
- Galveston Bay and Houston Ship Channel, TX
- Corpus Christi, TX
- Los Angeles/Long Beach Harbor, CA
- San Francisco Bay, San Pablo Bay, Carquinez Strait, Suisun Bay to Antioch, CA
- Straits of Juan de Fuca and Puget Sound, WA
- Prince William Sound, AK

Hot (Exclusion) Zone
The area where a hazard exists. This is the hazardous location on site, therefore entry requires personal protective equipment (PPE). It must be big enough for both mitigation activities and protection of personnel in the warm zone should an explosion, fire, change of wind direction, or an unexpected release occur during response activities.

Hypothermia
A dangerously high fever that can damage nerve centers. This condition can result from exposure to excessive heat over an extended period of time.

Ignition Temperature
The lowest temperature at which a fuel will burn without continued application of an ignition source.

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.

Incident Command System
A method by which the response to an extraordinary event, including a spill, is categorized into functional components and responsibility for each component assigned to the appropriate individual or agency.

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.

Lead Agency
The government agency that assumes the lead for directing the spill response.

Lead Federal Agency
The agency which coordinates the federal response to incidents on navigable waters. The lead Federal agencies are:

- **U. S. Coast Guard (USCG):** Oil and chemically hazardous materials incidents on navigable waters
- **Environmental Protection Agency (EPA):** Oil and chemically hazardous materials incidents on most inland waters and in the inland zone

Lead State Agency
The agency which coordinates state support to Federal and/or Local governments or assumes the lead in the absence of a Federal spill response.

Lower Flammable Limit
Minimum flammable concentration of a particular gas in the air.

Marine Transportation-Related Facility (MTR Facility)
An onshore 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
The planning values derived from the planning criteria used to evaluate the response resources described in the response plan to provide the on-water recovery capability and the shoreline protection and clean-up capability to conduct response activities for a worst case discharge from a facility in adverse weather.

Maximum Most Probable Discharge (USCG)
A discharge of the lesser of 2,500 barrels or ten percent of the volume of a worst case discharge.

Medium Discharge **(EPA)**
Same as maximum most probable discharge.

National Contingency Plan
The plan prepared under the Federal Water Pollution Control Act (33 United States 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.

Nearshore Area
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 (COLREG) lines) 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:

- At least 50% of which by volume, distill at a temperature of 340EC (645EF)
- At least 95% of which volume, distill at a temperature of 370EC (700EF)

Non-Petroleum Oil
Oil of any kind that is not petroleum-based. It includes, but is not limited to, animal and vegetable oils.

Offshore Area
The area beyond 12 nautical miles measured from the boundary lines defined in 46 CFR Part 7 extending seaward to 50 nautical miles, except in the Gulf of Mexico. In the Gulf of Mexico it is the area beyond 12 nautical miles of the line of demarcation (COLREG lines) defined in '80-740 - 80.850 of Title 33 of the CFR extending seaward to 50 nautical miles.

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 Removal Organization (OSRO)
An entity that provides oil spill response resources, and includes any for profit or not-for-profit contractor, cooperative, or in-house response resources that have been established in a geographic area to provide required response resources.

Operating Area
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
Rivers and canals, inland, Great Lakes, or ocean. These terms are used to define the conditions in which response equipment is designed to function.

Overhaul
A procedure following a fire whereby the area is examined for hidden fire and fire extension and the fire area is cleaned up.

Owner or Operator
Any person, individual, partnership, corporation, association, governmental unit, or public or private organization of any character.

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:

- Group II - specific gravity less than .85
- Group III - specific gravity between .85 and less than .95
- Group IV - specific gravity .95 to and including 1.0
- Group V - specific gravity greater than 1.0

Primary Response Contractor(s)
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(s)
An English-speaking representative(s) of the facility identified in the plan, located in the United States, available on a 24-hour basis, familiar with implementation of the facility response plan, and trained in his or her responsibilities under the plan. This person must have full written authority to implement the facility's response plan. This includes:

- Activating and engaging in contracting with identified oil spill removal organization(s)
- Acting as a liaison with the predesignated of Federal On-Scene Coordinator (FOCS)
- Obligating, either directly or through prearranged contracts, funds required to carry out all necessary or directed response activities

Regional Response Team
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.

Reid Vapor Pressure Method
Method used by the American Society of Testing Materials to test vapor pressure. It is a measure of the volatility, or tendency to vaporize, of a liquid.

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.

Rivers and Canals
A body of water confined within the inland area that has a projected depth of 12 feet or less, including the Intracoastal Waterway and other waterways artificially created for navigation.

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.

Slopover
An event that occurs when water is introduced into a tank of very hot liquid, causing the liquid

to froth and spatter. Small Discharge (EPA)
Same as average most probable discharge.

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 Management Team
The personnel identified to staff the organizational structure identified in a response plan to manage response plan implementation.

Spontaneous Ignition
A fire that occurs without a flame, spark, hot surface, or other outside source of ignition.

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 Reauthorization Act of 1986 (SARA). The SERC approves the State Oil and Hazardous Substance Discharge Prevention and Contingency Plan and Local Emergency Response Plans.

Static Electricity
Charges of electricity accumulated on opposing and usually moving surfaces having negative and positive charges, respectively. A hazard exists where the static potential is sufficient to discharge a spark in the presence of flammable vapors or combustible dusts.

Support Zone
Same as cold zone, an area free of contaminants so that personal protection equipment (PPE) is not required for personnel working in this area. Command functions and supporting operations are carried out here.

Tornado Warning
A tornado has been sighted.

Tornado Watch
Conditions are favorable for tornados to form.

Unified Command
The method by which local, state, and federal agencies 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

Warm (Contamination Reduction) Zone
A buffer between the hot and cold zones. Decontamination activities take place there. Equipment needed to support the primary response operation may be staged in the warm zone.

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.

Wildlife Rescue
Efforts made in conjunction with federal and state agencies to retrieve, clean, and rehabilitate birds and wildlife affected by an oil spill.

APPENDIX F Last revised: March 1, 2009
ADDITIONAL INFORMATION

- School Identification
- TGLO Coastal Water Facility Certification Provisions
- TGLO Oil Spill Reporting Boundaries
- TGLO Oil Wildlife Response Information Guide
- TGLO Sound Management Practice Program

LINK FILES

(b) (7)(F), (b) (3)

N

No Major River Crossings

Overview

Interconnect P-3, 8in.
Index: 60101030
Interconnect P-3

Date: July 12, 2011

J:\HCA_Tactical_Plans\HCA_Data_Review.mxd

(b) (7)(F), (b) (3)

N

No Major River Crossings

Overview

Interconnect P-4, 8in.
Index: 60101040
Interconnect P-4

Date: April 12, 2012

J:\HCA_Tactical_Plans\HCA_Data_Review.mxd

(b) (7)(F), (b) (3)

N

No Major River Crossings

Overview

Interconnect P-6, 6in.
Index: 60101060
Interconnect P-6

Date: April 4, 2012

J:\HCA_Tactical_Plans\HCA_Data_Review.mxd

(b) (7)(F), (b) (3)

[redacted]

N

NO MAJOR RIVER CROSSINGS

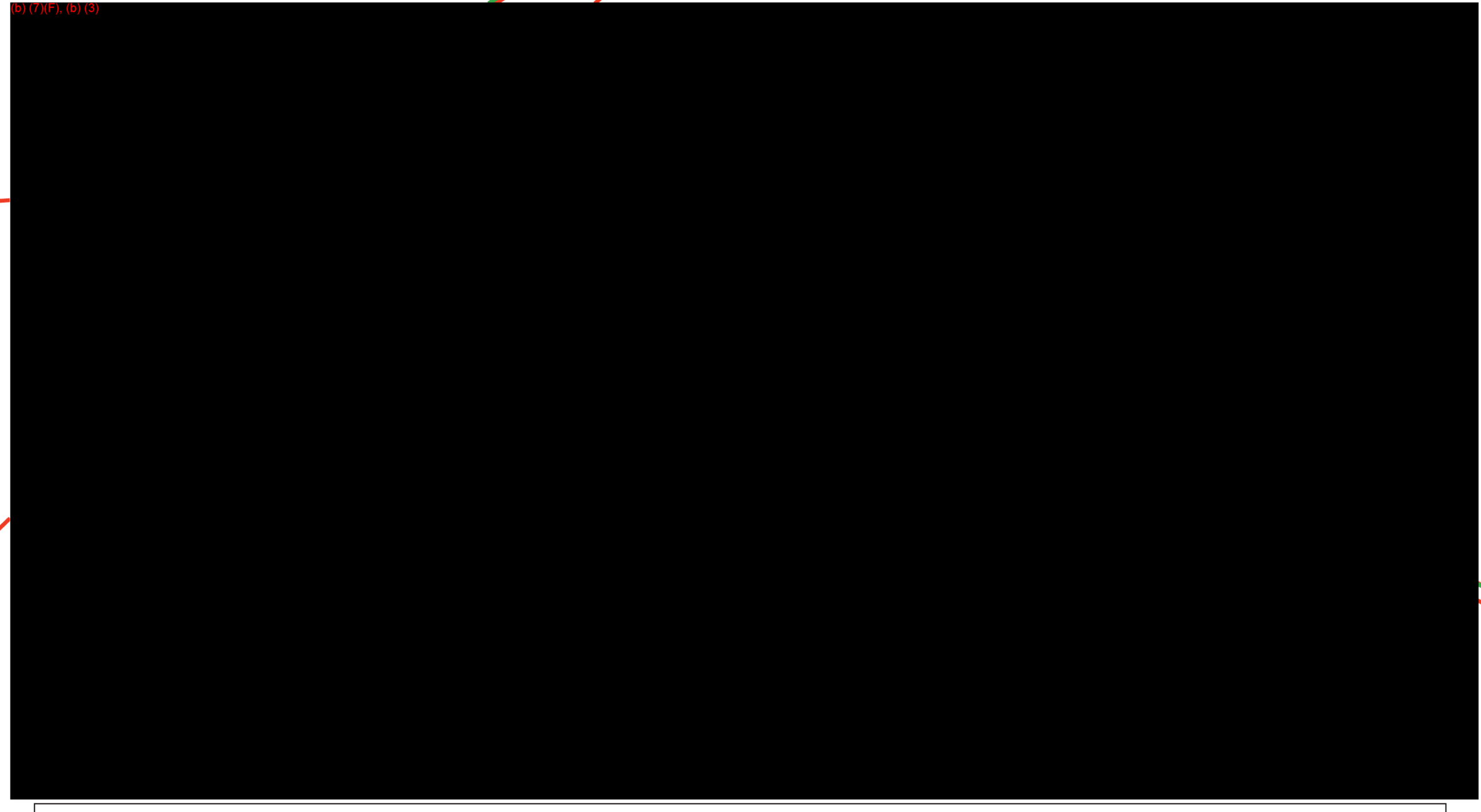
Overview

Interconnect P-10, 8in.
Index: 60101100
Interconnect P-10

Date: March 26, 2012

J:\HCA_Tactical_Plans\HCA_Data_Review.mxd

(b) (7)(F), (b) (3)



N

No Major River Crossings

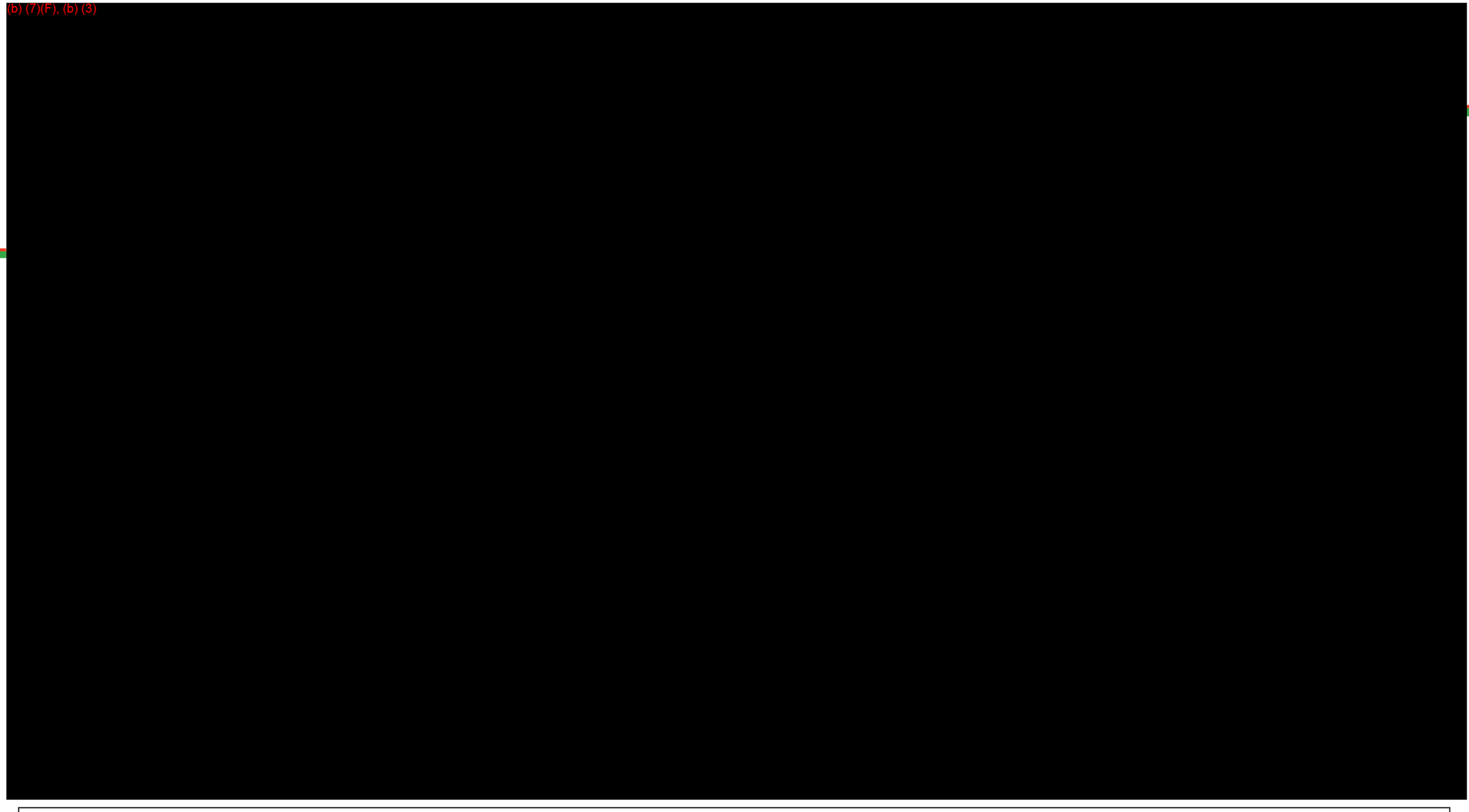
Overview

FHR, Gaso Cargo, 14in.
Index: 60102010
Gaso Cargo

Date: July 12, 2011

J:\HCA_Tactical_Plans\HCA_Data_Review.mxd

(b) (7)(F), (b) (3)



N

NO MAJOR RIVER CROSSINGS

Overview

FHR, Gaso Spur
Index: 60102011
Gaso Cargo

Date: January 18, 2012

J:\HCA_Tactical_Plans\HCA_Data_Review.mxd

(b) (7)(F), (b) (3)

N

No Major River Crossings

Overview

FHR, Kerosene, 8in.
Index: 60103030
Kerosene, 8in.

Date: August 11, 2011

J:\HCA_Tactical_Plans\HCA_Data_Review.mxd

(b) (7)(F), (b) (3)

N

No Major River Crossings

Overview

FHR, P-7 / Turkey Creek, 6in.
Index: 60109010
P-7 / Turkey Creek

Date: July 12, 2011

J:\HCA_Tactical_Plans\HCA_Data_Review.mxd

(b) (7)(F), (b) (3)

N

No Major River Crossings

Overview

P-15 EAST (FHR, Burner Cargo, 14in.)
Index: 60110010
P-15 EAST (Burner Cargo)

Date: November 2, 2012

J:\HCA_Tactical_Plans\HCA_Data_Review.mxd

(b) (7)(F), (b) (3)

N

NO MAJOR RIVER CROSSINGS

Overview

FHR, Burner Cargo, 14in.
Index: 60110011
FHR, Burner Cargo

Date: January 18, 2012

J:\HCA_Tactical_Plans\HCA_Data_Review.mxd

(b) (7)(F), (b) (3)

[redacted]

N

No Major River Crossings

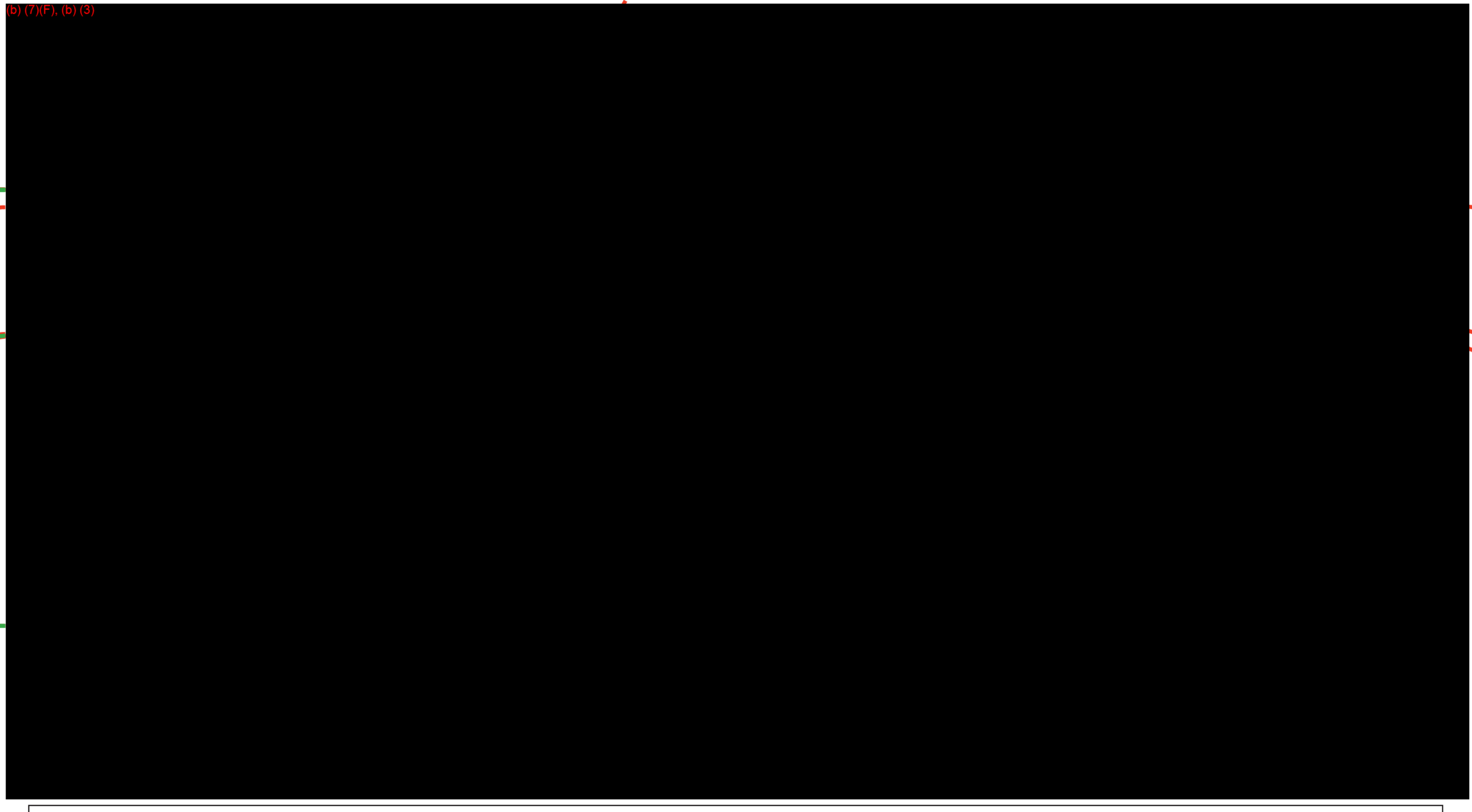
Overview

P-16 WEST (FHR, Burner Cargo, 14in.)
Index: 60110020
P-16 WEST (Burner Cargo)

Date: November 2, 2012

J:\HCA_Tactical_Plans\HCA_Data_Review.mxd

(b) (7)(F), (b) (3)



N

No Major River Crossings

Overview

FHR, Jet, 10in.
Index: 60112010
FHR, Jet

Date: July 12, 2011

J:\HCA_Tactical_Plans\HCA_Data_Review.mxd

(b) (7)(F), (b) (3)

N

No Major River Crossings

Overview

FHR, Turkey Creek - Inactive, 6in.
Index: 60113010
FHR, Turkey Creek - Inactive

Date: April 13, 2012

J:\HCA_Tactical_Plans\HCA_Data_Review.mxd

(b) (7)(F), (b) (3)

[redacted]

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

N

No Major River Crossings

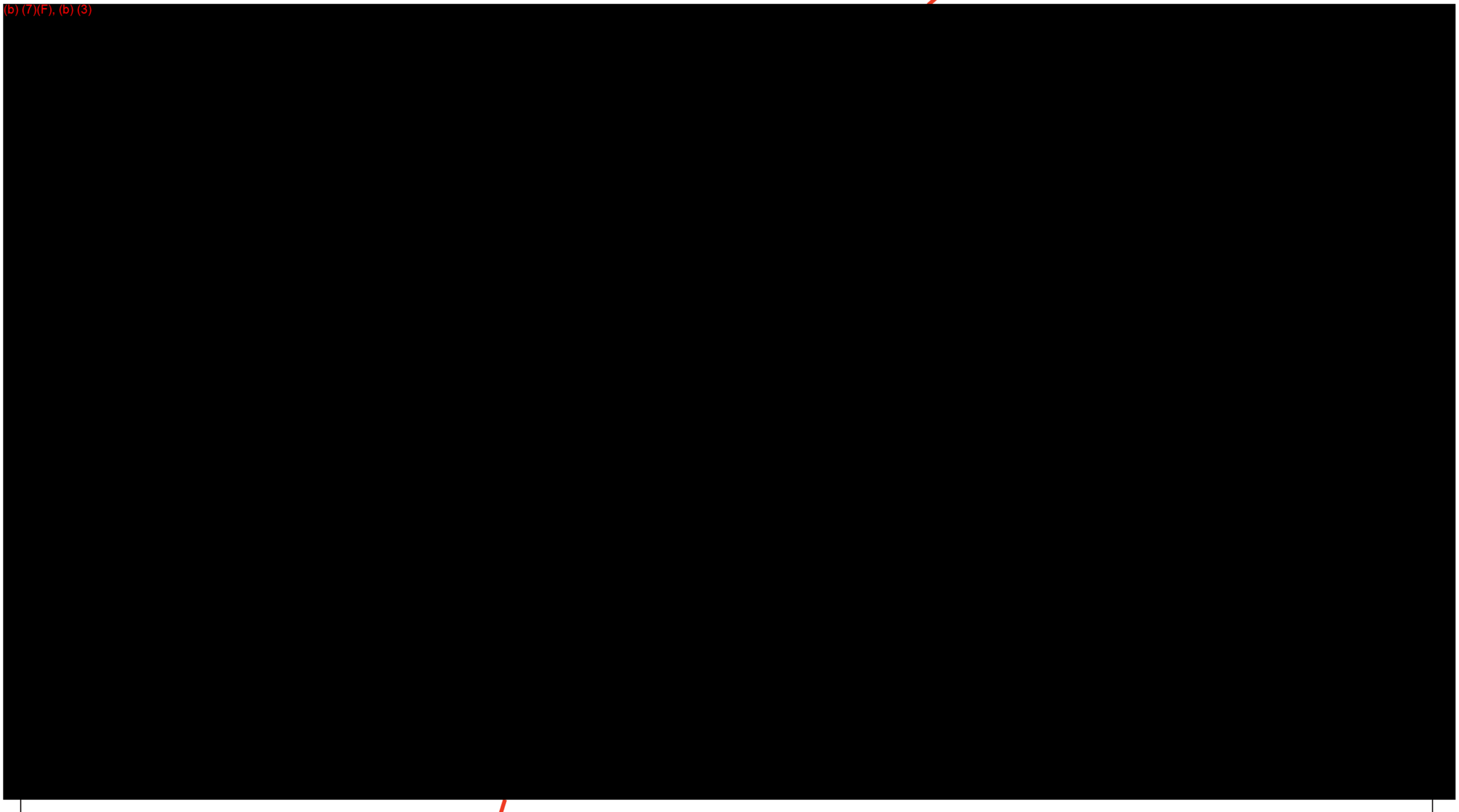
Overview

Sunfield To Kelsey, 6in.
Index: 60403010
Sunfield To Kelsey

Date: July 12, 2011

J:\HCA_Tactical_Plans\HCA_Data_Review.mxd

(b) (7)(F), (b) (3)



N

No Major River Crossings

Overview

Kelsey To Seeligson, 8in.
Index: 60403020
Kelsey To Seeligson

Date: July 12, 2011

J:\HCA_Tactical_Plans\HCA_Data_Review.mxd

(b) (7)(F), (b) (3)

[redacted]

N

No Major River Crossings

Overview

Viola To FHR East, 10in.
Index: 60410010
Viola To FHR East

Date: July 12, 2011

J:\HCA_Tactical_Plans\HCA_Data_Review.mxd

(b) (7)(F), (b) (3)

HCA COVERED SECTION
KOCH PIPELINES
COMMERCIALLY NAVIGABLE WATERWAY
DRINKING WATER RESOURCE HCA (Buffered)
ECOLOGICAL HCA (Buffered)
POPULATION HCA (Buffered)

Overview

Plains to Viola, 16in.
Index: 60410020
Plains to Viola

Date: April 15, 2013

0 0.08 0.16 0.24 Miles

N

J:\HCA_Tactical_Plans\HCA_Data_Review.mxd

Eagle Construction &
Environmental Services, LP
414 FM 1103
Cibolo, Texas 78108

January 7, 2009

Kin Gerold
Koch Pipeline Company, LP
PO Box 64596
St. Paul, MN 55164

Re: Self Certification Of Oil Spill Equipment Deployment / Exercise, "Annual Revision"
USCG OSRO Certification No. 0085

Ms. Gerold:

The National Preparedness for Response Exercise Program (PREP) sets guidelines to address exercise requirements for Oil Spill Removal Organizations (OSRO). In keeping with these guidelines and being identified in **Koch Pipeline Company, LP** Response Plan, **Eagle** is obligated to deploy a representative sample of each piece of response equipment listed in our inventory. Each item has been deployed and exercised in the environment in which it was intended to operate.

Eagle has deployed, either in training or during actual spills, a piece of Oil Spill Response Equipment that will represent all of the items listed in our response inventory. This includes but is not limited to various company owned pumps, booms, boats and excavation equipment.

The actual deployments/exercises in 2007 were as follows:

ACTUAL DEPLOYMENTS

Texas Divisions

- January 2007-Eagle responded to a 1,500 gallon jet fuel release at the San Antonio International Airport. 1000 feet of containment boom, skimmers, sorbents and vacuum trucks were used to remove the product.

- March 2007-Eagle responded to a train derailment in west Texas that resulted in an oil spill in a river. Eagle deployed 500 feet of containment boom to control the oil. A vacuum truck was used to remove the oil.

- May 2007-Eagle responded to an oil spill that impacted a cooling tower at a power plant in San Antonio, TX. Containment boom was used to control the spread of the oil. Vacuum trucks and sorbents were utilized to remove the oil.

- July 2007-Eagle responded to a 7,000 bbl jet fuel spill in Huntsville TX. Eagle deployed 3000 feet of boom and built underflow dams to control the release that impacted over 4 miles of Turkey Creek. 15 vacuum trucks and 5 drum skimmers were used to remove the fuel. 50 frac tanks were used to stage the fuel prior to disposal.

- August 2007-Eagle responded to an oil spill at an East Texas power plant. Oil from the impacted the lake. 1,000 feet of containment boom was used to control the oil.

- September 2007-Eagle deployed 1,000 feet of containment boom in the water intakes of a power plant near San Antonio, TX. The boom was kept in place during construction at the power plant. Eagle maintained the boom during the two month project.

- September 2007-Eagle deployed 500 feet of containment boom north of Tulsa, Oklahoma to control oil from that was released during the floods in the area. Sorbents were used to remove the oil.

- October 2007-Eagle responded to 1,000 bbl fuel release from a pipeline in south east Texas. Eagle utilized 200 feet of containment boom and trac hoes to control the release of product.

- December 2007-Eagle deployed 1,500 feet of containment boom on Lake Worth in Lake Worth, Texas to contain diesel fuel leaking from a boat that had begin to sink.

Ohio Division

- January 2007-Eagle responded to an unknown amount of oil released in Akron, OH that migrated through drainage tiles into a retention pond. Cleanup crews deployed over 2,000 feet of containment boom as well as 1,000 feet of absorbent materials. In addition, 2 vacuum trucks, 2 drum skimmers and boats were used in the effort.

- March 2007-Eagle deployed 1,600 feet of containment/absorbent boom in Toledo, OH to contain a diesel fuel spill in the Ottawa River. Eagle responded with a Hi-Rail vacuum truck, frac tanks, boats and an excavator to remove the oil from the frozen river.

- May 2007-Eagle responded to Willard, OH to a 2,000 gallon fuel spill. The spill was contained with containment/absorbent booms and underflow dams. The fuel was removed with vacuum trucks and 2 drum skimmers

Louisiana Division

- August 2007-Eagle responded to a gas well blowout. Eagle deployed 1,000 feet of containment boom to control the released liquids from the well.

EXCERCISES

- January 2007-Eagle took part in a spill drill a fuel storage facility in Fort Worth. A "worst case scenario" was discussed during the event.

- March 2007-Eagle deployed 2,000 feet of containment boom during a "worst case scenario" spill drill at a fuel storage facility in San Antonio, TX. State and local officials attended the full-scale drill.

- April 2007-Eagle attended a table top spill drill in east Texas for a pipeline company. The drill involved all the surrounding fire departments and city and state officials.

- May 2007-Eagle attended a table top drill scenario and contractor orientation for a petro-chemical company in Findlay, OH.

- October 2007-Eagle participated in a "worst case discharge scenario" for a petro-chemical company in Waco, TX. In addition to the Waco location, discussions were made for the facilities in San Antonio, Austin, and Fort Worth, Texas.

- November 2007-Eagle attended a table top spill drill in Sweetwater, TX for a pipeline company. The drill involved a "worst case scenario" release of product on the local water supply.

Other responses have occurred that fulfill the PREP requirements and documentation is available upon request. Eagle maintains documentation to verify testing and maintenance of all spill response equipment. All response personnel are trained to CFR 1910.120 and certificates are available upon request.

Please feel free to contact me at (210) 566-8366, toddj@ecesi.com, or on my cell phone at (817) 966-1493, if I can be of any further assistance.

In the event of an emergency, please call (800) 336-0909.

Sincerely,
Eagle Construction and Environmental Services, LP

Todd Johnson
Corporate Emergency Response Manager

Oil Spill Response Equipment Inventory
Ft. Worth Division

Containment Boom:

4000 feet of More Boom 18-inch boom - *pre loaded on two trailers 1000' each*
400 feet of More Boom10 inch boom
200 feet of More Boom 6-inch mini boom

Oil Skimmers:

Douglas Engineering, Skim Pac Mod. 18000 vacuum skimmer
Folex vacuum skimmer
3- Elastec single/double barrel drum skimmers (15-75 gpm)

Boats:

(2) Lowe 16 foot jon boat with 25-hp outboard motor
(3) Alumacraft 16 foot jon boat with 25-hp outboard motor
Generation 3, 18 foot flat bottom boat with 35-hp outboard motor

Frac Tanks:

(2) 1993 Herring frac tank
(9) 1993 VE Enterprises frac tank
(1) 1999 Modern Mfg. frac tank
(2) 1998 Frontier 500 bbl frac tank
(2) 1999 shop built skid mounted 8000 gallon tank

Vacuum Trailer and Trucks:

(1) 1991 130 BBL vacuum trailer
(1) 130 bbl 2000 Pioneer vacuum trailer
(1) 130 bbl 1990 Indou vacuum trailer
(1) 100 bbl 1985 Keith Huber vacuum trailer
(1) 100 bbl 1987 Keith Huber vacuum trailer
(1) 60 bbl 1977 Mack RS 686ST vacuum truck
(1) 60 bbl 1991 Kenworth T800 vacuum truck

Ft. Worth Division - Continued

Oil Spill Response Trailer:

Absorbent boom
Absorbent pads
Assorted hand tools
Banner tape
Boat oars
Bow saws
Chain saws
Chest waders
Decon solution
Dip nets
Fiber pearl absorbent
Fire extinguishers
Flash lights
Fuel cans
Leaf blowers
Life jackets
Peat moss absorbent
Pollution cans
Poly debris bags - 6 mil.
Poly sheeting - 6 mil.
PPE
Propane pear burners
Propane tanks
Pump sprayers
Rope
Universal boom couplers
Wash pumps and hose
Weed eaters
Wooden stakes

Bulk absorbents and additional supplies are stored in the Ft. Worth warehouse for rapid deployment.

OFFICE LOCATIONS

Corporate Office:	9701 East I-20 Eastland, Texas 76448 Phone: (254) 629-1718 Fax: (254) 629-8625	Contact: Marc Walraven E-Mail: marcw@ecesi.com Cell: (817) 829-7569
Fort Worth Office:	9204 Highway 287 N.W. Fort Worth, Texas 76131 Phone: (817) 847-1333 Fax: (817) 306-8086	Contact: JT Ponder E-mail: jtponder@ecesi.com Cell: (817) 829-0647
La Porte Office:	1700 North E Street La Porte, Texas 77571 Phone: (281) 867-9131 Fax: (281) 867-9150	Contact: Reggie Grimes E-mail: reggieg@ecesi.com Cell: (281) 541-7826
San Antonio Office:	414 FM1103 Cibolo, Texas 78108 Phone: (210) 566-8366 Fax: (210) 566-6247	Contact: Mark Anderson E-mail: marka@ecesi.com Cell: (210) 825-9167
Louisiana Office:	10049 Industriplex Gonzales, Louisiana 70737 Phone: (225) 677-7877 Fax: (225) 677-5474	Contact: Mark Allen E-mail: markallen@ecesi.com Cell: (225) 235-1403
Ohio Office:	3820 Ventura Drive Findlay, Ohio 45840 Phone: (419) 425-5845 Fax: (419) 425-5851	Contact: John Seifert E-mail: johns@ecesi.com Cell: (419) 348-4127
Tennessee Office:	1877 S. Roane Street Harriman, Tennessee 37748 Phone: (865) 882-7717 Fax: (865) 882-7719	Contact: David Dyer E-mail: davidd@ecesi.com Cell: (865) 338-5378

Corporate Emergency Response Manager-Todd Johnson (210) 566-8366 office, (817) 966-1943 cell
toddj@ecesi.com

KOCH

KOCH RISK MANAGEMENT SERVICES

MICHELLE P. BUTTERFIELD
MANAGER, CONTRACT RISK

September 7, 2006

Ms. Bobbie Risner
Garner Environmental Services, Inc.
1717 W. 13th St.
Deer Park, TX 77536

Via Email: floughner@garner-es.com

Re: Amendment to Intermittent Services Agreement #9500691-A

Dear Ms. Risner:

Your company currently has in effect an Intermittent Services Agreement dated June 14, 1995, as amended, (herein, the "Agreement") with Flint Hills Resources, LP, Koch Nitrogen Company, Koch Pipeline Company, L.P., Koch Supply & Trading, LP. The purpose of this amendment letter is as discussed below:

We understand that your company also will be providing work/services for **Koch Fertilizer Canada, Ltd.**. Thus, we propose amending the term "Company", as that term is defined in the Agreement, to include all of the following companies:

Flint Hills Resources, LP, Koch Fertilizer Canada, Ltd., Koch Nitrogen Company, Koch Pipeline Company, L.P., Koch Supply & Trading, LP

Under this proposed amendment letter, any future work/services performed by your company for Company, will be done pursuant to the Agreement dated June 14, 1995, as amended. All other terms and conditions of the Agreement would remain in full force and effect.

A request has been forwarded to your insurance company to provide a current insurance certificate incorporating the modifications stated above.

If you agree with this amendment letter, please sign in the appropriate space below, and return this letter to Michelle P. Butterfield, Manager, Contract Risk, Koch Risk Management, P.O. Box 2256, Bldg. T5G, Wichita, Kansas 67201, or via fax at (316) 828-9726.

Sincerely,

Michelle P. Butterfield

Michelle P. Butterfield
Manager, Contract Risk

AGREED AND ACCEPTED:
Garner Environmental Services, Inc.

Federal ID No.: 76-0134613
By: Otis Chambers
Printed Name: Otis Chambers
Title: Executive Vice President
Date: September 7, 2006

KOCH

CONTRACTUAL RISK MANAGEMENT

BILL BURGIN
CRM Legal Assistant

October 12, 2005

Via Facsimile: 281-479-0283

Ms. Bobbie Risner
Garner Environmental Services, Inc.
1717 W. 13th St.
Deer Park, TX 77536

Re: Agreement #9500691-A

Dear Ms. Risner:

Your company currently has in effect an Agreement dated June 14, 1995 (as amended, if applicable) (herein, the "Agreement") with Flint Hills Resources, LP, Koch Materials Company, Koch Nitrogen Company, Koch Pipeline Company, L.P., Koch Supply & Trading, LP. The purpose of this letter is as discussed below:

In connection with the sale by Koch Materials Company ("KMC") of certain of its asphalt assets on May 31, 2005, KMC has been removed from and is no longer a party to this Agreement, effective June 1, 2005. For the avoidance of doubt the terms of this Agreement will continue to apply to any event or occurrence on before June 1, 2005.

Also, due to divestitures, any of the following companies also parties to the Agreement may be removed: Chemical Petroleum Exchange, Inc., K.C. Asphalt, L.L.C. d/b/a Koch Performance Asphalt Company, Koch Waterproofing Solutions, Inc., Materials Transportation Services, Inc., NK Asphalt Partners, d/b/a Koch Asphalt Solutions – Southwest.

Please note that, except for the change to the Agreement set forth above, the terms, covenants and conditions of the Agreement will remain in full force and effect.

If you have any questions, please call me at (316) 828-5675.

Sincerely,

Bill Burgin

Bill Burgin

KOCH

CONTRACTUAL RISK MANAGEMENT

MICHELLE P. BUTTERFIELD
CRM Legal Assistant

August 31, 2005

Via Facsimile: 281-478-0296

Mr. Otis Chambers
Garner Environmental Services, Inc.
1717 W. 13th St.
Deer Park, TX 77536

Re: Amendment to Intermittent Services Agreement #9500691-A

Dear Mr. Chambers:

Your company currently has in effect an Intermittent Services Agreement dated June 14, 1995, as amended (herein, the "Agreement") with Flint Hills Resources, LP, Koch Materials Company, Koch Nitrogen Company, Koch Pipeline Company, L.P.. The purpose of this amendment letter is as discussed below:

We understand that your company also will be providing work/services for Koch Supply & Trading, LP. Thus, we propose amending the term "Company", as that term is defined in the Agreement, to include all of the following companies:

Flint Hills Resources, LP, Koch Materials Company, Koch Nitrogen Company, Koch Pipeline Company, L.P., Koch Supply & Trading, LP

Under this proposed amendment letter, future work/services performed by your company for Company, will be done pursuant to the Agreement dated June 14, 1995, as amended. All other terms and conditions of the Agreement would remain in full force and effect.

A request has been forwarded to your insurance company to provide a current insurance certificate incorporating the modifications stated above.

If you agree with this amendment letter, please sign in the appropriate space below, and return this letter to Michelle P. Butterfield, Legal Assistant, Koch Risk Management, P.O. Box 2256, Bldg. T5G, Wichita, Kansas 67201, or via fax at (316) 828-9726.

Sincerely,

Michelle P. Butterfield

Michelle P. Butterfield
Legal Assistant

Enclosures

AGREED AND ACCEPTED:
Garner Environmental Services, Inc.

Federal ID No.: 76-0134603
By: Otis Chambers
Printed Name: OTIS CHAMBERS
Title: Executive Vice President
Date: 09/31/05

KOCH

June 28, 2005

VIA FACSIMILE: 281-478-0296

Mr. Otis Chambers
Garner Environmental Services, Inc.
1717 W. 13th St.
Deer Park, TX 77536

Re: Partial Termination and Amendment of Agreement **9500691-A** for Koch Hydrocarbon, LP and Koch Underground Storage Company

Dear Mr. Chambers:

As you know, your company currently has in effect an Agreement, dated **June 14, 1995** (as amended, if applicable) (hereinafter "Agreement"), with certain Koch companies, including Koch Hydrocarbon, LP and Koch Underground Storage Company (hereinafter "KHLP and KUSC"). On May 9, 2005, ONEOK, Inc. ("ONEOK") agreed to acquire KHLP and KUSC. The sale of KHLP and KUSC will be effective upon the closing of the transaction with ONEOK (the date of the closing referred to as, the "Effective Date"), currently scheduled for July 1, 2005.

The Agreement will not transfer with the sale of KHLP and KUSC. Accordingly, we hereby advise you that, effective on the Effective Date, KHLP and KUSC will no longer be parties to the Agreement and will be removed from the defined term "Company" in the Agreement. Additionally, effective on the Effective Date, the term "Company" in the Agreement will mean the following companies only:

Flint Hills Resources, LP, Koch Materials Company, Koch Nitrogen Company, Koch Pipeline Company, L.P.

Because KHLP and KUSC will no longer be parties to the Agreement, you may delete KHLP and KUSC as certificate holders on any future insurance certificates you provide under the Agreement. Please note that, except for the changes to the Agreement set forth above, the terms, covenants and conditions of the Agreement will remain in full force and effect.

Although KHLP and KUSC will no longer be parties to the Agreement after the Effective Date, KHLP and KUSC, under their new ownership, may want you to continue providing services to KHLP and KUSC or their successor entity. If so, we anticipate that after the Effective Date, KHLP and KUSC or ONEOK will forward a replacement service agreement to you for your review and acceptance, or you can contact ONEOK directly by calling Delaine Kurth at (918) 588-7833. To the extent you are currently providing services to KHLP and KUSC, you should continue to provide those services after the Effective Date until further notice from KHLP and KUSC or ONEOK.

We appreciate your cooperation during this ownership change, and should you have any questions please feel free to contact me at 316-828-7872.

Sincerely,

Michelle P. Butterfield

Michelle P. Butterfield
CRM Administrator

KOCH INDUSTRIES INC

LEGAL DEPARTMENT

LYNDA L. WENINGER
LEGAL ASSISTANT

May 9, 2003

VIA FACSIMILE: 281-478-0296
Mr. Otis Chambers
Garner Environmental Services, Inc.
1717 W. 13th St.
Deer Park, Texas 77536

Re: Amendment to Intermittent Services Agreement 9500691-A
Flint Hills Resources, LP
Koch Hydrocarbon, LP,
Koch Nitrogen Company
Koch Underground Storage Company
Koch Fertilizer Storage and Terminal Company
Koch Materials Company
Koch Pipeline Company, L.P.

Dear Mr. Chambers:

Your company currently has in effect an Intermittent Services Agreement ("ISA") dated June 14, 1995, as amended April 25, 1997; December 19, 2001; and March 27, 2003, with the above referenced companies. The purpose of this letter is to amend Exhibit B-Insurance Requirements to add a new Paragraph 1.9, as further defined below:

Koch proposes to amend the ISA to add the following language to Exhibit B-Insurance Requirements as a new Paragraph 1.9:

1.9 Pollution Liability Insurance - Contractor shall provide and maintain, and ensure that all of Contractor's subcontractors provide and maintain, the following insurances: Contractor's Pollution Liability Insurance with coverage for (a.) bodily injury, sickness, disease, mental anguish or shock sustained by any person, including death; (b.) property damage, including physical injury to or destruction of tangible property, including the resulting loss of use thereof, clean up costs, and the loss of use of tangible property that has not been physically injured or destroyed; (c.) defense, including costs, charges and expenses incurred in the investigation, adjustment or defense of claims for such compensatory damages; for losses caused by pollution conditions that arise from the operations of the Contractor performed under this Agreement. If such policy is written on a claims-made basis, the Contractor warrants that continuous coverage will be maintained, or an extended coverage period will be exercised for a period of 12 months, beginning from the time the work under this Agreement is completed. Contractor agrees to name Company as an additional insured and to furnish insurance certificates showing the Contractor's compliance with this Paragraph 1.9. Contractor also agrees to notify Company 30 days in

advance of any cancellation or change to the insurance coverages shown on the certificate. Contractor shall maintain limits no less than Pollution Legal Liability: **$1,000,000 per loss** and **$1,000,000 annual aggregate.**

$1m OC

Note: Coverage for Contractor's Pollution Liability Insurance can be satisfied by the addition of a time element buyback endorsement on the General Liability Policy. The coverage must be as broad as the coverage described above, with a minimum requirement for discovery of 7 days and a minimum reporting period of 60 days.

Contractor shall, before commencing work, provide Company with a certificate of insurance satisfactory to Company of the insurance coverages set forth above.

Under this proposed amendment letter, future work/services performed by your company for any of the above referenced Koch companies will be done pursuant to the ISA dated June 14, 1995, the amendments dated April 25, 1997; December 19, 2001; and March 27, 2003, and this amendment dated May 9, 2003.

If you agree with this amendment letter, please sign in the appropriate space below and return this letter to Lynda L. Weninger, Koch Industries, Inc., P.O. Box 2256, Wichita, Kansas 67201.

Sincerely,

Lynda L. Weninger
I.S.A. Legal Assistant

Enclosures

AGREED AND ACCEPTED:
Garner Environmental Services, Inc.

By: Otis Chambers
Printed Name: Otis Chambers
Title: Executive Vice President
Date: 5/21/03

Exhibit B
Insurance Requirements
Supplement to Intermittent Services Agreement 9500691-A

1.0 With respect to Contractor's performance of the agreement to which this exhibit is attached (referred to hereinafter as the "agreement"), Contractor shall maintain the following insurance:

1.1 **Worker's Compensation and Employers' Liability Insurance,** as prescribed by applicable law including insurance covering liability under the Longshoremen's and Harbor Workers' Compensation Act, the Merchant Marine Act of 1920 (Jones Act) and the Outer Continental Shelf Land Act, if applicable. Coverage will include an Alternate Employer Endorsement (WC 00 03 01) naming Company as an Alternate Employer. Contractor shall require its insurer or insurance agent to provide, as requested by Company, Contractor's Experience Modification Rating (EMR).

1.2 **Commercial General Liability Insurance,** which shall be at least as broad as the coverage provided by a standard form Commercial General Liability Policy ISO CG 00 01 02 96, with standard exclusions "a" through "n", or ISO CG 00 01 07 98 with standard exclusions "a" through "o", with a minimum combined single limit of **$3,000,000** per occurrence for bodily injury and property damage and a **$3,000,000** aggregate each for the general policy and the products/completed operations hazard. This insurance must include the following features:

1.2.1 If work to be performed by Contractor includes construction or demolition operations within 50 feet of any railroad property and affecting any railroad bridge or trestle, tracks, road-beds, tunnel, underpass or crossing, and if Contractor's commercial general liability insurance policy is form ISO CG 00 01 11 88, then such policy will include a Railroad's Contractual Liability Endorsement CG 24 17 10 93.

1.2.2 Contractual Liability coverage.

1.2.3 Products and Completed operations.

1.2.4 Coverage for demolition of any building or structure, collapse, explosion, blasting, excavation and damage to property below the surface of the ground (XCU coverage), if applicable.

1.2.5 Coverage will include one of the following endorsements naming Company as an additional insured:

(i) Additional Insured - Owners, Lessees or Contractors (Form B) Endorsement (CG 20 10 10 93); or
(ii) Additional Insured - Owners, Lessees or Contractors Scheduled Person or Organization Endorsement (CG 20 10 03 97).

1.3 **Automobile Liability Insurance,** covering all owned, non owned, hired and leased vehicles with a minimum combined single limit for Bodily Injury and Property Damage of **$3,000,000** per accident. This insurance must include contractual liability coverage.

1.4 **Aircraft Liability Insurance** - If any operations require the use of aircraft, including helicopters, Contractor shall maintain or require owners of such aircraft to maintain Aircraft Liability Insurance with a combined single limit of not less than **$5,000,000** for bodily injury and property damage (including, passenger) liability.

1.5 **Hull and Machinery Insurance** covering vessels or barges owned or bareboat chartered by Contractor and used by Contractor in the performance of the agreement. Such vessels shall be insured for no less than the fair market value of such vessel or barge. Coverage shall include **Collision Liability Insurance** with limits no less than **$5,000,000.**

1.6 **Protection and Indemnity Insurance** - If marine work is to be performed under the agreement, Contractor shall maintain Protection and Indemnity Insurance, including coverage for injuries to or death of masters, mates and crews of vessels used in the performance of the agreement. The limits of liability of such insurance shall not be less than **$5,000,000** per occurrence. Contractor may cover its obligation for loss of life or bodily injury to the crew of the vessel by extension of the Workers Compensation Insurance 1.1 above (Jones Act). Coverage shall also include pollution liability for loss as specified in the requirements of applicable United States Federal and State Laws. All certificates evidencing financial responsibility shall be current and carried on board.

1.7 **Railroad Protective Liability** - If required by Company, Contractor shall maintain Railroad Protective Liability Insurance naming the railroad as the insured with a limit for bodily injury and property damage liability of **$2,000,000** per occurrence, **$6,000,000** aggregate. The original of said policy shall be furnished to railroad prior to any construction or entry upon the railroad easement premises by Contractor.

1.8 **Umbrella / Excess Insurance** - The limits specified in 1.1, 1.2, 1.3, 1.4, 1.5 and 1.6 above may be satisfied with a combination of primary and Umbrella/Excess Insurance.

1.9 **Pollution Liability Insurance** - Contractor shall provide and maintain, and ensure that all of Contractor's subcontractors provide and maintain, the following insurances: Contractor's Pollution Liability Insurance with coverage for (a.) bodily injury, sickness, disease, mental anguish or shock sustained by any person, including death; (b.) property damage, including physical injury to or destruction of tangible property, including the resulting loss of use thereof, clean up costs, and the loss of use of tangible property that has not been physically injured or destroyed; (c.) defense, including costs, charges and expenses incurred in the investigation, adjustment or defense of claims for such compensatory damages; for losses caused by pollution conditions that arise from the operations of the Contractor performed under this Agreement. If such policy is written on a claims-made basis, the Contractor warrants that continuous coverage will be maintained, or an extended coverage period will be exercised for a period of 12 months, beginning from the time the work under this Agreement is completed. Contractor agrees to name Company as an additional insured and to furnish insurance certificates showing the Contractor's compliance with this Paragraph 1.9. Contractor also agrees to notify Company 30 days in advance of any cancellation or change to the insurance coverages shown on the certificate. Contractor shall maintain limits no less than Pollution Legal Liability: **$1,000,000 per loss and $1,000,000 annual aggregate**.

Note: Coverage for Contractor's Pollution Liability Insurance can be satisfied by the addition of a time element buyback endorsement on the General Liability Policy. The coverage must be as broad as the coverage described above, with a minimum requirement for discovery of 7 days and a minimum reporting period of 60 days. Contractor shall, before commencing work, provide Company with a certificate of insurance satisfactory to Company of the insurance coverages set forth above.

2.0 **Policy Endorsements**

2.1 The above insurance shall include a requirement that the insurer provide Company with thirty (30) days' written notice prior to the effective date of any cancellation or material change of the insurance.

2.2 The insurance specified in Section 1.2, 1.4, 1.5, 1.6 and 1.8 hereof shall:

i) Name Company as an additional insured with respect to work performed for Company, with such additional insured endorsement providing coverage for Company with respect to liability arising out of Contractor's work performed for Company (including, but not limited to, liability caused or contributed to by the negligence of Contractor, its subcontractors, Company, third parties, or the agents, employees, or officers of any of them); and

ii) Be primary to and not in excess of or contributory with any other insurance available to Company.

3.0 **Evidence of Insurance** - Contractor shall, before commencing work, provide Company with a certificate (see attached **Exhibit C**) satisfactory to Company of the insurance coverages and endorsements set forth in Sections 1.0 and 2.0 above. If requested by Company, Contractor shall provide Company with certified copies of all policies.

4.0 **Waiver of Subrogation**

4.1 Contractor, on behalf of its insurers, waives any right of subrogation that such insurers may have against Company arising out of this agreement.

4.2 The insurance specified in Section 1.1 hereof shall contain a waiver of the right of subrogation against Company and an assignment of statutory lien, if applicable.

4.3 Any physical damage insurance carried by Contractor on construction equipment, tools, temporary structures and supplies owned or used by Contractor shall provide a waiver of the right of subrogation against Company.

5.0 All self-insured retentions ("SIRs") and deductibles shall be the responsibility of and to the account of Contractor; Contractor agrees that such insurance shall not be subject to any SIRs, unless specifically consented to in writing by Company.

6.0 The obligation to carry the insurance required by this Exhibit shall not limit or modify in any way any other obligations assumed by the Contractor under the agreement. Contractor shall be held accountable for all insurance coverages, including those of sub-contractors. Company shall not be under any duty to advise Contractor in the event that Contractor's insurance is not in compliance with this agreement. ACCEPTANCE OF ANY INSURANCE CERTIFICATE SHALL NOT CONSTITUTE ACCEPTANCE OF THE ADEQUACY OF COVERAGE, COMPLIANCE WITH THE REQUIREMENTS OF THE AGREEMENT, OR AN AMENDMENT TO THE AGREEMENT.

KOCH INDUSTRIES INC

LEGAL DEPARTMENT

April 4, 2003

LYNDA L. WENINGER
LEGAL ASSISTANT

Via Facsimile: 281-478-0296

Mr. Otis Chambers
Garner Environmental Services, Inc.
1717 W. 13th St.
Deer Park, Texas 77536

Re: Intermittent Services Agreement 9500691-A
Exhibit A – Rates

Dear Mr. Chambers:

Attached to the rate schedule is a "Field Service Terms and Conditions" (copy attached). The purpose of this letter is merely to clarify that Exhibit A – Rate Sheet is being provided to Koch for pricing purposes only, and that the page titled "Field Service Terms and Conditions" is not a part of the ISA and its other exhibits and attachments.

If this letter is an accurate statement of Garner Environmental Services, Inc's understanding, please indicate your acceptance by signing where indicated and return a copy to me as soon as possible. This letter will become a part of the ISA.

If you have any questions regarding this matter, please do not hesitate to call. Thank you.

Respectfully,

Lynda L. Weninger
I.S.A. Administrator/Legal Assistant

AGREED AND ACCEPTED
Garner Environmental Services, Inc.

Otis Chambers

Name: Otis Chambers, Ex V-P
Dated: 4/28/03

KOCH INDUSTRIES INC

LEGAL DEPARTMENT

March 27, 2003

LYNDA L. WENINGER
LEGAL ASSISTANT

VIA FACSIMILE: 281-478-0296

Mr. Otis Chambers
Garner Environmental Services, Inc.
1717 W. 13th St.
Deer Park, Texas 77536

Re: Amendment to Intermittent Services Agreement 9500691-A
Flint Hills Resources, LP — Koch Fertilizer Storage and Terminal Company
Koch Hydrocarbon, LP — Koch Materials Company
Koch Pipeline Company, L.P.

Dear Mr. Chambers:

Your company currently has in effect an Intermittent Services Agreement ("ISA") dated June 14, 1995, as amended April 25, 1997; and December 19, 2001, with the above referenced companies. From time to time other affiliated companies may need your services. The purpose of this letter is to propose adding **Koch Nitrogen Company and Koch Underground Storage Company** to the ISA.

We propose amending the term "Company," as that term is used in the ISA dated June 14, 1995, to include all of the following companies:

Flint Hills Resources, LP — Koch Fertilizer Storage and Terminal Company
Koch Hydrocarbon, LP — Koch Materials Company
Koch Nitrogen Company — Koch Pipeline Company, L.P.
Koch Underground Storage Company

Under this proposed amendment letter, future work/services performed by Garner Environmental Services, Inc. for any of the above referenced companies will be done pursuant to the ISA dated June 14, 1995, the amendments dated April 25, 1997; December 19, 2001, and this amendment dated March 27, 2003.

4111 East 37th Street North • Wichita, Kansas 67220 • P.O. Box 2256 • Wichita, Kansas 67201
316/828-6587 • FAX 316/828-7664

An amendment letter amending the Exhibit C, certificate of insurance, has been forwarded to your insurance company. If this proposed amendment is acceptable, please contact your agent and authorize him to sign the amendment letter.

If you agree with this amendment letter, please sign in the appropriate space below and return this letter to Lynda L. Weninger, Koch Legal Services, Koch Industries, Inc., P.O. Box 2256, Bldg. T4F, Wichita, Kansas 67201.

Sincerely,

Lynda L. Weninger
ISA Legal Assistant

Enclosures

AGREED AND ACCEPTED:
Garner Environmental Services, Inc.

By: Otis Chambers
Printed Name: Otis Chambers
Title: Executive Vice President
Date: 4/28/03

KOCH INDUSTRIES, INC.

LEGAL DEPARTMENT

GEOFF D. BAKER
ISA Administrator

December 19, 2001

VIA FACSIMILE: 281-478-0296
Mr. Otis Chambers
Garner Environmental Services, Inc.
1717 W. 13th St.
Deer Park, TX 77536

Re: Amendment to Intermittent Services Agreement 9500691-A
Koch Industries, Inc./affiliates/subsidiaries

Dear Mr. Chambers:

Garner Environmental Services, Inc. currently has in effect an Intermittent Services Agreement dated June 14, 1995 (as amended, if applicable) (the "ISA"), with the "Koch parties" to such ISA being listed as Koch Industries, Inc. and its various affiliates/subsidiaries. The purpose of this letter is to propose amending the ISA as detailed below.

Koch proposes that the term "Company," as used in the ISA, be amended to include the following listed entities (rather than Koch Industries, Inc. and its various affiliates and subsidiaries), effective with respect to work/services performed on or after January 1, 2002:

Diamond-Koch II, L.P.
Diamond-Koch III, L.P.
Koch Hydrocarbon, LP
Koch Materials Company
Koch Pipeline Company, L.P.
Koch Underground Storage Company
Koch Petroleum Group, L.P. (to be known as Flint Hills Resources, LP from and after January 1, 2002)

(Please note- If you are aware of your company performing services under the ISA for entities other than those listed above, please advise, and we will discuss modifying this letter accordingly. Also, the parties could add additional entities in the future via amendments, if so desired.)

In addition, Koch proposes adding certain clarification language to the ISA. For the convenience of the parties, the term "Company," as used in the ISA, includes multiple entities. Koch proposes adding the following language as a new last paragraph to the ISA, effective upon your company's execution of this letter amendment-

> "The parties recognize and acknowledge that 'Company,' as defined above, includes more than one entity. Contractor agrees that each such entity will be separately, not jointly, responsible for the obligations hereunder as relating to work performed for such entity."

If you agree with this amendment letter, please sign in the appropriate space below and return this letter to Geoff D. Baker, I.S.A. Administrator, Legal Department, Koch Industries, Inc., P.O. Box 2256, Bldg. T4F, Wichita, Kansas 67201, or via fax to (316) 828-7664.

Sincerely,

Geoff D. Baker

Geoff D. Baker
I.S.A. Administrator

Enclosure

AGREED AND ACCEPTED:
Garner Environmental Services, Inc.

By: Otis Chambers
Printed Name: Otis Chambers
Title: Executive Vice President
Date: 12/28/01

KOCH INDUSTRIES INC

July 12,2000

LEGAL DEPARTMENT

GEOFF D. BAKER
ISA ADMINISTRATOR

Via Facsimile: 281-478-0296
Mr. Otis Chambers
Garner Environmental Services, Inc.
1717 W. 13th St.
Deer Park, TX 77536

Re: Intermittent Services Agreement 9500691-A
Exhibit A – Rates

Dear Mr. Chambers:

We received an updated Rate Response Schedule for Intermittent Services Agreement 9500691-A dated June 14, 1995 (herein the "ISA"). Attached to the rate schedule there are Terms and Conditions included as part of the rate schedule. The purpose of this letter is merely to clarify that Exhibit A – Rate Sheet is being provided to Koch for pricing purposes only, and that Terms and Conditions do not become a part of the ISA and its other exhibits and attachments.

If this letter is an accurate statement of Garner Environmental Services, Inc. understanding, please indicate your acceptance by signing where indicated and return a copy to me as soon as possible. This letter will become a part of the ISA.

If you have any questions regarding this matter, please do not hesitate to call. Thank you.

Respectfully,

Geoff D Baker

Geoff Baker
I.S.A. Administrator

AGREED AND ACCEPTED
Garner Environmental Services, Inc.

Otis Chambers

Name:
Dated: 7-12-2000

KOCH INDUSTRIES INC

LEGAL DEPARTMENT

K. KELLY MITCHELL
LEGAL ASSISTANT

April 25, 1997

VIA FACSIMILE: 713-920-1359
Garner Environmental Services
Attn: C.J. Nadeau
314 Allen Genoa Road
Houston, TX 77017

Re: **Intermittent Services Agreement**
Koch Industries and/or All Affiliates

Dear Mr. Nadeau :

Your company has executed an Intermittent Services Agreement (ISA) dated June 14, 1995 with the above referenced Koch companies. The purpose of this letter is to propose adding certain language to the agreement that would enable your company to be an Oil Spill Response Organization for us.

By signing the appropriate space below and returning this letter to our office, you agree to amend the Intermittent Services Agreement to include the following conditions under the "Special Conditions" section of the ISA:

> *"Contractor represents and warrants that it is classified by the United States Coast Guard as a Class [insert the appropriate Class(es): A,B,C,D, and/or E]* ____ *Oil Spill Response Organization (OSRO) for [insert the appropriate environment(s), i.e. Great Lakes, inland, rivers and canals, or oceans]* ____ *environment(s) in the following geographic location(s): [insert precise description of geographic location in which OSRO classification applies]* ____ ***(SEE ATTACHED OSRO CLASSIFICATION LETTER)*** ____.
>
> *Upon telephone notification from Company, Contractor shall respond to any spill or release of oil or hazardous substance with the personnel and equipment specified by Company. Company may identify Contractor as an Oil Spill Response Organization in any facility response plan developed pursuant to the Federal Oil Pollution Act of 1990, or any state counterpart thereto, for any facility located in the geographic location(s) identified above. Contractor shall respond hereunder at the request of Company whether or not Company has identified Contractor in the particular facility's response plan. Contractor shall notify Company of any change in Contractor's OSRO classification [e.g. suspension or revocation or changes in class level(s), operating environment(s), or geographic location(s)] as soon as possible, but in no event more than five (5) calendar days after the effective date of such change, suspension, or revocation."*

If you agree with this amendment, please sign in the appropriate space below and return this letter to: K. Kelly Mitchell, ISA Administrator/Legal Department, P. O. Box 2256, Wichita, KS 67201, or by fax at (316)828-7664.

COMPANY
KOCH INDUSTRIES, INC. AND/OR ALL AFFILIATES

AGREED TO AND ACCEPTED ON THIS _____ DAY OF _____, 1997.

By: _____

Printed Name: _____

Title: _____

CONTRACTOR
GARNER ENVIRONMENTAL SERVICES INC.

AGREED TO AND ACCEPTED ON THIS 25th DAY OF April, 1997.

By: _____

Printed Name Nelson J. Fetgatter

Title: Vice-President

Very truly yours,

K. Kelly Mitchell
Legal Assistant/ISA Administrator

INTERMITTENT SERVICES AGREEMENT

Date: 14 June 1995

Contractor: GARNER ENVIRONMENTAL SERVICES

PARTIES

1. It is hereby agreed KOCH INDUSTRIES, INC. AND/OR ALL AFFILIATES (referred to as "Company") and GARNER ENVIRONMENTAL SERVICES (referred to as "Contractor"), whose business address is 314 Allen Genoa Road, Houston, Texas 77017 that Contractor will, as an independent contractor, furnish all necessary supervision, labor, materials and equipment (other than specified labor, materials and equipment furnished by Company) and shall perform work for Company as requested by Company from time to time during the term of this agreement in conformity with the terms of this agreement.

SPECIAL CONDITIONS:

Contractor shall be compensated in accordance with the attached rates marked as Exhibit "A". The rates shall include without limitation, all applicable taxes imposed by federal, state or other governments or bodies having jurisdiction.

BILLING AND PAYMENT

2. Contractor shall submit to Company's authorized representatives an itemized statement detailing charges for labor and equipment including hours, dates, the hourly charge for the labor or equipment and any charge for materials at the end of each thirty-days (name desired billing period - e.g., week, month or thirty days) during which work is performed. Contractor shall furnish upon demand any records relating to the statement prior to or after payment by Company.

3. Payment shall be made within thirty (30) days of receipt of Company of the statement described in paragraph 2 of this agreement. Company reserves the right to withhold payment until completion of the work and its acceptance by Company or until Contractor furnishes proof satisfactory to Company that all bills for materials and labor covering the work have been fully paid by Contractor, and that the premises upon which the work is done and any structures built, improved or added to are not subject to any material or labor liens or claims of liens. Final payment shall be made within thirty (30) days of the date of acceptance of the work by Company Contractor and/or any subcontractor shall promptly and satisfactorily settle all liens and claims for labor performed and supplies or material furnished in connection with the work; and in the event Contractor fails or refuses to promptly and satisfactorily settle any such liens or claims, Company shall, after notifying Contractor in writing, have the right to settle such claims for the account of Contractor and deduct the amount thereof from amounts payable to Contractor. Payments made under this agreement shall not constitute full or partial acceptance of the work or any part of the work by Company.

PERFORMANCE OF WORK

4. Contractor shall rely solely upon Contractor's own examination and investigation of the surface and subsurface conditions at the site, and all local and general conditions which may affect performance of the work.

5. Unless otherwise specified, Contractor shall secure all permits and licenses necessary to the performance of the work, shall pay all fees and make all deposits pertaining thereto, and shall at Contractor's expense furnish all bonds required to perform the work, and shall submit proof thereof to Company.

6. Contractor shall perform the work:

a. In a workmanlike manner using qualified, efficient and careful workers;
b. In accord with all plans, drawings and specifications;
c. In compliance with all applicable federal, state, local and Company's safety rules and regulations;
d. In a manner to protect the work, the environment, Company's property and the property and persons of others from loss, damage or injury of any type;
e. So as not to interfere with the operations of others on the premises; and,
f. Under the supervision of an employee of Contractor.

An employee supplied by Contractor without supervision by Contractor and who is under the exclusive direction and control of Company shall be considered a borrowed servant. In all other cases the employee shall be considered an employee of Contractor as an independent contractor. Contractor's duties to defend, indemnify, protect and hold harmless Company under Paragraph 12 of this agreement shall continue regardless of the characterization of an employee as a borrowed servant or the employee of an independent contractor.

7. Company may maintain such representatives as it deems necessary on the work site for the purpose of inspecting, testing and insuring the satisfactory completion of the work. Company may inspect the work at any time during the progress of the work, and Contractor shall provide reasonable facilities for such inspection. If any applicable statute, regulation or order requires any part of the work to be specially tested or approved, Contractor shall give Company reasonable notice of the time and place of such testing and inspection. Company may require Contractor to correct defective work or Company may have the work corrected by others, and, in either event, Contractor shall bear the cost of such correction.

8. Unless otherwise specified, all materials shall be new and workmanship shall be of good quality. No substitutions of materials from that specified in the plans and specifications in this agreement shall be permitted unless approval is given by Company in writing.

9. Contractor guarantees the work to be performed hereunder against defects in workmanship and material which shall appear within one year following final acceptance of the work by Company, and Contractor shall promptly remedy all such defects. Contractor shall arrange for the extensions, to Company, of all additional warranties by suppliers of goods or services which are consistent with or extend or expand the terms of the above-described warranty of Contractor.

10. Contractor and its employees, agents and subcontractors shall comply with all applicable laws, regulations, ordinances and other rules of federal, state and local government and political subdivisions, and of any other duly constituted authority having jurisdiction.

11. Contractor shall be responsible for, and hereby assumes all liability whether insured or self-insured, for loss or destruction of or physical damage to the following:

a. All tools, machinery, equipment and appliances which are owned by Contractor or loaned or leased by Contractor by others than Company and which are not to be incorporated into the completed work; and,

b. All personal property of Contractor's employees; whether or not such loss, destruction or damage is caused by, arises out of, or is in any way connected with the negligence of Company, its employees or agents.

INDEMNITY AND INSURANCE

12. Contractor shall defend, protect, indemnify and save Company, Koch Industries, Inc. and any company of which Koch Industries, Inc. owns or controls fifty percent or more of the shares entitled to vote at a general election of directors (collectively referred to for purposes of this Paragraph 12 as "Company") harmless from and against all claims, demands, lawsuits, causes of action, strict liability claims, penalties, fines, administrative law actions and orders, expenses (including but not limited to attorney's fees) and costs of every kind and character arising out of or in any way incident to any of the work performed by Contractor, its subcontractors or the employees of either, on account of personal injuries, death, damage to property, damage to the environment, or infringement of any patent, regardless of whether such harm is to Contractor, Company, the employees or officers of either or any other person or entity. The duty to defend, protect, indemnify and save Company harmless referred to in the preceding sentence shall include, but not be limited to, claims, demands, lawsuits, strict liability claims, penalties, fines, administrative law actions and orders, costs, expenses and causes of action which result from the comparative, concurrent or contributing negligence of any person or entity including, but not limited to, Company, its agents, employees or officers, except Contractor shall not be liable for loss or damage resulting from the sole (100%) negligence of Company. Contractor further agrees to pay Company for damages to Company's property and to indemnify, defend and hold it harmless against the payment of any and all taxes, penalties, fines, interest, liens or indebtedness or claims against Company's property or for work performed, or measured by the work performed, growing out of or incident to Contractor's operations under this contract including, but not limited to taxes, penalties, fines, interest, liens or encumbrances which result from the concurrent or contributing negligence of any person or entity, which may include Company, its agents, employees or officers.

13. Contractor shall maintain at its own cost and expense such insurance of a type and in the amounts as required by Company to insure Contractor's indemnification and other obligations under this agreement and which will protect Company from all claims for damages to persons and to property which may arise from any operations under this contract or any subcontracts related to this contract. Contractor shall maintain during the entire term of this Contract insurance policies within minimum limits of coverage all as set forth on Exhibit B which is made a part hereof by reference. Prior to commencing work Contractor shall require its insurer or insurance agent to supply Company a certificate of insurance in the form as set forth on Exhibit C. Such insurance shall name Company as an additional insured in accordance with the requirements of Exhibit B.

GENERAL PROVISIONS

14. This agreement may not be assigned in whole or in part by Contractor without the prior written consent of Company, nor shall work under the contract be assigned to a subcontractor without the prior written consent of Company.

15. No amendment to this agreement shall be valid unless made in writing and signed by authorized representatives of both parties.

16. Company's right to require strict performance of Contractor's obligations shall not be affected in any way by prior waiver, forbearance or other course of dealing.

17. This agreement comprises the entire agreement between Company and Contractor, and there are no agreements, understandings, conditions, or representations, oral or written, expressed or implied, which are not merged into this agreement or superseded by it.

18. If Contractor should be adjudged as bankrupt, or it should make a general assignment for the benefit of creditors, or if a receiver should be appointed for Contractor, or it should refuse or fail to supply competent supervision or enough properly skilled people or proper material or disregard laws, rules or regulations applicable to the work, or otherwise violate any provision of this agreement, then Company shall have the right to treat such as a breach of this agreement and may upon the giving of written notice terminate this agreement, terminate employment of Contractor, and take possession of the premises, all materials, tools, equipment, supplies, and appliances of any type and finish the work by whatever method it may deem appropriate.

19. Company may require Contractor to furnish a surety bond in the full amount of and guaranteeing faithful performance of this agreement. Such bond shall be written on a form prescribed or approved by Company and shall be purchased from a source approved by Company.

20. Company shall have the right, at any reasonable time and from time to time, to audit any and all records, documents and other data pertaining to this agreement. Contractor shall cooperate in furnishing to Company all such records, documents and other data in connection with any such audit.

21. Company does not guaranty an offer of work to Contractor during the term of this agreement. Company and Contractor agree, however, that any work offered by Company to Contractor and accepted by Contractor during the term of this agreement will be performed under the terms of this agreement. Company shall not be liable in damages or otherwise, if by reason of an act of God or public enemy, strike, lockout, boycott, picketing, riot, insurrection, fire, or any governmental order, rule, or regulation, or any ordinance it shall be delayed in, or prevented from, furnishing any materials, equipment, facilities, services, etc., required to be furnished by it hereunder.

22. Contractor shall comply with and be subject to the most recent Substance Abuse Policy issued by Koch Industries, Inc. All employees of Contractor shall be subject to drug testing when on the premises of Company. In addition to the foregoing requirements, should Contractor perform services related to facilities regulated by the United States Department of Transportation, Contractor shall have developed and implemented, or have contracted with an organization that has developed and implemented, substance abuse policies in compliance with 41 U.S.C. 701, et seq., 49 C.F.R. Part 199 and 49 C.F.R. Part 40, if applicable; and, with respect to equal employment opportunity and affirmative action compliance, Contractor shall comply with the provisions of Section 202 of Executive Order 11246 and the rules and regulations issued pursuant to Section 201 thereof. Contractor shall provide Company with documentation demonstrating compliance with such laws upon the request of Company.

23. Contractor warrants and represents that all of Contractor's employees have received all safety training required by law for employees working in an environment in which they may come in contact with crude oil, natural gas, natural gas liquids, refined products or hazardous materials. Contractor agrees to permit Company to inspect Contractor's records in order to assure compliance with this Paragraph 23.

TERM

24. This agreement shall be effective as of the date above written and shall continue for a one year period following that date. At the end of the initial one year period the agreement shall continue until replaced by a subsequent agreement or otherwise revoked by written notice by either party.

So agreed on the date below written.

COMPANY: KOCH INDUSTRIES, INC. AND/OR ALL AFFILIATES

By _____

Title Vice President

Date 6-21-95

COMPANY'S WITNESS

By _____

Date 6/26/95

CONTRACTOR: GARNER ENVIRONMENTAL SERVICES

By _____

Title Vice-President

Date 14 June 1995

CONTRACTOR'S WITNESS

By _____

Date 14 June 1995

6/20/95

rev. 5/95

P8-4640

Exhibit B
Insurance Requirements
Supplement to Intermittent Services Agreement

1.0 With respect to Contractor's performance of the agreement to which this exhibit is attached (referred to hereinafter as agreement), Contractor shall maintain the following insurance:

1.1 **Worker's Compensation and Employers' Liability Insurance,** as prescribed by applicable law including insurance covering liability under the Longshoremen's and Harbor Workers' Compensation Act, the Merchant Marine Act of 1920 (Jones Act) and the Outer Continental Shelf Land Act, if applicable. Coverage will include an Alternate Employer Endorsement (WC 00 03 01) naming Company as alternate employer.

1.2 **Commercial General Liability Insurance,** which shall be no less comprehensive and no more restrictive than the coverage provided by a standard form Commercial General Liability Policy (ISO CG 00 01 11 85 or CG 00 01 11 88) with standard exclusions "a" through "n", with a minimum combined single limit of $3,000,000 per occurrence for Bodily injury and Property Damage and a $3,000,000 aggregate each for the general policy and the Products/Completed Operations hazard. This insurance must include the following features:

1.2.1 If work to be performed by Contractor is on or near any railroad property, Coverage for such operations naming Railroad as an additional insured, unless coverage is provided under Railroad Protective Liability insurance - Section 1.7.

1.2.2 Contractual Liability, insuring the liabilities assumed under the Indemnity and Insurance Section of the agreement, inclusive of XCU exposure (1.2.4 below) if applicable, but excluding coverage for taxes and patent infringement.

1.2.3 Products and Completed operations.

1.2.4 Coverage for demolition of any building or structure, collapse, explosion, blasting, excavation and damage to property below the surface of the ground.

1.2.5 Coverage will include Additional Insured - Owners, Lessees or Contractors (Form B) Endorsement (CG 20 10 10 93) naming Company as an additional insured.

1.3 **Automobile Liability Insurance,** covering all owned, non owned and hired vehicles with a minimum combined single limit for Bodily Injury and Property Damage of $3,000,000 per accident. This insurance will include contractual liability insuring the indemnification provisions contained in this contract but excluding coverage for taxes.

1.4 **Aircraft Liability Insurance** - If any operations require the use of aircraft, including helicopters, Contractor shall maintain or require owners of such aircraft to maintain Aircraft Liability Insurance with a combined single limit of not less than $10,000,000 for bodily injury and property damage (including, passenger) liability.

1.5 **Hull and Machinery Insurance** covering vessels or barges owned or bareboat chartered by Contractor and used by contractor in the performance of the agreement. Such vessels shall be insured for no less than the fair market value of such vessel or barge. Coverage shall include **Collision Liability Insurance** with limits no less than $5,000,000.

1.6 **Protection and Indemnity Insurance** - If marine work is to be performed under the agreement, Protection and Indemnity Insurance, including coverage for injuries to or death of masters, mates and crews of vessels used in the performance of the agreement. The limits of liability of such insurance shall not be less than five million dollars ($5,000,000) per occurrence. Contractor may cover its obligation for loss of life or bodily injury to the crew of the vessel by extension of the Workers Compensation Insurance 1.1 above. Coverage shall also include pollution liability for loss as specified in the requirements of applicable United States Federal and State Laws. All certificates evidencing financial responsibility shall be current and carried on board.

1.7 **Railroad Protective Liability** - If work is to be performed on or near any railroad property, and protection is not afforded under 1.2.1 above, Railroad Protective Liability Insurance naming the railroad as the insured with a limit for bodily injury and property damage liability of $2,000,000.00 per occurrence, $6,000,000.00 aggregate. The original of said policy shall be furnished to railroad prior to any construction or entry upon the easement premises by Contractor.

1.8 The limits specified in 1.1, 1.2, 1.3, 1.4, 1.5 and 1.6 above may be satisfied with a combination of primary and Umbrella/Excess Insurance.

2.0 **Policy Endorsements**

2.1 The above insurance shall include a requirement that the insurer provide Company with thirty (30) days' written notice prior to the effective date of any cancellation or material change of the insurance.

2.2 The insurance specified in Section 1.2, 1.4, 1.5, and 1.6 hereof shall name Company as an additional insured with respect to operations performed under the agreement and shall be primary to and not in excess of or contributory with any other insurance available to Company.

3.0 **Evidence of insurance** ctor shall, before commencing work, p ompany with a certificate (see attached **Exhibit C**) satisfactory to Company of the insurance coverag and endorsements set forth in Sections 1.0 and 2.0 above. If requested by Company, Contractor shall provide Company with certified copies of all policies.

4.0 **Waiver of Subrogation**

4.1 Contractor, on behalf of its insurers, waives any right of subrogation that such insurers may have against Company arising out of this agreement.

4.2 The insurance specified in Section 1.1 hereof shall contain a waiver of the right of subrogation against the Company and an assignment of statutory lien, if applicable.

4.3 Any physical damage insurance carried by Contractor on construction equipment, tools, temporary structures and supplies owned or used by Contractor shall provide a waiver of the right of subrogation against the Company.

5.0 If the Work is performed on a footage, lump-sum or maximum cost basis, the cost of the above insurance shall be borne by Contractor.

6.0 If work is performed on a cost plus fee basis or for change order work Company will reimburse Contractor for the cost of such insurance up to the minimum limits prescribed in Section 1.0 above. Reimbursement of insurance costs under a cost plus fee contract and change order will be determined as follows:

6.1 Worker's Compensation Manual rates applied to field labor subject to Contractor's Experience Modification (not to exceed 1.00) applicable for entire contract period as identified in proposal and further subject to the premium discount schedule applicable in the state where the Work is to be performed.

6.2 Commercial General Liability rates To Be Identified in Contractor's Proposal applied to field labor only.

6.3 Automobile Liability Insurance borne by Contractor.

6.4 Aircraft Liability Insurance borne by Contractor.

6.5 Hull and Machinery Insurance borne by Contractor.

6.6 Protection and Indemnity Insurance borne by Contractor.

6.7 Railroad Protective Liability Insurance borne by Contractor.

7.0 The obligation to carry the insurance required by this Exhibit shall not limit or modify in any way any other obligations assumed by the Contractor under the agreement. Contractor shall be held accountable for all insurance coverages, including those of sub-contractors. Company shall not be under any duty to advise Contractor in the event that Contractor's insurance is not in compliance with this agreement.

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Back to Zone Overview Map

Open River Overview

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Back to Zone Overview Map

Open River Overview

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KOCH

CONTRACTUAL RISK MANAGEMENT

BILL BURGIN
CRM Legal Assistant

August 24, 2005

Via Facsimile: 361-289-6363

Mr. Mackey Ward
Miller Environmental Services, Inc.
600 Flato Road
Corpus Christi, TX 78405

Re: Agreement #9700335-A

Dear Mr. Ward:

Your company currently has in effect an Agreement dated April 24, 1997 (as amended, if applicable) (herein, the "Agreement") with Flint Hills Resources, LP, Koch Energy, Inc., Koch Pipeline Company, L.P., and Reiss Remediation, Inc. The purpose of this letter is as discussed below:

Due to an internal merger, Reiss Remediation, Inc. is now Reiss Remediation, LLC.

Please note that, except for the change to the Agreement set forth above, the terms, covenants and conditions of the Agreement will remain in full force and effect.

A request has been forwarded to your insurance company to provide a current insurance certificate incorporating the modification stated above.

If you have any questions, please give me a call at (316) 828-5675.

Sincerely,

Bill Burgin

4111 East 37th Street North • Wichita, Kansas 67220 • P.O. Box 2256 • Wichita, Kansas 67201
316/828-5675 • FAX 316/828-9063 or 316/828-9624

SECOND REQUEST
10-28-04

KOCH

KOCH RISK MANAGEMENT SERVICES

MICHELLE R. BUTTERFIELD
LEGAL ASSISTANT

October 22, 2004

VIA FACSIMILE: 361-289-6363

Mr. Mackey Ward
Miller Environmental Services, Inc.
600 Flato Road
Corpus Christi, Texas 78405

Re: Amendment to Intermittent Services Agreement 9700335-A
Flint Hills Resources, LP
Koch Pipeline Company, L.P.
Koch Energy, Inc.
Reiss Remediation, Inc.

Dear Mr. Ward:

Miller Environmental Services, Inc. ("Contractor") currently has in effect an Intermittent Services Agreement ("ISA") dated April 24, 1997, as amended December 1, 1999; January 1, 2001; January 15, 2001, with the above referenced Koch company(s). The purpose of this amendment is to amend the ISA to add two new paragraphs, as further defined below:

Koch proposes amending the ISA to add the following language to the end of the main body of the ISA as a new Paragraph 26:

26. CONFIDENTIALITY. All information that Contractor acquires from Company hereunder, directly or indirectly, and all information that arises out of the Work performed hereunder, concerning such Work and/or proprietary processes involved in the Work, including without limitation, information concerning Company's current and future business plans, information relating to Company's operations, and other Company-furnished information and know-how relating to the Work shall be deemed Company's "Proprietary Information." Company's Proprietary Information shall be held in strictest confidence by Contractor and shall be used solely for purposes of performing such Services. The obligations under this Paragraph shall survive completion of such work/services and termination of this Agreement.

In addition, Koch proposes adding certain clarification language to the ISA. For the convenience of the parties, and in order to reduce the necessity of having multiple agreements, the term "Company," as used in the ISA, currently includes multiple entities.

Koch proposes amending the ISA to add the following language to the end of the main body of the ISA as a new Paragraph 27, effective upon your company's execution of this letter amendment:

4111 East 37th Street North • Wichita, Kansas 67220 • P.O. Box 2256 • Wichita, Kansas 67201-2256
316/828-7872 • FAX 316/828-7664 • [illegible]

If you agree with this amendment letter, please sign in the appropriate space below and return this letter to Lynda L. Weninger, I.S.A. Administrator, Legal Department, Koch Industries, Inc., P.O. Box 2256, Bldg. TMD, Wichita, Kansas 67201.

Sincerely,

Lynda L. Weninger
I.S.A. Administrator/Legal Assistant

Enclosures

AGREED AND ACCEPTED:
Miller Environmental Services, Inc.

By: [signature]
Printed Name: MARKEY WARD
Title: OPERATIONS MANAGER
Date: 2/6/01

INTERMITTENT SERVICES AGREEMENT 9700335G-A

This Intermittent Services Agreement ("Agreement") is entered into this 1st day of January 2001, but effective as of the date specified below, by and between:

(i.) **Miller Environmental Services, Inc.** ("Contractor"); and

(ii.) **Koch Gateway Pipeline Company** (as of the Effective Date specified below, Koch Gateway Pipeline Company will be known as **Gulf South Pipeline Company, LP**) ("Company").

WHEREAS, attached hereto as Exhibit "1" is a copy of the Intermittent Services Agreement 9700335G-A dated April 24, 1997, as amended, by and between Contractor, Company, and the other parties listed therein (such agreement, including all amendments and exhibits thereto, shall be referred to as the "Original Intermittent Services Agreement") ;

AND, WHEREAS, Contractor and Company desire to enter into a new Intermittent Services Agreement that contains the same substantive terms and conditions as the Original Intermittent Services Agreement, but that is between only Contractor and Company.

NOW, THEREFORE, Contractor and Company state and agree as follows:

1. The terms and conditions contained in the Original Intermittent Services Agreement, a copy of which is attached hereto as Exhibit 1, are hereby made a part of this Agreement, the same as if such terms and conditions were fully set forth herein; provided, however, that: (i.) the term "Company," as used in such terms and conditions for purposes of this Agreement, shall mean only Koch Gateway Pipeline Company and Gulf South Pipeline Company, LP; and (ii.) the business and notice address for Company, for purposes of this Agreement, shall be 20 Greenway Plaza, Houston, Texas 77046.

The effect of the execution of this Agreement by the parties is that, from and after the Effective Date as defined below, an Intermittent Services Agreement will be in place between Contractor and Company that contains the same terms and conditions as the Original Intermittent Services Agreement, except as expressly modified herein.

2. The effective date ("Effective Date") of this Agreement shall be the date on which Koch Energy, Inc. contributes Company into Entergy-Koch, L.P. (the parent company of Company); Company will notify Contractor when such contribution occurs. In the event that Company determines that such contribution will not occur, Company shall notify Contractor of such non-occurrence, and this Agreement shall never become effective and shall be of no force or effect. Until the Effective Date, Company will continue to be a party to the Original Intermittent Services Agreement. From and after the Effective Date, the parties agree that Company will no longer be a party to the Original Intermittent Services Agreement with respect to work or services performed after the Effective Date.

3. The parties recognize and acknowledge that the execution of this Agreement does not affect in any manner the Original Intermittent Services Agreement, except as relating to Koch Gateway Pipeline Company/Gulf South Pipeline Company, LP. From and after the Effective Date, Contractor will have two Intermittent Services Agreements, one with Company as defined above and one with the "Koch entities" (other than Company as defined above) listed in the Original Intermittent Services Agreement.

EXECUTED BY THE PARTIES ON THE DATES INDICATED BELOW, BUT EFFECTIVE FOR ALL PURPOSES AS OF THE EFFECTIVE DATE AS DEFINED ABOVE:

"COMPANY"
Koch Gateway Pipeline Company/
Gulf South Pipeline Company, LP

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

"CONTRACTOR"
Miller Environmental Services, Inc.

By: John Perabo
Printed Name: JOHN PERABO
Title: RESPONSE COORDINATOR
Date: 22 JANUARY 2001

KOCH INDUSTRIES INC

LEGAL DEPARTMENT

CHARLES D. DUDLEY

December 1, 1999

Via Facsimile: 512-289-6363

Mr. Matt Dartez
Miller Environmental Services, Inc.
600 Flato Road
Corpus Christi, TX 78405

Re: Intermittent Services Agreement

Koch Energy Services Company (now known as Koch Energy, Inc.)
Koch Oil Company (now known as Koch Petroleum Group, L.P.)
Koch Refining Company, L.P. (now known as Koch Petroleum Group, L.P.)
Koch Gateway Pipeline Company
Koch Pipeline Company, L.P.

Dear Mr. Dartez:

Your company currently has in effect an Intermittent Services Agreement (herein, the "ISA") dated April 24, 1997 with the above referenced Koch companies. From time to time other affiliated Koch companies may need your services. The purpose of this letter is to propose amending the term "Company" as that term is used in the ISA, to include **Koch Operating Services Company** and **Koch Gateway Pipeline, L.P.**

Please note that Koch Oil Company and Koch Refining Company, L.P., through a consolidation and a name change, are now Koch Petroleum Group, L.P. Koch Energy Services Company through a merger is now known as Koch Energy, Inc.

Koch proposes amending the ISA to include all of the following Koch companies within the term "Company" effective as of the date of this letter.

Koch Energy, Inc.
Koch Gateway Pipeline Company
Koch Petroleum Group, L.P.
Koch Pipeline Company, L.P.
Koch Operating Services Company
Koch Gateway Pipeline, L.P.

Under this proposed amendment letter, future work/services performed by your company for any of the above referenced Koch companies will be done pursuant to the ISA dated April 24, 1997 and this amendment dated December 1, 1999.

By signing at the appropriate space below and returning this letter to our office, you agree to amend the ISA to include the above Koch companies within the term "Company" as used in the ISA.

4111 East 37th Street North • Wichita, Kansas 67220 • P.O. Box 2256 • Wichita, Kansas 67201
316/828-4707 • FAX 316/529-7727

A copy of the Exhibit C (Certificate of Insurance) reflecting this amendment has been forwarded to your insurance agency. Please ask your agent to complete the Exhibit C to evidence your current insurance coverage and the required endorsements. Under the ISA, Koch requires the above companies to be named additional insured (form CG 20 10 10 93 or CG 20 10 03 97) under the general liability and any applicable umbrella/excess liability policy. Under the workers compensation policy, Koch requires two endorsements, the alternate employer and waiver of subrogation.

If you agree with this amendment letter, please sign in the appropriate space below and return this letter to Charles D. Dudley, I.S.A. Administrator, Koch Industries, Inc., P.O. Box 2256, Bldg. T3D, Wichita, Kansas 67201, or fax it to me at (316)828-9063.

Very truly yours,

Charles D. Dudley
I.S.A. Administrator

AGREED AND ACCEPTED:
Miller Environmental Services, Inc.

By: Matt Darby
Printed Name: MATT DARBY
Title: RESPONSIBLE ORGANIZATOR
Date: 12/1/99

INTERMITTENT SERVICES AGREEMENT

Date: April 24, 1997
Agreement Number: 97-00335-A01

Contractor: Miller Environmental Services, Inc.

PARTIES

1. It is hereby agreed between **Koch Energy Services Company; Koch Gateway Pipeline Company; Koch Oil Company; Koch Pipeline Company, L.P.; Koch Refining Company, L.P.** (such companies being collectively referred to hereinafter as "Company") and **Miller Environmental Services, Inc.** (such company being referred to hereinafter as "Contractor"), whose business address is **600 Flato Road, Corpus Christi, TX 78405,** that Contractor will, as an independent contractor, furnish all necessary supervision, labor, materials and equipment (other than specified labor, materials and equipment furnished by Company) and shall perform work for Company as requested by Company from time to time during the term of this agreement in conformity with the terms of this agreement.

SPECIAL CONDITIONS (if applicable):

Contractor represents and warrants that it is classified by the United States Coast Guard as a Class **[insert the appropriate Class(es): A,B,C,D, and/or E]** _____ Oil Spill Response Organization (OSRO) for **[insert the appropriate environment(s), i.e. Great Lakes, inland, rivers and canals, or oceans]** _____ environment(s) in the following geographic location(s): **[insert precise description of geographic location in which OSRO classification applies]** _____

* See Attached OSRO Document

Upon telephone notification from Company, Contractor shall respond to any spill or release of oil or hazardous substance with the personnel and equipment specified by Company. Company may identify Contractor as an Oil Spill Response Organization in any facility response plan developed pursuant to the Federal Oil Pollution Act of 1990, or any state counterpart thereto, for any facility located in the geographic location(s) identified above. Contractor shall respond hereunder at the request of Company whether or not Company has identified Contractor in the particular facility's response plan. Contractor shall notify Company of any change in Contractor's OSRO classification [e.g. suspension or revocation or changes in class level(s), operating environment(s), or geographic location(s)] as soon as possible, but in no event more than five (5) calendar days after the effective date of such change, suspension, or revocation.

Contractor shall be compensated in accordance with the attached rates marked as Exhibit "A". The rates shall include without limitation, all applicable taxes imposed by federal, state or other governments or bodies having jurisdiction.

Contractor shall be compensated in accordance with the attached rates marked as Exhibit "A". The rates shall include without limitation, all applicable taxes imposed by federal, state or other governments or bodies having jurisdiction.

BILLING AND PAYMENT

2. Contractor shall submit to Company's authorized representatives an itemized statement detailing charges for labor and equipment including hours, dates, the hourly charge for the labor or equipment and any charge for materials at the end of each month during which work is performed. Contractor shall furnish upon demand any records relating to the statement prior to or after payment by Company.

3. Payment shall be made within thirty (30) days of Company's receipt of the statement described in Paragraph 2 of this agreement. Company reserves the right to withhold payment until completion of the work and its acceptance by Company or until Contractor furnishes proof satisfactory to Company that all bills for materials and labor covering the work have been fully paid by Contractor, and that the premises upon which the work is done and any structures built, improved or added to are not subject to any material or labor liens or claims of liens. Final payment shall be made within thirty (30) days of the date of acceptance of the work by Company. Contractor and/or any subcontractor shall promptly and satisfactorily settle all liens and claims for labor performed and supplies or material furnished in connection with the work; and in the event Contractor fails or refuses to promptly and satisfactorily settle any such liens or claims, Company shall, after notifying Contractor in writing, have the right to settle such claims for the account of Contractor and deduct the amount thereof from amounts payable to Contractor. Payments made under this agreement shall not constitute full or partial acceptance of the work or any part of the work by Company.

PERFORMANCE OF WORK

4. Contractor shall rely solely upon Contractor's own examination and investigation of the surface and subsurface conditions at the site, and all local and general conditions that may affect performance of the work.

5. Unless otherwise specified, Contractor shall secure all permits and licenses necessary to the performance of the work, shall pay all fees and make all deposits pertaining thereto, and shall at Contractor's expense furnish all bonds required to perform the work, and shall submit proof thereof to Company.

6. Contractor shall perform the work:

a. In a workmanlike manner using qualified, efficient and careful workers;
b. In accord with all plans, drawings and specifications;
c. In compliance with all applicable federal, state, local and Company's safety rules and regulations;
d. In a manner to protect the work, the environment, Company's property and the property and persons of others from loss, damage or injury of any type;
e. So as not to interfere with the operations of others on the premises; and,
f. Under the supervision of an employee of Contractor.

An employee supplied by Contractor without supervision by Contractor and who is under the exclusive direction and control of Company shall be considered a borrowed servant. In all other cases, the employee shall be considered an employee of Contractor as an independent contractor. Contractor's duties to defend, indemnify, protect and hold harmless Company under Paragraph 12 of this agreement shall continue regardless of the characterization of an employee as a borrowed servant or the employee of an independent contractor.

7. Company may maintain such representatives as it deems necessary on the work site for the purpose of inspecting, testing and ensuring the satisfactory completion of the work. Company may inspect the work at any time during the progress of the work, and Contractor shall provide reasonable facilities for such inspection. If any applicable statute, regulation or order requires any part of the work to be specially tested or approved, Contractor shall give Company reasonable notice of the time and place of such testing and inspection. Company may require Contractor to correct defective work or Company may have the work corrected by others, and, in either event, Contractor shall bear the cost of such correction.

8. Unless otherwise specified, all materials shall be new and workmanship shall be of good quality. No substitutions of materials from that specified in the plans and specifications in this agreement shall be permitted unless approval is given by Company in writing.

9. Contractor guarantees the work to be performed hereunder against defects in workmanship and material that shall appear within one year following final acceptance of the work by Company, and Contractor shall promptly remedy all such defects. Contractor shall arrange for the extensions, to Company, of all additional warranties by suppliers of goods or services that are consistent with or extend or expand the terms of the above-described warranty of Contractor.

10. Contractor and its employees, agents and subcontractors shall comply with all applicable laws, regulations, ordinances and other rules of federal, state and local government and political subdivisions, and of any other duly constituted authority having jurisdiction.

11. Contractor shall be responsible for, and hereby assumes all liability, whether insured or self-insured, for loss or destruction of, or physical damage to the following:

a. All tools, machinery, equipment and appliances that are owned by Contractor or loaned to or leased by Contractor by others than Company and that are not to be incorporated into the completed work; and,

b. All personal property of Contractor's employees; whether or not such loss, destruction or damage is caused by, arises out of, or is in any way connected with the negligence of Company, its employees or agents.

INDEMNITY

12. To the fullest extent permitted by law, Contractor shall defend, protect, indemnify and save Company, its parent company, partners, subsidiaries and any other related or affiliated entities, and their respective officers, directors and employees (collectively referred to for purposes of this Paragraph 12 as "Indemnitees") harmless from and against all claims, demands, lawsuits, causes of action, strict liability claims, penalties, fines, administrative law actions and orders, expenses (including, but not limited to, attorneys' fees) and costs of every kind and character arising out of or in any way incident to any of the work performed by Contractor, its subcontractors or the employees of either, on account of personal injuries, death, damage to property, damage to the environment, or infringement of any patent,

trademark, copyright or other property right, regardless of whether such harm is to Contractor, Indemnitees, the employees or officers of either or any other person or entity. The duty to defend, protect, indemnify and save Indemnitees harmless referred to in the preceding sentence shall include, but not be limited to, claims, demands, lawsuits, strict liability claims, penalties, fines, administrative law actions and orders, costs, expenses and causes of action that result from the comparative, concurrent or contributing negligence of any person or entity including, but not limited to, Indemnitees, their agents, employees or officers, except Contractor shall not be liable under this Paragraph 12 for loss or damage resulting from the sole (100%) negligence of Indemnitees. To the fullest extent permitted by law, Contractor further agrees to indemnify, defend and hold Indemnitees harmless against the payment of any and all taxes, penalties, fines, interest, liens or indebtedness or claims against Indemnitees' property or for work performed, or measured by the work performed, growing out of or incident to Contractor's operations under this agreement including, but not limited to, taxes, penalties, fines, interest, liens or encumbrances that result from the concurrent or contributing negligence of any person or entity, which may include Indemnitees, their agents, employees or officers. Contractor shall maintain at its own cost and expense insurance covering this indemnity provision.

If and to the extent that Section 623.015 of the Texas Transportation Code applies to work performed under this agreement by Contractor, its subcontractors or the employees of either, the above indemnity provision shall only apply to the extent permitted by such statute.

INSURANCE

13. In addition to any other insurance that Contractor shall acquire under this agreement, Contractor shall maintain at its own cost and expense such insurance of the types and in the amounts as required by Company to insure all of Contractor's obligations under this agreement and that will protect Company from all claims for damages to persons and to property that may arise from any operations under this agreement or any subcontracts related to this agreement. Contractor shall maintain during the entire term of this agreement insurance policies within minimum limits of coverage all as set forth on Exhibit B, which is made a part hereof by reference. Prior to commencing work, Contractor shall require its insurer or insurance agent to supply Company a certificate of insurance in the form as set forth on Exhibit C. Such insurance shall name Company as an additional insured in accordance with the requirements of Exhibit B, with such additional insured endorsements providing coverage for Company with respect to liability arising out of Contractor's work performed for Company (including, but not limited to, liability caused or contributed to by the negligence of Contractor, its subcontractors, Company, third parties, or the agents, employees, or officers of any of them). The insurance coverages to be provided by Contractor under this paragraph, including but not limited to the additional insured coverage provided to Company, shall be independent of the indemnity provisions of this agreement, and are not designed solely to guarantee payment of Contractor's indemnity obligations.

GENERAL PROVISIONS

14. This agreement may not be assigned in whole or in part by Contractor without the prior written consent of Company, nor shall work under the contract be assigned to a subcontractor without the prior written consent of Company.

15. No amendment to this agreement shall be valid unless made in writing and signed by authorized representatives of both parties.

16. Company's right to require strict performance of Contractor's obligations shall not be affected in any way by prior waiver, forbearance or other course of dealing.

17. This agreement and any subsequent amendments comprise the entire agreement between Company and Contractor, and there are no agreements, understandings, conditions, or representations, oral or written, expressed or implied, that are not merged into this agreement or superseded by it.

18. Subject to any restrictions imposed by applicable laws, if Contractor has a petition in bankruptcy filed by or against it, has a receiver appointed for it, becomes insolvent, makes a general assignment for the benefit of creditors, refuses or fails to supply competent supervision or enough properly skilled people or proper material, disregards laws, rules or regulations applicable to the work, or otherwise violates any provision of this agreement, then Company shall have the right (in addition to any other rights it may have at law or in equity) to treat such as a breach of this agreement and may, upon the giving of written notice, terminate this agreement, terminate employment of Contractor, and take possession of the premises, all materials, tools, equipment, supplies, and appliances of any type and finish the work by whatever method Company may deem appropriate.

19. Company may require Contractor to furnish a surety bond in the full amount of and guaranteeing faithful performance of this agreement, or otherwise guaranteeing Contractor's obligations under this agreement. Such bond(s) shall be written on a form prescribed or approved by Company and shall be purchased from a source approved by Company.

20. Company shall have the right, at any reasonable time and from time to time, to audit any and all records, documents and other data pertaining to this agreement. Contractor shall cooperate in furnishing to Company all such records, documents and other data in connection with any such audit.

21. Company does not guarantee an offer of work to Contractor during the term of this agreement. Company and Contractor agree, however, that any work offered by Company to Contractor and accepted by Contractor during the term of this agreement will be performed under the terms of this agreement. Company shall not be liable in damages or otherwise, if by reason of an act of God or public enemy, strike, lockout, boycott, picketing, riot, insurrection, fire, or any governmental order, rule, or regulation, or any ordinance Company shall be delayed in, or prevented from, furnishing any materials, equipment, facilities, services, etc., required to be furnished by it hereunder.

22. Contractor shall comply with and be subject to the most recent Substance Abuse Policy issued by Koch Industries, Inc. All employees of Contractor shall be subject to drug testing when on the premises of Company. In addition to the foregoing requirements, should Contractor perform services related to facilities regulated by the United States Department of Transportation, Contractor shall have developed and implemented, or have contracted with an organization that has developed and implemented, substance abuse policies in compliance with 41 U.S.C. 701, et seq., 49 C.F.R. Part 199 and 49 C.F.R. Part 40, if applicable; and, with respect to equal employment opportunity and affirmative action compliance, Contractor shall comply with the provisions of Section 202 of Executive Order 11246 and the rules and regulations issued pursuant to Section 201 thereof. Contractor shall provide Company with documentation demonstrating compliance with such laws upon the request of Company.

23. Contractor warrants and represents that, to the extent applicable to any activities that may be performed pursuant to this agreement by Contractor or its subcontractors, all of Contractor's employees and its subcontractors' employees have received all safety training required by law for employees working in an environment in which they may come in contact with crude oil, natural gas, natural gas liquids, refined products or hazardous materials. Contractor agrees to permit Company to inspect Contractor's records in order to assure compliance with this Paragraph 23.

24. In the event any provision herein shall be judicially interpreted or held to be void or otherwise unenforceable as written, such provision shall be deemed to be revised and modified to the extent necessary to make it legally enforceable. In any event, the remaining terms of the agreement shall be enforceable as though the void or unenforceable provision did not exist.

TERM

25. This agreement shall be effective as of the date above written and shall continue for a one-year period following that date. At the end of the initial one-year period the agreement shall continue until replaced by a subsequent agreement or otherwise revoked by written notice by either party.

So agreed on the date below written.

COMPANY
Koch Energy Services Company;
Koch Gateway Pipeline Company;
Koch Oil Company;
Koch Pipeline Company, L.P.;
Koch Refining Company, L.P.

By _____

Title _____

Date _____

COMPANY'S WITNESS

By _____

Date _____

CONTRACTOR
Miller Environmental Services, Inc.

By Charles M. H

Title PRESIDENT

Date 4/25/97

CONTRACTOR'S WITNESS

By _____

Date _____

KCM
4-25-97

Exhibit B
Insurance Requirements
Supplement to Intermittent Services Agreement
Agreement Number: 97-00335-A01

1.0 With respect to Contractor's performance of the agreement to which this exhibit is attached (referred to hereinafter as the "agreement"), Contractor shall maintain the following insurance:

1.1 Worker's Compensation and Employers' Liability Insurance, as prescribed by applicable law, including insurance covering liability under the Longshoremen's and Harbor Workers' Compensation Act, the Jones Act, Maritime Act of 1920 (Jones Act) and the Outer Continental Shelf Land Act, if applicable. Coverage will include an Alternate Employer Endorsement (WC 00 03 01) naming Company as an Alternate Employer.

1.2 Commercial General Liability Insurance, which shall be no less comprehensive and no more restrictive than the coverage provided by a standard form Commercial General Liability Policy ISO CG 00 01 11 88, CG 00 01 10 93, or CG 00 01 01 96 with standard exclusions "a" through "n", with a minimum combined single limit of $3,000,000 per occurrence for Bodily Injury and Property Damage and a $3,000,000 aggregate each for the general policy and the Products/Completed Operations hazard. This insurance must include the following features:

1.2.1 If work to be performed by Contractor includes construction or demolition operations within 50 feet of any railroad property and affecting any railroad bridge or trestle, tracks, road-beds, tunnel, underpass or crossing, and if Contractor's commercial general liability insurance policy is form ISO CG 00 01 11 88, then such policy will include a Railroad's Contractual Liability Endorsement CG 24 17 10 93.

1.2.2 Contractual Liability coverage.

1.2.3 Products and Completed operations.

1.2.4 Coverage for demolition of any building or structure, collapse, explosion, blasting, excavation and damage to property below the surface of the ground (XCU coverage), if applicable.

1.2.5 Coverage will include Additional Insured - Owners, Lessees or Contractors (Form B) Endorsement (CG 20 10 10 93) naming Company as an additional insured.

1.3 Automobile Liability Insurance, covering all owned, non owned, hired and leased vehicles with a minimum combined single limit for Bodily Injury and Property Damage of $3,000,000 per accident. This insurance must include contractual liability coverage.

1.4 Aircraft Liability Insurance - If any operations require the use of aircraft, including helicopters, Contractor shall maintain or require owners of such aircraft to maintain Aircraft Liability Insurance with a combined single limit of not less than $5,000,000 for bodily injury and property damage (including passenger) liability.

1.5 Hull and Machinery Insurance covering vessels or barges owned or bareboat chartered by Contractor and used by Contractor in the performance of the agreement. Such vessels shall be insured for no less than the fair market value of such vessel or barge. Coverage shall include Collision Liability Insurance with limits no less than $5,000,000.

1.6 Protection and Indemnity Insurance - If marine work is to be performed under the agreement, Contractor shall maintain Protection and Indemnity Insurance, including coverage for injuries to or death of masters, mates and crews of vessels used in the performance of the agreement. The limits of liability of such insurance shall not be less than $5,000,000 per occurrence. Contractor may cover its obligation for loss of life or bodily injury to the crew of the vessel by extension of the Workers Compensation Insurance 1.1 above (Jones Act). Coverage shall also include pollution liability for loss as specified in the requirements of applicable United States Federal and State Laws. All certificates evidencing financial responsibility shall be current and carried on board.

1.7 Railroad Protective Liability - If required by Company, Contractor shall maintain Railroad Protective Liability insurance naming the railroad as the insured with a limit for bodily injury and property damage liability of $2,000,000 per occurrence, $6,000,000 aggregate. The original of said policy shall be furnished to railroad prior to any construction or entry upon the railroad easement premises by Contractor.

1.8 Umbrella / Excess Insurance - The limits specified in 1.1, 1.2, 1.3, 1.4, 1.5 and 1.6 above may be satisfied with a combination of primary and Umbrella/Excess Insurance.

2.0 **Policy Endorsements**

2.1 The above insurance shall include a requirement that the insurer provide Company with thirty (30) days' written notice prior to the effective date of any cancellation or material change of the insurance.

2.2 The insurance specified in Section 1.2, 1.4, 1.5, 1.6 and 1.8 hereof shall:
(i.) name Company as an additional insured with respect to work performed for Company, with such additional insured endorsement (CG 20 10 10 93) providing coverage for Company with respect to liability arising out of Contractor's work performed for Company (including, but not limited to, liability caused or contributed to by the negligence of Contractor, its subcontractors, Company, third parties, or the agents, employees, or officers of any of them); and;
(ii.) be primary to and not in excess of or contributory with any other insurance available to Company.

3.0 Evidence of Insurance - Contractor shall, before commencing work, provide Company with a certificate (see attached Exhibit C) satisfactory to Company of the insurance coverages and endorsements set forth in Sections 1.0 and 2.0 above. If requested by Company, Contractor shall provide Company with certified copies of all policies.

4.0 Waiver of Subrogation

4.1 Contractor, on behalf of its insurers, waives any right of subrogation that such insurers may have against Company arising out of this agreement.

4.2 The insurance specified in Section 1.1 hereof shall contain a waiver of the right of subrogation against Company and an assignment of statutory lien, if applicable.

4.3 Any physical damage insurance carried by Contractor on construction equipment, tools, temporary structures and supplies owned or used by Contractor shall provide a waiver of the right of subrogation against Company.

5.0 The obligation to carry the insurance required by this Exhibit shall not limit or modify in any way any other obligations assumed by the Contractor under the agreement. Contractor shall be held accountable for all insurance coverages, including those of sub-contractors. Company shall not be under any duty to advise Contractor in the event that Contractor's insurance is not in compliance with this agreement. ACCEPTANCE OF ANY INSURANCE CERTIFICATE SHALL NOT CONSTITUTE ACCEPTANCE OF THE ADEQUACY OF COVERAGE, COMPLIANCE WITH THE REQUIREMENTS OF THE AGREEMENT, OR AN AMENDMENT TO THE AGREEMENT.

TECHNICAL RESPONSE PLANNING
CORPORATION

1995 ✧ 2005
10 YEARS OF EXCELLENCE

October 30, 2006

L. E. Herrick
Response Plans Officer
U.S. DOT Office of Pipeline Safety
400 Seventh Street, S.W., Room 2103
Washington, D.C. 20590

RE: RSPA Sequence Number 451 - Southern Zone Spill Response Plan
RSPA Sequence Number 640 - Central Zone Spill Response Plan
RSPA Sequence Number 638 - Northern Zone Spill Response Plan

Dear L. E. Herrick:

In response to the letter dated December 13, 2005 from your office, we are respectfully submitting, on behalf of Koch Pipeline Company, LP (KPL) two enclosed copies of the above referenced 49 CFR Part 194, Response Plans for Onshore Transportation-Related Facilities for your review and approval.

Previously KPL and Flint Hills Resources (FHR) submitted a joint Integrated Contingency Plan (ICP) to your office for review and approval. KPL and FHR are now submitting separate response plans due to the development of the electronic plan format.

There are several findings in the December 13, 2005 letter concerning uncertainties with the joint response plans and cross-reference errors. The electronic plan has addressed the cross-reference errors and the separate plans address the uncertainties that were contained in the combined plan. The OPS sequence numbers (452, 453, 639, 641, and 642) have been deleted from KPL's response plans. The TGLO map finding is no longer an issue as all maps are in electronic format.

The summary of review findings has been addressed in this submission. The plans include a cross references that will allow you to quickly review the plans and ensure KPL has met all required components. In addition we have attached a reference of all the plan items and the section in which they are addressed.

If you have any questions regarding the enclosed Koch Pipeline Plans, please contact Shawnna D. Poor, DOT Compliance Coordinator, at (361) 242-5504.

Sincerely,
TECHNICAL RESPONSE PLANNING CORPORATION

Gregory Desmond
Senior Project Manager

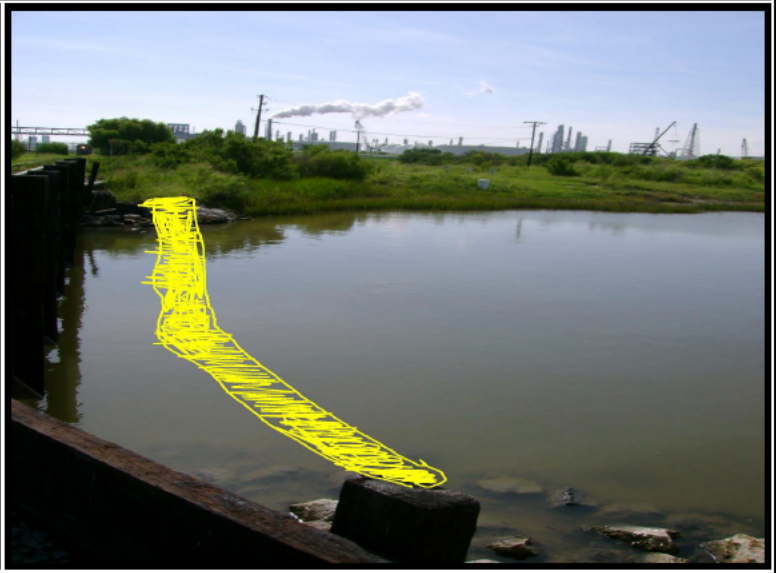
Enclosures
Federal Express

GD:ac

9720 Cypresswood Drive # 340 · Houston, Texas 77070 · Office: (281) 955-9600 · Fax: (281) 955-0369 · E-mail: info@trpcorp.com · Internet: www.trpcorp.com

Site 1 - Bridge Southside

Tule Lake



LEGEND Origin ● Destination ● Pipeline ▬

DRIVING DIRECTIONS

From Interstate 37, take the Sun Tide/Tuloso Road Exit. Head north on Suntide. Turn right on Marvin L. Berry Rd and continue ahead until you reach Texas Dock and Rail Co. You will need to check in with the guard.

RECOMMENDED EQUIPMENT	
QUANTITY	DESCRIPTION
	Containment Boom
	Sorbent Boom
	Vac Truck(s)
	Frac Tank(s)
	Work Boat(s)
	Skimmer(s)
	3/8" Polypropylene Line
	Stake(s)
	Sledge hammer(s)
	Sorbent pad(s)
	85 gallon drum liners
	Cell Phone(s)
	Portable Radios(s)
	Light tower(s)

RECOMMENDED EQUIPMENT	
QUANTITY	DESCRIPTION
	Port-o-let(s)
	Poly lined roll-off boxes
	Metal Culvert Pipes
	Trac-hoe

RECOMMENDED PERSONNEL	
NUMBERS	DESCRIPTION
	Boat Operator(s)
	Equipment Operator(s)
	Laborer(s)
	Supervisor(s)
	Vac Truck Operator(s)

RESPONSE STRATEGY

Latitude/Longitude: (b) (7)(F), (b) (3)

Location: 7002 Marvin L Berry Rd, Corpus Christi, TX 78409

Water Way: Tule Lake

Owner:

Distance from Spill Source: The Viola Station sits on tidal flats. The tidal flats feed Tule Lake which then empties into the Corpus Christi Ship Channel.

Map Reference:

Response Objective: Containment and collection

Response Tactic: - Normal Conditions
Deploy 2 50-ft segment of hard boom across Tule Lake and anchor using shoreline anchoring techniques to divert oil to the right shore bank for containment and recovery operations. Any hard boom utilized should be backed with sorbent boom. Use vac truck and skimmer for recovery operations. The first picture depicts the staging are that is on Texas Dock and Rail Property. The second picture is of the access restricted area of Citgo. We will need to gain authorization in order for our contractors/employees to get to this site. The picture in the middle depicts where the hard boom will be placed for containment and collection strategies (yellow shaded area).

Watercourse Description: Tule Lake has this outfall into the Corpus Christi Ship Channel.

Description of Worksite:

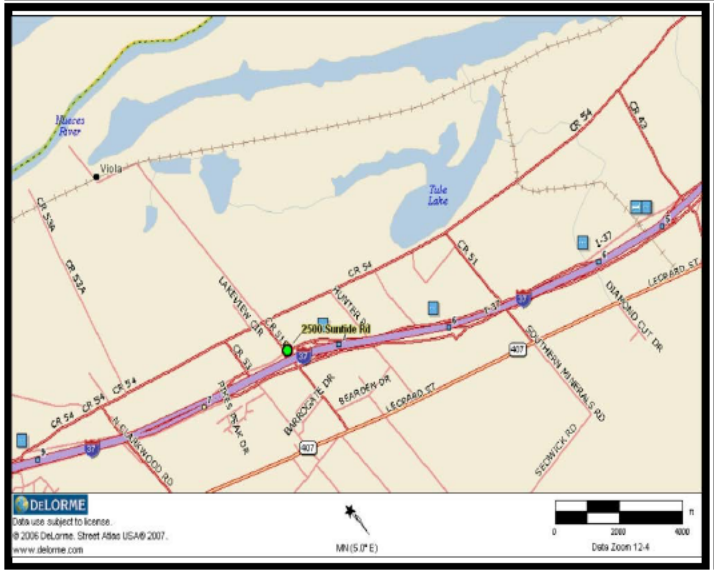
Critical Response Information: This staging and recovery area is on Texas Dock and Rail Co and Citgo property. We must first gain authorization to access the site. Remember SAFETY F RST!

Date Last Revised: October 25, 2006

Site 1 - Bridge Southside

Site 3 - Culvert

Viola Station



LEGEND Origin ● Destination ● Pipeline ▬

DRIVING DIRECTIONS

From Interstate 37, take the Sun Tide/Tuloso Road Exit. Head north on Suntide. The station is on the right hand side of Suntide Road.

RECOMMENDED EQUIPMENT	
QUANTITY	DESCRIPTION
	Containment Boom
	Sorbent Boom
	Vac Truck(s)
	Frac Tank(s)
	Work Boat(s)
	Skimmer(s)
	3/8" Polypropylene Line
	Stake(s)
	Sledge hammer(s)
	Sorbent pad(s)
	85 gallon drum liners
	Cell Phone(s)
	Portable Radios(s)
	Light tower(s)

RECOMMENDED EQUIPMENT	
QUANTITY	DESCRIPTION
	Port-o-let(s)
	Poly lined roll-off boxes
	Metal Culvert Pipes
	Trac-hoe

RECOMMENDED PERSONNEL	
NUMBERS	DESCRIPTION
	Boat Operator(s)
	Equipment Operator(s)
	Laborer(s)
	Supervisor(s)
	Vac Truck Operator(s)

RESPONSE STRATEGY

Latitude/Longitude (b) (7)(F), (b) (3)

Location: 2500 Sun

Water Way: Tule Lake

Owner:

Distance from Spill Source: The Viola Station sits on tidal flats. The tidal flats feed Tule Lake which then empties into the Corpus Christi Ship Channel.

Map Reference:

Response Objective: Protection, Containment and collection

Response Tactic: - Normal Conditions
There is a ditch that runs along the southern end of the Facility that leads directly to the tidal flats. Deploy sorbent boom across the culverts for protection, containment and recovery operations. Use vac truck and skimmer for recovery operations during high water conditions. The first two pictures depict the culvert on the south side of the station. Sorbent boom is permanently staged on either side of the culvert as shown. The picture in the middle depicts where the sorbent boom is placed for protection strategies (yellow shaded areas) and the arrows show the direction of flow.

Watercourse Description: Tidal flats are an environmentally sensitive area. There are many migratory birds that inhabit the area.

Description of Worksite:

Critical Response Information: Suntide Road is heavily trafficked. If you need assistance in maintaining access to and from the area call FHR. Exxon has a pump station directly behind these culverts. We need to ensure we notify all neighbors in the event of a release. Remember SAFETY F RST!

Date Last Revised: October 25, 2006

Site 3 - Culvert

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

[redacted]

(b) (7)(F), (b) (3)

[redacted]

(b) (7)(F), (b) (3)

[redacted]

Back to Zone Overview Map

(b) (7)(F), (b) (3)

[redacted]

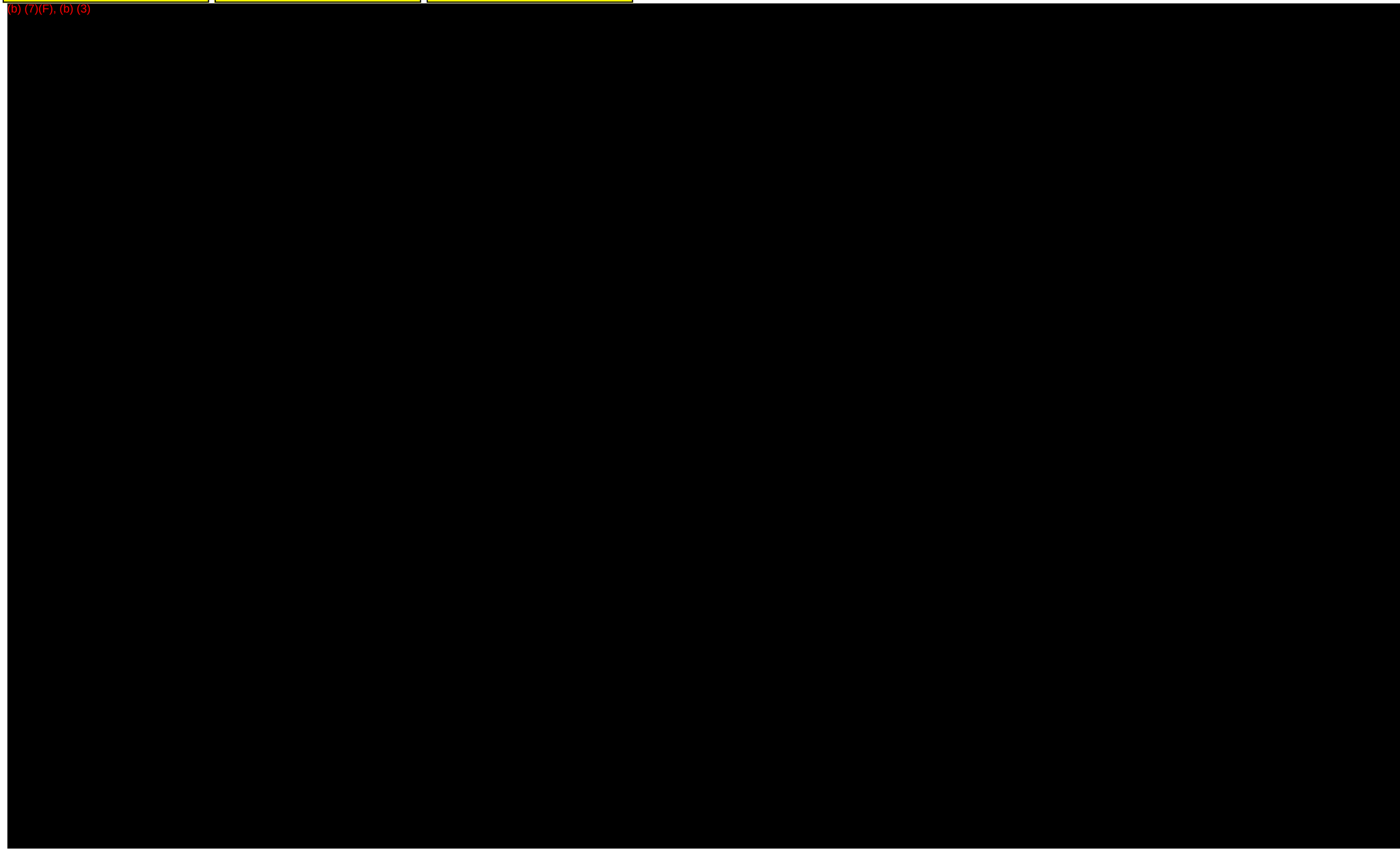
(b) (7)(F), (b) (3)

[redacted]

Back to Zone Overview Map | Open Map 3 of 4 | Open River Overview

PHMSA 000078220

(b) (7)(F), (b) (3)



(b) (7)(F), (b) (3)

Back to Zone Overview Map

Open River Overview

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

KOCH

KOCH PIPELINE COMPANY LP

March 1, 2012

Melanie Barber
Environmental Planning Officer
U.S. Department of Transportation
Pipeline and Hazardous Materials Safety Administration
Room E22-210
1200 New Jersey Avenue, S.E.
Washington, D.C. 20590
RE:

- RSPA Sequence Number 640 – Central Zone, Spill Response Plan
- RSPA Sequence Number 638 – Northern Zone, Spill Response Plan
- RSPA Sequence Number 451 – Southern Zone, Spill Response Plan

Dear Ms. Barber:

Pursuant to 49 CFR 194.121(a)(2), Koch Pipeline Company, L.P. ("KPL") hereby resubmits the significant and substantial harm plans, as required, based on our five (5) year review and update of procedures. Enclosed, is a CD of KPL's revised Spill Response Plans, outlined above. If you have any questions, please contact me at (361) 242-5544 or Gabriel.Lugo@kochpipeline.com.

Sincerely,

Gabriel Lugo
Emergency Response Manager

Encl.

8606 IH 37
Corpus Christi, Texas 78409

From: Ortiz, Christina
To: Lugo, Gabriel
Subject: FW: FedEx Shipment Notification
Date: Thursday, March 01, 2012 2:13:53 PM

From: trackingupdates@fedex.com [mailto:trackingupdates@fedex.com]
Sent: Wednesday, February 29, 2012 9:15 AM
To: Ortiz, Christina
Subject: FedEx Shipment Notification

This tracking update has been requested by:

Company Name:	Koch Pipeline Company, LP
Name:	Christina Ortiz
E-mail:	christina.ortiz@kochpipeline.com

Christina Ortiz of Koch Pipeline Company, LP sent Melanie Barber of U.S. DOT, Environmental Planning 1 FedEx Priority Overnight package(s).

This shipment is scheduled to be sent on 02/29/2012.

Reference information includes:

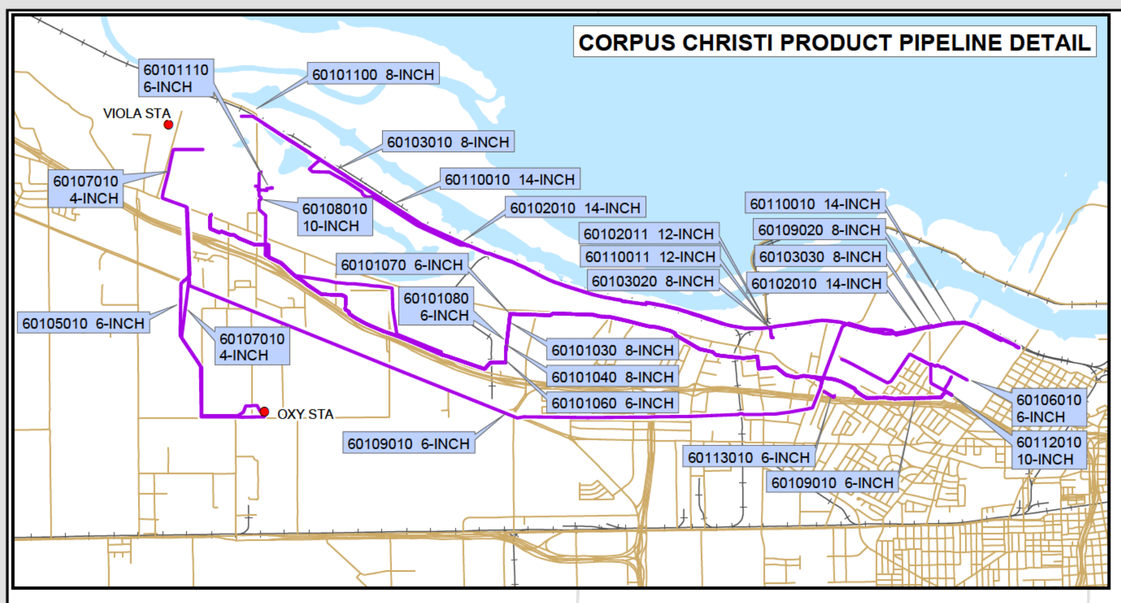
Reference:	PHMSA 5 Year Review
Special handling/Services:	Deliver Weekday
Status:	Shipment information sent to FedEx
Tracking number:	793283008937

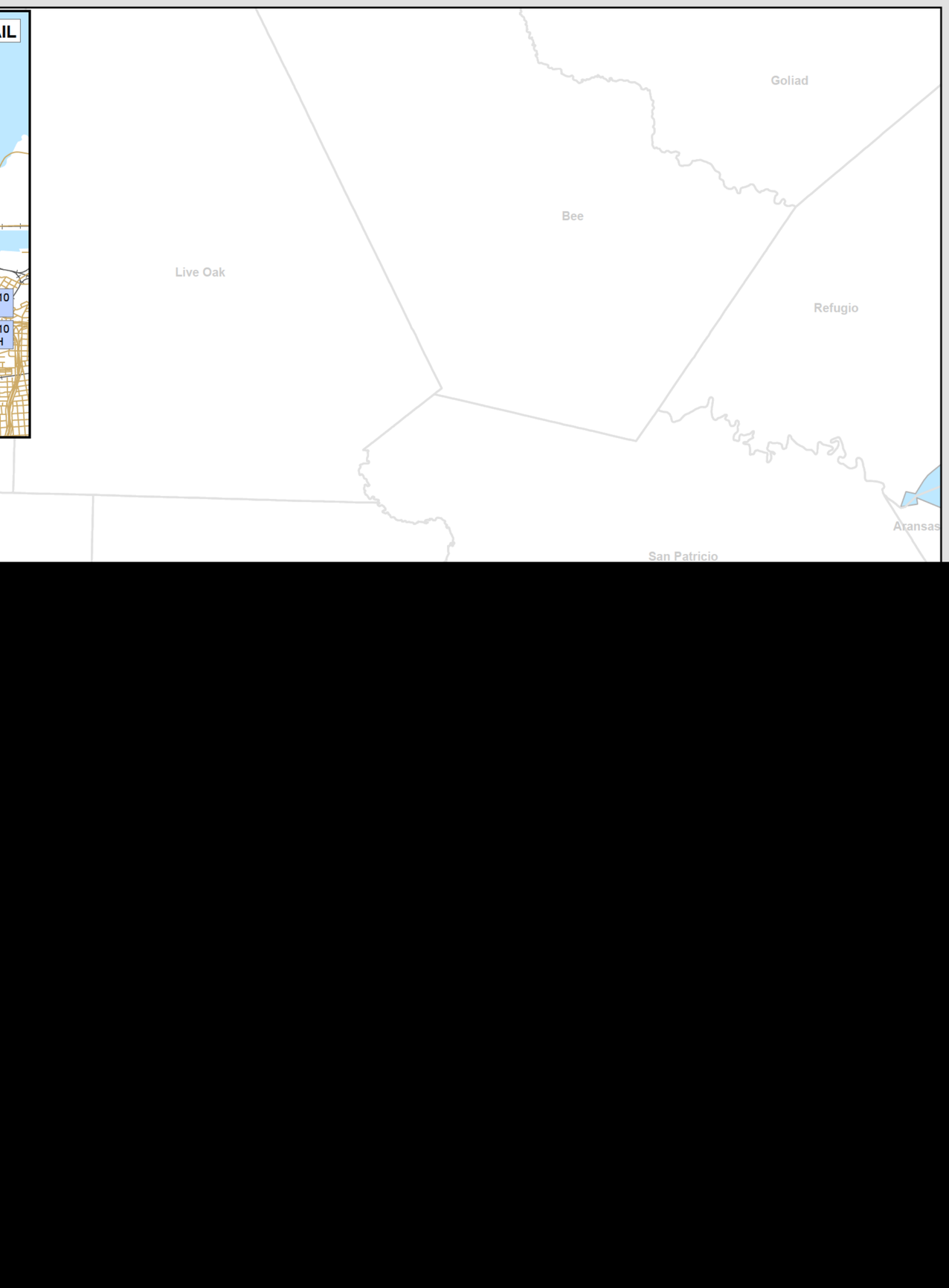
To track the latest status of your shipment, click on the tracking number above, or visit us at fedex.com.

To learn more about FedEx Express, please visit our website at fedex.com.

This tracking update has been sent to you by FedEx on the behalf of the Requestor noted above. FedEx does not validate the authenticity of the requestor and does not validate, guarantee or warrant the authenticity of the request, the requestor's message, or the accuracy of this tracking update. For tracking results and fedex.com's terms of use, go to fedex.com.

Thank you for your business.





(b) (7)(F), (b) (3)

Pipeline Worst Case Discharge
Breakout Tank Worst Case Discharge
Active Crude Pipeline
Active Products Pipeline

Active Koch Owned or Operated Pipelines
Southern Zone

N
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Miles
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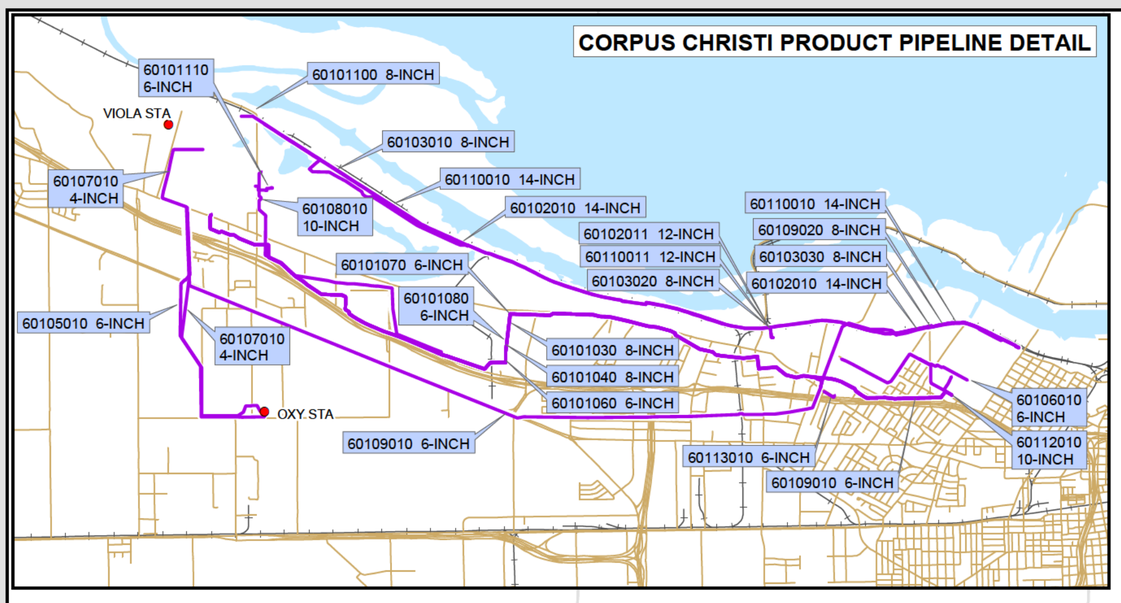

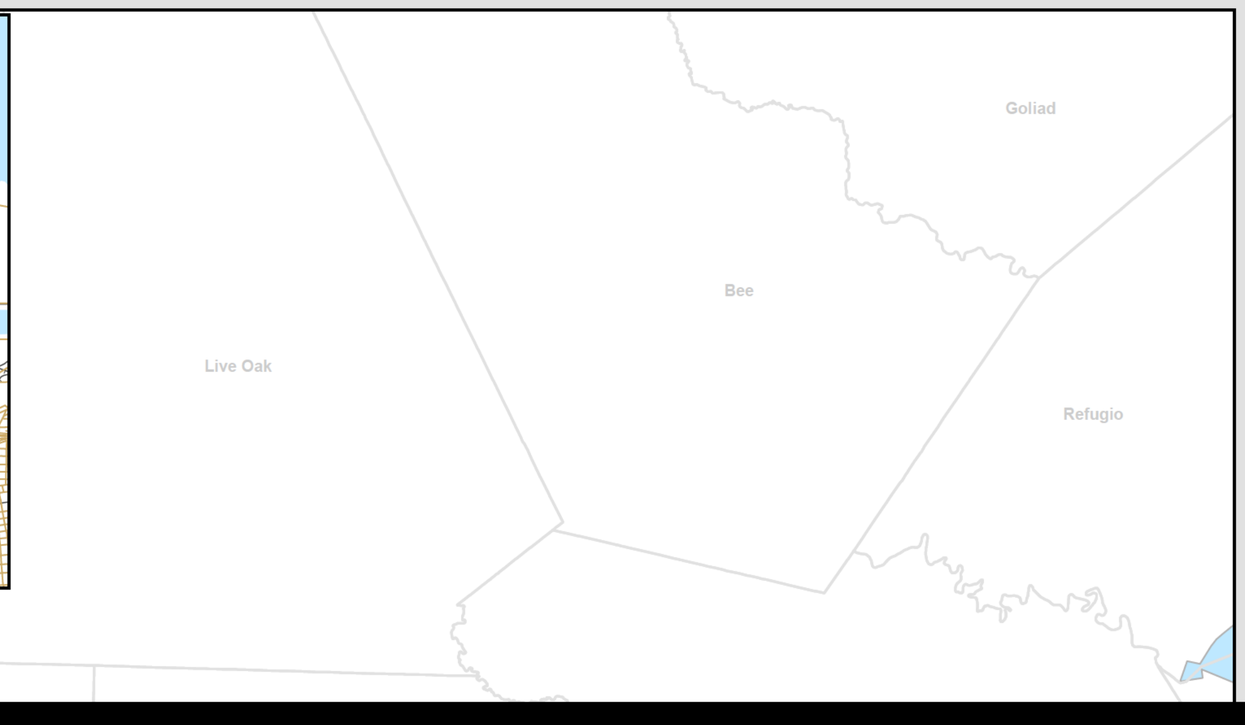

(b) (7)(F), (b) (3)

Pipeline Worst Case Discharge
Breakout Tank Worst Case Discharge
Active Crude Pipeline
Active Products Pipeline

Active Koch Owned or Operated Pipelines
Southern Zone

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INTERMITTENT SERVICES AGREEMENT

Date: June 13, 2005
Agreement Number: 0500279-A

Contractor: TAS Environmental Services, L.P.

PARTIES
It is hereby agreed between:

(i) Flint Hills Resources, L.P. Koch Pipeline Company, L.P., (such company or companies being collectively referred to hereinafter as "Company"), whose business address is P.O. Box 2256, Wichita, Kansas 67201, and

(ii) TAS Environmental Services, L.P. (such company being referred to hereinafter as "Contractor"), whose business address is 3929 California Parkway, Ft. Worth, TX 76119,

that Contractor will, as an independent contractor, furnish all necessary supervision, labor, materials and equipment (other than specified labor, materials and equipment furnished by Company) and shall perform work for Company as requested by Company from time to time during the term of this agreement in conformity with the terms of this agreement.

SPECIAL CONDITIONS:

1. Contractor represents and warrants that it is classified by the United States Coast Guard as a Class: A,B,C,D, and/or E <Applied For>_____ Oil Spill Response Organization (OSRO) for i.e. Great Lakes, inland, rivers and canals, or oceans <Applied For>_____ environment(s) in the following geographic location(s) Fort Worth, TX; San Antonio, TX, Dallas, TX, Austin, TX. Attached hereto as Schedule 1 is a copy of Contractor's current OSRO Classification Letter. If Contractor is not OSRO classified, attach a complete list and description of all response equipment, personnel and training that will be maintained and made available by Contractor during the term of this agreement.

Upon telephone notification from Company, Contractor shall respond to any spill or release of oil or hazardous substance with the personnel and equipment specified by Company. Company may identify Contractor as an Oil Spill Response Organization in any facility response plan developed pursuant to the Federal Oil Pollution Act of 1990, or any state counterpart thereto, for any facility located in the geographic location(s) identified above. Contractor shall respond hereunder at the request of Company whether or not Company has identified Contractor in the particular facility's response plan. Contractor shall notify Company of any change in Contractor's OSRO classification [e.g. suspension or revocation or changes in class level(s), operating environment(s), or geographic location(s)] as soon as possible, but in no event more than five (5) calendar days after the effective date of such change, suspension, or revocation. If Contractor is not ORSO classified, Contractor shall notify Company within five (5) calendar days of any material change in response equipment or personnel availability and shall provide Company with an updated list and description of such resources.

Contractor shall comply with all Federal, State and local laws, rules and regulations, including but not limited to all rules and regulations promulgated and in force pursuant to the Occupational, Safety and Health Act and all HazCom, HazMat, and HazWoper requirements set forth therein. Contractor shall be solely responsible for ensuring its employees have received all certifications and training required by the Occupational, Safety and Health Act, and any and all other applicable Federal, State or local laws, rules or regulations.

Contractor shall be compensated in accordance with the attached rates marked as "Exhibit A". In the event of a conflict between the provisions contained within the main body of this agreement and a provision contained within Exhibit A, the provisions in the main body of this agreement shall control. The rates shall include, without limitation, all applicable taxes imposed by federal, state or other governments or bodies having jurisdiction.

BILLING AND PAYMENT

2. Contractor shall submit to Company's authorized representatives an itemized statement detailing charges for labor and equipment including hours, dates, the hourly charge for the labor or equipment and any charge for materials at the end of each month during which work is performed. Contractor shall furnish upon demand any records relating to the statement prior to or after payment by Company. If "Company", as defined above, includes more then one entity, Contractor agrees that each such entity will be separately, not jointly, responsible for the payment obligations hereunder as relating to work performed for such entity.

3. Payment shall be made within thirty (30) days of Company's receipt of the statement described in Paragraph 2 of this agreement. Company reserves the right to withhold payment until completion of the work and its acceptance by Company or until Contractor furnishes proof satisfactory to Company that all bills for materials and labor covering the work have been fully paid by Contractor, and that the premises upon which the work is done and any structures built, improved or added to are not subject to any material or labor liens or claims of liens. Final payment shall be made within thirty (30) days of the date of acceptance of the work by Company. Contractor and/or any subcontractor shall promptly and satisfactorily settle all liens and claims for labor performed and supplies or material furnished in connection with the work; and in the event Contractor fails or refuses to promptly and satisfactorily settle any such liens or claims, Company shall, after notifying Contractor in writing, have the right to settle such claims for the account of Contractor and deduct the amount thereof from amounts payable to Contractor. Payments made under this agreement shall not constitute full or partial acceptance of the work or any part of the work by Company.

PERFORMANCE OF WORK

4. Contractor shall rely solely upon Contractor's own examination and investigation of the surface and subsurface conditions at the site, and all local and general conditions that may affect performance of the work.

5. Unless otherwise specified, Contractor shall secure all permits and licenses necessary to the performance of the work, shall pay all fees and make all deposits pertaining thereto, and shall at Contractor's expense furnish all bonds required to perform the work, and shall submit proof thereof to Company.

6. Contractor shall perform the work:
a. In a workmanlike manner using qualified, efficient and careful workers;
b. In accord with all plans, drawings and specifications;
c. In compliance with all applicable federal, state, local and Company's safety rules and regulations;
d. In a manner to protect the work, the environment, Company's property and the property and persons of others from loss, damage or injury of any type;
e. So as not to interfere with the operations of others on the premises; and,
f. Under the supervision of an employee of Contractor.

An employee supplied by Contractor without supervision by Contractor and who is under the exclusive direction and control of Company shall be considered a borrowed servant. In all other cases, the employee shall be considered an employee of Contractor as an independent contractor. Contractor's duties to defend, indemnify, protect and hold harmless Company under Paragraph 12 of this agreement shall continue regardless of the characterization of an employee as a borrowed servant or the employee of an independent contractor.

7. Company may maintain such representatives as it deems necessary on the work site for the purpose of inspecting, testing and ensuring the satisfactory completion of the work. Company may inspect the work at any time during the progress of the work, and Contractor shall provide reasonable facilities for such inspection. If any applicable statute, regulation or order requires any part of the work to be specially tested or approved, Contractor shall give Company reasonable notice of the time and place of such testing and inspection. Company may require Contractor to correct defective work or Company may have the work corrected by others, and, in either event, Contractor shall bear the cost of such correction.

8. Unless otherwise specified, all materials shall be new and workmanship shall be of good quality. No substitutions of materials from that specified in the plans and specifications in this agreement shall be permitted unless approval is given by Company in writing.

9. Contractor guarantees the work to be performed hereunder against defects in workmanship and material that shall appear within one year following final acceptance of the work by Company, and Contractor shall promptly remedy all such defects. Contractor shall arrange for the extensions, to Company, of all additional warranties by suppliers of goods or services that are consistent with or extend or expand the terms of the above described warranty of Contractor.

10. Contractor and its employees, agents and subcontractors shall comply with all applicable laws, regulations, ordinances and other rules of federal, state and local government and political subdivisions, and of any other duly constituted authority having jurisdiction.

11. Contractor shall be responsible for, and hereby assumes all liability, whether insured or self-insured, for loss or destruction of or physical damage to the following: All tools, machinery, equipment and appliances that are owned by Contractor or loaned to or leased by Contractor by others than Company and that are not to be incorporated into the completed work; and, all personal property of Contractor's employees, whether or not such loss, destruction or damage is caused by, arises out of, or is in any way connected with the negligence of Company, its employees or agents.

INDEMNITY

12. TO THE FULLEST EXTENT PERMITTED BY LAW, CONTRACTOR SHALL DEFEND, PROTECT, INDEMNIFY AND SAVE COMPANY, ITS PARENT COMPANY, PARTNERS, SUBSIDIARIES AND ANY OTHER RELATED OR AFFILIATED ENTITIES, AND THEIR RESPECTIVE OFFICERS, DIRECTORS AND EMPLOYEES (COLLECTIVELY REFERRED TO FOR PURPOSES OF THIS PARAGRAPH 12 AS "INDEMNITEES") HARMLESS FROM AND AGAINST ALL CLAIMS, LIABILITIES, DAMAGES, DEMANDS, LAWSUITS, CAUSES OF ACTION, STRICT LIABILITY CLAIMS, PENALTIES, FINES, ADMINISTRATIVE LAW ACTIONS AND ORDERS, EXPENSES (INCLUDING, BUT NOT LIMITED TO, ATTORNEYS' FEES) AND COSTS OF EVERY KIND AND CHARACTER (COLLECTIVELY "CLAIMS/LIABILITIES") ARISING OUT OF OR IN ANY WAY INCIDENT TO ANY OF THE WORK PERFORMED BY CONTRACTOR, ITS SUBCONTRACTORS OR THE

EMPLOYEES OF EITHER, ON ACCOUNT OF PERSONAL INJURIES, DEATH, DAMAGE TO PROPERTY, DAMAGE TO THE ENVIRONMENT, OR INFRINGEMENT OF ANY PATENT, TRADEMARK, COPYRIGHT OR OTHER PROPERTY RIGHT, REGARDLESS OF WHETHER SUCH HARM IS TO CONTRACTOR, INDEMNITEES, THE EMPLOYEES OR OFFICERS OF EITHER OR ANY OTHER PERSON OR ENTITY. THE DUTY TO DEFEND, PROTECT, INDEMNIFY AND SAVE INDEMNITEES HARMLESS REFERRED TO IN THE PRECEDING SENTENCE SHALL INCLUDE, BUT NOT BE LIMITED TO, CLAIMS/LIABILITIES THAT RESULT FROM THE COMPARATIVE, CONCURRENT OR CONTRIBUTING NEGLIGENCE OF ANY PERSON OR ENTITY INCLUDING, BUT NOT LIMITED TO, INDEMNITEES OR THEIR AGENTS, EXCEPT CONTRACTOR SHALL NOT BE LIABLE UNDER THIS PARAGRAPH 12 FOR LOSS OR DAMAGE RESULTING FROM THE SOLE (100%) NEGLIGENCE OF INDEMNITEES. TO THE FULLEST EXTENT PERMITTED BY LAW, CONTRACTOR FURTHER AGREES TO INDEMNIFY, DEFEND AND HOLD INDEMNITEES HARMLESS AGAINST THE PAYMENT OF ANY AND ALL TAXES, PENALTIES, FINES, INTEREST, LIENS OR INDEBTEDNESS OR CLAIMS AGAINST INDEMNITEES' PROPERTY OR FOR WORK PERFORMED, OR MEASURED BY THE WORK PERFORMED, GROWING OUT OF OR INCIDENT TO CONTRACTOR'S OPERATIONS UNDER THIS AGREEMENT INCLUDING, BUT NOT LIMITED TO, TAXES, PENALTIES, FINES, INTEREST, LIENS OR ENCUMBRANCES THAT RESULT FROM THE CONCURRENT OR CONTRIBUTING NEGLIGENCE OF ANY PERSON OR ENTITY, WHICH MAY INCLUDE INDEMNITEES, THEIR AGENTS, EMPLOYEES OR OFFICERS. CONTRACTOR SHALL MAINTAIN AT ITS OWN COST AND EXPENSE INSURANCE COVERING THIS INDEMNITY PROVISION. CONTRACTOR'S DUTIES UNDER THIS PARAGRAPH SURVIVE THE TERMINATION, REVOCATION, OR EXPIRATION OF THIS AGREEMENT.

INSURANCE

13. In addition to any other insurance that Contractor shall acquire under this agreement, Contractor shall maintain at its own cost and expense such insurance of the types and in the amounts as required by Company to insure all of Contractor's obligations under this agreement and that will protect Company from all claims for damages to persons and to property that may arise from any operations under this agreement or any subcontracts related to this agreement. Contractor shall maintain during the entire term of this agreement insurance policies within minimum limits of coverage all as set forth on Exhibit B, which is made a part hereof by reference. Prior to commencing work, Contractor shall require its insurer or insurance agent to supply Company a certificate of insurance in the form as set forth on Exhibit C. Such insurance shall name Company as an additional insured in accordance with the requirements of Exhibit B, with such additional insured endorsements providing coverage for Company with respect to liability arising out of Contractor's work performed for Company (including, but not limited to, liability caused or contributed to by the negligence of Contractor, its subcontractors, Company, third parties, or the agents, employees, or officers of any of them). All self-insured retentions ("SIRs") and deductibles shall be the responsibility of and to the account of Contractor; Contractor agrees that such insurance shall not be subject to any SIRs unless specifically consented to in writing by Company. The insurance coverages to be provided by Contractor under this paragraph, including but not limited to the additional insured coverage provided to Company, shall be independent of the indemnity provisions of this agreement, and are not designed solely to guarantee payment of Contractor's indemnity obligations.

GENERAL PROVISIONS

14. This agreement may not be assigned in whole or in part by Contractor without the prior written consent of Company, nor shall work under the contract be assigned to a subcontractor without the prior written consent of Company.

15. No amendment to this agreement shall be valid unless made in writing and signed by authorized representatives of both parties.

16. Company's right to require strict performance of Contractor's obligations shall not be affected in any way by prior waiver, forbearance or other course of dealing.

17. This agreement and any subsequent amendments comprise the entire agreement between Company and Contractor with respect to the subject matter hereof, and there are no agreements, understandings, conditions, or representations, oral or written, expressed or implied, that are not merged into this agreement or superseded by it.

18. Subject to any restrictions imposed by applicable laws, if Contractor has a petition in bankruptcy filed by or against it, has a receiver appointed for it, becomes insolvent, makes a general assignment for the benefit of creditors, refuses or fails to supply competent supervision or enough properly skilled people or proper material, disregards laws, rules or regulations applicable to the work, or otherwise violates any provision of this agreement, then Company shall have the right (in addition to any other rights it may have at law or in equity) to treat such as a breach of this agreement and may upon the giving of written notice terminate this agreement, terminate employment of Contractor, and take possession of the premises, all materials, tools, equipment, supplies, and appliances of any type and finish the work by whatever method Company may deem appropriate.

19. Company may require Contractor to furnish a surety bond in the full amount of and guaranteeing faithful performance of this agreement, or otherwise guaranteeing Contractor's obligations under this agreement. Such bond(s) shall be written on a form prescribed or approved by Company and shall be purchased from a source approved by Company.

20. Company shall have the right, at any reasonable time and from time to time, to audit any and all records, documents and other data pertaining to this agreement. Contractor shall cooperate in furnishing to Company all such records, documents and other data in connection with any such audit.

21. Company does not guarantee an offer of work to Contractor during the term of this agreement. Company and Contractor agree, however, that any work offered by Company to Contractor and accepted by Contractor during the term of this agreement will be performed under the terms of this agreement. Company shall not be liable in damages or otherwise, if by reason of an

act of God or public enemy, strike, lockout, boycott, picketing, riot, insurrection, fire, or any governmental order, rule, or regulation, or any ordinance Company shall be delayed in, or prevented from, furnishing any materials, equipment, facilities, services, etc., required to be furnished by it hereunder.

22. Contractor shall comply with and be subject to the most recent Substance Abuse Policy issued by Koch Industries, Inc. All employees of Contractor shall be subject to drug testing when on the premises of Company. In addition to the foregoing requirements, should Contractor perform services related to facilities regulated by the United States Department of Transportation, Contractor shall have developed and implemented, or have contracted with an organization that has developed and implemented, substance abuse policies in compliance with 41 U.S.C. 701, et seq., 49 C.F.R. Part 199 and 49 C.F.R. Part 40, if applicable; and, with respect to equal employment opportunity and affirmative action compliance, Contractor shall comply with the provisions of Section 202 of Executive Order 11246 and the rules and regulations issued pursuant to Section 201 thereof. Contractor shall provide Company with documentation demonstrating compliance with such laws upon the request of Company.

23. Contractor warrants and represents that, to the extent applicable to any activities that may be performed pursuant to this agreement by Contractor or its subcontractors, all of Contractor's employees and its subcontractors' employees have received all safety training required by law for employees working in an environment in which they may come in contact with crude oil, natural gas, natural gas liquids, refined products or hazardous materials. Contractor agrees to permit Company to inspect Contractor's records in order to assure compliance with this Paragraph 23.

24. In the event any provision herein shall be judicially interpreted or held to be void or otherwise unenforceable as written, such provision shall be deemed to be revised and modified to the extent necessary to make it legally enforceable. In any event, the remaining terms of the agreement shall be enforceable as though the void or unenforceable provision did not exist.

CONFIDENTIALITY

25. All information that Contractor acquires from Company hereunder, directly or indirectly, and all information that arises out of the Work performed hereunder, concerning such Work and/or proprietary processes involved in the Work, including without limitation, information concerning Company's current and future business plans, information relating to Company's operations, and other Company-furnished information and know-how relating to the Work shall be deemed Company's "Proprietary Information." Company's Proprietary Information shall be held in strictest confidence by Contractor and shall be used solely for purposes of performing such Services. The obligations under this Paragraph shall survive completion of such work/services and termination of this Agreement.

TERM

26. This agreement shall be effective as of the date first above written and shall continue for a one-year period following that date. At the end of the initial one-year period, the agreement shall continue until replaced by a subsequent agreement or otherwise revoked by written notice by either party.

SO AGREED, EXECUTED ON THE DATES INDICATED BELOW, BUT EFFECTIVE AS OF THE DATE FIRST ABOVE WRITTEN:

COMPANY
Flint Hills Resources, LP
Koch Pipeline Company, L.P.

By Bob O'Hair
Bob O'Hair
(Printed Name)
Title Vice President
Date 6-22-05

CONTRACTOR
TAS Environmental Services, L.P.

Federal ID Number: 20-1454928

By
J Salter
(Printed Name)
Title President of GP
Date 6.13.5

Exhibit B
Insurance Requirements
Supplement to Intermittent Services Agreement 0500279-A

1.0 With respect to Contractor's performance of the agreement to which this exhibit is attached (referred to hereinafter as the "agreement"), Contractor shall maintain the following insurance:

1.1 **Worker's Compensation and Employers' Liability Insurance**, as prescribed by applicable law including insurance covering liability under the Longshoremen's and Harbor Workers' Compensation Act, the Merchant Marine Act of 1920 (Jones Act) and the Outer Continental Shelf Land Act, if applicable. Coverage will include an Alternate Employer Endorsement (WC 00 03 01) naming Company as an Alternate Employer. Contractor shall require its insurer or insurance agent to provide, as requested by Company, Contractor's Experience Modification Rating (EMR).

1.2 **Commercial General Liability Insurance**, which shall be at least as broad as the coverage provided by a standard form Commercial General Liability Policy (ISO CG 00 01 01 96, with standard exclusions "a" through "n"; ISO forms CG 00 01 07 98 or CG 00 01 10 01, with standard exclusions "a" through "o", with a minimum combined single limit of **$3,000,000** per occurrence for Bodily injury and Property Damage and a **$3,000,000** aggregate each for the general policy and the Products/Completed Operations hazard. This insurance must include the following features:

1.2.1 If work to be performed by Contractor includes construction or demolition operations within 50 feet of any railroad property and affecting any railroad bridge or trestle, tracks, road-beds, tunnel, underpass or crossing, and if Contractor's commercial general liability insurance policy is form ISO CG 00 01 11 88, then such policy will include a Railroad's Contractual Liability Endorsement CG 24 17 10 93.

1.2.2 Contractual Liability coverage.

1.2.3 Products and Completed operations.

1.2.4 Coverage for demolition of any building or structure, collapse, explosion, blasting, excavation and damage to property below the surface of the ground (XCU coverage), if applicable.

1.2.5 Coverage will include one of the following endorsements naming Company as an additional insured:

(i) Additional Insured - Owners, Lessees or Contractors (Form B) Endorsement (CG 20 10 10 93); or
(ii) Additional Insured - Owners, Lessees or Contractors Scheduled Person or Organization Endorsement (CG 20 10 03 97); or
(iii) Additional Insured – Owners, Lessees or Contractors Scheduled Person or Organization Endorsement (CG 20 10 10 01).

1.3 **Automobile Liability Insurance**, covering all owned, non owned, hired and leased vehicles with a minimum combined single limit for Bodily Injury and Property Damage of **$3,000,000** per accident. This insurance must include contractual liability coverage.

1.4 **Aircraft Liability Insurance** - If any operations require the use of aircraft, including helicopters, Contractor shall maintain or require owners of such aircraft to maintain Aircraft Liability Insurance with a combined single limit of not less than **$5,000,000** for bodily injury and property damage (including, passenger) liability.

1.5 **Hull and Machinery Insurance** covering vessels or barges owned or bareboat chartered by Contractor and used by Contractor in the performance of the agreement. Such vessels shall be insured for no less than the fair market value of such vessel or barge. Coverage shall include **Collision Liability Insurance** with limits no less than **$5,000,000.**

1.6 **Protection and Indemnity Insurance** - If marine work is to be performed under the agreement, Contractor shall maintain Protection and Indemnity Insurance, including coverage for injuries to or death of masters, mates and crews of vessels used in the performance of the agreement. The limits of liability of such insurance shall not be less than **$5,000,000** per occurrence. Contractor may cover its obligation for loss of life or bodily injury to the crew of the vessel by extension of the Workers Compensation Insurance 1.1 above (Jones Act). Coverage shall also include pollution liability for loss as specified in the requirements of applicable United States Federal and State Laws. All certificates evidencing financial responsibility shall be current and carried on board.

1.7 **Railroad Protective Liability** - If required by Company, Contractor shall maintain Railroad Protective Liability Insurance naming the railroad as the insured with a limit for bodily injury and property damage liability of **$2,000,000** per occurrence, **$6,000,000** aggregate. The original of said policy shall be furnished to railroad prior to any construction or entry upon the railroad easement premises by Contractor.

1.8 **Umbrella / Excess Insurance** - The limits specified in 1.1, 1.2, 1.3, 1.4, 1.5 and 1.6 above may be satisfied with a combination of primary and Umbrella/Excess Insurance, such policies naming Company as additional insured.

1.9 **Pollution Liability Insurance - If required by Company,** Contractor shall provide and maintain, and ensure that all of Contractor's subcontractors provide and maintain, the following insurances: Contractor's Pollution Liability Insurance with coverage for (a.) bodily injury, sickness, disease, mental anguish or shock sustained by any person, including death; (b.) property damage, including physical injury to or destruction of tangible property, including the resulting loss of use thereof, clean up costs, and the loss of use of tangible property that has not been physically injured or destroyed; (c.) defense, including costs, charges and expenses incurred in the investigation, adjustment or defense of claims for such compensatory damages; for losses caused by pollution conditions that arise from the operations of the Contractor performed under this Agreement. If such policy is written on a claims-made basis, the Contractor warrants that continuous coverage will be maintained, or an extended coverage period will be exercised for a period of 12 months, beginning from the time the work under this Agreement is completed. Contractor agrees to name Company as an additional insured and to furnish insurance certificates showing the Contractor's compliance with this Paragraph 1.9. Contractor also agrees to notify Company 30 days in advance of any cancellation or change to the insurance coverages shown on the certificate. Contractor shall maintain limits no less than Pollution Legal Liability: **$5,000,000 per loss** and **$5,000,000 annual aggregate.**

Note: Coverage for Contractor's Pollution Liability Insurance can be satisfied by the addition of a time element buyback endorsement on the General Liability Policy. The coverage must be as broad as the coverage described above, with a minimum requirement for discovery of 7 days and a minimum reporting period of 60 days.

Contractor shall, before commencing work, provide Company with a certificate of insurance satisfactory to Company of the insurance coverages set forth above.

2.0 **Policy Endorsements**

2.1 The above insurance shall include a requirement that the insurer provide Company with thirty (30) days' written notice prior to the effective date of any cancellation or material change of the insurance.

2.2 The insurance specified in Sections 1.2, 1.4, 1.5, 1.6, 1.8 and 1.9 hereof, as well as any Excess/Umbrella insurance coverage available to Contractor, shall:

i) Name Company as an additional insured with respect to work performed for Company, with such additional insured endorsement providing coverage for Company with respect to liability arising out of Contractor's work performed for Company (including, but not limited to, liability caused or contributed to by the negligence of Contractor, its subcontractors, Company, third parties, or the agents, employees, or officers of any of them);
ii) Be primary to and not in excess of or contributory with any other insurance available to Company; and
iii) Acknowledge that in no event shall Company's insurance, including but not limited to any SIR or deductible, be considered "other insurance" under the terms of Contractor's policies .

3.0 **Evidence of Insurance** - Contractor shall, before commencing work, provide Company with a certificate (see attached **Exhibit C**) satisfactory to Company of the insurance coverages and endorsements set forth in Sections 1.0 and 2.0 above. If requested by Company, Contractor shall provide Company with certified copies of all policies.

4.0 **Waiver of Subrogation**

4.1 Contractor, on behalf of its insurers, waives any right of subrogation that such insurers may have against Company arising out of this agreement.

4.2 The insurance specified in Section 1.1 hereof shall contain a waiver of the right of subrogation against Company and an assignment of statutory lien, if applicable.

4.3 Any physical damage insurance carried by Contractor on construction equipment, tools, temporary structures and supplies owned or used by Contractor shall provide a waiver of the right of subrogation against Company.

5.0 All self-insured retentions ("SIRs") and deductibles shall be the responsibility of and to the account of Contractor; Contractor agrees that such insurance shall not be subject to any SIRs, unless specifically consented to in writing by Company.

6.0 The obligation to carry the insurance required by this Exhibit shall not limit or modify in any way any other obligations assumed by the Contractor under the agreement. Contractor shall be held accountable for all insurance coverages, including those of sub-contractors. Company shall not be under any duty to advise Contractor in the event that Contractor's insurance is not in compliance with this agreement. ACCEPTANCE OF ANY INSURANCE CERTIFICATE SHALL NOT CONSTITUTE ACCEPTANCE OF THE ADEQUACY OF COVERAGE, COMPLIANCE WITH THE REQUIREMENTS OF THE AGREEMENT, OR AN AMENDMENT TO THE AGREEMENT.

INTERMITTENT SERVICES AGREEMENT

Date: June 13, 2005
Agreement Number: 0500279-A

Contractor: TAS Environmental Services, L.P.

PARTIES
It is hereby agreed between:

(i) Flint Hills Resources, L.P. Koch Pipeline Company, L.P., (such company or companies being collectively referred to hereinafter as "Company"), whose business address is P.O. Box 2256, Wichita, Kansas 67201, and

(ii) TAS Environmental Services, L.P. (such company being referred to hereinafter as "Contractor"), whose business address is 3929 California Parkway, Ft. Worth, TX 76119,

that Contractor will, as an independent contractor, furnish all necessary supervision, labor, materials and equipment (other than specified labor, materials and equipment furnished by Company) and shall perform work for Company as requested by Company from time to time during the term of this agreement in conformity with the terms of this agreement.

SPECIAL CONDITIONS:

1. Contractor represents and warrants that it is classified by the United States Coast Guard as a Class: A,B,C,D, and/or E <Applied For>_____ Oil Spill Response Organization (OSRO) for i.e. Great Lakes, inland, rivers and canals, or oceans <Applied For>_____ environment(s) in the following geographic location(s) Fort Worth, TX; San Antonio, TX, Dallas, TX, Austin, TX. Attached hereto as Schedule 1 is a copy of Contractor's current OSRO Classification Letter. If Contractor is not OSRO classified, attach a complete list and description of all response equipment, personnel and training that will be maintained and made available by Contractor during the term of this agreement.

Upon telephone notification from Company, Contractor shall respond to any spill or release of oil or hazardous substance with the personnel and equipment specified by Company. Company may identify Contractor as an Oil Spill Response Organization in any facility response plan developed pursuant to the Federal Oil Pollution Act of 1990, or any state counterpart thereto, for any facility located in the geographic location(s) identified above. Contractor shall respond hereunder at the request of Company whether or not Company has identified Contractor in the particular facility's response plan. Contractor shall notify Company of any change in Contractor's OSRO classification [e.g. suspension or revocation or changes in class level(s), operating environment(s), or geographic location(s)] as soon as possible, but in no event more than five (5) calendar days after the effective date of such change, suspension, or revocation. If Contractor is not ORSO classified, Contractor shall notify Company within five (5) calendar days of any material change in response equipment or personnel availability and shall provide Company with an updated list and description of such resources.

Contractor shall comply with all Federal, State and local laws, rules and regulations, including but not limited to all rules and regulations promulgated and in force pursuant to the Occupational, Safety and Health Act and all HazCom, HazMat, and HazWoper requirements set forth therein. Contractor shall be solely responsible for ensuring its employees have received all certifications and training required by the Occupational, Safety and Health Act, and any and all other applicable Federal, State or local laws, rules or regulations.

Contractor shall be compensated in accordance with the attached rates marked as "Exhibit A". In the event of a conflict between the provisions contained within the main body of this agreement and a provision contained within Exhibit A, the provisions in the main body of this agreement shall control. The rates shall include, without limitation, all applicable taxes imposed by federal, state or other governments or bodies having jurisdiction.

BILLING AND PAYMENT

2. Contractor shall submit to Company's authorized representatives an itemized statement detailing charges for labor and equipment including hours, dates, the hourly charge for the labor or equipment and any charge for materials at the end of each month during which work is performed. Contractor shall furnish upon demand any records relating to the statement prior to or after payment by Company. If "Company", as defined above, includes more then one entity, Contractor agrees that each such entity will be separately, not jointly, responsible for the payment obligations hereunder as relating to work performed for such entity.

3. Payment shall be made within thirty (30) days of Company's receipt of the statement described in Paragraph 2 of this agreement. Company reserves the right to withhold payment until completion of the work and its acceptance by Company or until Contractor furnishes proof satisfactory to Company that all bills for materials and labor covering the work have been fully paid by Contractor, and that the premises upon which the work is done and any structures built, improved or added to are not subject to any material or labor liens or claims of liens. Final payment shall be made within thirty (30) days of the date of acceptance of the work by Company. Contractor and/or any subcontractor shall promptly and satisfactorily settle all liens and claims for labor performed and supplies or material furnished in connection with the work; and in the event Contractor fails or refuses to promptly and satisfactorily settle any such liens or claims, Company shall, after notifying Contractor in writing, have the right to settle such claims for the account of Contractor and deduct the amount thereof from amounts payable to Contractor. Payments made under this agreement shall not constitute full or partial acceptance of the work or any part of the work by Company.

PERFORMANCE OF WORK

4. Contractor shall rely solely upon Contractor's own examination and investigation of the surface and subsurface conditions at the site, and all local and general conditions that may affect performance of the work.

5. Unless otherwise specified, Contractor shall secure all permits and licenses necessary to the performance of the work, shall pay all fees and make all deposits pertaining thereto, and shall at Contractor's expense furnish all bonds required to perform the work, and shall submit proof thereof to Company.

6. Contractor shall perform the work:
a. In a workmanlike manner using qualified, efficient and careful workers;
b. In accord with all plans, drawings and specifications;
c. In compliance with all applicable federal, state, local and Company's safety rules and regulations;
d. In a manner to protect the work, the environment, Company's property and the property and persons of others from loss, damage or injury of any type;
e. So as not to interfere with the operations of others on the premises; and,
f. Under the supervision of an employee of Contractor.

An employee supplied by Contractor without supervision by Contractor and who is under the exclusive direction and control of Company shall be considered a borrowed servant. In all other cases, the employee shall be considered an employee of Contractor as an independent contractor. Contractor's duties to defend, indemnify, protect and hold harmless Company under Paragraph 12 of this agreement shall continue regardless of the characterization of an employee as a borrowed servant or the employee of an independent contractor.

7. Company may maintain such representatives as it deems necessary on the work site for the purpose of inspecting, testing and ensuring the satisfactory completion of the work. Company may inspect the work at any time during the progress of the work, and Contractor shall provide reasonable facilities for such inspection. If any applicable statute, regulation or order requires any part of the work to be specially tested or approved, Contractor shall give Company reasonable notice of the time and place of such testing and inspection. Company may require Contractor to correct defective work or Company may have the work corrected by others, and, in either event, Contractor shall bear the cost of such correction.

8. Unless otherwise specified, all materials shall be new and workmanship shall be of good quality. No substitutions of materials from that specified in the plans and specifications in this agreement shall be permitted unless approval is given by Company in writing.

9. Contractor guarantees the work to be performed hereunder against defects in workmanship and material that shall appear within one year following final acceptance of the work by Company, and Contractor shall promptly remedy all such defects. Contractor shall arrange for the extensions, to Company, of all additional warranties by suppliers of goods or services that are consistent with or extend or expand the terms of the above described warranty of Contractor.

10. Contractor and its employees, agents and subcontractors shall comply with all applicable laws, regulations, ordinances and other rules of federal, state and local government and political subdivisions, and of any other duly constituted authority having jurisdiction.

11. Contractor shall be responsible for, and hereby assumes all liability, whether insured or self-insured, for loss or destruction of or physical damage to the following: All tools, machinery, equipment and appliances that are owned by Contractor or loaned to or leased by Contractor by others than Company and that are not to be incorporated into the completed work; and, all personal property of Contractor's employees, whether or not such loss, destruction or damage is caused by, arises out of, or is in any way connected with the negligence of Company, its employees or agents.

INDEMNITY

12. TO THE FULLEST EXTENT PERMITTED BY LAW, CONTRACTOR SHALL DEFEND, PROTECT, INDEMNIFY AND SAVE COMPANY, ITS PARENT COMPANY, PARTNERS, SUBSIDIARIES AND ANY OTHER RELATED OR AFFILIATED ENTITIES, AND THEIR RESPECTIVE OFFICERS, DIRECTORS AND EMPLOYEES (COLLECTIVELY REFERRED TO FOR PURPOSES OF THIS PARAGRAPH 12 AS "INDEMNITEES") HARMLESS FROM AND AGAINST ALL CLAIMS, LIABILITIES, DAMAGES, DEMANDS, LAWSUITS, CAUSES OF ACTION, STRICT LIABILITY CLAIMS, PENALTIES, FINES, ADMINISTRATIVE LAW ACTIONS AND ORDERS, EXPENSES (INCLUDING, BUT NOT LIMITED TO, ATTORNEYS' FEES) AND COSTS OF EVERY KIND AND CHARACTER (COLLECTIVELY "CLAIMS/LIABILITIES") ARISING OUT OF OR IN ANY WAY INCIDENT TO ANY OF THE WORK PERFORMED BY CONTRACTOR, ITS SUBCONTRACTORS OR THE

EMPLOYEES OF EITHER, ON ACCOUNT OF PERSONAL INJURIES, DEATH, DAMAGE TO PROPERTY, DAMAGE TO THE ENVIRONMENT, OR INFRINGEMENT OF ANY PATENT, TRADEMARK, COPYRIGHT OR OTHER PROPERTY RIGHT, REGARDLESS OF WHETHER SUCH HARM IS TO CONTRACTOR, INDEMNITEES, THE EMPLOYEES OR OFFICERS OF EITHER OR ANY OTHER PERSON OR ENTITY. THE DUTY TO DEFEND, PROTECT, INDEMNIFY AND SAVE INDEMNITEES HARMLESS REFERRED TO IN THE PRECEDING SENTENCE SHALL INCLUDE, BUT NOT BE LIMITED TO, CLAIMS/LIABILITIES THAT RESULT FROM THE COMPARATIVE, CONCURRENT OR CONTRIBUTING NEGLIGENCE OF ANY PERSON OR ENTITY INCLUDING, BUT NOT LIMITED TO, INDEMNITEES OR THEIR AGENTS, EXCEPT CONTRACTOR SHALL NOT BE LIABLE UNDER THIS PARAGRAPH 12 FOR LOSS OR DAMAGE RESULTING FROM THE SOLE (100%) NEGLIGENCE OF INDEMNITEES. TO THE FULLEST EXTENT PERMITTED BY LAW, CONTRACTOR FURTHER AGREES TO INDEMNIFY, DEFEND AND HOLD INDEMNITEES HARMLESS AGAINST THE PAYMENT OF ANY AND ALL TAXES, PENALTIES, FINES, INTEREST, LIENS OR INDEBTEDNESS OR CLAIMS AGAINST INDEMNITEES' PROPERTY OR FOR WORK PERFORMED, OR MEASURED BY THE WORK PERFORMED, GROWING OUT OF OR INCIDENT TO CONTRACTOR'S OPERATIONS UNDER THIS AGREEMENT INCLUDING, BUT NOT LIMITED TO, TAXES, PENALTIES, FINES, INTEREST, LIENS OR ENCUMBRANCES THAT RESULT FROM THE CONCURRENT OR CONTRIBUTING NEGLIGENCE OF ANY PERSON OR ENTITY, WHICH MAY INCLUDE INDEMNITEES, THEIR AGENTS, EMPLOYEES OR OFFICERS. CONTRACTOR SHALL MAINTAIN AT ITS OWN COST AND EXPENSE INSURANCE COVERING THIS INDEMNITY PROVISION. CONTRACTOR'S DUTIES UNDER THIS PARAGRAPH SURVIVE THE TERMINATION, REVOCATION, OR EXPIRATION OF THIS AGREEMENT.

INSURANCE

13. In addition to any other insurance that Contractor shall acquire under this agreement, Contractor shall maintain at its own cost and expense such insurance of the types and in the amounts as required by Company to insure all of Contractor's obligations under this agreement and that will protect Company from all claims for damages to persons and to property that may arise from any operations under this agreement or any subcontracts related to this agreement. Contractor shall maintain during the entire term of this agreement insurance policies within minimum limits of coverage all as set forth on Exhibit B, which is made a part hereof by reference. Prior to commencing work, Contractor shall require its insurer or insurance agent to supply Company a certificate of insurance in the form as set forth on Exhibit C. Such insurance shall name Company as an additional insured in accordance with the requirements of Exhibit B, with such additional insured endorsements providing coverage for Company with respect to liability arising out of Contractor's work performed for Company (including, but not limited to, liability caused or contributed to by the negligence of Contractor, its subcontractors, Company, third parties, or the agents, employees, or officers of any of them). All self-insured retentions ("SIRs") and deductibles shall be the responsibility of and to the account of Contractor; Contractor agrees that such insurance shall not be subject to any SIRs unless specifically consented to in writing by Company. The insurance coverages to be provided by Contractor under this paragraph, including but not limited to the additional insured coverage provided to Company, shall be independent of the indemnity provisions of this agreement, and are not designed solely to guarantee payment of Contractor's indemnity obligations.

GENERAL PROVISIONS

14. This agreement may not be assigned in whole or in part by Contractor without the prior written consent of Company, nor shall work under the contract be assigned to a subcontractor without the prior written consent of Company.

15. No amendment to this agreement shall be valid unless made in writing and signed by authorized representatives of both parties.

16. Company's right to require strict performance of Contractor's obligations shall not be affected in any way by prior waiver, forbearance or other course of dealing.

17. This agreement and any subsequent amendments comprise the entire agreement between Company and Contractor with respect to the subject matter hereof, and there are no agreements, understandings, conditions, or representations, oral or written, expressed or implied, that are not merged into this agreement or superseded by it.

18. Subject to any restrictions imposed by applicable laws, if Contractor has a petition in bankruptcy filed by or against it, has a receiver appointed for it, becomes insolvent, makes a general assignment for the benefit of creditors, refuses or fails to supply competent supervision or enough properly skilled people or proper material, disregards laws, rules or regulations applicable to the work, or otherwise violates any provision of this agreement, then Company shall have the right (in addition to any other rights it may have at law or in equity) to treat such as a breach of this agreement and may upon the giving of written notice terminate this agreement, terminate employment of Contractor, and take possession of the premises, all materials, tools, equipment, supplies, and appliances of any type and finish the work by whatever method Company may deem appropriate.

19. Company may require Contractor to furnish a surety bond in the full amount of and guaranteeing faithful performance of this agreement, or otherwise guaranteeing Contractor's obligations under this agreement. Such bond(s) shall be written on a form prescribed or approved by Company and shall be purchased from a source approved by Company.

20. Company shall have the right, at any reasonable time and from time to time, to audit any and all records, documents and other data pertaining to this agreement. Contractor shall cooperate in furnishing to Company all such records, documents and other data in connection with any such audit.

21. Company does not guarantee an offer of work to Contractor during the term of this agreement. Company and Contractor agree, however, that any work offered by Company to Contractor and accepted by Contractor during the term of this agreement will be performed under the terms of this agreement. Company shall not be liable in damages or otherwise, if by reason of an

act of God or public enemy, strike, lockout, boycott, picketing, riot, insurrection, fire, or any governmental order, rule, or regulation, or any ordinance Company shall be delayed in, or prevented from, furnishing any materials, equipment, facilities, services, etc., required to be furnished by it hereunder.

22. Contractor shall comply with and be subject to the most recent Substance Abuse Policy issued by Koch Industries, Inc. All employees of Contractor shall be subject to drug testing when on the premises of Company. In addition to the foregoing requirements, should Contractor perform services related to facilities regulated by the United States Department of Transportation, Contractor shall have developed and implemented, or have contracted with an organization that has developed and implemented, substance abuse policies in compliance with 41 U.S.C. 701, et seq., 49 C.F.R. Part 199 and 49 C.F.R. Part 40, if applicable; and, with respect to equal employment opportunity and affirmative action compliance, Contractor shall comply with the provisions of Section 202 of Executive Order 11246 and the rules and regulations issued pursuant to Section 201 thereof. Contractor shall provide Company with documentation demonstrating compliance with such laws upon the request of Company.

23. Contractor warrants and represents that, to the extent applicable to any activities that may be performed pursuant to this agreement by Contractor or its subcontractors, all of Contractor's employees and its subcontractors' employees have received all safety training required by law for employees working in an environment in which they may come in contact with crude oil, natural gas, natural gas liquids, refined products or hazardous materials. Contractor agrees to permit Company to inspect Contractor's records in order to assure compliance with this Paragraph 23.

24. In the event any provision herein shall be judicially interpreted or held to be void or otherwise unenforceable as written, such provision shall be deemed to be revised and modified to the extent necessary to make it legally enforceable. In any event, the remaining terms of the agreement shall be enforceable as though the void or unenforceable provision did not exist.

CONFIDENTIALITY

25. All information that Contractor acquires from Company hereunder, directly or indirectly, and all information that arises out of the Work performed hereunder, concerning such Work and/or proprietary processes involved in the Work, including without limitation, information concerning Company's current and future business plans, information relating to Company's operations, and other Company-furnished information and know-how relating to the Work shall be deemed Company's "Proprietary Information." Company's Proprietary Information shall be held in strictest confidence by Contractor and shall be used solely for purposes of performing such Services. The obligations under this Paragraph shall survive completion of such work/services and termination of this Agreement.

TERM

26. This agreement shall be effective as of the date first above written and shall continue for a one-year period following that date. At the end of the initial one-year period, the agreement shall continue until replaced by a subsequent agreement or otherwise revoked by written notice by either party.

SO AGREED, EXECUTED ON THE DATES INDICATED BELOW, BUT EFFECTIVE AS OF THE DATE FIRST ABOVE WRITTEN:

COMPANY
Flint Hills Resources, LP
Koch Pipeline Company, L.P.

By Bob O'Hair
Bob O'Hair
(Printed Name)
Title Vice President
Date 6-22-05

CONTRACTOR
TAS Environmental Services, L.P.

Federal ID Number: 20-1454928

By
J Salzer
(Printed Name)
Title President of GP
Date 6.13.5

Exhibit B
Insurance Requirements
Supplement to Intermittent Services Agreement 0500279-A

1.0 With respect to Contractor's performance of the agreement to which this exhibit is attached (referred to hereinafter as the "agreement"), Contractor shall maintain the following insurance:

1.1 **Worker's Compensation and Employers' Liability Insurance**, as prescribed by applicable law including insurance covering liability under the Longshoremen's and Harbor Workers' Compensation Act, the Merchant Marine Act of 1920 (Jones Act) and the Outer Continental Shelf Land Act, if applicable. Coverage will include an Alternate Employer Endorsement (WC 00 03 01) naming Company as an Alternate Employer. Contractor shall require its insurer or insurance agent to provide, as requested by Company, Contractor's Experience Modification Rating (EMR).

1.2 **Commercial General Liability Insurance**, which shall be at least as broad as the coverage provided by a standard form Commercial General Liability Policy (ISO CG 00 01 01 96, with standard exclusions "a" through "n"; ISO forms CG 00 01 07 98 or CG 00 01 10 01, with standard exclusions "a" through "o", with a minimum combined single limit of **$3,000,000** per occurrence for Bodily injury and Property Damage and a **$3,000,000** aggregate each for the general policy and the Products/Completed Operations hazard. This insurance must include the following features:

1.2.1 If work to be performed by Contractor includes construction or demolition operations within 50 feet of any railroad property and affecting any railroad bridge or trestle, tracks, road-beds, tunnel, underpass or crossing, and if Contractor's commercial general liability insurance policy is form ISO CG 00 01 11 88, then such policy will include a Railroad's Contractual Liability Endorsement CG 24 17 10 93.

1.2.2 Contractual Liability coverage.

1.2.3 Products and Completed operations.

1.2.4 Coverage for demolition of any building or structure, collapse, explosion, blasting, excavation and damage to property below the surface of the ground (XCU coverage), if applicable.

1.2.5 Coverage will include one of the following endorsements naming Company as an additional insured:

(i) Additional Insured - Owners, Lessees or Contractors (Form B) Endorsement (CG 20 10 10 93); or
(ii) Additional Insured - Owners, Lessees or Contractors Scheduled Person or Organization Endorsement (CG 20 10 03 97); or
(iii) Additional Insured – Owners, Lessees or Contractors Scheduled Person or Organization Endorsement (CG 20 10 10 01).

1.3 **Automobile Liability Insurance**, covering all owned, non owned, hired and leased vehicles with a minimum combined single limit for Bodily Injury and Property Damage of **$3,000,000** per accident. This insurance must include contractual liability coverage.

1.4 **Aircraft Liability Insurance** - If any operations require the use of aircraft, including helicopters, Contractor shall maintain or require owners of such aircraft to maintain Aircraft Liability Insurance with a combined single limit of not less than **$5,000,000** for bodily injury and property damage (including, passenger) liability.

1.5 **Hull and Machinery Insurance** covering vessels or barges owned or bareboat chartered by Contractor and used by Contractor in the performance of the agreement. Such vessels shall be insured for no less than the fair market value of such vessel or barge. Coverage shall include **Collision Liability Insurance** with limits no less than **$5,000,000.**

1.6 **Protection and Indemnity Insurance** - If marine work is to be performed under the agreement, Contractor shall maintain Protection and Indemnity Insurance, including coverage for injuries to or death of masters, mates and crews of vessels used in the performance of the agreement. The limits of liability of such insurance shall not be less than **$5,000,000** per occurrence. Contractor may cover its obligation for loss of life or bodily injury to the crew of the vessel by extension of the Workers Compensation Insurance 1.1 above (Jones Act). Coverage shall also include pollution liability for loss as specified in the requirements of applicable United States Federal and State Laws. All certificates evidencing financial responsibility shall be current and carried on board.

1.7 **Railroad Protective Liability** - If required by Company, Contractor shall maintain Railroad Protective Liability Insurance naming the railroad as the insured with a limit for bodily injury and property damage liability of **$2,000,000** per occurrence, **$6,000,000** aggregate. The original of said policy shall be furnished to railroad prior to any construction or entry upon the railroad easement premises by Contractor.

1.8 **Umbrella / Excess Insurance** - The limits specified in 1.1, 1.2, 1.3, 1.4, 1.5 and 1.6 above may be satisfied with a combination of primary and Umbrella/Excess Insurance, such policies naming Company as additional insured.

1.9 **Pollution Liability Insurance - If required by Company,** Contractor shall provide and maintain, and ensure that all of Contractor's subcontractors provide and maintain, the following insurances: Contractor's Pollution Liability Insurance with coverage for (a.) bodily injury, sickness, disease, mental anguish or shock sustained by any person, including death; (b.) property damage, including physical injury to or destruction of tangible property, including the resulting loss of use thereof, clean up costs, and the loss of use of tangible property that has not been physically injured or destroyed; (c.) defense, including costs, charges and expenses incurred in the investigation, adjustment or defense of claims for such compensatory damages; for losses caused by pollution conditions that arise from the operations of the Contractor performed under this Agreement. If such policy is written on a claims-made basis, the Contractor warrants that continuous coverage will be maintained, or an extended coverage period will be exercised for a period of 12 months, beginning from the time the work under this Agreement is completed. Contractor agrees to name Company as an additional insured and to furnish insurance certificates showing the Contractor's compliance with this Paragraph 1.9. Contractor also agrees to notify Company 30 days in advance of any cancellation or change to the insurance coverages shown on the certificate. Contractor shall maintain limits no less than Pollution Legal Liability: **$5,000,000 per loss** and **$5,000,000 annual aggregate.**

Note: Coverage for Contractor's Pollution Liability Insurance can be satisfied by the addition of a time element buyback endorsement on the General Liability Policy. The coverage must be as broad as the coverage described above, with a minimum requirement for discovery of 7 days and a minimum reporting period of 60 days.

Contractor shall, before commencing work, provide Company with a certificate of insurance satisfactory to Company of the insurance coverages set forth above.

2.0 **Policy Endorsements**

2.1 The above insurance shall include a requirement that the insurer provide Company with thirty (30) days' written notice prior to the effective date of any cancellation or material change of the insurance.

2.2 The insurance specified in Sections 1.2, 1.4, 1.5, 1.6, 1.8 and 1.9 hereof, as well as any Excess/Umbrella insurance coverage available to Contractor, shall:

i) Name Company as an additional insured with respect to work performed for Company, with such additional insured endorsement providing coverage for Company with respect to liability arising out of Contractor's work performed for Company (including, but not limited to, liability caused or contributed to by the negligence of Contractor, its subcontractors, Company, third parties, or the agents, employees, or officers of any of them);
ii) Be primary to and not in excess of or contributory with any other insurance available to Company; and
iii) Acknowledge that in no event shall Company's insurance, including but not limited to any SIR or deductible, be considered "other insurance" under the terms of Contractor's policies .

3.0 **Evidence of Insurance** - Contractor shall, before commencing work, provide Company with a certificate (see attached **Exhibit C**) satisfactory to Company of the insurance coverages and endorsements set forth in Sections 1.0 and 2.0 above. If requested by Company, Contractor shall provide Company with certified copies of all policies.

4.0 **Waiver of Subrogation**

4.1 Contractor, on behalf of its insurers, waives any right of subrogation that such insurers may have against Company arising out of this agreement.

4.2 The insurance specified in Section 1.1 hereof shall contain a waiver of the right of subrogation against Company and an assignment of statutory lien, if applicable.

4.3 Any physical damage insurance carried by Contractor on construction equipment, tools, temporary structures and supplies owned or used by Contractor shall provide a waiver of the right of subrogation against Company.

5.0 All self-insured retentions ("SIRs") and deductibles shall be the responsibility of and to the account of Contractor; Contractor agrees that such insurance shall not be subject to any SIRs, unless specifically consented to in writing by Company.

6.0 The obligation to carry the insurance required by this Exhibit shall not limit or modify in any way any other obligations assumed by the Contractor under the agreement. Contractor shall be held accountable for all insurance coverages, including those of sub-contractors. Company shall not be under any duty to advise Contractor in the event that Contractor's insurance is not in compliance with this agreement. ACCEPTANCE OF ANY INSURANCE CERTIFICATE SHALL NOT CONSTITUTE ACCEPTANCE OF THE ADEQUACY OF COVERAGE, COMPLIANCE WITH THE REQUIREMENTS OF THE AGREEMENT, OR AN AMENDMENT TO THE AGREEMENT.

INTERMITTENT SERVICES AGREEMENT

Date: June 13, 2005
Agreement Number: 0500279-A

Contractor: TAS Environmental Services, L.P.

PARTIES
It is hereby agreed between:

(i) Flint Hills Resources, L.P. Koch Pipeline Company, L.P., (such company or companies being collectively referred to hereinafter as "Company"), whose business address is P.O. Box 2256, Wichita, Kansas 67201, and

(ii) TAS Environmental Services, L.P. (such company being referred to hereinafter as "Contractor"), whose business address is 3929 California Parkway, Ft. Worth, TX 76119,

that Contractor will, as an independent contractor, furnish all necessary supervision, labor, materials and equipment (other than specified labor, materials and equipment furnished by Company) and shall perform work for Company as requested by Company from time to time during the term of this agreement in conformity with the terms of this agreement.

SPECIAL CONDITIONS:

1. Contractor represents and warrants that it is classified by the United States Coast Guard as a Class: A,B,C,D, and/or E <Applied For>_____ Oil Spill Response Organization (OSRO) for i.e. Great Lakes, inland, rivers and canals, or oceans <Applied For>_____ environment(s) in the following geographic location(s) Fort Worth, TX, San Antonio, TX, Dallas, TX, Austin, TX. Attached hereto as Schedule 1 is a copy of Contractor's current OSRO Classification Letter. If Contractor is not OSRO classified, attach a complete list and description of all response equipment, personnel and training that will be maintained and made available by Contractor during the term of this agreement.

Upon telephone notification from Company, Contractor shall respond to any spill or release of oil or hazardous substance with the personnel and equipment specified by Company. Company may identify Contractor as an Oil Spill Response Organization in any facility response plan developed pursuant to the Federal Oil Pollution Act of 1990, or any state counterpart thereto, for any facility located in the geographic location(s) identified above. Contractor shall respond hereunder at the request of Company whether or not Company has identified Contractor in the particular facility's response plan. Contractor shall notify Company of any change in Contractor's OSRO classification [e.g. suspension or revocation or changes in class level(s), operating environment(s), or geographic location(s)] as soon as possible, but in no event more than five (5) calendar days after the effective date of such change, suspension, or revocation. If Contractor is not ORSO classified, Contractor shall notify Company within five (5) calendar days of any material change in response equipment or personnel availability and shall provide Company with an updated list and description of such resources.

Contractor shall comply with all Federal, State and local laws, rules and regulations, including but not limited to all rules and regulations promulgated and in force pursuant to the Occupational, Safety and Health Act and all HazCom, HazMat, and HazWoper requirements set forth therein. Contractor shall be solely responsible for ensuring its employees have received all certifications and training required by the Occupational, Safety and Health Act, and any and all other applicable Federal, State or local laws, rules or regulations.

Contractor shall be compensated in accordance with the attached rates marked as "Exhibit A". In the event of a conflict between the provisions contained within the main body of this agreement and a provision contained within Exhibit A, the provisions in the main body of this agreement shall control. The rates shall include, without limitation, all applicable taxes imposed by federal, state or other governments or bodies having jurisdiction.

BILLING AND PAYMENT

2. Contractor shall submit to Company's authorized representatives an itemized statement detailing charges for labor and equipment including hours, dates, the hourly charge for the labor or equipment and any charge for materials at the end of each month during which work is performed. Contractor shall furnish upon demand any records relating to the statement prior to or after payment by Company. If "Company", as defined above, includes more then one entity, Contractor agrees that each such entity will be separately, not jointly, responsible for the payment obligations hereunder as relating to work performed for such entity.

3. Payment shall be made within thirty (30) days of Company's receipt of the statement described in Paragraph 2 of this agreement. Company reserves the right to withhold payment until completion of the work and its acceptance by Company or until Contractor furnishes proof satisfactory to Company that all bills for materials and labor covering the work have been fully paid by Contractor, and that the premises upon which the work is done and any structures built, improved or added to are not subject to any material or labor liens or claims of liens. Final payment shall be made within thirty (30) days of the date of acceptance of the work by Company. Contractor and/or any subcontractor shall promptly and satisfactorily settle all liens and claims for labor performed and supplies or material furnished in connection with the work; and in the event Contractor fails or refuses to promptly and satisfactorily settle any such liens or claims, Company shall, after notifying Contractor in writing, have the right to settle such claims for the account of Contractor and deduct the amount thereof from amounts payable to Contractor. Payments made under this agreement shall not constitute full or partial acceptance of the work or any part of the work by Company.

PERFORMANCE OF WORK

4. Contractor shall rely solely upon Contractor's own examination and investigation of the surface and subsurface conditions at the site, and all local and general conditions that may affect performance of the work.

5. Unless otherwise specified, Contractor shall secure all permits and licenses necessary to the performance of the work, shall pay all fees and make all deposits pertaining thereto, and shall at Contractor's expense furnish all bonds required to perform the work, and shall submit proof thereof to Company.

6. Contractor shall perform the work:
a. In a workmanlike manner using qualified, efficient and careful workers;
b. In accord with all plans, drawings and specifications;
c. In compliance with all applicable federal, state, local and Company's safety rules and regulations;
d. In a manner to protect the work, the environment, Company's property and the property and persons of others from loss, damage or injury of any type;
e. So as not to interfere with the operations of others on the premises; and,
f. Under the supervision of an employee of Contractor.

An employee supplied by Contractor without supervision by Contractor and who is under the exclusive direction and control of Company shall be considered a borrowed servant. In all other cases, the employee shall be considered an employee of Contractor as an independent contractor. Contractor's duties to defend, indemnify, protect and hold harmless Company under Paragraph 12 of this agreement shall continue regardless of the characterization of an employee as a borrowed servant or the employee of an independent contractor.

7. Company may maintain such representatives as it deems necessary on the work site for the purpose of inspecting, testing and ensuring the satisfactory completion of the work. Company may inspect the work at any time during the progress of the work, and Contractor shall provide reasonable facilities for such inspection. If any applicable statute, regulation or order requires any part of the work to be specially tested or approved, Contractor shall give Company reasonable notice of the time and place of such testing and inspection. Company may require Contractor to correct defective work or Company may have the work corrected by others, and, in either event, Contractor shall bear the cost of such correction.

8. Unless otherwise specified, all materials shall be new and workmanship shall be of good quality. No substitutions of materials from that specified in the plans and specifications in this agreement shall be permitted unless approval is given by Company in writing.

9. Contractor guarantees the work to be performed hereunder against defects in workmanship and material that shall appear within one year following final acceptance of the work by Company, and Contractor shall promptly remedy all such defects. Contractor shall arrange for the extensions, to Company, of all additional warranties by suppliers of goods or services that are consistent with or extend or expand the terms of the above described warranty of Contractor.

10. Contractor and its employees, agents and subcontractors shall comply with all applicable laws, regulations, ordinances and other rules of federal, state and local government and political subdivisions, and of any other duly constituted authority having jurisdiction.

11. Contractor shall be responsible for, and hereby assumes all liability, whether insured or self-insured, for loss or destruction of or physical damage to the following: All tools, machinery, equipment and appliances that are owned by Contractor or loaned to or leased by Contractor by others than Company and that are not to be incorporated into the completed work; and, all personal property of Contractor's employees, whether or not such loss, destruction or damage is caused by, arises out of, or is in any way connected with the negligence of Company, its employees or agents.

INDEMNITY

12. TO THE FULLEST EXTENT PERMITTED BY LAW, CONTRACTOR SHALL DEFEND, PROTECT, INDEMNIFY AND SAVE COMPANY, ITS PARENT COMPANY, PARTNERS, SUBSIDIARIES AND ANY OTHER RELATED OR AFFILIATED ENTITIES, AND THEIR RESPECTIVE OFFICERS, DIRECTORS AND EMPLOYEES (COLLECTIVELY REFERRED TO FOR PURPOSES OF THIS PARAGRAPH 12 AS "INDEMNITEES") HARMLESS FROM AND AGAINST ALL CLAIMS, LIABILITIES, DAMAGES, DEMANDS, LAWSUITS, CAUSES OF ACTION, STRICT LIABILITY CLAIMS, PENALTIES, FINES, ADMINISTRATIVE LAW ACTIONS AND ORDERS, EXPENSES (INCLUDING, BUT NOT LIMITED TO, ATTORNEYS' FEES) AND COSTS OF EVERY KIND AND CHARACTER (COLLECTIVELY "CLAIMS/LIABILITIES") ARISING OUT OF OR IN ANY WAY INCIDENT TO ANY OF THE WORK PERFORMED BY CONTRACTOR, ITS SUBCONTRACTORS OR THE

EMPLOYEES OF EITHER, ON ACCOUNT OF PERSONAL INJURIES, DEATH, DAMAGE TO PROPERTY, DAMAGE TO THE ENVIRONMENT, OR INFRINGEMENT OF ANY PATENT, TRADEMARK, COPYRIGHT OR OTHER PROPERTY RIGHT, REGARDLESS OF WHETHER SUCH HARM IS TO CONTRACTOR, INDEMNITEES, THE EMPLOYEES OR OFFICERS OF EITHER OR ANY OTHER PERSON OR ENTITY. THE DUTY TO DEFEND, PROTECT, INDEMNIFY AND SAVE INDEMNITEES HARMLESS REFERRED TO IN THE PRECEDING SENTENCE SHALL INCLUDE, BUT NOT BE LIMITED TO, CLAIMS/LIABILITIES THAT RESULT FROM THE COMPARATIVE, CONCURRENT OR CONTRIBUTING NEGLIGENCE OF ANY PERSON OR ENTITY INCLUDING, BUT NOT LIMITED TO, INDEMNITEES OR THEIR AGENTS, EXCEPT CONTRACTOR SHALL NOT BE LIABLE UNDER THIS PARAGRAPH 12 FOR LOSS OR DAMAGE RESULTING FROM THE SOLE (100%) NEGLIGENCE OF INDEMNITEES. TO THE FULLEST EXTENT PERMITTED BY LAW, CONTRACTOR FURTHER AGREES TO INDEMNIFY, DEFEND AND HOLD INDEMNITEES HARMLESS AGAINST THE PAYMENT OF ANY AND ALL TAXES, PENALTIES, FINES, INTEREST, LIENS OR INDEBTEDNESS OR CLAIMS AGAINST INDEMNITEES' PROPERTY OR FOR WORK PERFORMED, OR MEASURED BY THE WORK PERFORMED, GROWING OUT OF OR INCIDENT TO CONTRACTOR'S OPERATIONS UNDER THIS AGREEMENT INCLUDING, BUT NOT LIMITED TO, TAXES, PENALTIES, FINES, INTEREST, LIENS OR ENCUMBRANCES THAT RESULT FROM THE CONCURRENT OR CONTRIBUTING NEGLIGENCE OF ANY PERSON OR ENTITY, WHICH MAY INCLUDE INDEMNITEES, THEIR AGENTS, EMPLOYEES OR OFFICERS. CONTRACTOR SHALL MAINTAIN AT ITS OWN COST AND EXPENSE INSURANCE COVERING THIS INDEMNITY PROVISION. CONTRACTOR'S DUTIES UNDER THIS PARAGRAPH SURVIVE THE TERMINATION, REVOCATION, OR EXPIRATION OF THIS AGREEMENT.

INSURANCE

13. In addition to any other insurance that Contractor shall acquire under this agreement, Contractor shall maintain at its own cost and expense such insurance of the types and in the amounts as required by Company to insure all of Contractor's obligations under this agreement and that will protect Company from all claims for damages to persons and to property that may arise from any operations under this agreement or any subcontracts related to this agreement. Contractor shall maintain during the entire term of this agreement insurance policies within minimum limits of coverage all as set forth on Exhibit B, which is made a part hereof by reference. Prior to commencing work, Contractor shall require its insurer or insurance agent to supply Company a certificate of insurance in the form as set forth on Exhibit C. Such insurance shall name Company as an additional insured in accordance with the requirements of Exhibit B, with such additional insured endorsements providing coverage for Company with respect to liability arising out of Contractor's work performed for Company (including, but not limited to, liability caused or contributed to by the negligence of Contractor, its subcontractors, Company, third parties, or the agents, employees, or officers of any of them). All self-insured retentions ("SIRs") and deductibles shall be the responsibility of and to the account of Contractor; Contractor agrees that such insurance shall not be subject to any SIRs unless specifically consented to in writing by Company. The insurance coverages to be provided by Contractor under this paragraph, including but not limited to the additional insured coverage provided to Company, shall be independent of the indemnity provisions of this agreement, and are not designed solely to guarantee payment of Contractor's indemnity obligations.

GENERAL PROVISIONS

14. This agreement may not be assigned in whole or in part by Contractor without the prior written consent of Company, nor shall work under the contract be assigned to a subcontractor without the prior written consent of Company.

15. No amendment to this agreement shall be valid unless made in writing and signed by authorized representatives of both parties.

16. Company's right to require strict performance of Contractor's obligations shall not be affected in any way by prior waiver, forbearance or other course of dealing.

17. This agreement and any subsequent amendments comprise the entire agreement between Company and Contractor with respect to the subject matter hereof, and there are no agreements, understandings, conditions, or representations, oral or written, expressed or implied, that are not merged into this agreement or superseded by it.

18. Subject to any restrictions imposed by applicable laws, if Contractor has a petition in bankruptcy filed by or against it, has a receiver appointed for it, becomes insolvent, makes a general assignment for the benefit of creditors, refuses or fails to supply competent supervision or enough properly skilled people or proper material, disregards laws, rules or regulations applicable to the work, or otherwise violates any provision of this agreement, then Company shall have the right (in addition to any other rights it may have at law or in equity) to treat such as a breach of this agreement and may upon the giving of written notice terminate this agreement, terminate employment of Contractor, and take possession of the premises, all materials, tools, equipment, supplies, and appliances of any type and finish the work by whatever method Company may deem appropriate.

19. Company may require Contractor to furnish a surety bond in the full amount of and guaranteeing faithful performance of this agreement, or otherwise guaranteeing Contractor's obligations under this agreement. Such bond(s) shall be written on a form prescribed or approved by Company and shall be purchased from a source approved by Company.

20. Company shall have the right, at any reasonable time and from time to time, to audit any and all records, documents and other data pertaining to this agreement. Contractor shall cooperate in furnishing to Company all such records, documents and other data in connection with any such audit.

21. Company does not guarantee an offer of work to Contractor during the term of this agreement. Company and Contractor agree, however, that any work offered by Company to Contractor and accepted by Contractor during the term of this agreement will be performed under the terms of this agreement. Company shall not be liable in damages or otherwise, if by reason of an

act of God or public enemy, strike, lockout, boycott, picketing, riot, insurrection, fire, or any governmental order, rule, or regulation, or any ordinance Company shall be delayed in, or prevented from, furnishing any materials, equipment, facilities, services, etc., required to be furnished by it hereunder.

22. Contractor shall comply with and be subject to the most recent Substance Abuse Policy issued by Koch Industries, Inc. All employees of Contractor shall be subject to drug testing when on the premises of Company. In addition to the foregoing requirements, should Contractor perform services related to facilities regulated by the United States Department of Transportation, Contractor shall have developed and implemented, or have contracted with an organization that has developed and implemented, substance abuse policies in compliance with 41 U.S.C. 701, et seq., 49 C.F.R. Part 199 and 49 C.F.R. Part 40, if applicable; and, with respect to equal employment opportunity and affirmative action compliance, Contractor shall comply with the provisions of Section 202 of Executive Order 11246 and the rules and regulations issued pursuant to Section 201 thereof. Contractor shall provide Company with documentation demonstrating compliance with such laws upon the request of Company.

23. Contractor warrants and represents that, to the extent applicable to any activities that may be performed pursuant to this agreement by Contractor or its subcontractors, all of Contractor's employees and its subcontractors' employees have received all safety training required by law for employees working in an environment in which they may come in contact with crude oil, natural gas, natural gas liquids, refined products or hazardous materials. Contractor agrees to permit Company to inspect Contractor's records in order to assure compliance with this Paragraph 23.

24. In the event any provision herein shall be judicially interpreted or held to be void or otherwise unenforceable as written, such provision shall be deemed to be revised and modified to the extent necessary to make it legally enforceable. In any event, the remaining terms of the agreement shall be enforceable as though the void or unenforceable provision did not exist.

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25. All information that Contractor acquires from Company hereunder, directly or indirectly, and all information that arises out of the Work performed hereunder, concerning such Work and/or proprietary processes involved in the Work, including without limitation, information concerning Company's current and future business plans, information relating to Company's operations, and other Company-furnished information and know-how relating to the Work shall be deemed Company's "Proprietary Information." Company's Proprietary Information shall be held in strictest confidence by Contractor and shall be used solely for purposes of performing such Services. The obligations under this Paragraph shall survive completion of such work/services and termination of this Agreement.

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26. This agreement shall be effective as of the date first above written and shall continue for a one-year period following that date. At the end of the initial one-year period, the agreement shall continue until replaced by a subsequent agreement or otherwise revoked by written notice by either party.

SO AGREED, EXECUTED ON THE DATES INDICATED BELOW, BUT EFFECTIVE AS OF THE DATE FIRST ABOVE WRITTEN:

COMPANY
Flint Hills Resources, LP
Koch Pipeline Company, L.P.

By Bob O'Hair
Bob O'Hair
(Printed Name)
Title Vice President
Date 6-22-05

CONTRACTOR
TAS Environmental Services, L.P.

Federal ID Number: 20-1454928

By
J Salter
(Printed Name)
Title President of GP
Date 6.13.5

Exhibit B
Insurance Requirements
Supplement to Intermittent Services Agreement 0500279-A

1.0 With respect to Contractor's performance of the agreement to which this exhibit is attached (referred to hereinafter as the "agreement"), Contractor shall maintain the following insurance:

1.1 **Worker's Compensation and Employers' Liability Insurance**, as prescribed by applicable law including insurance covering liability under the Longshoremen's and Harbor Workers' Compensation Act, the Merchant Marine Act of 1920 (Jones Act) and the Outer Continental Shelf Land Act, if applicable. Coverage will include an Alternate Employer Endorsement (WC 00 03 01) naming Company as an Alternate Employer. Contractor shall require its insurer or insurance agent to provide, as requested by Company, Contractor's Experience Modification Rating (EMR).

1.2 **Commercial General Liability Insurance**, which shall be at least as broad as the coverage provided by a standard form Commercial General Liability Policy (ISO CG 00 01 01 96, with standard exclusions "a" through "n"; ISO forms CG 00 01 07 98 or CG 00 01 10 01, with standard exclusions "a" through "o", with a minimum combined single limit of **$3,000,000** per occurrence for Bodily injury and Property Damage and a **$3,000,000** aggregate each for the general policy and the Products/Completed Operations hazard. This insurance must include the following features:

1.2.1 If work to be performed by Contractor includes construction or demolition operations within 50 feet of any railroad property and affecting any railroad bridge or trestle, tracks, road-beds, tunnel, underpass or crossing, and if Contractor's commercial general liability insurance policy is form ISO CG 00 01 11 88, then such policy will include a Railroad's Contractual Liability Endorsement CG 24 17 10 93.

1.2.2 Contractual Liability coverage.

1.2.3 Products and Completed operations.

1.2.4 Coverage for demolition of any building or structure, collapse, explosion, blasting, excavation and damage to property below the surface of the ground (XCU coverage), if applicable.

1.2.5 Coverage will include one of the following endorsements naming Company as an additional insured:

(i) Additional Insured - Owners, Lessees or Contractors (Form B) Endorsement (CG 20 10 10 93); or
(ii) Additional Insured - Owners, Lessees or Contractors Scheduled Person or Organization Endorsement (CG 20 10 03 97); or
(iii) Additional Insured – Owners, Lessees or Contractors Scheduled Person or Organization Endorsement (CG 20 10 10 01).

1.3 **Automobile Liability Insurance**, covering all owned, non owned, hired and leased vehicles with a minimum combined single limit for Bodily Injury and Property Damage of **$3,000,000** per accident. This insurance must include contractual liability coverage.

1.4 **Aircraft Liability Insurance** - If any operations require the use of aircraft, including helicopters, Contractor shall maintain or require owners of such aircraft to maintain Aircraft Liability Insurance with a combined single limit of not less than **$5,000,000** for bodily injury and property damage (including, passenger) liability.

1.5 **Hull and Machinery Insurance** covering vessels or barges owned or bareboat chartered by Contractor and used by Contractor in the performance of the agreement. Such vessels shall be insured for no less than the fair market value of such vessel or barge. Coverage shall include **Collision Liability Insurance** with limits no less than **$5,000,000.**

1.6 **Protection and Indemnity Insurance** - If marine work is to be performed under the agreement, Contractor shall maintain Protection and Indemnity Insurance, including coverage for injuries to or death of masters, mates and crews of vessels used in the performance of the agreement. The limits of liability of such insurance shall not be less than **$5,000,000** per occurrence. Contractor may cover its obligation for loss of life or bodily injury to the crew of the vessel by extension of the Workers Compensation Insurance 1.1 above (Jones Act). Coverage shall also include pollution liability for loss as specified in the requirements of applicable United States Federal and State Laws. All certificates evidencing financial responsibility shall be current and carried on board.

1.7 **Railroad Protective Liability** - If required by Company, Contractor shall maintain Railroad Protective Liability Insurance naming the railroad as the insured with a limit for bodily injury and property damage liability of **$2,000,000** per occurrence, **$6,000,000** aggregate. The original of said policy shall be furnished to railroad prior to any construction or entry upon the railroad easement premises by Contractor.

1.8 **Umbrella / Excess Insurance** - The limits specified in 1.1, 1.2, 1.3, 1.4, 1.5 and 1.6 above may be satisfied with a combination of primary and Umbrella/Excess Insurance, such policies naming Company as additional insured.

1.9 **Pollution Liability Insurance - If required by Company,** Contractor shall provide and maintain, and ensure that all of Contractor's subcontractors provide and maintain, the following insurances: Contractor's Pollution Liability Insurance with coverage for (a.) bodily injury, sickness, disease, mental anguish or shock sustained by any person, including death; (b.) property damage, including physical injury to or destruction of tangible property, including the resulting loss of use thereof, clean up costs, and the loss of use of tangible property that has not been physically injured or destroyed; (c.) defense, including costs, charges and expenses incurred in the investigation, adjustment or defense of claims for such compensatory damages; for losses caused by pollution conditions that arise from the operations of the Contractor performed under this Agreement. If such policy is written on a claims-made basis, the Contractor warrants that continuous coverage will be maintained, or an extended coverage period will be exercised for a period of 12 months, beginning from the time the work under this Agreement is completed. Contractor agrees to name Company as an additional insured and to furnish insurance certificates showing the Contractor's compliance with this Paragraph 1.9. Contractor also agrees to notify Company 30 days in advance of any cancellation or change to the insurance coverages shown on the certificate. Contractor shall maintain limits no less than Pollution Legal Liability: **$5,000,000 per loss** and **$5,000,000 annual aggregate.**

Note: Coverage for Contractor's Pollution Liability Insurance can be satisfied by the addition of a time element buyback endorsement on the General Liability Policy. The coverage must be as broad as the coverage described above, with a minimum requirement for discovery of 7 days and a minimum reporting period of 60 days.

Contractor shall, before commencing work, provide Company with a certificate of insurance satisfactory to Company of the insurance coverages set forth above.

2.0 **Policy Endorsements**

2.1 The above insurance shall include a requirement that the insurer provide Company with thirty (30) days' written notice prior to the effective date of any cancellation or material change of the insurance.

2.2 The insurance specified in Sections 1.2, 1.4, 1.5, 1.6, 1.8 and 1.9 hereof, as well as any Excess/Umbrella insurance coverage available to Contractor, shall:

i) Name Company as an additional insured with respect to work performed for Company, with such additional insured endorsement providing coverage for Company with respect to liability arising out of Contractor's work performed for Company (including, but not limited to, liability caused or contributed to by the negligence of Contractor, its subcontractors, Company, third parties, or the agents, employees, or officers of any of them);
ii) Be primary to and not in excess of or contributory with any other insurance available to Company; and
iii) Acknowledge that in no event shall Company's insurance, including but not limited to any SIR or deductible, be considered "other insurance" under the terms of Contractor's policies .

3.0 **Evidence of Insurance** - Contractor shall, before commencing work, provide Company with a certificate (see attached **Exhibit C**) satisfactory to Company of the insurance coverages and endorsements set forth in Sections 1.0 and 2.0 above. If requested by Company, Contractor shall provide Company with certified copies of all policies.

4.0 **Waiver of Subrogation**

4.1 Contractor, on behalf of its insurers, waives any right of subrogation that such insurers may have against Company arising out of this agreement.

4.2 The insurance specified in Section 1.1 hereof shall contain a waiver of the right of subrogation against Company and an assignment of statutory lien, if applicable.

4.3 Any physical damage insurance carried by Contractor on construction equipment, tools, temporary structures and supplies owned or used by Contractor shall provide a waiver of the right of subrogation against Company.

5.0 All self-insured retentions ("SIRs") and deductibles shall be the responsibility of and to the account of Contractor; Contractor agrees that such insurance shall not be subject to any SIRs, unless specifically consented to in writing by Company.

6.0 The obligation to carry the insurance required by this Exhibit shall not limit or modify in any way any other obligations assumed by the Contractor under the agreement. Contractor shall be held accountable for all insurance coverages, including those of sub-contractors. Company shall not be under any duty to advise Contractor in the event that Contractor's insurance is not in compliance with this agreement. ACCEPTANCE OF ANY INSURANCE CERTIFICATE SHALL NOT CONSTITUTE ACCEPTANCE OF THE ADEQUACY OF COVERAGE, COMPLIANCE WITH THE REQUIREMENTS OF THE AGREEMENT, OR AN AMENDMENT TO THE AGREEMENT.

INTERMITTENT SERVICES AGREEMENT

Date: June 13, 2005
Agreement Number: 0500279-A

Contractor: TAS Environmental Services, L.P.

PARTIES
It is hereby agreed between:

(i) Flint Hills Resources, L.P. Koch Pipeline Company, L.P., (such company or companies being collectively referred to hereinafter as "Company"), whose business address is P.O. Box 2256, Wichita, Kansas 67201, and

(ii) TAS Environmental Services, L.P. (such company being referred to hereinafter as "Contractor"), whose business address is 3929 California Parkway, Ft. Worth, TX 76119,

that Contractor will, as an independent contractor, furnish all necessary supervision, labor, materials and equipment (other than specified labor, materials and equipment furnished by Company) and shall perform work for Company as requested by Company from time to time during the term of this agreement in conformity with the terms of this agreement.

SPECIAL CONDITIONS:

1. Contractor represents and warrants that it is classified by the United States Coast Guard as a Class: A,B,C,D, and/or E <Applied For>_____ Oil Spill Response Organization (OSRO) for i.e. Great Lakes, inland, rivers and canals, or oceans <Applied For>_____ environment(s) in the following geographic location(s) Fort Worth, TX, San Antonio, TX, Dallas, TX, Austin, TX. Attached hereto as Schedule 1 is a copy of Contractor's current OSRO Classification Letter. If Contractor is not OSRO classified, attach a complete list and description of all response equipment, personnel and training that will be maintained and made available by Contractor during the term of this agreement.

Upon telephone notification from Company, Contractor shall respond to any spill or release of oil or hazardous substance with the personnel and equipment specified by Company. Company may identify Contractor as an Oil Spill Response Organization in any facility response plan developed pursuant to the Federal Oil Pollution Act of 1990, or any state counterpart thereto, for any facility located in the geographic location(s) identified above. Contractor shall respond hereunder at the request of Company whether or not Company has identified Contractor in the particular facility's response plan. Contractor shall notify Company of any change in Contractor's OSRO classification [e.g. suspension or revocation or changes in class level(s), operating environment(s), or geographic location(s)] as soon as possible, but in no event more than five (5) calendar days after the effective date of such change, suspension, or revocation. If Contractor is not ORSO classified, Contractor shall notify Company within five (5) calendar days of any material change in response equipment or personnel availability and shall provide Company with an updated list and description of such resources.

Contractor shall comply with all Federal, State and local laws, rules and regulations, including but not limited to all rules and regulations promulgated and in force pursuant to the Occupational, Safety and Health Act and all HazCom, HazMat, and HazWoper requirements set forth therein. Contractor shall be solely responsible for ensuring its employees have received all certifications and training required by the Occupational, Safety and Health Act, and any and all other applicable Federal, State or local laws, rules or regulations.

Contractor shall be compensated in accordance with the attached rates marked as "Exhibit A". In the event of a conflict between the provisions contained within the main body of this agreement and a provision contained within Exhibit A, the provisions in the main body of this agreement shall control. The rates shall include, without limitation, all applicable taxes imposed by federal, state or other governments or bodies having jurisdiction.

BILLING AND PAYMENT

2. Contractor shall submit to Company's authorized representatives an itemized statement detailing charges for labor and equipment including hours, dates, the hourly charge for the labor or equipment and any charge for materials at the end of each month during which work is performed. Contractor shall furnish upon demand any records relating to the statement prior to or after payment by Company. If "Company", as defined above, includes more then one entity, Contractor agrees that each such entity will be separately, not jointly, responsible for the payment obligations hereunder as relating to work performed for such entity.

3. Payment shall be made within thirty (30) days of Company's receipt of the statement described in Paragraph 2 of this agreement. Company reserves the right to withhold payment until completion of the work and its acceptance by Company or until Contractor furnishes proof satisfactory to Company that all bills for materials and labor covering the work have been fully paid by Contractor, and that the premises upon which the work is done and any structures built, improved or added to are not subject to any material or labor liens or claims of liens. Final payment shall be made within thirty (30) days of the date of acceptance of the work by Company. Contractor and/or any subcontractor shall promptly and satisfactorily settle all liens and claims for labor performed and supplies or material furnished in connection with the work; and in the event Contractor fails or refuses to promptly and satisfactorily settle any such liens or claims, Company shall, after notifying Contractor in writing, have the right to settle such claims for the account of Contractor and deduct the amount thereof from amounts payable to Contractor. Payments made under this agreement shall not constitute full or partial acceptance of the work or any part of the work by Company.

PERFORMANCE OF WORK

4. Contractor shall rely solely upon Contractor's own examination and investigation of the surface and subsurface conditions at the site, and all local and general conditions that may affect performance of the work.

5. Unless otherwise specified, Contractor shall secure all permits and licenses necessary to the performance of the work, shall pay all fees and make all deposits pertaining thereto, and shall at Contractor's expense furnish all bonds required to perform the work, and shall submit proof thereof to Company.

6. Contractor shall perform the work:
a. In a workmanlike manner using qualified, efficient and careful workers;
b. In accord with all plans, drawings and specifications;
c. In compliance with all applicable federal, state, local and Company's safety rules and regulations;
d. In a manner to protect the work, the environment, Company's property and the property and persons of others from loss, damage or injury of any type;
e. So as not to interfere with the operations of others on the premises; and,
f. Under the supervision of an employee of Contractor.

An employee supplied by Contractor without supervision by Contractor and who is under the exclusive direction and control of Company shall be considered a borrowed servant. In all other cases, the employee shall be considered an employee of Contractor as an independent contractor. Contractor's duties to defend, indemnify, protect and hold harmless Company under Paragraph 12 of this agreement shall continue regardless of the characterization of an employee as a borrowed servant or the employee of an independent contractor.

7. Company may maintain such representatives as it deems necessary on the work site for the purpose of inspecting, testing and ensuring the satisfactory completion of the work. Company may inspect the work at any time during the progress of the work, and Contractor shall provide reasonable facilities for such inspection. If any applicable statute, regulation or order requires any part of the work to be specially tested or approved, Contractor shall give Company reasonable notice of the time and place of such testing and inspection. Company may require Contractor to correct defective work or Company may have the work corrected by others, and, in either event, Contractor shall bear the cost of such correction.

8. Unless otherwise specified, all materials shall be new and workmanship shall be of good quality. No substitutions of materials from that specified in the plans and specifications in this agreement shall be permitted unless approval is given by Company in writing.

9. Contractor guarantees the work to be performed hereunder against defects in workmanship and material that shall appear within one year following final acceptance of the work by Company, and Contractor shall promptly remedy all such defects. Contractor shall arrange for the extensions, to Company, of all additional warranties by suppliers of goods or services that are consistent with or extend or expand the terms of the above described warranty of Contractor.

10. Contractor and its employees, agents and subcontractors shall comply with all applicable laws, regulations, ordinances and other rules of federal, state and local government and political subdivisions, and of any other duly constituted authority having jurisdiction.

11. Contractor shall be responsible for, and hereby assumes all liability, whether insured or self-insured, for loss or destruction of or physical damage to the following: All tools, machinery, equipment and appliances that are owned by Contractor or loaned to or leased by Contractor by others than Company and that are not to be incorporated into the completed work; and, all personal property of Contractor's employees, whether or not such loss, destruction or damage is caused by, arises out of, or is in any way connected with the negligence of Company, its employees or agents.

INDEMNITY

12. TO THE FULLEST EXTENT PERMITTED BY LAW, CONTRACTOR SHALL DEFEND, PROTECT, INDEMNIFY AND SAVE COMPANY, ITS PARENT COMPANY, PARTNERS, SUBSIDIARIES AND ANY OTHER RELATED OR AFFILIATED ENTITIES, AND THEIR RESPECTIVE OFFICERS, DIRECTORS AND EMPLOYEES (COLLECTIVELY REFERRED TO FOR PURPOSES OF THIS PARAGRAPH 12 AS "INDEMNITEES") HARMLESS FROM AND AGAINST ALL CLAIMS, LIABILITIES, DAMAGES, DEMANDS, LAWSUITS, CAUSES OF ACTION, STRICT LIABILITY CLAIMS, PENALTIES, FINES, ADMINISTRATIVE LAW ACTIONS AND ORDERS, EXPENSES (INCLUDING, BUT NOT LIMITED TO, ATTORNEYS' FEES) AND COSTS OF EVERY KIND AND CHARACTER (COLLECTIVELY "CLAIMS/LIABILITIES") ARISING OUT OF OR IN ANY WAY INCIDENT TO ANY OF THE WORK PERFORMED BY CONTRACTOR, ITS SUBCONTRACTORS OR THE

EMPLOYEES OF EITHER, ON ACCOUNT OF PERSONAL INJURIES, DEATH, DAMAGE TO PROPERTY, DAMAGE TO THE ENVIRONMENT, OR INFRINGEMENT OF ANY PATENT, TRADEMARK, COPYRIGHT OR OTHER PROPERTY RIGHT, REGARDLESS OF WHETHER SUCH HARM IS TO CONTRACTOR, INDEMNITEES, THE EMPLOYEES OR OFFICERS OF EITHER OR ANY OTHER PERSON OR ENTITY. THE DUTY TO DEFEND, PROTECT, INDEMNIFY AND SAVE INDEMNITEES HARMLESS REFERRED TO IN THE PRECEDING SENTENCE SHALL INCLUDE, BUT NOT BE LIMITED TO, CLAIMS/LIABILITIES THAT RESULT FROM THE COMPARATIVE, CONCURRENT OR CONTRIBUTING NEGLIGENCE OF ANY PERSON OR ENTITY INCLUDING, BUT NOT LIMITED TO, INDEMNITEES OR THEIR AGENTS, EXCEPT CONTRACTOR SHALL NOT BE LIABLE UNDER THIS PARAGRAPH 12 FOR LOSS OR DAMAGE RESULTING FROM THE SOLE (100%) NEGLIGENCE OF INDEMNITEES. TO THE FULLEST EXTENT PERMITTED BY LAW, CONTRACTOR FURTHER AGREES TO INDEMNIFY, DEFEND AND HOLD INDEMNITEES HARMLESS AGAINST THE PAYMENT OF ANY AND ALL TAXES, PENALTIES, FINES, INTEREST, LIENS OR INDEBTEDNESS OR CLAIMS AGAINST INDEMNITEES' PROPERTY OR FOR WORK PERFORMED, OR MEASURED BY THE WORK PERFORMED, GROWING OUT OF OR INCIDENT TO CONTRACTOR'S OPERATIONS UNDER THIS AGREEMENT INCLUDING, BUT NOT LIMITED TO, TAXES, PENALTIES, FINES, INTEREST, LIENS OR ENCUMBRANCES THAT RESULT FROM THE CONCURRENT OR CONTRIBUTING NEGLIGENCE OF ANY PERSON OR ENTITY, WHICH MAY INCLUDE INDEMNITEES, THEIR AGENTS, EMPLOYEES OR OFFICERS. CONTRACTOR SHALL MAINTAIN AT ITS OWN COST AND EXPENSE INSURANCE COVERING THIS INDEMNITY PROVISION. CONTRACTOR'S DUTIES UNDER THIS PARAGRAPH SURVIVE THE TERMINATION, REVOCATION, OR EXPIRATION OF THIS AGREEMENT.

INSURANCE

13. In addition to any other insurance that Contractor shall acquire under this agreement, Contractor shall maintain at its own cost and expense such insurance of the types and in the amounts as required by Company to insure all of Contractor's obligations under this agreement and that will protect Company from all claims for damages to persons and to property that may arise from any operations under this agreement or any subcontracts related to this agreement. Contractor shall maintain during the entire term of this agreement insurance policies within minimum limits of coverage all as set forth on Exhibit B, which is made a part hereof by reference. Prior to commencing work, Contractor shall require its insurer or insurance agent to supply Company a certificate of insurance in the form as set forth on Exhibit C. Such insurance shall name Company as an additional insured in accordance with the requirements of Exhibit B, with such additional insured endorsements providing coverage for Company with respect to liability arising out of Contractor's work performed for Company (including, but not limited to, liability caused or contributed to by the negligence of Contractor, its subcontractors, Company, third parties, or the agents, employees, or officers of any of them). All self-insured retentions ("SIRs") and deductibles shall be the responsibility of and to the account of Contractor; Contractor agrees that such insurance shall not be subject to any SIRs unless specifically consented to in writing by Company. The insurance coverages to be provided by Contractor under this paragraph, including but not limited to the additional insured coverage provided to Company, shall be independent of the indemnity provisions of this agreement, and are not designed solely to guarantee payment of Contractor's indemnity obligations.

GENERAL PROVISIONS

14. This agreement may not be assigned in whole or in part by Contractor without the prior written consent of Company, nor shall work under the contract be assigned to a subcontractor without the prior written consent of Company.

15. No amendment to this agreement shall be valid unless made in writing and signed by authorized representatives of both parties.

16. Company's right to require strict performance of Contractor's obligations shall not be affected in any way by prior waiver, forbearance or other course of dealing.

17. This agreement and any subsequent amendments comprise the entire agreement between Company and Contractor with respect to the subject matter hereof, and there are no agreements, understandings, conditions, or representations, oral or written, expressed or implied, that are not merged into this agreement or superseded by it.

18. Subject to any restrictions imposed by applicable laws, if Contractor has a petition in bankruptcy filed by or against it, has a receiver appointed for it, becomes insolvent, makes a general assignment for the benefit of creditors, refuses or fails to supply competent supervision or enough properly skilled people or proper material, disregards laws, rules or regulations applicable to the work, or otherwise violates any provision of this agreement, then Company shall have the right (in addition to any other rights it may have at law or in equity) to treat such as a breach of this agreement and may upon the giving of written notice terminate this agreement, terminate employment of Contractor, and take possession of the premises, all materials, tools, equipment, supplies, and appliances of any type and finish the work by whatever method Company may deem appropriate.

19. Company may require Contractor to furnish a surety bond in the full amount of and guaranteeing faithful performance of this agreement, or otherwise guaranteeing Contractor's obligations under this agreement. Such bond(s) shall be written on a form prescribed or approved by Company and shall be purchased from a source approved by Company.

20. Company shall have the right, at any reasonable time and from time to time, to audit any and all records, documents and other data pertaining to this agreement. Contractor shall cooperate in furnishing to Company all such records, documents and other data in connection with any such audit.

21. Company does not guarantee an offer of work to Contractor during the term of this agreement. Company and Contractor agree, however, that any work offered by Company to Contractor and accepted by Contractor during the term of this agreement will be performed under the terms of this agreement. Company shall not be liable in damages or otherwise, if by reason of an

act of God or public enemy, strike, lockout, boycott, picketing, riot, insurrection, fire, or any governmental order, rule, or regulation, or any ordinance Company shall be delayed in, or prevented from, furnishing any materials, equipment, facilities, services, etc., required to be furnished by it hereunder.

22. Contractor shall comply with and be subject to the most recent Substance Abuse Policy issued by Koch Industries, Inc. All employees of Contractor shall be subject to drug testing when on the premises of Company. In addition to the foregoing requirements, should Contractor perform services related to facilities regulated by the United States Department of Transportation, Contractor shall have developed and implemented, or have contracted with an organization that has developed and implemented, substance abuse policies in compliance with 41 U.S.C. 701, et seq., 49 C.F.R. Part 199 and 49 C.F.R. Part 40, if applicable; and, with respect to equal employment opportunity and affirmative action compliance, Contractor shall comply with the provisions of Section 202 of Executive Order 11246 and the rules and regulations issued pursuant to Section 201 thereof. Contractor shall provide Company with documentation demonstrating compliance with such laws upon the request of Company.

23. Contractor warrants and represents that, to the extent applicable to any activities that may be performed pursuant to this agreement by Contractor or its subcontractors, all of Contractor's employees and its subcontractors' employees have received all safety training required by law for employees working in an environment in which they may come in contact with crude oil, natural gas, natural gas liquids, refined products or hazardous materials. Contractor agrees to permit Company to inspect Contractor's records in order to assure compliance with this Paragraph 23.

24. In the event any provision herein shall be judicially interpreted or held to be void or otherwise unenforceable as written, such provision shall be deemed to be revised and modified to the extent necessary to make it legally enforceable. In any event, the remaining terms of the agreement shall be enforceable as though the void or unenforceable provision did not exist.

CONFIDENTIALITY

25. All information that Contractor acquires from Company hereunder, directly or indirectly, and all information that arises out of the Work performed hereunder, concerning such Work and/or proprietary processes involved in the Work, including without limitation, information concerning Company's current and future business plans, information relating to Company's operations, and other Company-furnished information and know-how relating to the Work shall be deemed Company's "Proprietary Information." Company's Proprietary Information shall be held in strictest confidence by Contractor and shall be used solely for purposes of performing such Services. The obligations under this Paragraph shall survive completion of such work/services and termination of this Agreement.

TERM

26. This agreement shall be effective as of the date first above written and shall continue for a one-year period following that date. At the end of the initial one-year period, the agreement shall continue until replaced by a subsequent agreement or otherwise revoked by written notice by either party.

SO AGREED, EXECUTED ON THE DATES INDICATED BELOW, BUT EFFECTIVE AS OF THE DATE FIRST ABOVE WRITTEN:

COMPANY
Flint Hills Resources, LP
Koch Pipeline Company, L.P.

By Bob O'Hair
Bob O'Hair
(Printed Name)
Title Vice President
Date 6-22-05

CONTRACTOR
TAS Environmental Services, L.P.

Federal ID Number: 20-1454928

By
J Salter
(Printed Name)
Title President of GP
Date 6.13.5

Exhibit B
Insurance Requirements
Supplement to Intermittent Services Agreement 0500279-A

1.0 With respect to Contractor's performance of the agreement to which this exhibit is attached (referred to hereinafter as the "agreement"), Contractor shall maintain the following insurance:

1.1 **Worker's Compensation and Employers' Liability Insurance**, as prescribed by applicable law including insurance covering liability under the Longshoremen's and Harbor Workers' Compensation Act, the Merchant Marine Act of 1920 (Jones Act) and the Outer Continental Shelf Land Act, if applicable. Coverage will include an Alternate Employer Endorsement (WC 00 03 01) naming Company as an Alternate Employer. Contractor shall require its insurer or insurance agent to provide, as requested by Company, Contractor's Experience Modification Rating (EMR).

1.2 **Commercial General Liability Insurance**, which shall be at least as broad as the coverage provided by a standard form Commercial General Liability Policy (ISO CG 00 01 01 96, with standard exclusions "a" through "n"; ISO forms CG 00 01 07 98 or CG 00 01 10 01, with standard exclusions "a" through "o", with a minimum combined single limit of **$3,000,000** per occurrence for Bodily injury and Property Damage and a **$3,000,000** aggregate each for the general policy and the Products/Completed Operations hazard. This insurance must include the following features:

1.2.1 If work to be performed by Contractor includes construction or demolition operations within 50 feet of any railroad property and affecting any railroad bridge or trestle, tracks, road-beds, tunnel, underpass or crossing, and if Contractor's commercial general liability insurance policy is form ISO CG 00 01 11 88, then such policy will include a Railroad's Contractual Liability Endorsement CG 24 17 10 93.

1.2.2 Contractual Liability coverage.

1.2.3 Products and Completed operations.

1.2.4 Coverage for demolition of any building or structure, collapse, explosion, blasting, excavation and damage to property below the surface of the ground (XCU coverage), if applicable.

1.2.5 Coverage will include one of the following endorsements naming Company as an additional insured:

(i) Additional Insured - Owners, Lessees or Contractors (Form B) Endorsement (CG 20 10 10 93); or
(ii) Additional Insured - Owners, Lessees or Contractors Scheduled Person or Organization Endorsement (CG 20 10 03 97); or
(iii) Additional Insured – Owners, Lessees or Contractors Scheduled Person or Organization Endorsement (CG 20 10 10 01).

1.3 **Automobile Liability Insurance**, covering all owned, non owned, hired and leased vehicles with a minimum combined single limit for Bodily Injury and Property Damage of **$3,000,000** per accident. This insurance must include contractual liability coverage.

1.4 **Aircraft Liability Insurance** - If any operations require the use of aircraft, including helicopters, Contractor shall maintain or require owners of such aircraft to maintain Aircraft Liability Insurance with a combined single limit of not less than **$5,000,000** for bodily injury and property damage (including, passenger) liability.

1.5 **Hull and Machinery Insurance** covering vessels or barges owned or bareboat chartered by Contractor and used by Contractor in the performance of the agreement. Such vessels shall be insured for no less than the fair market value of such vessel or barge. Coverage shall include **Collision Liability Insurance** with limits no less than **$5,000,000.**

1.6 **Protection and Indemnity Insurance** - If marine work is to be performed under the agreement, Contractor shall maintain Protection and Indemnity Insurance, including coverage for injuries to or death of masters, mates and crews of vessels used in the performance of the agreement. The limits of liability of such insurance shall not be less than **$5,000,000** per occurrence. Contractor may cover its obligation for loss of life or bodily injury to the crew of the vessel by extension of the Workers Compensation Insurance 1.1 above (Jones Act). Coverage shall also include pollution liability for loss as specified in the requirements of applicable United States Federal and State Laws. All certificates evidencing financial responsibility shall be current and carried on board.

1.7 **Railroad Protective Liability** - If required by Company, Contractor shall maintain Railroad Protective Liability Insurance naming the railroad as the insured with a limit for bodily injury and property damage liability of **$2,000,000** per occurrence, **$6,000,000** aggregate. The original of said policy shall be furnished to railroad prior to any construction or entry upon the railroad easement premises by Contractor.

1.8 **Umbrella / Excess Insurance** - The limits specified in 1.1, 1.2, 1.3, 1.4, 1.5 and 1.6 above may be satisfied with a combination of primary and Umbrella/Excess Insurance, such policies naming Company as additional insured.

1.9 **Pollution Liability Insurance - If required by Company,** Contractor shall provide and maintain, and ensure that all of Contractor's subcontractors provide and maintain, the following insurances: Contractor's Pollution Liability Insurance with coverage for (a.) bodily injury, sickness, disease, mental anguish or shock sustained by any person, including death; (b.) property damage, including physical injury to or destruction of tangible property, including the resulting loss of use thereof, clean up costs, and the loss of use of tangible property that has not been physically injured or destroyed; (c.) defense, including costs, charges and expenses incurred in the investigation, adjustment or defense of claims for such compensatory damages; for losses caused by pollution conditions that arise from the operations of the Contractor performed under this Agreement. If such policy is written on a claims-made basis, the Contractor warrants that continuous coverage will be maintained, or an extended coverage period will be exercised for a period of 12 months, beginning from the time the work under this Agreement is completed. Contractor agrees to name Company as an additional insured and to furnish insurance certificates showing the Contractor's compliance with this Paragraph 1.9. Contractor also agrees to notify Company 30 days in advance of any cancellation or change to the insurance coverages shown on the certificate. Contractor shall maintain limits no less than Pollution Legal Liability: **$5,000,000 per loss** and **$5,000,000 annual aggregate.**

Note: Coverage for Contractor's Pollution Liability Insurance can be satisfied by the addition of a time element buyback endorsement on the General Liability Policy. The coverage must be as broad as the coverage described above, with a minimum requirement for discovery of 7 days and a minimum reporting period of 60 days.

Contractor shall, before commencing work, provide Company with a certificate of insurance satisfactory to Company of the insurance coverages set forth above.

2.0 **Policy Endorsements**

2.1 The above insurance shall include a requirement that the insurer provide Company with thirty (30) days' written notice prior to the effective date of any cancellation or material change of the insurance.

2.2 The insurance specified in Sections 1.2, 1.4, 1.5, 1.6, 1.8 and 1.9 hereof, as well as any Excess/Umbrella insurance coverage available to Contractor, shall:

i) Name Company as an additional insured with respect to work performed for Company, with such additional insured endorsement providing coverage for Company with respect to liability arising out of Contractor's work performed for Company (including, but not limited to, liability caused or contributed to by the negligence of Contractor, its subcontractors, Company, third parties, or the agents, employees, or officers of any of them);
ii) Be primary to and not in excess of or contributory with any other insurance available to Company; and
iii) Acknowledge that in no event shall Company's insurance, including but not limited to any SIR or deductible, be considered "other insurance" under the terms of Contractor's policies .

3.0 **Evidence of Insurance** - Contractor shall, before commencing work, provide Company with a certificate (see attached **Exhibit C**) satisfactory to Company of the insurance coverages and endorsements set forth in Sections 1.0 and 2.0 above. If requested by Company, Contractor shall provide Company with certified copies of all policies.

4.0 **Waiver of Subrogation**

4.1 Contractor, on behalf of its insurers, waives any right of subrogation that such insurers may have against Company arising out of this agreement.

4.2 The insurance specified in Section 1.1 hereof shall contain a waiver of the right of subrogation against Company and an assignment of statutory lien, if applicable.

4.3 Any physical damage insurance carried by Contractor on construction equipment, tools, temporary structures and supplies owned or used by Contractor shall provide a waiver of the right of subrogation against Company.

5.0 All self-insured retentions ("SIRs") and deductibles shall be the responsibility of and to the account of Contractor; Contractor agrees that such insurance shall not be subject to any SIRs, unless specifically consented to in writing by Company.

6.0 The obligation to carry the insurance required by this Exhibit shall not limit or modify in any way any other obligations assumed by the Contractor under the agreement. Contractor shall be held accountable for all insurance coverages, including those of sub-contractors. Company shall not be under any duty to advise Contractor in the event that Contractor's insurance is not in compliance with this agreement. ACCEPTANCE OF ANY INSURANCE CERTIFICATE SHALL NOT CONSTITUTE ACCEPTANCE OF THE ADEQUACY OF COVERAGE, COMPLIANCE WITH THE REQUIREMENTS OF THE AGREEMENT, OR AN AMENDMENT TO THE AGREEMENT.

RELEASE TO
OR THREATENING
NAVIGABLE OR COASTAL WATERS

TGLO

TITLE 31

TEXAS ADMINISTRATIVE CODES

CHAPTER 19,
RULE 19.13 (C)

REQUIRED ELEMENTS OF DISCHARGE PREVENTION AND RESPONSE PLANS

NOTIFICATIONS: IN THE EVENT OF A SPILL ENTERING OR THREATENING NAVIGABLE OR COASTAL WATER

EXTERNAL NOTIFICATIONS

REQUIRED BY 31TAC19.13C5:

NATIONAL RESPONSE CENTER

800-424-8802

PLUS;

STATE OF TEXAS (TGLO / TCEQ)

800-832-8224

PLUS;

RAILROAD COMMISSION OFFICE OF PIPELINE SAFETY 512-463-6788

PLUS APPLICABLE;

OIL & GAS OFFICE DISTRICT OFFICE*

*** NOTE: FOR NUMBER LOOK ON EXTERNAL NOTIFICATION SECTION**

SPECIAL PROCEDURES / RESOURCES IDENTIFIED

19.13(c) (4) (F) Average Daily Throughput of oil at the facility:

Viola - 75,000 to 85,000 bbls / day
Refugio – 30,000 to 40,000 bbls / day

19.13 (c)(5) for a facility which normally does not have personnel on-site, a commitment to maintain in a prominent location a sign or placard which states that the GLO and National Response Center are to be notified of an oil spill and gives the 24-hour phone numbers for notifying the GLO and National Response Center;

KPL plans to place TGLO / NRC Stickers at prominent asset areas such as Bay Crossing Signs and Pump Station entrance. Additionally, the TGLO / NRC numbers are located on Figure 3.1-5 and Appendix G of this Plan.

19.13(c) (7) Drill including Notification to NRC and TGLO:

KPL plans to conduct an annual oil spill drill that entails notifying the GLO and National Response Center and keeping which documents as shown in Appendix A of when the notification drill was conducted and facility personnel who participated in it.

31TAC19.13(c) (10)

Insitu Burn

In the event of a spill, there will be no use of Insitu Burn without prior approval from the RRT (Work through UCS - USCG / TGLO)

Dispersants

In the event of a spill, there will be no use of dispersants without prior approval from the RRT (Work through UCS - USCG / TGLO)

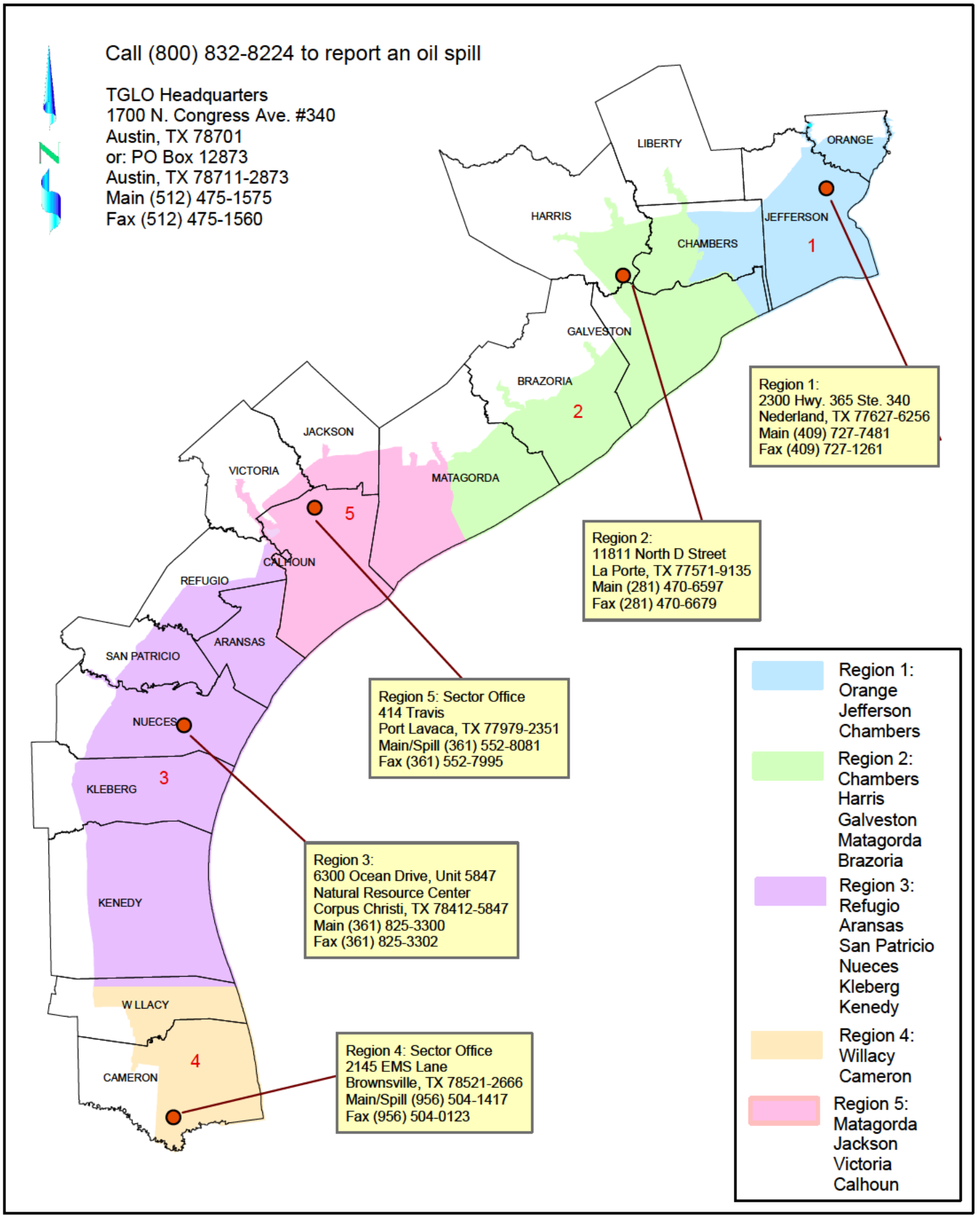
Wildlife Handling and Rehabilitation

This resource will be contacted through Miller Environmental:

Wildlife Rehab and Education
www.wrande.org
951 Power ST.
League City, Texas 77573

Sharon Schmalz
Work 281-332-8319
Pager 713-279-1417
Michele Johnson
Pager 281-418-8100

TGLO - Oil Spill Prevention & Response Regional Offices

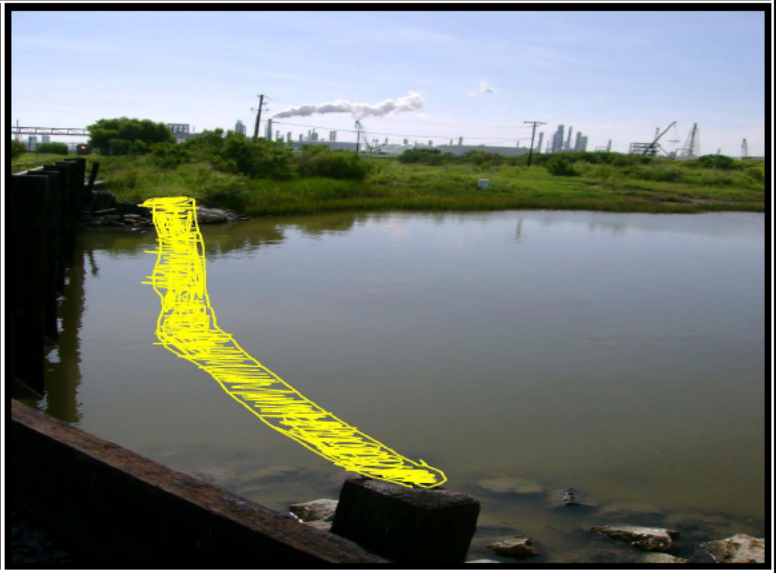


This map was produced on 10/6/2005 at 10 31:43 AM
by Robert L. Barron, GIS Application Developer
IS/GIS/Applciaton Development

Locations are general in nature. The author makes no warranties on accuarcy or locations. Map not suitable for navigation purposes.

Site 1 - Bridge Southside

Tule Lake



RESPONSE STRATEGY

Latitude/Longitude: (b) (7)(F), (b) (3)

Location: 7002 Marvin L Berry Rd, Corpus Christi, TX 78409

Water Way: Tule Lake

Owner:

Distance from Spill Source: The Viola Station sits on tidal flats. The tidal flats feed Tule Lake which then empties into the Corpus Christi Ship Channel.

Map Reference:

Response Objective: Containment and collection

Response Tactic: - Normal Conditions
Deploy 2 50-ft segment of hard boom across Tule Lake and anchor using shoreline anchoring techniques to divert oil to the right shore bank for containment and recovery operations. Any hard boom utilized should be backed with sorbent boom. Use vac truck and skimmer for recovery operations. The first picture depicts the staging are that is on Texas Dock and Rail Property. The second picture is of the access restricted area of Citgo. We will need to gain authorization in order for our contractors/employees to get to this site. The picture in the middle depicts where the hard boom will be placed for containment and collection strategies (yellow shaded area).

Watercourse Description: Tule Lake has this outfall into the Corpus Christi Ship Channel.

Description of Worksite:

Critical Response Information: This staging and recovery area is on Texas Dock and Rail Co and Citgo property. We must first gain authorization to access the site. Remember SAFETY F RST!

Date Last Revised: October 25, 2006

LEGEND Origin ● Destination ● Pipeline ▬

DRIVING DIRECTIONS

From Interstate 37, take the Sun Tide/Tuloso Road Exit. Head north on Suntide. Turn right on Marvin L. Berry Rd and continue ahead until you reach Texas Dock and Rail Co. You will need to check in with the guard.

RECOMMENDED EQUIPMENT

QUANTITY	DESCRIPTION
	Containment Boom
	Sorbent Boom
	Vac Truck(s)
	Frac Tank(s)
	Work Boat(s)
	Skimmer(s)
	3/8" Polypropylene Line
	Stake(s)
	Sledge hammer(s)
	Sorbent pad(s)
	85 gallon drum liners
	Cell Phone(s)
	Portable Radios(s)
	Light tower(s)

RECOMMENDED EQUIPMENT

QUANTITY	DESCRIPTION
	Port-o-let(s)
	Poly lined roll-off boxes
	Metal Culvert Pipes
	Trac-hoe

RECOMMENDED PERSONNEL

NUMBERS	DESCRIPTION
	Boat Operator(s)
	Equipment Operator(s)
	Laborer(s)
	Supervisor(s)
	Vac Truck Operator(s)

Site 1 - Bridge Southside

(b) (7)(F), (b) (3)