

**Port Hudson
Facility Response Plan**

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**Port Hudson, Louisiana
Facility Response Plan**

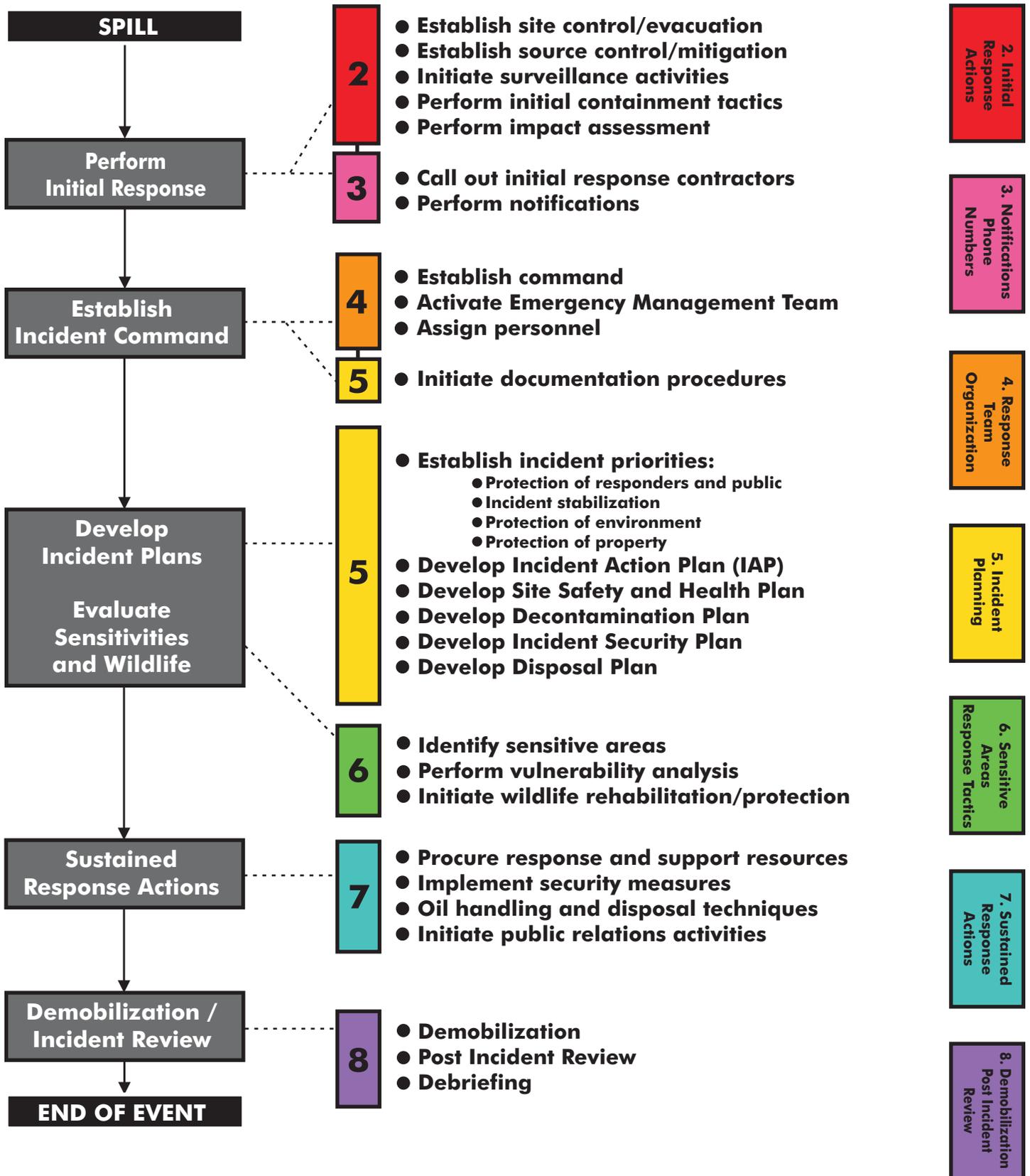
Developed by:



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

Response Procedures Flow Chart



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DATE OF CHANGE	DESCRIPTION OF CHANGE
10/1/2007	Updated Figure 3.1-3, Section 7.1.1, Figure A.1-2, Figure A.2-1, Appendix D.8, and added new Figure D.8-2.
2/17/2010	Reviewed plan February 2010

2/26/2010	EPA USCG PHMSA FRP/SPCC C - SPCC Plans
2/26/2010	USCG SECURITY Plan update
3/17/2010 8:43:41 AM	USCG SECURITY 16.0 Audits and Security Amendments
3/17/2010 8:56:52 AM	USCG SECURITY 16.0 Audits and Security Amendments
3/26/2010 10:01:45 AM	USCG SECURITY 1.0 Security Administration and Organization of the Facility
5/24/2010 10:28:13 AM	USCG SECURITY E.0 Additional Information
7/1/2010	Entire Plan
7/22/2010 9:56:43 AM	DOCK OPS Figure 13 - Additional Information
8/5/2010 10:05:19 AM	DOCK OPS Figure 4 - Dock Plot Plan
8/5/2010 10:07:23 AM	DOCK OPS Figure 6 - Dock Operations Manual Regulations 33 CFR 154.310 - (4) Vessel Information
8/5/2010 10:08:18 AM	DOCK OPS Figure 6 - Dock Operations Manual Regulations 33 CFR 154.310 - (16) Maximum Allowable Working Pressure (MAWP)
8/9/2010 9:06:27 AM	EPA USCG PHMSA FRP/SPCC 3 - Notifications / Telephone Numbers 3.1 Emergency Information and Notification Procedures Figure 3.1-3 - Internal Notifications and Telephone Numbers Facility Response Team
8/9/2010	DOCK OPS Figure 5 - Notifications
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DATE OF CHANGE	DESCRIPTION OF CHANGE
8/10/2010 9:52:16 AM	EPA USCG PHMSA FRP/SPCC 1 - Introduction Figure 1-2 - Information Summary Information Summary
8/10/2010 9:54:08 AM	EPA USCG PHMSA FRP/SPCC 3 - Notifications / Telephone Numbers 3.1 Emergency Information and Notification Procedures Figure 3.1-3 - Internal Notifications and Telephone Numbers Facility Response Team
8/10/2010	USCG SECURITY Introduction
8/10/2010	USCG SECURITY Figure 1-1 - Security Organization Chart

8/10/2010 9:59:12 AM	USCG SECURITY 8.0 Communications Company Personnel
3/22/2011 10:14:58 AM	EPA USCG PHMSA FRP/SPCC C - SPCC Plans Figure C-7 - Drainage Diagram
3/22/2011 10:30:15 AM	SPCC 2.1 Spill Prevention Figure 2.1-3 - Plot Plan
3/22/2011 11:04:11 AM	SPCC 1.1 Introduction Figure 1.1-4 - Record of Reviews
3/22/2011 11:04:51 AM	SPCC 2.1 Spill Prevention Figure 2.1-5 - Containment Calculation
3/22/2011 11:07:56 AM	SPCC 1.1 Introduction Figure 1.1-1 - Professional Engineer Certification Upload
7/21/2011 9:47:24 AM	EPA USCG PHMSA FRP/SPCC 3 - Notifications / Telephone Numbers 3.1 Emergency Information and Notification Procedures Figure 3.1-3 - Internal Notifications and Telephone Numbers Facility Response Team
7/21/2011 9:47:46 AM	SPCC 3.4 Notifications Figure 3.4-2 - Notifications Company Personnel
9/8/2011	Section 3 Figure 3.1-4, ERAP Figure 3-3
10/24/2011 8:25:10 AM	EPA USCG PHMSA FRP/SPCC 3 - Notifications / Telephone Numbers 3.1 Emergency Information and Notification Procedures Figure 3.1-3 - Internal Notifications and Telephone Numbers Facility Response Team
10/24/2011 8:29:14 AM	EPA USCG PHMSA FRP/SPCC 3 - Notifications / Telephone Numbers 3.1 Emergency Information and Notification Procedures Figure 3.1-3 - Internal Notifications and Telephone Numbers Emergency Response Personnel and Business Unit Notifications

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DATE OF CHANGE	DESCRIPTION OF CHANGE
10/24/2011 8:29:43 AM	EPA USCG PHMSA FRP/SPCC 3 - Notifications / Telephone Numbers 3.1 Emergency Information and Notification Procedures Figure 3.1-3 - Internal Notifications and Telephone Numbers Emergency Response Personnel and Business Unit Notifications
10/24/2011 8:29:57 AM	EPA USCG PHMSA FRP/SPCC 3 - Notifications / Telephone Numbers 3.1 Emergency Information and

	Notification Procedures Figure 3.1-3 - Internal Notifications and Telephone Numbers Emergency Response Personnel and Business Unit Notifications
10/24/2011 9:08:48 AM	EPA USCG PHMSA FRP/SPCC 1 - Introduction Figure 1-2 - Information Summary Information Summary
10/24/2011 9:09:54 AM	EPA USCG PHMSA FRP/SPCC 1 - Introduction Figure 1-2 - Information Summary Information Summary
10/24/2011 9:37:26 AM	EPA USCG PHMSA FRP/SPCC 1 - Introduction Figure 1-4 - Facility Photograph
10/24/2011 9:44:16 AM	EPA USCG PHMSA FRP/SPCC 1 - Introduction Figure 1-4 - Facility Photograph
10/24/2011 10:28:15 AM	EPA USCG PHMSA FRP/SPCC C - SPCC Plans Figure C-3 - Record of Reviews
10/24/2011 10:31:22 AM	EPA USCG PHMSA FRP/SPCC C - SPCC Plans Figure C-4 - SPCC Plan SPCC Regulations 40 CFR, 112.7 - (g) Security
10/24/2011 10:32:47 AM	EPA USCG PHMSA FRP/SPCC C - SPCC Plans Figure C-4 - SPCC Plan SPCC Regulations 40 CFR, 112.7 - (g) Security
10/24/2011 10:33:15 AM	EPA USCG PHMSA FRP/SPCC C - SPCC Plans Figure C-4 - SPCC Plan SPCC Regulations 40 CFR, 112.7 - (g) Security
10/24/2011 10:34:19 AM	EPA USCG PHMSA FRP/SPCC C - SPCC Plans Figure C-4 - SPCC Plan SPCC Regulations 40 CFR, 112.7 - (g) Security
10/24/2011 10:35:05 AM	EPA USCG PHMSA FRP/SPCC C - SPCC Plans Figure C-4 - SPCC Plan SPCC Regulations 40 CFR, 112.7 - (g) Security
10/24/2011 10:35:39 AM	EPA USCG PHMSA FRP/SPCC C - SPCC Plans Figure C-4 - SPCC Plan SPCC Regulations 40 CFR, 112.7 - (g) Security
10/24/2011 10:36:58 AM	EPA USCG PHMSA FRP/SPCC C - SPCC Plans Figure C-4 - SPCC Plan SPCC Regulations 40 CFR, 112.7 - (g) Security
10/24/2011 10:37:53 AM	EPA USCG PHMSA FRP/SPCC C - SPCC Plans Figure C-4 - SPCC Plan SPCC Regulations 40 CFR, 112.7 - (g) Security
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DATE OF CHANGE	DESCRIPTION OF CHANGE
10/24/2011 10:38:08 AM	EPA USCG PHMSA FRP/SPCC C - SPCC Plans Figure C-4 - SPCC Plan SPCC Regulations 40 CFR, 112.7 - (g) Security
10/24/2011 10:38:48 AM	EPA USCG PHMSA FRP/SPCC C - SPCC Plans Figure C-4 - SPCC Plan SPCC Regulations 40 CFR, 112.7 - (g) Security
10/24/2011 10:41:54 AM	EPA USCG PHMSA FRP/SPCC C - SPCC Plans Figure C-4 - SPCC Plan SPCC Regulations 40 CFR, 112.8 - (b) Facility Drainage
10/24/2011 1:58:57 PM	EPA USCG PHMSA FRP/SPCC 1 - Introduction Figure 1-5 - Facility Site Plan
10/24/2011	EPA USCG PHMSA FRP/SPCC 1 - Introduction 1.3 Certification of Adequate Resources
10/24/2011 3:32:40 PM	EPA USCG PHMSA FRP/SPCC C - SPCC Plans Figure C-1 - Professional Engineer Certification
10/24/2011 3:41:30 PM	EPA USCG PHMSA FRP/SPCC C - SPCC Plans Figure C-2 - Management Approval and Review
10/24/2011 3:43:42 PM	EPA USCG PHMSA FRP/SPCC C - SPCC Plans Figure C-6 - Addendum
10/24/2011 3:43:46 PM	EPA USCG PHMSA FRP/SPCC C - SPCC Plans Figure C-6 - Addendum
10/24/2011 4:13:29 PM	EPA USCG PHMSA FRP/SPCC C - SPCC Plans Figure C-1 - Professional Engineer Certification
10/26/2011 8:51:27 AM	EPA USCG PHMSA FRP/SPCC 1 - Introduction Figure 1-6 - Pipeline System Overview Map
10/26/2011 9:10:03 AM	EPA USCG PHMSA FRP/SPCC C - SPCC Plans Figure C-4 - SPCC Plan SPCC Regulations 40 CFR, 112.7 - (h) Facility Tank Car And Tank Truck Loading/Unloading Rack
10/27/2011 3:08:11 PM	SPCC 1.1 Introduction Figure 1.1-2 - Certification and Applicability of Substantial Harm
11/2/2011 3:18:45 PM	FSP Introduction
11/2/2011 3:20:18 PM	FSP Introduction
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DATE OF	DESCRIPTION OF CHANGE
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CHANGE	
11/2/2011 3:20:35 PM	FSP Introduction
11/2/2011 3:55:45 PM	FSP Introduction
11/3/2011 11:45:17 AM	EPA USCG PHMSA FRP/SPCC 1 - Introduction Figure 1-1 - Distribution List
11/3/2011 11:49:28 AM	EPA USCG PHMSA FRP/SPCC D - Hazard Evaluation and Risk Analysis D.8 Product Characteristics and Hazards Figure D.8-2 - MSDS
12/16/2011	Section 3 Figure 3.1-4, ERAP Figure 3-3
12/22/2011 12:10:33 PM	EPA USCG PHMSA FRP/SPCC 1 - Introduction Figure 1-1 - Distribution List
12/22/2011 12:12:09 PM	FSP 1.0 Security Administration and Organization of the Facility Figure 1-1 - Security Organization Chart
12/22/2011 1:16:33 PM	FSP E.0 Additional Information
12/22/2011 1:16:38 PM	FSP E.0 Additional Information
12/22/2011 1:18:20 PM	FSP E.0 Additional Information
12/22/2011 1:18:58 PM	FSP E.0 Additional Information
12/27/2011	Section 3 Figure 3.1-4, ERAP Figure 3-3
12/27/2011	Section 3 Figure 3.1-4, ERAP Figure 3-3
12/27/2011	Section 3 Figure 3.1-4, ERAP Figure 3-3
12/27/2011 4:03:03 PM	FSP Introduction
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DATE OF CHANGE	DESCRIPTION OF CHANGE
12/28/2011 3:26:37 PM	SPCC 1.1 Introduction Figure 1.1-3 - Management Approval and Review
12/28/2011 3:27:38 PM	SPCC 1.1 Introduction Figure 1.1-2 - Certification and Applicability of Substantial Harm
12/30/2011 8:51:01 AM	EPA USCG PHMSA FRP/SPCC 1 - Introduction 1.3 Certification of Adequate Resources
12/30/2011 8:51:29 AM	EPA USCG PHMSA FRP/SPCC 1 - Introduction 1.3 Certification of Adequate Resources
2/9/2012 12:27:55 PM	EPA USCG PHMSA FRP/SPCC 3 - Notifications / Telephone Numbers 3.1 Emergency Information and Notification Procedures Figure 3.1-3 - Internal Notifications and Telephone Numbers Facility

	Response Team
2/9/2012 12:29:00 PM	FSP Introduction
2/9/2012 12:29:30 PM	FSP Introduction
2/9/2012 3:22:15 PM	EPA USCG PHMSA FRP/SPCC 1 - Introduction 1.3 Certification of Adequate Resources
3/7/2012 3:23:03 PM	EPA USCG PHMSA FRP/SPCC 3 - Notifications / Telephone Numbers 3.1 Emergency Information and Notification Procedures Figure 3.1-3 - Internal Notifications and Telephone Numbers Facility Response Team
4/3/2012 11:27:54 AM	EPA USCG PHMSA FRP/SPCC B - Contractor Response Equipment B.1 Cooperatives and Contractors B.1.1 OSRO Classification
4/3/2012 11:33:29 AM	EPA USCG PHMSA FRP/SPCC 6 - Sensitive Areas / Response Tactics 6.7 Tactical Overview Map
6/20/2012	EPA USCG PHMSA FRP/SPCC 1 - Introduction 1.4 Agency Submittal / Approval Letters
6/21/2012	DOM Figure 13 - Additional Information
6/21/2012	DOM Figure 6 - Dock Operations Manual Regulations 33 CFR 154.310 - (23) Tank Cleaning and Stripping Operations
7/9/2012	EPA USCG PHMSA FRP/SPCC 3 - Notifications / Telephone Numbers 3.1 Emergency Information and Notification Procedures Figure 3.1-4 - External Notifications and Telephone Numbers External Notifications

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7/9/2012	EPA USCG PHMSA FRP/SPCC 3 - Notifications / Telephone Numbers 3.1 Emergency Information and Notification Procedures Figure 3.1-3 - Internal Notifications and Telephone Numbers Emergency Response Personnel and Business Unit Notifications
7/10/2012	EPA USCG PHMSA FRP/SPCC 3 - Notifications / Telephone Numbers 3.1 Emergency Information and Notification Procedures Figure 3.1-4 - External Notifications and Telephone Numbers External Notifications

7/12/2012 4:43:14 PM	EPA USCG PHMSA FRP/SPCC C - SPCC Plans Figure C-4 - SPCC Plan SPCC Regulations 40 CFR, 112.7 - (j) State Discharge Prevention Requirements
7/12/2012	EPA USCG PHMSA FRP/SPCC 3 - Notifications / Telephone Numbers 3.1 Emergency Information and Notification Procedures Figure 3.1-4 - External Notifications and Telephone Numbers USCG Classified OSRO's / Non-Classified OSRO's
7/12/2012	EPA USCG PHMSA FRP/SPCC C - SPCC Plans Figure C-4 - SPCC Plan SPCC Regulations 40 CFR, 112.7 - (f) Personnel Training And Discharge Prevention Procedures
7/12/2012	EPA USCG PHMSA FRP/SPCC C - SPCC Plans Figure C-4 - SPCC Plan SPCC Regulations 40 CFR, 112.7 - (g) Security
7/13/2012 3:48:30 PM	EPA USCG PHMSA FRP/SPCC C - SPCC Plans Figure C-5 - Tank Tables
8/9/2012	SPCC 1.1 Introduction Figure 1.1-1 - Professional Engineer Certification Upload
8/9/2012	SPCC 2.1 Spill Prevention Figure 2.1-5 - Containment Calculation
8/9/2012	SPCC 1.1 Introduction Figure 1.1-5 - Addendum
8/22/2012	EPA USCG PHMSA FRP/SPCC 6 - Sensitive Areas / Response Tactics 6.9 Tactical Plans
8/23/2012	EPA USCG PHMSA FRP/SPCC 2 - Initial Response Actions 2.1 Spill Response Figure 2.1-1 - Spill Response Action Checklist
8/27/2012	EPA USCG PHMSA FRP/SPCC 7 - Sustained Response Actions 7.1 Response Resources 7.1.1 Facility Response Equipment
9/4/2012	EPA USCG PHMSA FRP/SPCC E - Cross-References Figure E-7 - EPA Response Plan Cover Sheet Applicability of Substantial Harm Criteria
9/4/2012	EPA USCG PHMSA FRP/SPCC 7 - Sustained Response Actions 7.1 Response Resources 7.1.1 Facility Response Equipment

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9/7/2012	EPA USCG PHMSA FRP/SPCC 7 - Sustained Response Actions 7.1 Response Resources 7.1.1 Facility Response Equipment
9/13/2012	EPA USCG PHMSA FRP/SPCC 3 - Notifications / Telephone Numbers 3.1 Emergency Information and Notification Procedures Figure 3.1-4 - External Notifications and Telephone Numbers External Notifications
1/7/2013	EPA USCG PHMSA FRP/SPCC 6 - Sensitive Areas / Response Tactics 6.6 Vulnerability Analysis (Detailed)
1/9/2013	EPA USCG PHMSA FRP/SPCC D - Hazard Evaluation and Risk Analysis D.4 Planning Distance Calculations Figure D.4-1 - Planning Distance Calculations Upload
1/9/2013	EPA USCG PHMSA FRP/SPCC D - Hazard Evaluation and Risk Analysis D.4 Planning Distance Calculations Figure D.4-1 - Planning Distance Calculations
2/21/2013	EPA USCG PHMSA FRP/SPCC C - SPCC Plans Figure C.1-1 - Professional Engineer Certification Upload
2/21/2013	EPA USCG PHMSA FRP/SPCC 1 - Introduction Figure 1-2 - Information Summary Information Summary
2/21/2013	EPA USCG PHMSA FRP/SPCC 1 - Introduction Figure 1-5 - Facility Site Plan
2/21/2013	EPA USCG PHMSA FRP/SPCC 2 - Initial Response Actions 2.1 Spill Response Figure 2.1-1 - Spill Response Action Checklist
2/21/2013	EPA USCG PHMSA FRP/SPCC 3 - Notifications / Telephone Numbers 3.1 Emergency Information and Notification Procedures Figure 3.1-3 - Internal Notifications and Telephone Numbers Facility Response Team
2/21/2013	EPA USCG PHMSA FRP/SPCC 3 - Notifications / Telephone Numbers 3.1 Emergency Information and Notification Procedures Figure 3.1-3 - Internal Notifications and Telephone Numbers Emergency Response Personnel and Business Unit Notifications
2/21/2013	EPA USCG PHMSA FRP/SPCC 3 - Notifications / Telephone Numbers 3.1 Emergency Information and Notification Procedures Figure 3.1-4 - External Notifications and Telephone Numbers External Notifications
2/21/2013	EPA USCG PHMSA FRP/SPCC 3 - Notifications /

	Telephone Numbers 3.1 Emergency Information and Notification Procedures Figure 3.1-4 - External Notifications and Telephone Numbers USCG Classified OSRO's / Non-Classified OSRO's
2/21/2013	EPA USCG PHMSA FRP/SPCC 6 - Sensitive Areas / Response Tactics 6.6 Vulnerability Analysis (Detailed)
2/21/2013	EPA USCG PHMSA FRP/SPCC 6 - Sensitive Areas / Response Tactics 6.7 Tactical Overview Map
Port Hudson	

RECORD OF CHANGES

Changes to this Plan will be documented on this page. Plan review and modifications will be initiated and coordinated with Terminal Management.

DATE OF CHANGE	DESCRIPTION OF CHANGE
2/21/2013	EPA USCG PHMSA FRP/SPCC 6 - Sensitive Areas / Response Tactics 6.9 Tactical Plans
2/21/2013	EPA USCG PHMSA FRP/SPCC 6 - Sensitive Areas / Response Tactics 6.10 Sensitivity Maps
2/21/2013	EPA USCG PHMSA FRP/SPCC 7 - Sustained Response Actions 7.1 Response Resources 7.1.1 Facility Response Equipment
2/21/2013	EPA USCG PHMSA FRP/SPCC 7 - Sustained Response Actions 7.3 Site Security Measures Figure 7.3-2 - Facility Security
2/21/2013	EPA USCG PHMSA FRP/SPCC 7 - Sustained Response Actions 7.4 Waste Management Figure 7.4-4 - Facility Specific Disposal Locations
2/21/2013	EPA USCG PHMSA FRP/SPCC C - SPCC Plans Figure C-1 - Professional Engineer Certification
2/21/2013	EPA USCG PHMSA FRP/SPCC C - SPCC Plans Figure C-2 - Management Approval and Review
2/21/2013	EPA USCG PHMSA FRP/SPCC C - SPCC Plans Figure C-3 - Record of Reviews
2/21/2013	EPA USCG PHMSA FRP/SPCC C - SPCC Plans Figure C-4 - SPCC Plan SPCC Regulations 40 CFR, 112.7 - (a) General Facility Requirements
2/21/2013	EPA USCG PHMSA FRP/SPCC C - SPCC Plans Figure C-4 - SPCC Plan SPCC Regulations 40 CFR, 112.7 - (b) Prediction Of The Direction, Rate Of Flow, And Total Quantity Of Oil Which Could Be Discharged From The Facility As A Result Of Each Type Of Major

	Equipment Failure
2/21/2013	EPA USCG PHMSA FRP/SPCC C - SPCC Plans Figure C-4 - SPCC Plan SPCC Regulations 40 CFR, 112.7 - (c) Provide appropriate Containment
2/21/2013	EPA USCG PHMSA FRP/SPCC C - SPCC Plans Figure C-4 - SPCC Plan SPCC Regulations 40 CFR, 112.7 - (h) Facility Tank Car And Tank Truck Loading/Unloading Rack
2/21/2013	EPA USCG PHMSA FRP/SPCC C - SPCC Plans Figure C-4 - SPCC Plan SPCC Regulations 40 CFR, 112.7 - (k) Qualified Oil-Filled Operational Equipment
2/21/2013	EPA USCG PHMSA FRP/SPCC C - SPCC Plans Figure C-4 - SPCC Plan SPCC Regulations 40 CFR, 112.8 - (b) Facility Drainage
2/21/2013	EPA USCG PHMSA FRP/SPCC C - SPCC Plans Figure C-5 - Tank Tables
Port Hudson	

RECORD OF CHANGES

Changes to this Plan will be documented on this page. Plan review and modifications will be initiated and coordinated with Terminal Management.

DATE OF CHANGE	DESCRIPTION OF CHANGE
2/21/2013	EPA USCG PHMSA FRP/SPCC C - SPCC Plans Figure C-7 - Drainage Diagram
2/21/2013	EPA USCG PHMSA FRP/SPCC C - SPCC Plans Figure C-8 - Evacuation Diagram
2/21/2013	EPA USCG PHMSA FRP/SPCC C - SPCC Plans Figure C-9 - Piping Diagram
2/21/2013	EPA USCG PHMSA FRP/SPCC C - SPCC Plans Figure C-14 - Reportable Spill History
2/21/2013	EPA USCG PHMSA FRP/SPCC C - SPCC Plans Figure C-14 - Reportable Spill History
2/21/2013	EPA USCG PHMSA FRP/SPCC C - SPCC Plans Figure C-15 - Containment and Drainage Planning
2/21/2013	EPA USCG PHMSA FRP/SPCC D - Hazard Evaluation and Risk Analysis D.2 Vulnerability Analysis D.2 Vulnerability Analysis
2/21/2013	EPA USCG PHMSA FRP/SPCC D - Hazard Evaluation and Risk Analysis D.4 Planning Distance Calculations Figure D.4-1 - Planning Distance Calculations
2/21/2013	EPA USCG PHMSA FRP/SPCC D - Hazard

	Evaluation and Risk Analysis D.4 Planning Distance Calculations Figure D.4-1 - Planning Distance Calculations Upload
2/21/2013	EPA USCG PHMSA FRP/SPCC D - Hazard Evaluation and Risk Analysis D.5 Discharge Scenarios D.5.1 Small and Medium Discharge Scenarios D.5.1 Worst Case Discharge Response Resource
2/22/2013	EPA USCG PHMSA FRP/SPCC C - SPCC Plans Figure C-7 - Drainage Diagram
2/22/2013	EPA USCG PHMSA FRP/SPCC C - SPCC Plans Figure C-8 - Evacuation Diagram
2/22/2013	EPA USCG PHMSA FRP/SPCC 1 - Introduction Figure 1-5 - Facility Site Plan

SECTION 1

Last Revised: February 22, 2013

INTRODUCTION

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Figure 1-1 - Distribution List

Figure 1-2 - Port Hudson Information Summary

Figure 1-3 - Facility Area Map

Figure 1-4 - Facility Photograph

Figure 1-5 - Facility Site Plan

Figure 1-6 - Pipeline System Overview Map

1.1 Purpose / Scope of Plan

1.2 Plan Review and Update Procedure

1.3 Certification of Adequate Resources

1.4 Agency Submittal / Approval Letters

FIGURE 1-1 - DISTRIBUTION LIST

PLAN HOLDER	ADDRESS	NUMBER OF COPIES			
		PAPER	DISTRIBUTION DATE	ELECTRONIC	DISTRIBUTION DATE
United States Coast Guard, Marine Safety Unit, Baton Rouge, Louisiana	6041 Crestmount Drive Baton Rouge, LA 70809	0		1	
U.S. EPA Region VI (6SF-RO), Attn: FRP Coordinator	1445 Ross Avenue Dallas, TX 75202-2733	0		1	
Response Plans Custodian	1200 New Jersey Avenue, SE- Room E22-310 Washington, DC 20590	0		1	
Port Hudson Facility Manager - Facility Copy	769 Port Hudson Cemetery Rd. Zachary, LA 70791	1		1	

FIGURE 1-2 - PORT HUDSON INFORMATION SUMMARY

Owner/Operator:	Genesis Crude Oil, L.P. 919 Milam, Suite 2100 Houston, TX 77002
Owner/Operator Telephone:	(713) 860-2500

Facility Name:	Port Hudson
Facility Address:	769 Port Hudson Cemetery Road, P.O. Box 1326 Zachary (East Baton Rouge Parish), Louisiana 70791
Facility Latitude/Longitude:	(b) (7)(F)
Facility Telephone/Fax:	(225) 654-0085, Control Room: (800) 806-5463 / (225) 654-8602 Fax
Facility EPA FRP #:	FRP-06-LA-00221
Facility PHMSA FRP #:	
Facility USCG FRP #:	
Description of Facility:	<p>The Port Hudson Facility located on the Mississippi River includes a Barge Dock, associated piping, and a single welded steel tank with an external floating roof, located within a secondary containment dike. (b) (7)(F)</p> <p>Also included is a trucking terminal located in East Baton Rouge Parish, Louisiana, on Highway 3113 approximately 0.75 miles west of Highway 64 and 13.5 miles northwest of Baton Rouge, LA.</p> <p>The gathering system, beginning at the trucking terminal and consisting of a (b) (7)(F) bbl crude oil tank and a (b) (7)(F) diesel tank with a 4" pipeline, runs in a westerly direction for approximately 1,147'. It then enlarges to 8" and runs in a southerly direction for 9,761' ending at the Port Hudson Marine Terminal. A 3" gathering line 403' in length runs from Flash Exploration to the manifold for the (b) (7)(F).</p> <p>A 16" line beginning at the terminal runs in a southerly then westerly direction for a distance of 8,246' ending at the dock facility.</p> <p>The dock is located on the left (east) descending bank of the Mississippi River at River Mile Post 253.6, East Baton Rouge Parish, LA. The lines from the terminal to the dock consist mainly of 8,246' of 16" line, along with several smaller lengths of line. A total of 2,488.64 bbls of product is contained within these lines. The lines from trucking to the terminal consist mainly of 1,147' of 4" line and 9,761' of 8" line, along with a 3", 403' gathering line. A total of 625.72 bbls of product is contained within these three lines. A 16" line consists of 1,862.92 bbls of product.</p> <p>Substantial expansion occurred in 1986 when the (b) (7)(F) tank was added to the Truck Terminal and again in 2010 when a 300 bbl Diesel tank was added to the Truck Terminal for</p>

	refueling trucks.
River Mile:	253.6
Size, Type, and Number of Vessels the Facility Can Transfer Oil to or from Simultaneously:	(b) (7)(F)

FIGURE 1-2 - PORT HUDSON INFORMATION SUMMARY, CONTINUED

Qualified Individuals: (Refer to APPENDIX A, FIGURE A.2-3 for QI Training Records)	Facility		
	Name and Contact Information	Work Address	Home Address
	Clint Murray Port Hudson Supervisor Louisiana IC Primary Qualified Individual (225) 654-0085 (Office) (b) (6) (225) 993-2364 (Mobile)	769 Port Hudson Cemetery Road Zachary, LA 70791	(b) (6)
	Business Unit		
	Name and Contact Information	Work Address	Home Address
	Tom Boyd Pipeline Operations Manager (USA) MS Alternate Qualified Individual (601) 729-3587 (Office) (b) (6) (601) 319-4004 (Mobile)	1984 Highway 28 Taylorsville, MS 39168	

FIGURE 1-2 - PORT HUDSON INFORMATION SUMMARY, CONTINUED

Line Sections/ Products Handled: (Refer to Product Characteristic and Hazards, FIGURE	SECTION	COUNTY	PRODUCTS
	8" line		crude oil / condensate mix
	4" line		crude oil /

D.8-1)				condensate mix	
	16" line			crude oil / condensate mix	
	3" line			crude oil / condensate mix	
Facility Data: (See APPENDIX C for date and type of substantial expansion)	Location (Address and County)	Hours of Operations/ Manning	Throughput	Date of Startup	Wellhead Protection Area
	769 Port Hudson Cemetery Road, P.O. Box 1326 Zachary (East Baton Rouge Parish), East Baton Rouge Parish	The Port Hudson Terminal and Dock may be operated 24 hours/day, seven days/week. It is only manned as required for transfer operations. Vessels arrive at various times of the day and night for loading. Loading	1200 BPD	1980	N/A
	West Baton Rouge Parish Iberville Parish Ascension Parish, Louisiana 70791	transfer takes approximately nine to 12 hours. The truck unloading facility is operated 24 hours/day, seven days/week by company drivers. Site personnel are normally onsite 8- 5 M- F.			
	Current Operations				
	The Port Hudson Facility is a crude oil terminal and storage facility located near Port Hudson, Louisiana. NAICS Code 424710.				
Description of	The pipeline carries refined oil (including) in the areas shown in				

Zone:	FIGURE 1-3 and FIGURE 1-4
Response Zone Consists of the Following Counties:	East Baton Rouge Parish West Baton Rouge Parish Iberville Parish Ascension Parish
Alignment Maps (Piping, Plan Profiles):	Maintained at: On the Genesis G drive under pipeline.
Worst Case Discharge:	The DOT/PHMSA WCD volume for this plan is: T (b) (7)(F)
Statement of Significant and Substantial Harm:	The response zones in this system all contain pipelines greater than 6 5/8 inches and are longer than ten 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 , APPENDIX D.2.1 and APPENDIX D.3 .
Date Prepared:	Dec. 14, 2009

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 - FACILITY AREA MAP

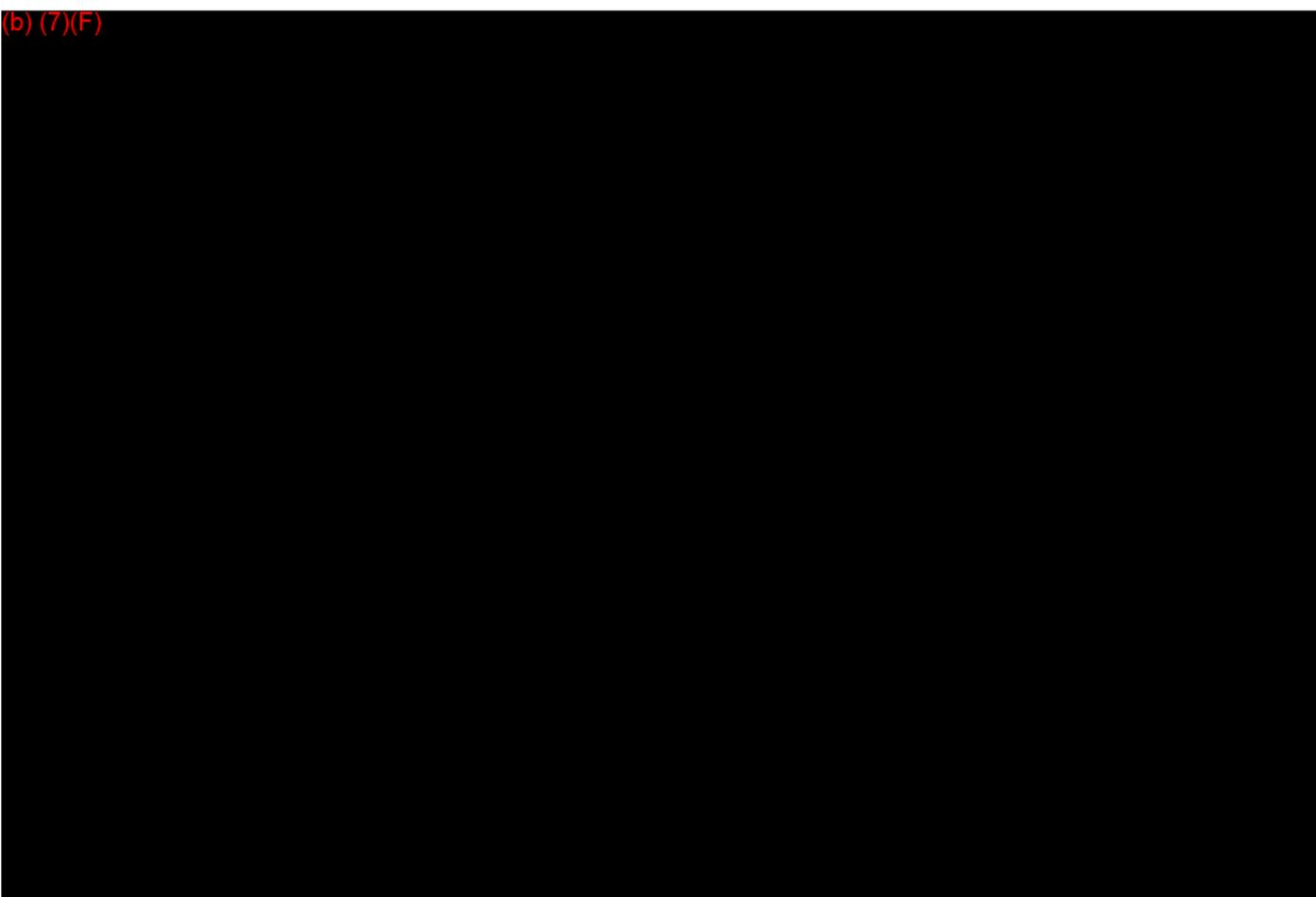


FIGURE 1-4 - FACILITY PHOTOGRAPH



Port Hudson

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FIGURE 1-5 - FACILITY SITE PLAN

[Click to view/print Facility Site Plan](#)

Port Hudson

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FIGURE 1-6 - PIPELINE SYSTEM OVERVIEW MAP

[Click to view/print Line Segment Overview](#)

Port Hudson

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1.1 PURPOSE / SCOPE OF PLAN

The purpose of this Facility Response Plan (Plan) is to provide guidelines to quickly, safely, and effectively respond to a spill. The Facility is owned and operated by Genesis Crude Oil, 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), EPA Region VI Regional Contingency Plan. Specifically, this Plan is intended to satisfy:

- U.S. Environmental Protection Agency (EPA) requirements for an OPA 90 Plan (40 CFR 112.20)
- U.S. Environmental Protection Agency (EPA) requirements for a Spill Prevention Control and Countermeasures (SPCC) Plan (40 CFR 112.7)
- U.S. Coast Guard (USCG) requirements for an OPA 90 Plan (33 CFR 154.1035)
- U.S. Environmental Protection Agency (EPA) requirements for a Resource Conservation and Recovery Act (RCRA) Plan (40 CFR 265.50 through 265.56))
- 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)

1.2 PLAN REVIEW AND UPDATE PROCEDURE

In accordance with 40 CFR 112.20, this Plan will be reviewed annually and modified to address new or different operating conditions or information included in the Plan. Company internal policy states that the Plan will be reviewed at least annually and modified as appropriate. In the event the Company experiences a Worst Case Discharge, the effectiveness of the plan will be evaluated and updated as necessary. If a new or different operating condition or information would substantially effect the implementation of the Plan, the Company will modify the Plan to address such a change and, within 30 days of making such a change, submit the change to PHMSA. EPA must receive the change within 60 days.

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 will be submitted to PHMSA stating that the plan is still current.

The U.S. Coast Guard (USCG) requires that plan changes be submitted in a timely manner. The plan review must occur within one (1) month of the anniversary date of the USCG approval letter. If no changes are required, the facility shall submit a letter to the USCG stating "No Changes Required."

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

CONDITIONS REQUIRING REVISIONS AND SUBMISSIONS	EPA	PHMSA	USCG	RCRA
Relocation or replacement of the transportation system in a way that substantially affects the	x	x		

information included in the Plan, such as a change to the Worst Case Discharge volume.				
A change in the Facility's configuration that materially alters the information included in the Plan.	x		x	
A change in the type of oil handled, stored, or transferred that materially alters the required response resources.	x	x	x	
A change in key personnel (Qualified Individuals).	x	x		x
Material change in capabilities of the Oil Spill Removal Organization(s) (OSROs) that provide equipment and personnel.	x	x		x
Material change in the Facility's spill prevention and response equipment or emergency response procedures.	x		x	x
Any other changes that materially affect the implementation of the Plan.	x	x	x	x
A change in the NCP or ACP that has significant impact on the equipment appropriate for response activities.		x		
A change in the name of the Oil Spill Removal Organization (OSRO).			x	
A change in the Facility's operating area that includes ports or geographic area.			x	
Applicable regulations are required.				x
The Plan fails in an emergency.				x

All requests for changes must be made through the Environmental Department.

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 into the paper copy of the plan.

1.3 CERTIFICATION OF ADEQUATE RESOURCES

[Click to view/print Certification of Adequate Resources](#)

1.4 AGENCY SUBMITTAL / APPROVAL LETTERS

[Click to view/print USGS Approval Letters](#)

SECTION 2

Last Revised: February 21, 2013

INITIAL RESPONSE ACTIONS

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2.1 Spill ResponseFigure 2.1-1 - Spill Response Action Checklist**2.1.1 Spill Detection and Mitigation Procedures**Figure 2.1-2 - Spill Mitigation Procedures**2.1.2 Spill Surveillance Guidelines**Figure 2.1-3 - Spill Surveillance Checklist**2.1.3 Spill Volume Estimating**Figure 2.1-4 - Spill Estimation Factors2.1.4 Estimating Spill Trajectories**2.1.5 Initial Containment Actions**2.1.6 Safety Considerations**2.2 Evacuation****2.3 Tornado****2.4 Flood****2.5 Medical****2.6 Bomb Threat****2.7 Fire and/or Explosion****2.8 Vapor Cloud**

2.1 SPILL RESPONSE

FIGURE 2.1-1 - SPILL RESPONSE ACTION CHECKLIST

RESPONSE ACTION	
First Person to Discover Spill	
Immediately notify Facility Manager. Take appropriate action to protect life and ensure safety of personnel. Contact the appropriate local emergency responders or request the office to do so.	<input type="checkbox"/>
Immediately shut down terminal operations (if applicable). (b) (7)(F) Manual operated valves should be closed if safe to do so.	<input type="checkbox"/>
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.	<input type="checkbox"/>
Facility Management	
Assume role of Incident Commander until relieved by Vice President of HSSE.	<input type="checkbox"/>
Conduct preliminary assessment of health and safety hazards.	<input type="checkbox"/>
Evacuate nonessential personnel, notify emergency response agencies to provide security, and evacuate surrounding area (if necessary).	<input type="checkbox"/>
Provide an incident briefing.	<input type="checkbox"/>
Notify the Operations Control Center to initiate the Emergency Notification Process for Environmental Spill Response coordination.	<input type="checkbox"/>
If safe to do so, direct facility responders to shut down potential ignition sources in the vicinity of the spill, including motors, electrical pumps, electrical power, flares, etc. Keep drivers away from truck rack if spill occurs there.	<input type="checkbox"/>
If safe to do so, direct facility responders to shut down and control 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.	<input type="checkbox"/>
If safe to do so, direct facility responders to stabilize and contain the situation. This may include construction of minor earthen berms and/or sorbent boom and pads.	<input type="checkbox"/>
For low flash oil (<100°F), consider applying foam over the oil, using water spray to reduce vapors, grounding all equipment handling the oil, and using non-sparking tools.	<input type="checkbox"/>
If there is a potential to impact shorelines, consider lining shoreline with sorbent or diversion boom to reduce impact.	<input type="checkbox"/>
Obtain the information necessary to complete the Oil Spill Report Form (FIGURE 3.1-2).	<input type="checkbox"/>
Make local notifications: <ul style="list-style-type: none"> • LEPC • Police • Fire 	<input type="checkbox"/>

• Sheriff	
Vice President of HSSE	
Callout Spill Management Team and primary spill responders, as appropriate (FIGURE 3.1-3)	
Make appropriate notifications:	
<ul style="list-style-type: none"> • National Response Center (800) 424-8802 • External regulatory notifications (FIGURE 3.1-4) 	<input type="checkbox"/>

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

RESPONSE ACTION, CONTINUED	
Spill Management Team	
Activate all or a portion of Spill Management Team (SMT) (as necessary). Environmental Department will maintain contact with notified regulatory agencies.	<input type="checkbox"/>
Mobilize spill response contractors (if necessary). It is much better to demobilize equipment and personnel if not needed than to delay contacting them if they are needed.	<input type="checkbox"/>
Document all response actions taken, including notifications, agency/media meetings, equipment and personnel mobilization and deployment, and area impacted. (Refer to SECTION 5 for documentation.)	<input type="checkbox"/>
Water-based Spills: Initiate spill tracking and surveillance operations. Determine extent of pollution via surveillance aircraft or vehicle. Estimate volume of spill utilizing information in SECTION 2.1.3 . Send photographer / videographer, if safe. Use of dispersants requires Federal or State approval.	<input type="checkbox"/>
Land-based Spills: Initiate spill tracking and surveillance, if applicable.	<input type="checkbox"/>
SECONDARY RESPONSE ACTIONS (Refer to SMT job descriptions in SECTION 4.6)	
FACILITY-SPECIFIC RESPONSE CONSIDERATIONS (Refer to SECTION 6 for maps, tactical plans, and sensitivity information.)	

SITE SPECIFIC ACTIONS	
DOCUMENT ALL ACTIONS TAKEN	
First Priority	
Account for all personnel and visitors.	<input type="checkbox"/>
Identify and assess fire/safety hazards.	<input type="checkbox"/>
Second Priority	

Secure spill source, if possible.	<input type="checkbox"/>
Assure all required notifications are conducted.	<input type="checkbox"/>
Secure all drainage leading from Facility.	<input type="checkbox"/>
Third Priority	
The facilities truck unloading station and the large tank storage area?s drainage and secondary containment is adequate to contain a spill of small or medium size, preventing it from reaching the Mississippi River. Once the spill has been contained, resources are present at the Facility to recover spilled product safety conditions permitting and if required support from the OSRO?s will be used to recover released product.	<input type="checkbox"/>
<p>Truck unloading Site Spill</p> <p>Shutdown unloading immediately. Shut the source of the spill off if safe to do.</p> <p>Use sorbents to help contain spilled oil.</p> <p>Place sand bags and sorbents around the storm water drains if threatened by flow.</p> <p>Follow spill notification process. OSRO response will be initiated for support and clean up.</p> <p>Trench an area to change/contain the flow if required.</p> <p>The OSRO will remove contaminated soil and dispose of it in accordance with state regulations.</p>	<input type="checkbox"/>
<p>Tank Storage Area---Small/medium Spill</p> <p>Shut the source of the spill off if safe to do.</p> <p>Use sorbents to help contain spilled oil if small spill/leak.</p> <p>Follow the spill notification process. The OSRO response will be initiated for support and clean up.</p> <p>The OSRO will remove contaminated soil and dispose of it in accordance with state or federal regulations.</p> <p>For a Large Spill follow the spill notification process.</p> <p>The OSRO response will be initiated for response and clean up.</p> <p>The OSRO will remove contaminated soil and dispose of it in accordance with state or federal regulations.</p>	<input type="checkbox"/>
<p>Dock Area ---Small/medium Spill</p> <p>Shut the source of the spill off, if safe to do.</p>	

Use sorbents to help contain spilled oil if small spill/leak.	<input type="checkbox"/>
Follow the spill notification process. The OSRO response will be initiated for response and cleanup.	<input type="checkbox"/>
Large Spill- Follow the spill notification process.	
The OSRO response will be initiated for response, clean up and disposal.	
Once deployment of response equipment has been completed, initiate recovery of product.	<input type="checkbox"/>
Upon arrival of SMT, assure all information is accurate and complete prior to being released.	<input type="checkbox"/>
Assure proper documentation has been completed from initial discovery of spill to finish; reference SECTION 5 .	<input type="checkbox"/>

2.1.1 Spill Detection and Mitigation Procedures

See **APPENDIX D.3** for spill detection protocols.

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 D**.

FIGURE 2.1-2 - SPILL MITIGATION PROCEDURES

TYPE	MITIGATION PROCEDURE
Failure of Transfer Equipment	<ol style="list-style-type: none"> 1. Personnel safety is the first priority. Evacuate nonessential personnel or personnel at high risk. 2. Terminate transfer operations and close block valves. 3. Drain product into containment areas (if possible). 4. Eliminate sources of vapor cloud ignition by shutting down all engines and motors.
Tank Overfill/Failure	<ol style="list-style-type: none"> 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. Shut down source of vapor cloud ignition by shutting down all engines and motors. 4. Ensure that dike discharge valves are closed. 5. Transfer fluid to another tank with adequate storage capacity (if possible). 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)	<ol style="list-style-type: none"> 1. Personnel safety is the first priority. Evacuate nonessential personnel or personnel at high risk. 2. Shut down pumps. Close the closest block valves on each side of the rupture. 3. Drain the line back into contained areas (if possible). Alert nearby personnel of potential safety hazards. 4. Shut down source of vapor cloud ignition by shutting down all engines and motors. 5. If piping is leaking and under pressure, relieve pressure by draining into a containment area or back to a tank (if possible). Then repair line according to established procedures.
Fire/Explosion	<ol style="list-style-type: none"> 1. Personnel safety is the first priority. Evacuate nonessential personnel or personnel at risk of injury. 2. Notify local fire and police departments. 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). 5. Eliminate sources of vapor cloud ignition by shutting down all engines and motors. 6. Control fire before taking steps to contain spill. <p>Also refer to fire/explosion response procedures in <u>SECTION 2.7</u>.</p>
Manifold Failure	<ol style="list-style-type: none"> 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 block valves on both sides of the leak/rupture. 4. Shut down source of vapor cloud ignition by shutting down all engines and motors. 5. Drain fluids back into containment areas (if possible).

2.1.2 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.
- All surveillance should be done upwind of the spill.
- 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 is best accomplished through the use of helicopters or small planes; helicopters are preferred 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.
- All observations should be documented in writing and with photographs and/or videotapes.
- 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.
- Record aerial observations on detailed maps, such as topographic maps.
- In the event of reduced visibility, such as dense fog or cloud cover, boats may have to be used to patrol the area and to document the location and movements of the spill; however, this method may not be safe if the spill involves a highly flammable product.
- Surveillance also is required during spill response operations to gauge the effectiveness of response operations; to assist in locating 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):
Time:	On-scene weather (wind, sea state, visibility):
Incident name:	Platform (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 or land spaces, shallow water areas):
Oil Observations	
Slick location(s):	Color and appearance (i.e., rainbow, dull or silver sheen, black or brown in color or mousse):
Slick dimensions:	Percent coverage:
Orientation of slick(s):	Is oil recoverable (Y/N)?:
Distribution of oil (i.e., windrows, streamers, pancakes or patches):	
Considerations	
<ul style="list-style-type: none"> • 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

2.1.3 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.

Some rapid methods to estimate spill size are:

- Transfer operations: Multiply the pumping rate by the elapsed time that the leak was in progress, plus the drainage volume of the line between the two closest valves or isolation points (volume loss = pump rate [bbls/min] x elapsed time [min] + line contents [bbl]).
- Tank overfills: Elapsed time multiplied by the pumping rate.
- 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

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

2.1.4 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

2.1.5 Initial Containment Actions

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

- Prevent the oil from impacting water, thereby reducing 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, and
- Oil's characteristics.

2.1.6 Safety Considerations

- Containment actions should not be conducted during inclement weather or unsafe conditions, such as high winds, fast currents, or unstable terrain.
- Eliminate all ignition sources.
- Avoid contact with the spilled product.
- Use respiratory protection (if trained to do so).
- Ensure that the area remains secure to air/boat/vehicular traffic.

2.2 EVACUATION

EVACUATION CHECKLIST	
TASK	
Request assistance from off-site response organizations; convey Command Post's location. Notify appropriate agencies (if appropriate).	<input type="checkbox"/>
Assemble personnel at predetermined safe location: upwind/up gradient of release (assembly area).	<input type="checkbox"/>
Account for Company and contractor personnel.	<input type="checkbox"/>
Assess casualties (number/type/location).	<input type="checkbox"/>
Determine probable location of missing personnel.	<input type="checkbox"/>
Secure site, establish re-entry point and check-in/check-out procedures.	<input type="checkbox"/>
Develop list of known hazards (confined spaces, electrical hazards, physical hazards, vapors, oxygen deficiency, fire/explosion, etc.).	<input type="checkbox"/>
Monitor situation (weather, vapors, product migration) for significant changes.	<input type="checkbox"/>
Assist in developing a Rescue Plan, if necessary.	<input type="checkbox"/>

2.2 EVACUATION, CONTINUED

EVACUATION FACTORS	
FACTOR	DESCRIPTION
Stored material location	<ul style="list-style-type: none"> • Located in oil storage area • Identified in facility Plot Plan (FIGURE C-7)
Spilled material hazards	<ul style="list-style-type: none"> • Hazard is fire/explosion
Water currents, tides, or wave conditions	<ul style="list-style-type: none"> • N/A
Evacuation routes	<ul style="list-style-type: none"> • Routes are summarized on Evacuation Plan Diagram (FIGURE C-8) • Criteria for determining safest evacuation routes from facility may include: wind direction, potential exposure to toxins and carcinogens, intense heat, potential for explosion/fire, and blockage of planned route by fire, debris, or released liquid
Alternate evacuation routes	<ul style="list-style-type: none"> • Alternate routes may exist; refer to Evacuation Plan Diagram (FIGURE C-8)
Injured personnel transportation	<ul style="list-style-type: none"> • Emergency vehicles can be mobilized to the facility (FIGURE 3.1-4)
Alarm/Notification system location	<ul style="list-style-type: none"> • Control building on site and control center in Houston, TX
Community evacuation plans	<ul style="list-style-type: none"> • Company may request local police, county sheriff, and/or state police assistance (FIGURE 3.1-4). Community evacuations are the responsibility of these agencies.
Spill flow direction	<ul style="list-style-type: none"> • South toward the Mississippi River • Identified in Facility Drainage Diagram (APPENDIX C)
Prevailing wind direction and speed	<ul style="list-style-type: none"> • East Southeast at 8 mph (November 1998 Climatic Wind Data for Baton Rouge, LA according to the National Climatic Data Center) • Because wind direction varies with weather conditions, consideration for evacuation routing will depend in part on wind direction

Emergency personnel/response equipment arrival route	<ul style="list-style-type: none"> • Highway 64 to Highway 61 to private land on the left. • Directions to nearest medical facility provided below
--	--

2.2 EVACUATION, CONTINUED

EVACUATION FACTORS	
FACTOR	DESCRIPTION
Centralized check-in area	<ul style="list-style-type: none"> • Field East of the facility • Supervisor is responsible for head count
Mitigation Command Center location	<ul style="list-style-type: none"> • Initial Command Center located at • Trucking facility • Mobile Command Posts may be established as necessary
Facility Shelter Location	<ul style="list-style-type: none"> • Control building • Not a safe harbor from fires, explosions, vapor clouds, or other significant emergencies; however, may be used for temporary shelter from inclement weather
Directions to nearest medical facility	<p>Directions to Lane Memorial :</p> <ul style="list-style-type: none"> • Take HWY 61 South to Mt. Pleasant - Zachary Rd / LA 64. Slight Right on to High Street, Left onto Main Street.

2.3 TORNADO

TORNADO CHECKLIST	
TASK	
<p>Monitor news media reports (FIGURE 3.1-4).</p> <ul style="list-style-type: none"> • Tornado watch means conditions are favorable for tornadoes. • Tornado warning means a tornado has been sighted. 	<input type="checkbox"/>
<p>When a tornado warning is issued, sound the local alarm. Notify off-site personnel of the situation (Control Center or Regional Management).</p>	<input type="checkbox"/>

Take shelter: <ul style="list-style-type: none"> Go to an interior room on the lowest floor. Get under a sturdy piece of furniture or solid structure. Use your arms to protect head and neck. 	<input type="checkbox"/>
Have location personnel report to the designated area.	<input type="checkbox"/>
Account for all personnel on duty.	<input type="checkbox"/>
Look for funnel formations on the ground or in the clouds; listen for a roar that sounds like a jet aircraft or rail traffic.	<input type="checkbox"/>
If the facility is damaged by the tornado, notify Management.	<input type="checkbox"/>
Go to the scene of the incident to evaluate the situation. <ul style="list-style-type: none"> Be aware of broken glass and downed power lines. Assess the area for damaged equipment or product releases. Check for injuries. Use caution entering a damaged building. 	<input type="checkbox"/>
Update Supervisory Personnel/Management.	<input type="checkbox"/>
Conduct post-emergency evaluation and report.	<input type="checkbox"/>

2.4 FLOOD

FLOOD CHECKLIST	
TASK	
Perform continuous monitoring of the situation by listening to radio and/or television reports (FIGURE 3.1-4). <ul style="list-style-type: none"> Flash flood watch means flooding is possible. Flash flood warning means flooding is occurring or is imminent. 	<input type="checkbox"/>
Update Supervisory Personnel when flooding is imminent.	<input type="checkbox"/>
Establish an evacuation plan (SECTION 2.2).	<input type="checkbox"/>
Take preliminary actions to secure the facility before flooding and mandatory evacuation.	<input type="checkbox"/>
Consider having sandbags brought to sites that could be affected by the flooding.	<input type="checkbox"/>
Consider obtaining portable pumps and hoses from local suppliers or from other petroleum service locations in the area.	<input type="checkbox"/>

Remove product from underground storage tanks (i.e., sumps and separators, if applicable) and replace with water to prevent them from floating out of the ground.	<input type="checkbox"/>
If additional new product is available fill each tank to the minimum level necessary to prevent buoyancy in the event of flooding (Rule of thumb is 30% of the safe fill height). If additional product is not available, transfer appropriate product among tanks to prevent buoyance. If minimum levels cannot be reached through product transfer, add water bottoms.	<input type="checkbox"/>
Plug all rack drains and facility drains connected to the sump.	<input type="checkbox"/>
Empty all dikes of water.	<input type="checkbox"/>
Ensure that tank roof drains are working properly.	<input type="checkbox"/>
Anchor all bulk additive tanks, fuel barrels, empty drums, and propane tanks (if applicable).	<input type="checkbox"/>
Notify Supervisory Personnel/Management that the facility will be closed. Customer should be notified.	<input type="checkbox"/>
Back up computer files.	<input type="checkbox"/>
Remove assets such as files, computers, spare parts, and vehicles.	<input type="checkbox"/>
Shut off high voltage power and natural gas lines.	<input type="checkbox"/>
Close all valves on product and additive storage tanks.	<input type="checkbox"/>
Before evacuation, know where all the employees will be residing and obtain phone numbers so they can be contacted if additional emergencies occur.	<input type="checkbox"/>

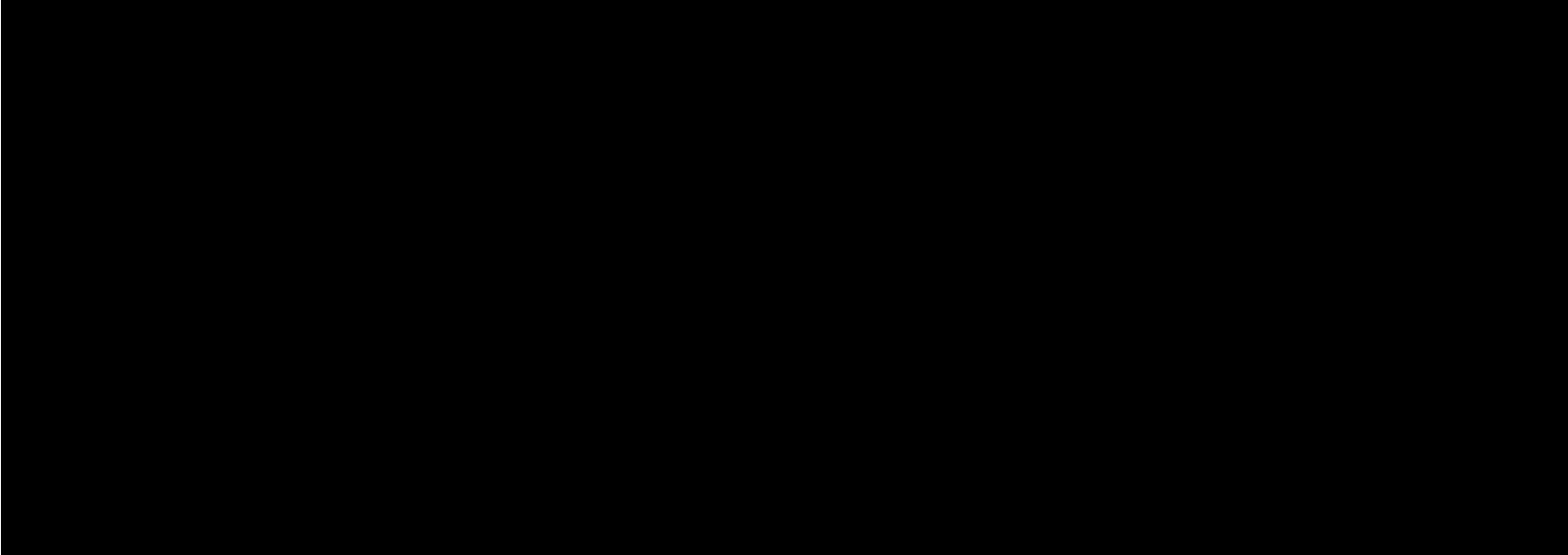
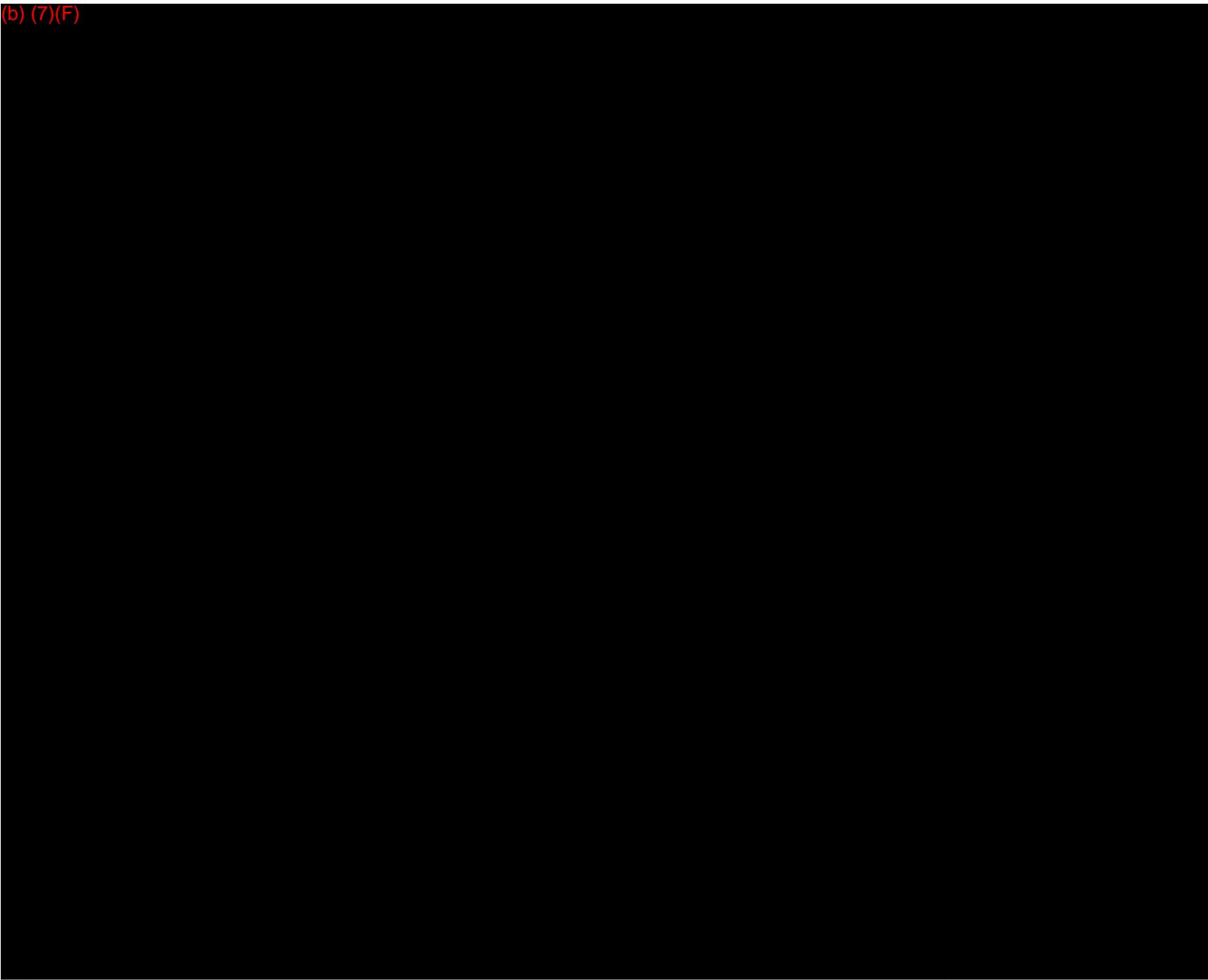
2.4 FLOOD, CONTINUED

FLOOD CHECKLIST	
TASK	
Conduct a post-emergency evacuation and report.	<input type="checkbox"/>
Maintain hazards awareness: <ul style="list-style-type: none"> • Structural damage; • Equipment damage and product releases; • Downed power lines; • Leaking natural gas, water, and sewer lines; • Poisonous snakes and other wildlife sheltering in structures, vehicles, and furniture; and • Avoid direct contact with flood water, mud, and animal carcasses. 	<input type="checkbox"/>

2.5 MEDICAL

MEDICAL CHECKLIST	
TASK	
Summon Emergency Medical Services (EMS) to the scene (FIGURE 3.1-4).	<input type="checkbox"/>
Do not move the patient unless a situation (such as a fire) threatens the patient's life.	<input type="checkbox"/>
If trained, provide appropriate first aid for both injury and shock until the EMS arrives at the scene.	<input type="checkbox"/>
As the situation warrants, try to stop the bleeding and keep the patient breathing until the EMS arrives at the scene.	<input type="checkbox"/>
<p>The rescuer's role includes:</p> <ul style="list-style-type: none"> • 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. 	<input type="checkbox"/>
Notify Supervisory Personnel and/or Regional Management.	<input type="checkbox"/>
Notify victim's immediate family.	<input type="checkbox"/>
Complete follow-up and written reporting, as the situation demands.	<input type="checkbox"/>

(b) (7)(F)



2.7 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.	<input type="checkbox"/>
Notify the local police and fire departments (Dial 911).	<input type="checkbox"/>
Sound the facility alarm and push the red emergency shutdown switch (if equipped).	
Notify Qualified Individual and Operations Control (if applicable).	<input type="checkbox"/>
Appropriately trained personnel may attempt to extinguish the fire if it is in the incipient (early) stage and if it can be done safely .	<input type="checkbox"/>
In the event the fire is too large for an individual to fight alone, the individual sounding the alarm or making the phone call should stand by at a safe distance to direct the fire department to the scene of the fire and keep personnel and vehicles from entering the danger area.	<input type="checkbox"/>
Alert all Facility areas of the exact location and extent of the fire.	<input type="checkbox"/>
Instruct all drivers to discontinue loading, disconnect loading arms, and tell all drivers present to stand by the trucks (if safe to do so) and wait for instructions to remove same to safe area.	<input type="checkbox"/>
Shut off all pumps.	
If the fire/explosion is a result of a pipe rupture, isolate product release by closing valves.	<input type="checkbox"/>
If product is being received from pipeline and or dock, notify the appropriate personnel of the fire and request that the transfer be shut down. The tank which is receiving product from the pipeline must not be closed until assurance is received that the transfer is shut down, unless that tank is on fire.	
After confirmation has been received that pipelines have been shut down, close the pipeline header valves.	<input type="checkbox"/>
Undertake basic site control: <ul style="list-style-type: none"> • Make an assessment of hazards. • Isolate the area. • Keep people away from the scene and outside the safety perimeter. • Establish safety zones and escape routes. 	<input type="checkbox"/>
Respond to the fire: <ul style="list-style-type: none"> • Establish a Command Post and lines of communication. • Maintain site control. • Establish Incident Command/Unified Command as necessary (SECTION 4.4). 	<input type="checkbox"/>

Call in additional resources if on-scene personnel and equipment are inadequate to handle the emergency.	<input type="checkbox"/>
Conduct a post-emergency evaluation and report.	<input type="checkbox"/>

2.7 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.	<input type="checkbox"/>
Notify the local police and fire departments.	<input type="checkbox"/>
Notify Qualified Individual and Operations Control.	<input type="checkbox"/>
Go to the incident scene to evaluate the situation; approach cautiously from upwind; do not rush in.	<input type="checkbox"/>
Undertake basic site control: <ul style="list-style-type: none"> • Make an assessment of hazards. • Isolate the area. • Keep people away from the scene and outside the safety perimeter. • Establish safety zones and escape routes. 	<input type="checkbox"/>
If roads or railroads are in the affected area, assist the sheriff or local emergency officials with halting traffic.	<input type="checkbox"/>
Update the next level manager.	<input type="checkbox"/>
If the fire/explosion is a result of a pipe rupture, isolate the product release by closing valves.	<input type="checkbox"/>
Respond to the fire: <ul style="list-style-type: none"> • Establish a Command Post and lines of communication. • Maintain site control. • Establish Incident Command/Unified Command as necessary (SECTION 4.4). 	<input type="checkbox"/>

Call in additional resources if on-scene personnel and equipment are inadequate to handle the emergency.	<input type="checkbox"/>
Conduct a post-emergency evaluation and report.	<input type="checkbox"/>

2.8 VAPOR CLOUD

VAPOR CLOUD CHECKLIST	
TASK	
The person who discovers the vapor cloud will sound the alarm and notify the supervisor on duty and vacate the area.	<input type="checkbox"/>
Remember: the only proper action in the presence of a vapor cloud is to get away from it. Do not shut off electrical equipment.	<input type="checkbox"/>
All personnel will report to the evacuation muster point for roll call and further instructions.	<input type="checkbox"/>
After all personnel have been accounted for, the Facility Management, the Facility Supervisor, or a Facility Operator will initiate the following actions as deemed necessary: <ul style="list-style-type: none"> • Shut down pipeline. • Evacuate adjacent property. • Only the fire department will be permitted to enter the Facility. 	<input type="checkbox"/>
Contact the appropriate agencies and potentially affected neighbors (refer to FIGURE 3.1-4).	<input type="checkbox"/>

SECTION 3

Last Revised: February 21, 2013

NOTIFICATIONS / TELEPHONE NUMBERS

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3.1 Emergency Information and Notification Procedures**Figure 3.1-1 - Emergency Notification Flow Chart**Figure 3.1-2 - Oil Spill Report FormFigure 3.1-3 - Internal Notifications and Telephone NumbersFigure 3.1-4 - External Notifications and Telephone Numbers

3.1 EMERGENCY INFORMATION AND NOTIFICATION PROCEDURES

The notification sequence for a spill is as follows:

- Incident Observer / First Responder will identify and control the source of a spill, if safe to do so, then will notify the Control Room.
- The Control Room will conduct notifications as illustrated in the Notification Flow Chart (**FIGURE 3.1-1**).

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

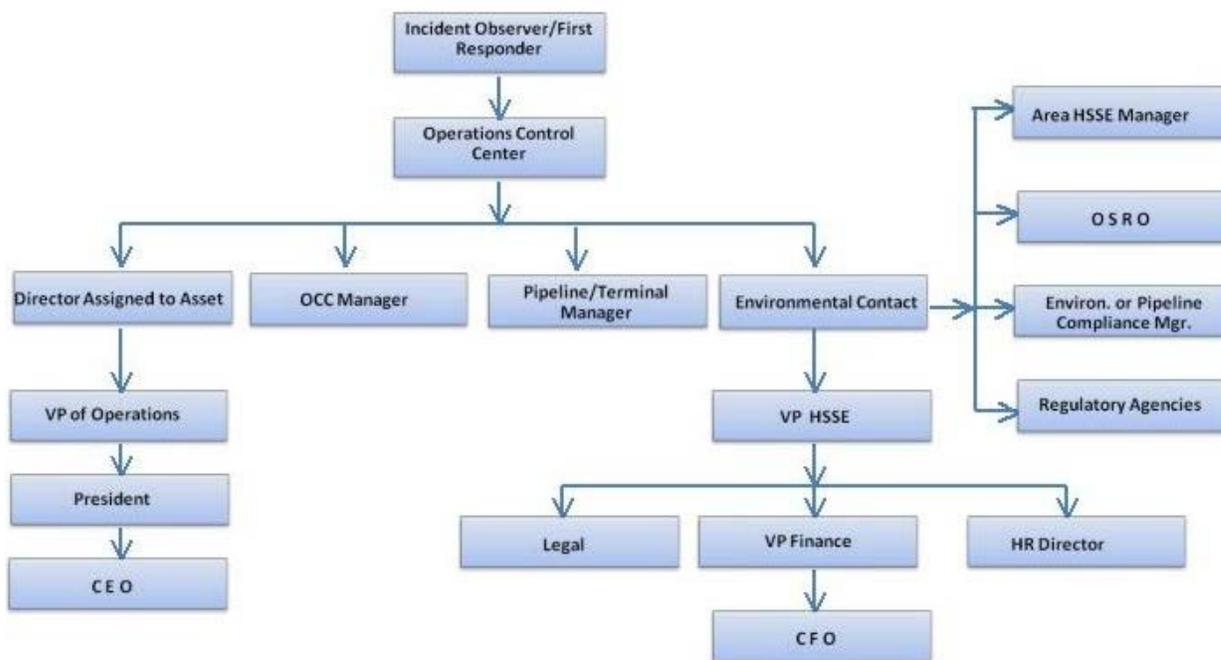
This section also contains the following:

- **FIGURE 3.1-2** provides an Oil Spill Report Form. This form is utilized for initial and follow-up notifications. Follow-up notifications are the responsibility of the Liaison Officer.
- **FIGURE 3.1-3** and **FIGURE 3.1-4** provides a notification summary and documentation form to assist in documenting notifications.

The Company has attempted to make the following arrangements, as appropriate for the type of hazardous waste handled at the terminal and the potential need for the services of these organizations:

- 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;
- 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;
- Agreements with State emergency response teams, emergency response contractors, and equipment suppliers; and
- 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.

FIGURE 3.1-1 - EMERGENCY NOTIFICATION FLOW CHART

**GENESIS EMERGENCY NOTIFICATION
FLOW CHART**

FIGURE 3.1-2 - OIL SPILL REPORT FORM

INVOLVED PARTIES			
Reporting Party		Suspected Responsible Party	
Name:		Name:	
Phone:	(Day)	Phone:	(Day)
	(Evening)		(Evening)
Position:		Company:	
Company:		Organizational Type: <input type="checkbox"/> Private Citizen <input type="checkbox"/> Private Enterprise <input type="checkbox"/> Public Utility <input type="checkbox"/> Local Government <input type="checkbox"/> State Government <input type="checkbox"/> Federal Government	
Address:			
Person Discovering Incident			
Name:			
Company/Organization:			
City:	State:	Zip:	
Were materials released? <input type="checkbox"/> Yes <input type="checkbox"/> No		Calling for Responsible Party <input type="checkbox"/> Yes <input type="checkbox"/> No	
INCIDENT DESCRIPTION			

Date:	Time: <input type="checkbox"/> AM <input type="checkbox"/> PM	Weather:	
Incident Address/Location:		Latitude: _____ degrees _____ min _____ sec N	
		Longitude: _____ degrees _____ min _____ sec W	
Mile Post/River Marker:			
City/County:		Distance from City:	
State:		Direction from City:	
Source and Cause of Incident:			
Storage Tank Type: <input type="checkbox"/> Above Ground <input type="checkbox"/> Below Ground <input type="checkbox"/> Unknown			
Tank Capacity:		Facility Capacity:	
MATERIAL INFORMATION			
CHRIS Code	Product Released	Released Quantity (Include units of measure)	Quantity in Water (Include units of measure)

Note: Refer to the Incident Database for spill history and spill reporting.

*** INITIAL NOTIFICATION SHOULD NOT BE DELAYED PENDING COLLECTION OF ALL INFORMATION**

FIGURE 3.1-2 - OIL SPILL REPORT FORM, CONTINUED

INITIAL IMPACT	
Number of Injuries:	Number of Deaths:
Were there Evacuations? <input type="checkbox"/> Yes <input type="checkbox"/> No	Number Evacuated:
Was there any Damage? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Damage in dollars (estimate):	
Is the Spill Contained within the boundaries of the facility? <input type="checkbox"/> Yes <input type="checkbox"/> No	

Direction of Flow:

RESPONSE ACTION(S)

Action(s) Taken to Correct, Control or Mitigate Incident:

ADDITIONAL INFORMATION

Any information about the incident not recorded elsewhere in the report (e.g., duration of spill, treatment or disposal measures).

COMPLETED NOTIFICATIONS

Report	Phone Number	Date	Case Number	Time	Name	Title
NRC <input type="checkbox"/>	(800) 424-8802*					

Note: Refer to the Incident Database for spill history and spill reporting.

*** INITIAL NOTIFICATION SHOULD NOT BE DELAYED PENDING COLLECTION OF ALL INFORMATION**

FIGURE 3.1-3 - 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

FACILITY RESPONSE TEAM		
NAME/TITLE	PHONE NUMBER	RESPONSE TIME (hours)
Clint Murray Port Hudson Supervisor Louisiana IC Primary Qualified Individual	(225) 654-0085 (Office) (b) (6) (225) 993-2364 *(Mobile)	0.75
John Mansur Terminal Operator operation Support	(225) 654-0085 (Office) (b) (6) (225) 993-2065 *(Mobile)	1

Refer to **APPENDIX A, FIGURE A.2-3** for personnel training records

FIGURE 3.1-3 - INTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS,
CONTINUED

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

*24-Hour Number

EMERGENCY RESPONSE PERSONNEL AND BUSINESS UNIT NOTIFICATIONS						
NAME/TITLE	PHONE NUMBER	RESPONSE TIME (hours)	ICS POSITION	RESPONSE TRAINING TYPE ¹		
				1	2	3
Tom Boyd Pipeline Operations Manager (USA) MS Alternate Qualified Individual	(601) 729-3587 (Office) (b) (6) (601) 319-4004 *(Mobile)			X	X	X
Genesis Control Room Pipeline Emergency	(800) 806-5463/(713) 849-5928 (Office) (713) 875-2042 *(Mobile)					
Chris Kuhn	(713) 860-2754 (Office)					

Control Center Supervisor	(713) 545-2984 *(Mobile)			x	x	x
Bruce McElheny Environmental Compliance	225-216-5909 (Office) (b) (6) 225-281-7740 *(Mobile)		Logistics Section Chief	x	x	x
Dean Duplantis Environmental Specialist	(832) 280-3013 (Office) (281) 900-4077 *(Mobile)				x	x
Steve Hinton HSSE Manager	(318) 242-5283 (Office) (b) (6) (318) 548-2419 *(Mobile)			x	x	x
Trey Fegley Director of Optimization	(318) 607-4177 *(Mobile)		TPT Operations Section Chief			
Kristi Unzicker Manager Environmental and Marine Compliance	(713) 860-2606 (Office) (b) (6) (832) 506-5903 *(Mobile)		Planning Section Chief	x	x	x
John Jewett Manager, DOT Compliance and Security	713-860-2605 (Office) (713) 292-3881 *(Mobile)		Liaison Officer			
Mike Moore Vice President and General Manager of Pipelines and Transportation	(713) 860-2760 (Office) (832) 250-0348 *(Mobile)			x	x	x

EMERGENCY RESPONSE TRAINING TYPE¹

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, SMT, QI Components
3	Qualified Individual/Incident Command Training

Note: Refer to **APPENDIX A** for training dates.

FIGURE 3.1-3 - INTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS,
CONTINUED

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

*24-Hour Number

EMERGENCY RESPONSE PERSONNEL AND BUSINESS UNIT NOTIFICATIONS						
NAME/TITLE	PHONE NUMBER	RESPONSE TIME (hours)	ICS POSITION	RESPONSE TRAINING TYPE ¹		
				1	2	3
Jeff Gifford VP HSSE	713-860-2542 (Office) 281-753-8891 *(Mobile)		Incident Commander			
Steve Nathanson President/COO	(713) 860-2660 (Office) (225) 603-8220 *(Mobile)					
Grant Sims Chief Executive Officer	(713) 860-2525 (Office) (b) (6) (713) 253-2684 *(Mobile)					
Bob Deere CFO	(713) 860-2516 (Office) (b) (6) (713) 392-2330 *(Mobile)					
	(713) 860-2926 (Office)					

Karen Pape Corp. Controller/Exec. V.P.	(b) (6) [REDACTED] (713) 304-3287 *(Mobile)					
Kristen Jesulaitis General Counsel	(713) 860-2684 (Office) (b) (6) [REDACTED] (281) 753-8891 *(Mobile)					
Kathy Vicory Director of Human Resources	(713) 860-2546 (Office)					

EMERGENCY RESPONSE TRAINING TYPE¹

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.

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FIGURE 3.1-3 - INTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED

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

*24-Hour Number

EMERGENCY RESPONSE CONTRACTORS						
NAME/TITLE	PHONE NUMBER	RESPONSE TIME (hours)	RESPONSIBILITY DURING RESPONSE ACTION	RESPONSE TRAINING TYPE ¹		
				1	2	3
Clean Harbors Environmental Services Inc.	(800) 645-8265*			x	x	

OMIES	(800) 645-6671*	1	Support-Clean-up-disposal	x	x	x
U.S. Environmental Services, LLC.	(888) 279-9930* 225-673-4200	1	Support-Clean-up-disposal	x		
ES&H	(877) 437-2634	1.5	Clean up	x	x	x

EMERGENCY RESPONSE TRAINING TYPE¹

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, SMT, QI Components
3	Qualified Individual/Incident Command Training

Note: Refer to **APPENDIX A** for training dates.

FIGURE 3.1-4 - 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	(800) 424-8802* (202) 267-2180 (202) 267-1322 (fax)	
Recommended		
Federal Agencies		
EPA Region VI Spill Hotline	(866) 372-7745*	
U.S. Coast Guard - 8th District - COTP New Orleans	(504)365-2542 emergency 24/7	
State Agencies		
Louisiana Department of Environmental Quality Single Point of Contact	(225) 219-3640	

Louisiana Office of Fire Marshal	(225) 925-4911	
Louisiana State Police - Spill/Emergency Reporting	(225) 925-6595*	
Water Intake notification	225-342-7521 225-342-7148	
Louisiana Department of Health and Hospitals Office of Public Health Center for Environmental Health Services		
Local Agencies		
L E P C	(225) 389-2100	
Fire Departments		
Baton Rouge Fire	(225) 389-4600 911*	
Emergency Medical Services		
East Baton Rouge EMS	225-389-3300 911*	
Hospitals		
Lane Regional Medical Center	(225) 658-4335 emergency	
Law Enforcement		
Baton Rouge Police	(225) 389-2000 911*	
USCG CLASSIFIED OSRO		
Clean Harbors Environmental Services Inc.	(800) 645-8265*	
ES&H	(877) 437-2634	
OMIES	(800) 645-6671*	

FIGURE 3.1-4 - EXTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS ,
CONTINUED

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		
USCG CLASSIFIED OSRO		
U.S. Environmental Services, LLC.	(888) 279-9930* 225-673-4200	
Radio Stations		
KRVE (96.1 FM)	(225)499-9610	
WDGL (98.1 FM)	(225) 388-9898	
WJBO (1150 AM)	225-231-1860	
Television Stations		
9 WAFB	225-215-4800	
WBRZ (Ch. 2)	225.387.2222	
Transport Companies		
The Port of Greater Baton Rouge	225-342-5378 24 Hour	
Water Intakes		
Dow Chemical	(225) 685-2369	
Exxon-Refinery Superintent	225-977-7641*	
Honeywell	(225) 642-8311	
Weather		
National Weather Service, New Orleans/Baton Rouge Forecast Office	(504) 522-7330 (985) 649-0357	

SECTION 4

Last Revised: February 2009

RESPONSE TEAM ORGANIZATION

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4.1 Description4.2 Activation Procedures4.3 Team Member Response Times4.4 Incident Command System / Unified Command4.5 Qualified Individual (QI)Figure 4.5-1 - Spill Management Team (SMT) Activation ProcedureFigure 4.5-2 - Spill Management Team (SMT) Organization Chart4.6 Spill Management Team (SMT) Job Descriptions and Guidelines

4.1 DESCRIPTION

The Company has developed its emergency response organization around the Incident Command System (ICS), which provides the structure for effective management of response resources. The Spill Management Team (SMT) has been created and organized to plan for and manage oil spills and other emergencies.

The SMT is composed of Company personnel from offices within the Area. Additional personnel from outlying offices can be used (if needed). The SMT 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 SMT will handle all communications with the media and the public. Job descriptions for each SMT member are provided in **SECTION 4.6**. The SMT will train by participating in exercises as noted in APPENDIX A.

4.2 ACTIVATION PROCEDURES

Activation of the SMT may be accomplished in stages. Initially, the First Responder assumes the role of Incident Commander (IC). During a spill incident, the initial IC may be able to respond without assistance from the SMT. If the situation requires more resources, he may request additional personnel or management support from the SMT. This request is made to the Qualified Individual (QI). Depending on the situation, the QI may then assume the role of Incident Commander. The QI would then call out the other SMT members. The SMT activation procedure is provided in FIGURE 4.5-1.

4.3 TEAM MEMBER RESPONSE TIMES

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

4.4 INCIDENT COMMAND SYSTEM / UNIFIED COMMAND

The Incident Command System (ICS) will be used by the Company SMT for spill response. The SMT organization chart is provided in FIGURE 4.5-2. The organization can be expanded or contracted as necessary. If an OSRO or other contractor is used to staff ICS positions for the Spill Management Team, the commitment will be specified in writing.

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

- Federal On-Scene Coordinator (FOSC)
- State On-Scene Coordinator (SOSC)
- Company Incident Commander

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 Spill Management Team. Refer to **SECTION 4.6** for detailed checklists of the SMT roles and responsibilities as well as organizational interfaces with external parties.

4.5 QUALIFIED INDIVIDUAL (QI)

The Qualified Individual (QI) is an English-speaking representative, available on a 24-hour basis, and trained in the responsibilities outlined in this section. The QI has the following responsibilities and authorities as required by the Oil Pollution Act of 1990 (OPA 90):

- Activate internal alarm and hazard communication systems to notify all appropriate personnel.
- Notify all response personnel and contractors (as needed).
- Identify the character, exact source, amount, and extent of the release and other necessary items needed for notifications.
- Notify and provide information to appropriate federal, state, and local authorities.
- Assess the interaction of the spilled substance with water and/or other substances stored at the facility and notify on-scene response personnel of assessment.
- Assess possible hazards to human health and the environment.
- Assess and implement prompt removal actions.
- Coordinate rescue and response actions.
- Access Company funds to initiate cleanup activities.
- Direct cleanup activities until properly relieved of the responsibility or the incident is terminated.

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

FIGURE 4.5-1 - SPILL MANAGEMENT TEAM (SMT) ACTIVATION PROCEDURE

GENESIS EMERGENCY NOTIFICATION FLOW CHART

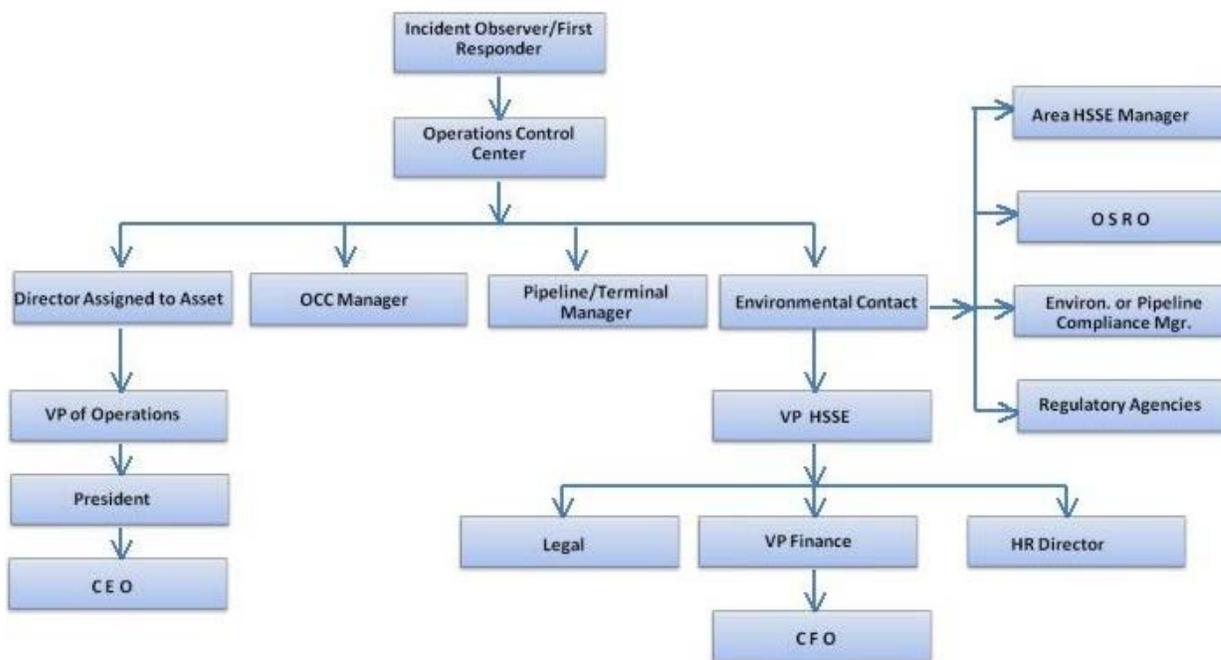
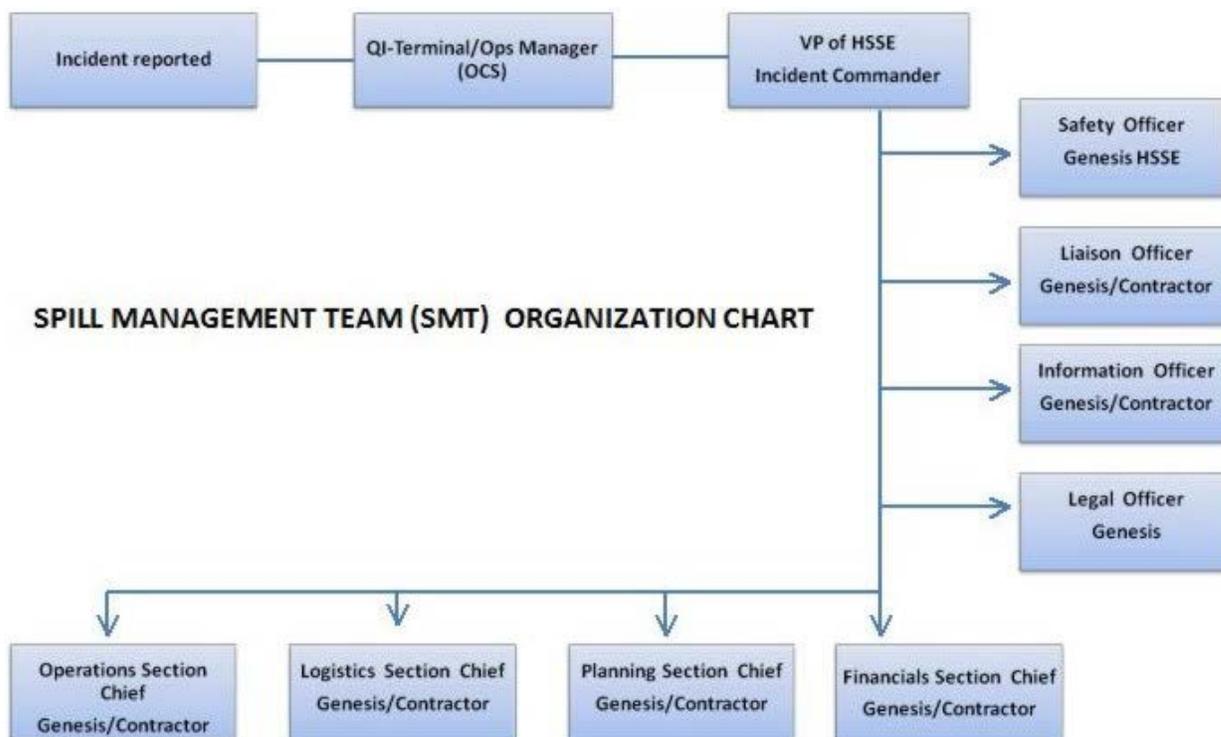


FIGURE 4.5-2 - SPILL MANAGEMENT TEAM (SMT) ORGANIZATION CHART

[\(Click here for larger view\)](#)



4.6 SPILL MANAGEMENT TEAM (SMT) JOB DESCRIPTIONS AND GUIDELINES

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

- Incident Commander
- Safety Officer
- Operations Chief
- Planning Chief
- Logistics Chief
- Finance Chief
- Information Officer
- Liaison Officer

INCIDENT COMMANDER

The Incident Commander (IC) manages all activities related to an emergency response and acts as Qualified Individual (QI). As such, the IC needs to be familiar with the contents of the Facility Response Plan (FRP), Oil Spill Response Plan (OSRP), Emergency Response Action Plan (ERAP), and the Spill Prevention Control and Countermeasure Plan (SPCC). The IC must also be familiar with the operation of the Incident Command System (ICS) and the Unified Command Structure (UCS).

The primary goal of this system is to establish and maintain control of the emergency response. If the emergency involves a multi-jurisdictional response (Federal and State), the Unified Command Structure (UCS) should be established. **Realize that the Federal On-Scene Coordinator (FOSC) does have the authority to override the Incident Commander and assume control of the response.** Every effort should be made to establish a collaborative relationship to manage the incident site with the appropriate responding agencies.

As soon as possible but not later than one (1) week following an incident, the Incident Commander shall conduct a critique of the response and follow-up of action items. Participants shall include Operations Control personnel, Company supervisors, and employees and outside agencies involved in the response. An Incident Debriefing Form is provided in **FIGURE 8.3-1**.

Responsibilities:

- Maintain Activity Log.
- Establish Incident Command/Unified Command Post.
- Activate necessary section(s) of the Incident Command System (ICS) to deal with the emergency. Fill out the appropriate section(s) of the Incident

Command organization chart and post it at the Incident Command Center.

- Develop goals and objectives for response.
- Work with Safety Officer and Planning Section Chief to develop a Site Safety Plan (SSP).
- Approve, authorize, and distribute Incident Action Plan (IAP) and SSP.
- Conduct planning meetings and briefings with the section chiefs.
- As Qualified Individual coordinate actions with Federal On-Scene Coordinator (FOSC) and State On-Scene Coordinator (SOSC).
- In a multi-jurisdictional response, ensure that all agencies are represented in the ICS.
- Coordinate and approve media information releases with the FOSC, SOSC, and Public Information Officer (PIO).
- Keep management informed of developments and progress.
- Authorize demobilization of resources as they are no longer needed.
- Complete Standard Incident Debriefing Form (**FIGURE 8.3-1**).

SAFETY OFFICER

The Safety Officer is responsible for assessing and monitoring hazardous and unsafe situations at the emergency response site(s). The Safety Officer must develop measures that assure the safety of the public and response personnel. This involves maintaining an awareness of active and developing situations, ensuring the preparation and implementation of the Site Safety Plan (SSP) and assessing safety issues related to the Incident Action Plans (IAP).

Responsibilities:

- Maintain Activity Log.
- Obtain briefing from Incident Commander (IC).
- Develop, implement, and disseminate SSP with IC and section chiefs.
- Participate in planning meetings and briefings.
- Establish safety staff if necessary.
- Identify emergency contact numbers. Fill out emergency contact chart and post in the Incident Command Center.
- Conduct safety briefings with all emergency responders.
- Investigate accidents that have occurred during emergency response.
- Ensure proper hazard zones are established.
- Ensure all emergency responders have appropriate level of training.
- Ensure proper Personal Protective Equipment (PPE) is available and used.
- Advise Security/Medical Group Leader concerning PPE requirements.

- Ensure emergency alarms/warning systems are in place as needed.
- Participate in Post Incident Review (**SECTION 8.3**).

OPERATIONS CHIEF

The Operations Chief is responsible for the management of all operations applicable to the field response and site restoration activities. Operations directs field activities based on the Incident Action Plan (IAP) and Site Safety Plan (SSP).

Responsibilities:

- Maintain Activity Log.
- Obtain briefing from Incident Commander (IC).
- Participate in Incident Command planning meetings and briefings.
- Conduct planning meetings and briefings for Operations Section.
- Develop operations portion of IAP.
- Supervise the implementation of the IAP.
- Make or approve expedient changes to the IAP.
- Request resources needed to implement IAP.
- Approve list of resources to be released.
- Ensure safe tactical operations.
- Establish a staging area for personnel and equipment.
- Confirm first responder actions.
- Confirm the completion of rescue/evacuation and administering of first aid.
- Confirm site perimeters have been established.
- Coordinate activities of public safety responders, contractors, and mutual assistance organizations.
- Participate in Post Incident Review (**SECTION 8.3**).

PLANNING CHIEF

The Planning Chief is responsible for collecting, evaluating, and disseminating information related to the current and future events of the response effort. The Planning Chief must understand the current situation; predict the future course of events; predict future needs; develop response and cleanup strategies; and review the incident once complete.

The Planning Chief must coordinate activities with the Incident Commander (IC) and other Chiefs to ensure that current and future needs are appropriately handled.

Responsibilities:

- Maintain Activity Log.
- Obtain briefing from the IC.
- Establish and maintain communication with IC and other Section Chiefs.
- Advise IC on any significant changes of incident status.
- Conduct planning meetings and briefings for Planning section.
- Coordinate and provide input to the preparation of the Incident Action Plan (IAP).
- Participate in Incident Command planning meetings and briefings.
- In a multi-jurisdictional response, ensure that all agencies are represented in the Planning Section.
- Coordinate future needs for the emergency response.
- Determine response personnel needs.
- Determine personnel needs and request personnel for Planning section.
- Assign technical specialists (archaeologists, historians, biologists, etc.) where needed.
- Collect and analyze information on the situation.
- Assemble information on alternative response and cleanup strategies.
- Ensure situation status unit has a current organization chart of the Incident Command Organization.
- Provide periodic spill movement/migration prediction.
- Participate in Post Incident Review (**SECTION 8.3**).

LOGISTICS CHIEF

The Logistics Chief is responsible for procuring facilities, services, and material in support of the emergency response effort.

Responsibilities:

- Maintain Activity Log.
- Obtain briefing from the Incident Commander (IC).
- Participate in Incident Command planning meetings and briefings.
- Conduct planning meetings and briefings for Logistics section.
- Participate in the preparation of the Incident Action Plan (IAP).
- Identify service and support requirements for planned operations.
- Identify sources of supply for identified and potential needs.
- Advise IC on current service and support requirements.

- Procure needed materials, equipment and services from sources by means consistent with the timing requirements of the IAP and Operations.
- Ensure all purchases are documented.
- Participate in Post Incident Review (**SECTION 8.3**).

FINANCE CHIEF

The Finance Chief is responsible for accounting, legal, right-of-way and risk management functions that support the emergency response effort. In this role, the primary responsibility is supporting the Command Staff and Logistics Section matters pertaining to expenses during and following the emergency response.

Responsibilities:

- Maintain Activity Log.
- Obtain briefing from Incident Commander (IC).
- Participate in Incident Command planning meetings and briefings.
- Conduct planning meetings and briefings for Finance section.
- Participate in preparation of the Incident Action Plan (IAP).
- Participate in planning meetings.
- Participate in Unified Command System (UCS) as incident warrants.
- Request assistance of corporate accounting, legal, right-of-way or risk management as needed.
- Assist with contracting administration.
- Participate in Post Incident Review (**SECTION 8.3**).

INFORMATION OFFICER

The Information Officer (IO) provides critical contact between the media/public and the emergency responders. The IO is responsible for developing and releasing information about the incident to the news media, incident personnel, appropriate agencies and public. When the response is multi-jurisdictional (involves the federal and state agencies), the IO must coordinate gathering and releasing information with these agencies.

The IO needs to communicate that the Company is conducting an effective response to the emergency. The IO is responsible for communicating the needs and concerns of the public to the Incident Commander (IC).

Responsibilities:

- Maintain Activity Log.
- Obtain briefing from IC.
- Participate in all planning meetings and briefings.
- Obtain outside information that may be useful to incident planning.
- Develop goals and objectives regarding public information.
- Arrange for necessary workspace, materials, telephones and staffing for Public Information Center (PIC).
- Establish a PIC, ensuring all appropriate agencies participate.
- Provide a single point of media contact for the IC.
- Coordinate media access to the response site as approved by the IC.
- Obtain approval for release of information from the IC.
- Arrange for meetings between media and emergency responders.
- Maintain list of all media present.
- Participate in Post Incident Review (**SECTION 8.3**)

LIAISON OFFICER

If a Unified Command Structure is not established, a Liaison Officer is appointed as the point of contact for personnel assigned to the incident from assisting or cooperating agencies.

Responsibilities:

- Maintain Activity Log.
- Obtain briefing from Incident Commander (IC).
- Participate in planning meetings and briefings.
- Identify and maintain communications link with agency representatives, assisting, and coordinating agencies.
- Identify current or potential inter-organizational issues and advise IC as appropriate.
- Coordinate with Legal Group Leader and Public Information Officer (PIO) regarding information and documents released to government agencies.
- Participate in Post Incident Review (**SECTION 8.3**).

SECTION 5
INCIDENT PLANNING

Last Revised: February 2009

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5.1 Documentation Procedures

5.2 Incident Action Plan Process and Meetings

Figure 5.2-1 Operational Period Planning Cycle

5.2.1 Incident Occurs / Notifications

5.2.2 Initial Response and Assessment

5.2.3 Unified Command Objectives Meeting

5.2.4 Tactics Meeting

5.2.5 Planning Meeting

5.2.6 Incident Action Plan (IAP) Preparation and Approval

5.2.7 Operations Briefing

5.2.8 Assess Progress

5.2.9 Initial Unified Command Meeting

5.2.10 Command Staff Meeting

5.2.11 Command and General Staff Breakfast / Supper

5.2.12 Business Management Meeting

5.2.13 Agency Representative Meeting

5.2.14 News Briefing

SECTION 5
INCIDENT PLANNING, CONTINUED

5.3 ICS Forms

5.3.1 Incident Briefing ICS 201-OS

5.3.2 Incident Action Plan (IAP) Cover Sheet

5.3.3 Incident Objectives ICS 202-OS

5.3.4 Organization Assignment List ICS 203-OS

5.3.5 Assignment List ICS 204-OS

5.3.6 Communications Plan ICS 205-OS

5.3.7 Medical Plan ICS 206-OS

5.3.8 Incident Status Summary ICS 209-OS

5.3.9 Unit Log ICS 214-OS

5.3.10 Individual Log ICS 214a-OS

5.4 Site Safety and Health Plan

5.5 Decontamination Plan

5.6 Disposal Plan

5.7 Incident Security Plan

5.8 Demobilization Plan

5.1 DOCUMENTATION PROCEDURES

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

costs.

Documentation should begin immediately upon spill notification and continue until termination of all operations. Documentation should include the following:

- Spill origin and characteristics,
- Sampling surveys,
- Photographic surveys,
- Climatological data,
- Labor and equipment accounting, and
- Copies of all logs, contracts, contacts, and plans prepared for the incident.

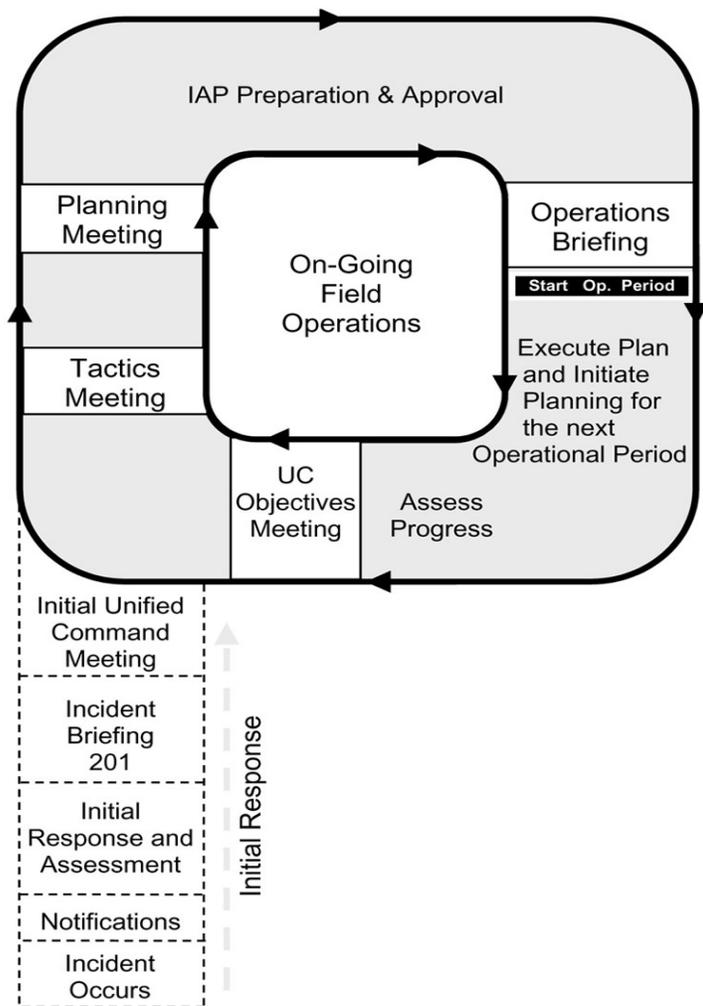
5.2 INCIDENT ACTION PLAN PROCESS AND MEETINGS

The period of INITIAL RESPONSE AND ASSESSMENT occurs in all incidents. Short-term responses (small in scope and/or duration, e.g., few resources working one operational period) often can be coordinated using only ICS 201 Briefings.

Long-term, more complex responses, will likely require a dedicated Planning Section Chief (PSC) who must arrange 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. Only the meetings and events directly relevant to assembling the IAP are described. The IC/UC specifies the operational periods (e.g., 12-hour shifts, sunrise to sunset, 24-hour shifts etc.).

The 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, notifications will be made to the appropriate Federal, State, and Local agencies and the initial assessment and response actions will begin.

5.2.2 Initial Response and Assessment

INCIDENT BRIEFING (ICS 201)

During the transfer of command process, an ICS 201 formatted briefing provides the incoming IC/UC with basic information regarding the incident situation and the resources allotted to the incident. Most importantly, it is the de facto 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 also is suitable for briefing individuals newly assigned to Command and General Staff, as well as 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 for the ICS 202 form. 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 30-45 minute 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 alternatives).
3. 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. Depending on incident complexity, this meeting should last no longer than 45 minutes. This meeting fine-tunes objectives and priorities, identifies and solves problems, and defines work assignments and responsibilities on a completed ICS Form 215 (Operations Planning Worksheet). Meeting preparations include conducting a Tactics Meeting. Displays in the meeting room should include Objectives (ICS 202) for the next operational 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 ICS 215 is used by the Logistics Section Chief to prepare the off-incident tactical and logistical resource orders, and used by Planning Section Chief to develop IAP assignment lists.

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:

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 with Situation Unit Leader, Resources Unit Leader
3. State primary and alternative strategies to meet objectives. Operations Section Chief with 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, with 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]
6.	Incident Map	[Situation Unit Leader]

5.2.6 Incident Action Plan (IAP) Preparation and Approval, Continued

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 less-than-30-minute 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.	[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 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.

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

Coordinate Command Staff functions, responsibilities and objectives. It is scheduled as necessary by the IC/UC. Command Staff (IC/UC, Safety Officer, Liaison Officer, 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 under-30-minute meeting is for participants to develop and update the operating plan for finance and logistics support. 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: Finance/Administration Section Chief, Cost Unit Leader, Logistics Section Chief, Supply Unit Leader, Demobilization Unit Leader. It is generally conducted before the PLANNING MEETING.

5.2.13 Agency Representative Meeting

To update agency representatives and 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 allow for changes should the plan's expectations be unattainable by an agency.

5.2.14 News Briefing

To brief the news media and public on the most current and accurate incident facts. Set up by the Information Officer, moderated by an appropriate representative, and featuring selected spokespersons. Spokespersons should be prepared by the Information Officer to address anticipated issues. The briefing should be well planned, organized, and scheduled to meet the media's needs.

5.3 ICS FORMS

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

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

For use by the Command Staff to gather information on the Spill Management Team's (SMT) 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 must be approved by the Incident Commander, Federal On-Scene Coordinator (FOOSC), 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, and 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 level of Division and Groups.

- **COMMUNICATIONS PLAN - 205**

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

- **MEDICAL PLAN - ICS 206**

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

5.3 ICS FORMS, CONTINUED

All ICS Forms are available electronically via the Forms Navigator.

- **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

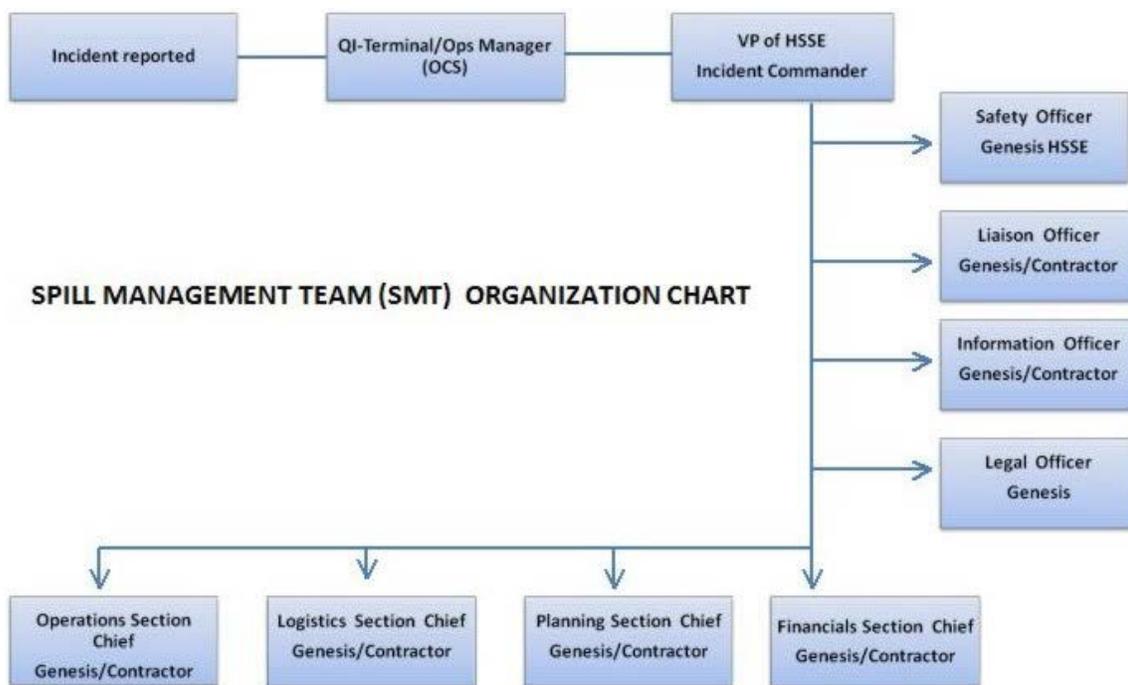
1. Incident Name	2. Prepared By: (name) Date: Time:	INCIDENT BRIEFING ICS 201-OS
3. Map/Sketch (Include maps drawn here or attached, showing the total area of operations, the incident site/area, overflight results, trajectories, impacted shorelines or other graphics depicting situational and response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

INCIDENT BRIEFING	March, 2000	ICS 201-OS (pg 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



**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

Port Hudson

Page 5 - 19

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																																																																												
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Compensation Unit		Air Support Supervisor	
Cost Unit		Helicopter Coordinator	
a. Support Branch		Fixed-wing Coordinator	
Director		8. Finance Section	
Supply Unit		Chief	
Facilities Unit		Deputy	
Transportation Unit		Time Unit	
Vessel Support Unit		Procurement Unit	
Ground Support Unit		Compensation Unit	
b. Service Branch		Unit	
Director		Cost Unit	
Communications Unit			
Medical Unit			
Food Unit			
9. Prepared by: (Resources Unit)		Date/Time	
ORGANIZATION		March, 2000	
ASSIGNMENT LIST		ICS 203-OS	

5.3.5 Assignment List ICS 204-OS

1. Incident Name	2. Operational Period (Date/Time)		ASSIGNMENT LIST ICS 204-OS	
	From:	To:		
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	
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10. Prepared By (Resources Unit Leader)	Date/Time	11. Approved By (Planning Section Chief)	Date/Time
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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

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]		7. Safety Status		[Safety Officer]
Source Status:		Remaining Potential (bbl):		Since Last Report		Total	
		Rate of Spillage (bbl/hr):		Responder Injury			
Secured <input type="checkbox"/>		Unsecured <input type="checkbox"/>		Public Injury			
		Since Last Report					
Volume Spilled				8. Equipment Resources		[RUL]	
Mass Balance/Oil Budget				Description		Ordered	Available / Staged
Recovered Oil				Assigned		Out of Service	
Evaporation				Spill Resp. Vsls			
Natural Dispersion							

Chemical Dispersion								Fishing Vessels					
Burned								Tugs					
Floating, Contained								Barges					
Floating, Uncontained								Other Vessels					
Onshore													
Total Spilled Oil Accounted For:													
4. Waste Management (Estimated)				[OPS/Disposal]				Skimmers					
	Recovered	Stored	Disposed										
Oil (bbl)							Boom (ft.)						
Oily Liquids (bbl)							Sbnt/Snr Bm. (ft.)						
Liquids (bbl)													
Oily Solids (tons)							Vacuum Trucks						
Solids (tons)													
5. Shoreline Impacts (Estimated, in miles)			[PSC/EUL/SSC]				Helicopters						
Degree of Oiling	Affected	Cleaned	To Be Cleaned										
Light							Fixed Wing						
Medium													
Heavy													
Total													
6. Wildlife Impacts				[OPS/Wildlife Br.]				9. Personnel Resources [RUL]					
Numbers in () indicate subtotal that are threatened / endangered species.				Died in Facility				Description	People in Cmd. Post	People in the Field	Total People On Scene		
	Captured	Cleaned	Released	DOA	Euth.	Other	Federal						
Birds							State						
Mammals							Local						
Reptiles							RP						
Fish							Contract Personnel						
Total							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

Oil:		H2S Potentially present <input type="checkbox"/> Yes <input type="checkbox"/> No	
Treatment Chemicals:			
Weather Related Hazards:	<input type="checkbox"/> Heat Stress	<input type="checkbox"/> Cold Concerns	<input type="checkbox"/> Others:
Other Hazards and Concerns:			
PPE REQUIRED:			
ITEM	YES	NO	N/A
Breathing Air			
Tyvek suit			
Rubber Gloves			
Rubber Boots			
Hard Hats			
Safety Glasses			
Rain Suit			
Personnel Monitor			
Surrounding Population: <input type="checkbox"/> Industrial <input type="checkbox"/> Residential <input type="checkbox"/> Other:			
Topography: <input type="checkbox"/> Rocky <input type="checkbox"/> Sandy beach <input type="checkbox"/> Docks <input type="checkbox"/> Cliffs <input type="checkbox"/> Other:			
SITE ORGANIZATION:			
Function and Name	Phone Number		
OSC			
Scientific Support Coord.			
Responsible Party			
Site Safety			
Others:			

5.4 SITE SAFETY AND HEALTH PLAN, CONTINUED

Entry Objectives:

<input type="checkbox"/> Site Surveys <input type="checkbox"/> Scientific Support <input type="checkbox"/> Other Activities:					
Primary Evacuation Route:					
Secondary Evacuation Route:					
Assembly Point (s):					
Radio Communications:					
Frequency	Channel	VHF	UHF	CB	OTHER
Phone Communications:					
Contact	Ac Voice	Ac Fax	Ac Cellular	Ac Pager	Ac Home
OSC					
SSHO					
ATSDR					
Police					
Sheriff					
Fire					
Ambulance					
Hospital					

OSC - On-Scene Coordinator

SSHO - Site Safety and Health Office

ATSDR - Agency for Toxic Substance and Disease Registry

This agency can provide emergency medical and toxicological information, assist in determining procedures for potential chemical overexposures, and can provide on scene assistance for certain chemical emergencies.

5.4 SITE SAFETY AND HEALTH PLAN, CONTINUED

Detailed objectives shall be developed daily and shall be described during the pre-entry safety briefing.

1. **Reporting:** Anyone entering or departing a work area, or associated control zones, shall report to the site supervisor.
2. **Site Safety Plan:** No person shall enter a site without subscribing to this or another approved Site Safety and Health Plan.
3. **Training:** No person shall enter a site without adequate training in hazardous waste operations, safety and health; based on work assignment and applicable hazardous conditions.
4. **Site Boundaries:** The following control boundaries have been established, and should be marked as follows:
 - a. Exclusion (Hot) Zone(s): Orange, red or black and yellow
 - b. Contamination Reduction (Warm Zone(s): Yellow
 - c. Support (Cold) Zone(s): Green

The above zones shall be marked as needed to control traffic and enforce decontamination procedures. Appropriate placards, barricades, traffic cones, and/or boundary tape shall be used for this purpose.

5. **Site Map:** The site safety map is attached and shall be modified as necessary for each sector by the site safety supervisor when any of the following are modified:
 - a. Exclusion Zone boundaries.
 - b. Contamination Reduction Zone: Boundaries, decontamination layout, equipment storage, temporary waste storage areas, washing, toilets and hygiene facilities.
 - c. Support Zone: Boundaries, first aid stations, emergency fire fighting equipment, command post/office spaces, new equipment staging/storage, eating/rest areas, bird/mammal cleaning and rehabilitation.
 - d. Location of unidentified hazards: Underground cables, overhead cables, pits, trenches, open holes/hatches, hearing protection areas, hard hat areas, suspected locations of poisonous plants, insects, or animals, high pressure wash areas, bioremediation application areas, and dispersant application areas.

5.4 SITE SAFETY AND HEALTH PLAN, CONTINUED

HAZARD EVALUATION

CHEMICAL HAZARDS (Check appropriate category of oil, or attach appropriate MSDS if available)

A. Oils Containing Hydrogen Sulfide

Composition: Composed of an indefinite petroleum mixture. May contain Hydrogen Sulfide, benzene, toluene, xylene, naphthalenes, and PolyAromatic Hydrocarbons in concentrations that may vary widely depending on the source of the oil weathering and aging.

Hazardous Description: H₂S is a highly toxic colorless gas which has the smell of rotten eggs in low concentrations and a sweet acidic smell in higher concentrations. It has the potential to deaden the sense of smell due to olfactory nerve anesthesia at levels as low as 10 ppm.

It is a highly flammable gas with an LEL of 4.3% and an UEL of 45% , burns with a blue flame and produces Sulfur Dioxide. It is heavier than air and tends to settle in low - lying areas, and is water-soluble.

PEL	10ppm	It is the policy of Genesis to don positive pressure respirators at this concentration.
STEL	15 ppm	
Ceiling	20 ppm	
Max Peak	50 ppm	
IDLH	100 ppm	

Basic Precautions: Keep all sources of ignition and hot metal surfaces away from spill/release. The use of explosion-proof equipment is required. Stay upwind and away from spill/release. Atmospheric Monitoring is required until the Site Safety Officer determines it is no longer needed. Positive Pressure Breathing Apparatus must be available for all personnel exposed to H₂S.

5.4 SITE SAFETY AND HEALTH PLAN, CONTINUED

The following controls shall be observed on site (Check appropriate).

GENERAL SITE SAFETY AND HEALTH PROCEDURES	Ö
Work near water: All personnel working in boats, on docks, or generally within 10 feet of water deeper than 3 feet, shall wear Coast Guard approved flotation devices (PFDs).	
Heat Stress. The site safety and health officer shall generally be guided by the ACGIH guidelines in determining work/rest periods. Cold water or other appropriate drinks shall be available at all times and drinking them encouraged during rest periods.	
Cold Stress: The site safety and health officer shall generally be guided by the ACGIH guidelines in determining work/rest periods. Workers shall be provided adequate warm clothing, rest opportunities, exposure protection, warm fluid shall also be available during rest periods. For prolonged water temperatures below 59 degrees F. or a combined water and air temperature	

less than 120 degrees F. exposure suits shall be worn by personnel working/traveling in small boats or aircraft over water, and immersion suits shall be available for vessel operations other than small boats.	
High Noise Levels: Hearing protection shall be used in high noise areas designated the site safety officer (exceeding 84dBA --- generally where noise levels require personnel to raise their voices to be heard).	
Confined Spaces: Follow OSHA confined space regulations 29 CFR 1910.146 as specified in GENESIS CRUDE OIL HSSE Manual Procedure 3.1.	
Poisonous/infectious insects: Personnel shall be provided with long-sleeved clothing and insect repellent in designated areas. Personnel should inspect each other for ticks during breaks.	
Poisonous snakes: All personnel working in designated areas shall wear snake proof leggings or hip high rubber boots. Snake bite kits shall be kept with first aid kits in these areas.	
Poisonous plants: Long sleeved clothing shall be worn in areas designated to contain these plants. If these plants are accidentally touched, the plant sap should be washed off of the affected area with soapy water. “DO NOT SCRATCH”	
Electrical Hazards: Electrical hazards are designated on the site map, and shall be marked with suitable placards, barricades, or warning tape as necessary.	
Trap Hazards: Open manholes, pits, trenches, or similar hazards are noted on the site map. The site safety officer shall ensure that these locations are periodically checked during the day.	
Carbon Monoxide: Equipment operators shall ensure that personnel do not linger or work near exhaust pipes.	
Falling Objects: Hard hat areas determined by the site survey shall be noted on project maps.	
UV Light Exposure: Sunscreens of protection factor 15 or greater and UV tinted safety glasses shall be made available for response personnel as needed.	
Helicopter Operations: Pilots shall provide safety briefing for all passengers.	
All Terrain Vehicles (ATVs): Drivers shall maintain a safe speed at all times and shall not be allowed to operate vehicles in a reckless manner. ATV drivers shall not operate ATVs outside of areas and lanes specified by the site safety officer.	

5.4 SITE SAFETY AND HEALTH PLAN, CONTINUED

SITE SAFETY AND HEALTH OFFICER CHECKLIST				
Action	Completed		N/A	Time Completed
	Yes	No		

Site Safety and Health Plan				
On-Site Safety Meeting				
Atmospheric Monitoring of Location				
Atmospheric Monitoring of Residential Areas				
Personal H2S Monitors in use				
Make sure PPE requirements understood				
Make sure PPE available				
Verify Workers Hazwoper Training				
Ambulances on Standby				
Portable Toilets where needed				
Personal Flotation Devices in use				
Back Up Safety Officer on standby				
Security Guards contacted and on call				
Inform workers that no unauthorized personnel should handle oil soaked animals				
Orange vest used in woods during hunting season				
Decon Stations in place				

Safety Officer: _____

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 must 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 zone, which is appropriately lined to prevent the spread of contaminants. Dikes are installed under the lining to contain runoff.

5.5 DECONTAMINATION PLAN, CONTINUED

Procedures for these stations are as follows:

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 long-handled 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	Splash suit removal	With assistance of helper, remove splash suit. 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.
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.

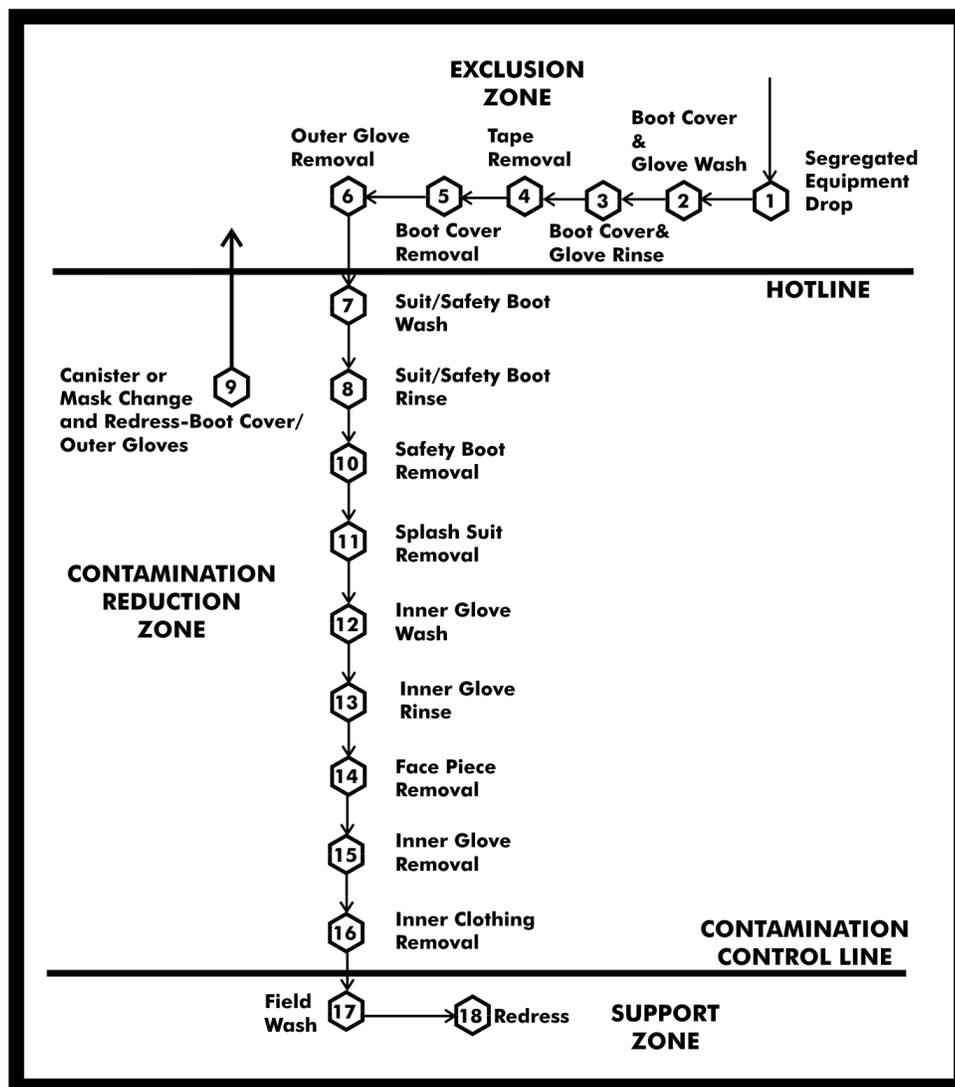
5.5 DECONTAMINATION PLAN, CONTINUED

Procedures for these stations are as follows:

MAXIMUM MEASURES FOR DECONTAMINATION, CONTINUED		
STATION 17	Field wash	Shower if highly toxic, skin-corrosive or skin-absorbable materials are known or suspected to be present. Wash hands and face if shower is not available.
STATION 18	Re-dress	Put on clean clothes.

5.5 DECONTAMINATION PLAN, CONTINUED

DECONTAMINATION PROCEDURES, MAXIMUM DECONTAMINATION LAYOUT



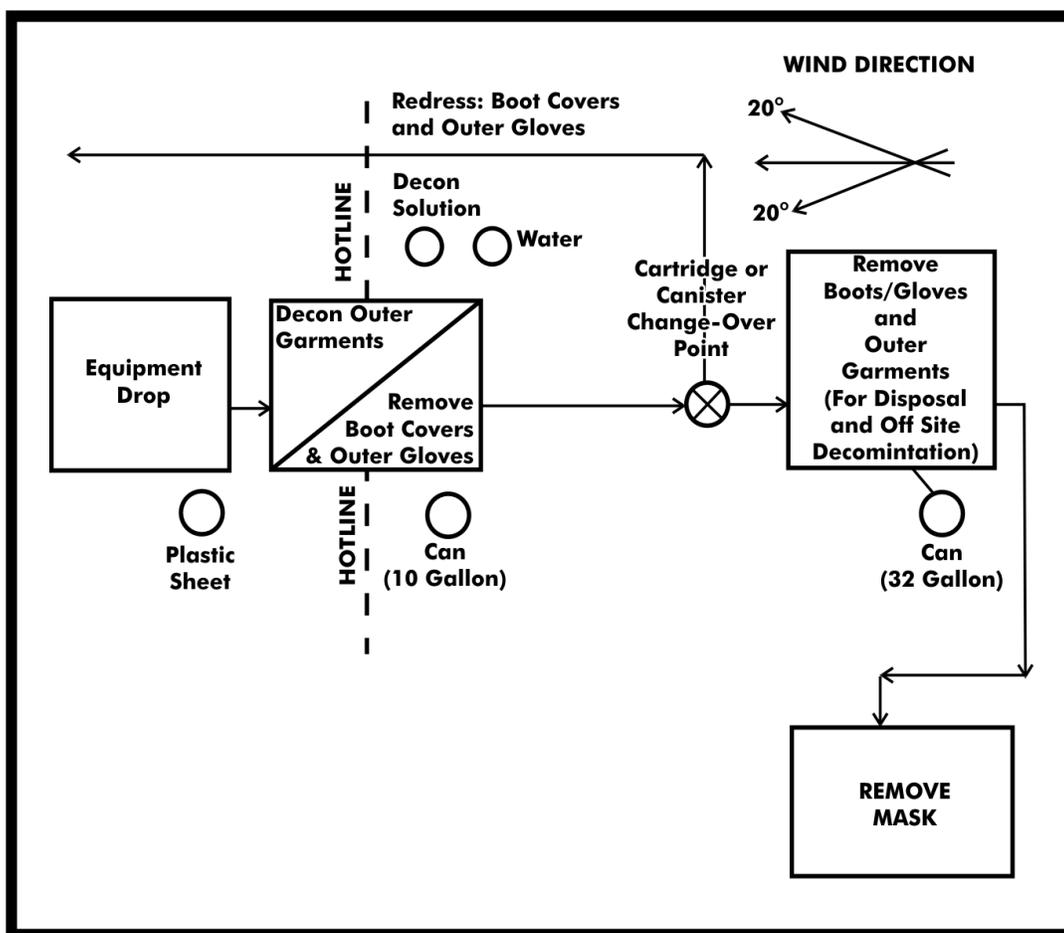
5.5 DECONTAMINATION PLAN, CONTINUED

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

	change	canister (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, 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.

5.5 DECONTAMINATION PLAN, CONTINUED

DECONTAMINATION PROCEDURES, MINIMUM DECONTAMINATION LAYOUT



5.6 DISPOSAL PLAN

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:	U.S. EPA ID#:
Waste properties:	Waste name:
U.S. EPA waste code:	State waste code:
EPA hazardous waste:	
Waste storage and transportation:	
Proposed storage method:	

5.6 DISPOSAL PLAN, CONTINUED

Proposed transportation method:
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:

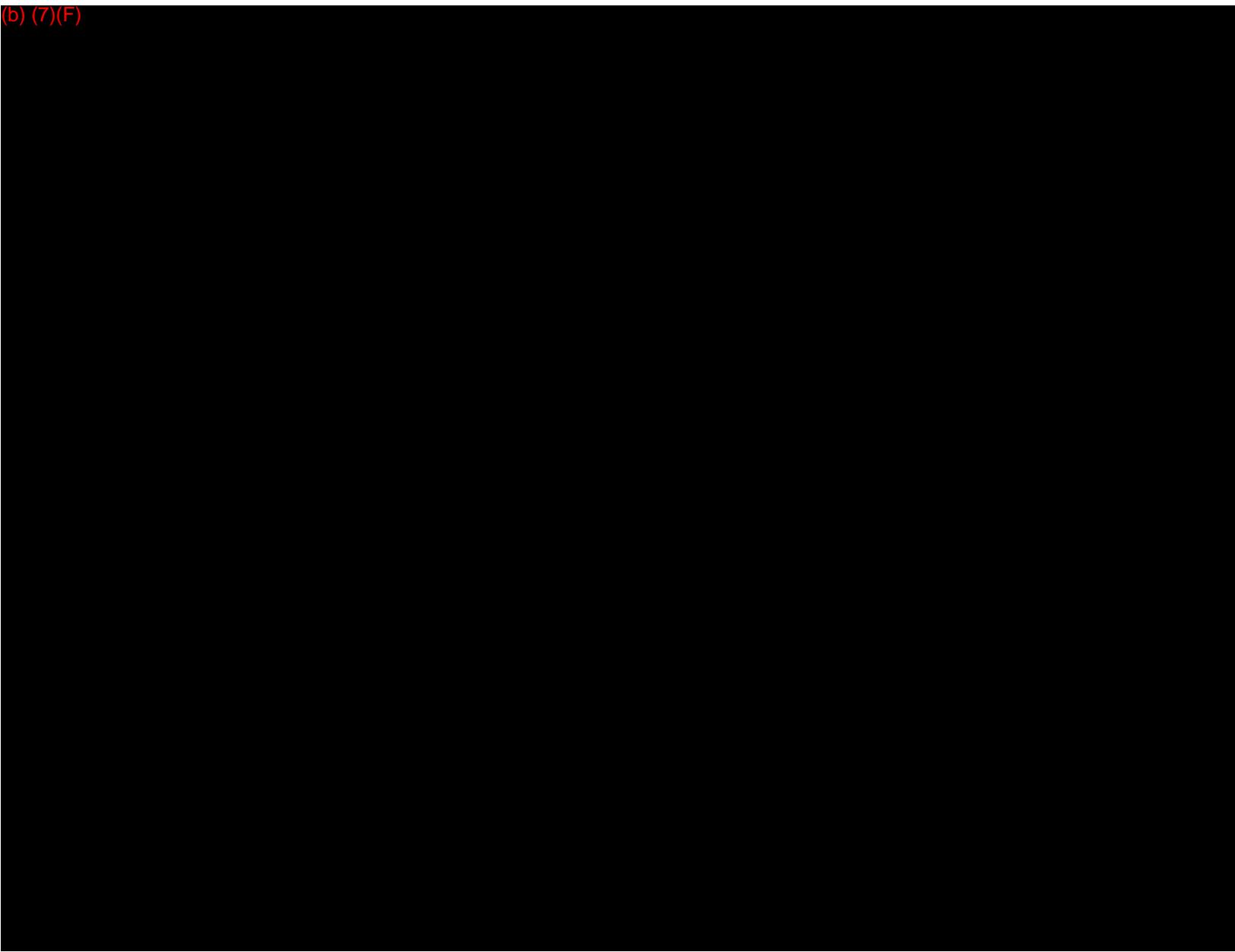
Resources required for disposal options:

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:	

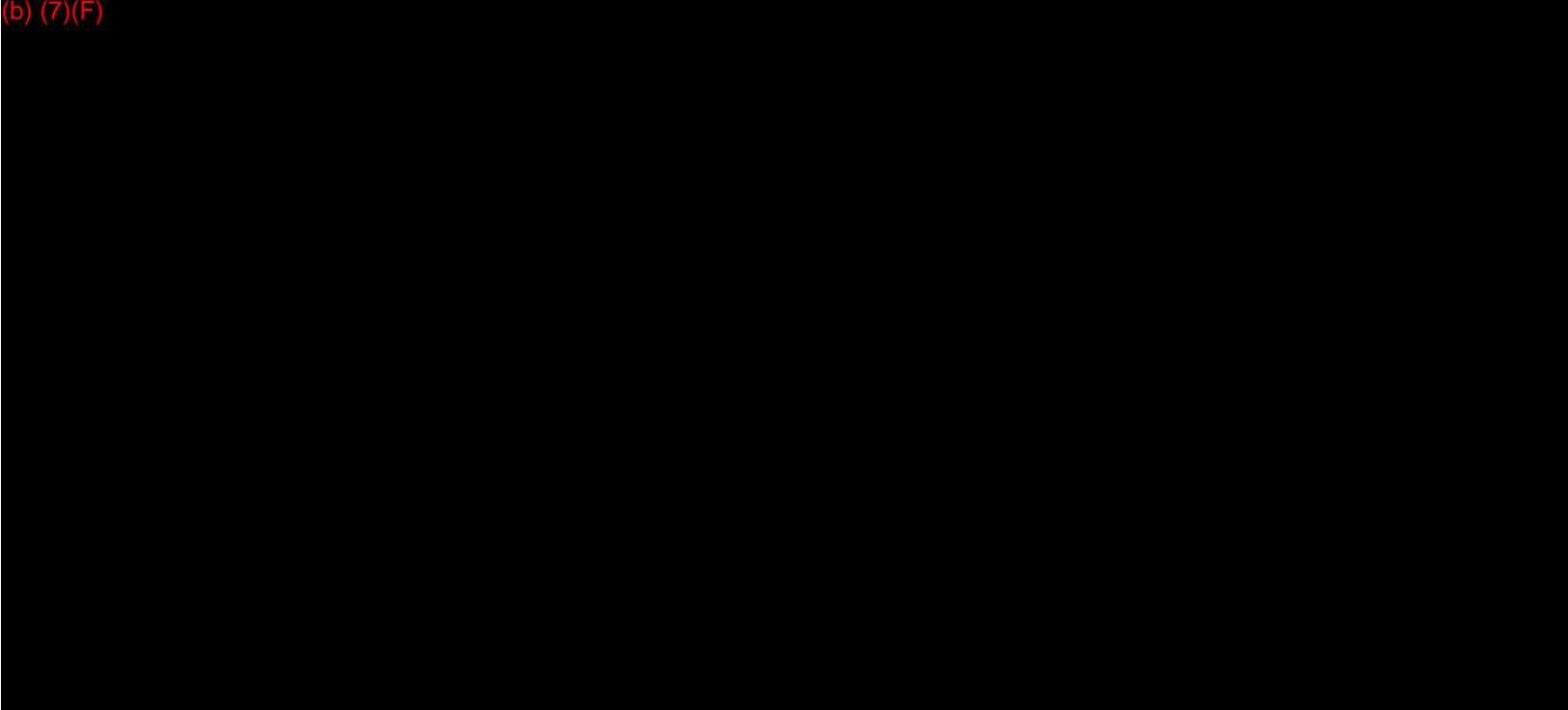
5.6 DISPOSAL PLAN, CONTINUED

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

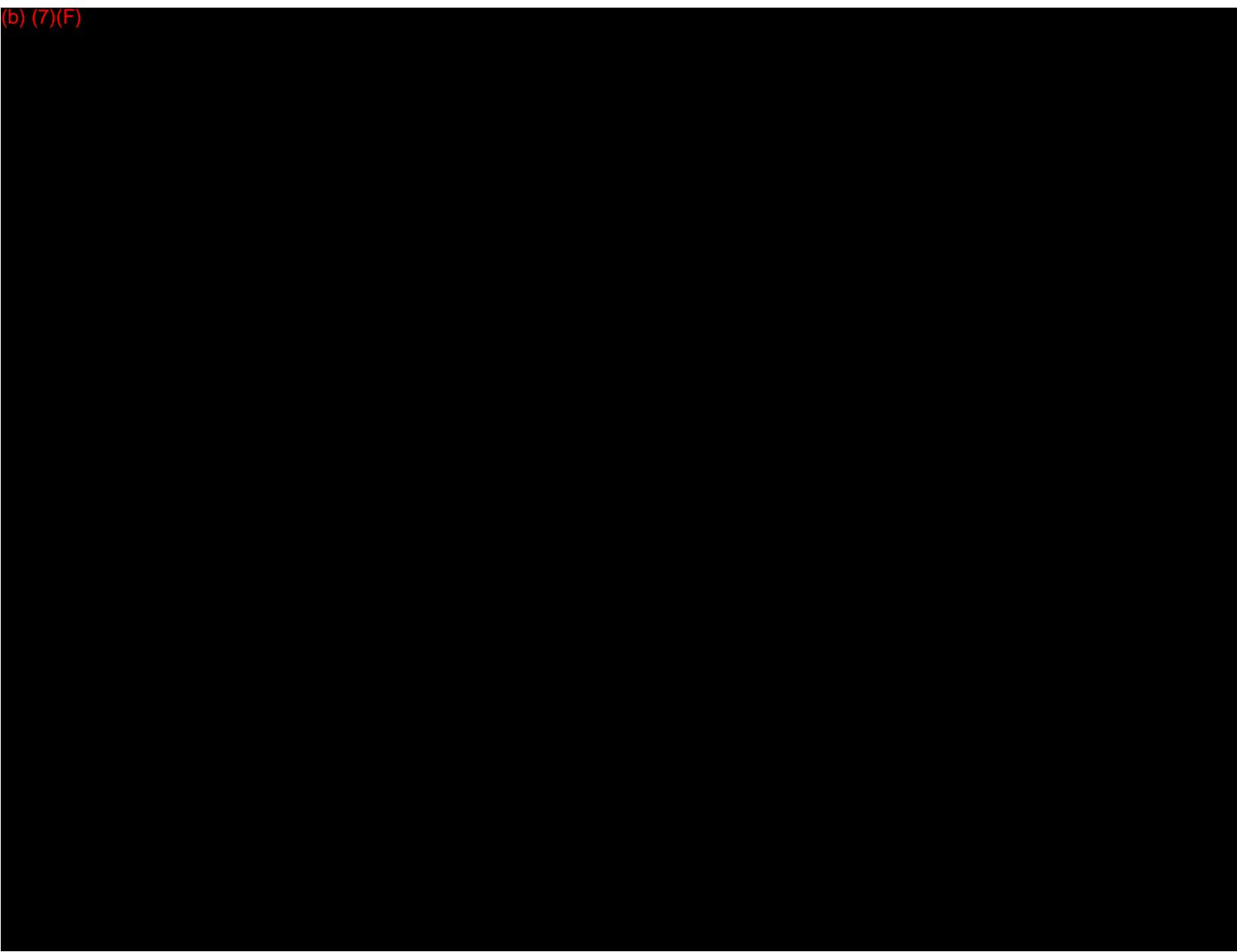
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5.8 DEMOBILIZATION PLAN

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

Demobilization procedures:

- Operations Section will determine which resources are ready for release from a specific collection site.
- The Planning Section will provide guidance on release priorities and demobilization recommendations.
- Information maintained by the Planning Section will be utilized to assist in the prioritization.
- Each incident will require a Decontamination Area.
- Decontaminated equipment will be returned to appropriate staging area for release or re-deployment.
- Transports for equipment will be required if remote from staging area.
- The Planning Section will document all demobilization and decontamination activities.
- Equipment designated for re-assignment will be mobilized to the appropriate staging area.
- The Supervisor will ensure a log is maintained documenting that proper decontamination procedures are performed for each piece of equipment.
- The Operations Section will ensure that redeployed personnel receive proper rest prior to returning to duty.
- The Planning Section Chief will monitor personnel redeployment activities to ensure number of hours worked is within acceptable guidelines.
- The Operations Section Chief must approve the Demobilization Plan before decontamination, release, or redeployment of any resources.

SECTION 6 Last Revised: February 21, 2013
SENSITIVE AREAS / RESPONSE TACTICS

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6.1 Area Description

6.2 Spill Containment / Recovery

Figure 6.2-1 - Response Tactics for Various Shorelines

6.3 Sensitive Area Protection

Figure 6.3-1 - Sensitive Area Protection Implementation Sequence

Figure 6.3-2 - Summary of Shoreline and Terrestrial Cleanup Techniques

6.4 Wildlife Protection and Rehabilitation

6.5 Endangered and Threatened Species By State

6.6 Vulnerability Analysis (Detailed)

6.7 Tactical Overview Map

6.8 Tactical Plan Index

6.9 Tactical Plans

6.10 Sensitivity Maps

6.1 AREA DESCRIPTION

Site specific maps and response tactics are included in **SECTION 6.7** and **SECTION 6.9**. 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 must be evaluated during the response to ensure that the selected response methods are appropriate for the situation.

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 storage tanks. Spills occurring within the secondary containment area or along pipeline and piping 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 and 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.

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 on the following page.

Containment/Diversion

- Berms are constructed ahead of advancing surface spills to contain spill or divert spill to a containment area.

Berming

- 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 used in a manner described above.
 - 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	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • May require high pressure spraying: <ul style="list-style-type: none"> • To remove oil • To prepare substrate for recolonization of barnacle and oyster communities • For aesthetic reasons

Freshwater Flat	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Marshes require the highest priority for shoreline protection • Natural recovery is recommended when: <ul style="list-style-type: none"> • 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

	breeding purposes		roots <ul style="list-style-type: none"> Oil wrack and other debris may be removed by hand
Swamp	<ul style="list-style-type: none"> 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 forested woodlands Birds and mammals use swamps during feeding and breeding activities 	<ul style="list-style-type: none"> 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, the roots of swamp forest trees are not exposed; thus, little damage to trees is expected. Any underbrush vegetation, however, would be severely impacted 	<ul style="list-style-type: none"> 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 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
Open water	<ul style="list-style-type: none"> Have ocean like waves and currents 	<ul style="list-style-type: none"> Most organisms are mobile enough to move 	<ul style="list-style-type: none"> Booming, skimming, vacuuming, and

	<ul style="list-style-type: none"> • Weather changes effect on-water conditions • River mouths present problems • Thermal stratification occurs 	<ul style="list-style-type: none"> • out of the spill area • Aquatic birds are vulnerable to oiling • Human usage (such as transportation, water intakes, and recreational activities) may be restricted 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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 may include wet meadows and marshes 	<ul style="list-style-type: none"> • Wildlife and socioeconomic areas likely to be impacted • Wind will control the oil's distribution 	<ul style="list-style-type: none"> • Booming, skimming, vacuuming, and sorbents are the preferred cleanup methods • Should not use containment booming, vacuuming, sorbents, and skimming on gasoline spills • Cleanup options include physical

			herding, sorbents, and debris/vegetation removal
Small rivers and streams	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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 a shoreline or aquatic area that is determined to be sensitive for environmental, economic, cultural, or human use reasons. Implementation of sensitive area protection techniques must 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 6.10](#).

FIGURE 6.3-1 - SENSITIVE AREA PROTECTION IMPLEMENTATION SEQUENCE

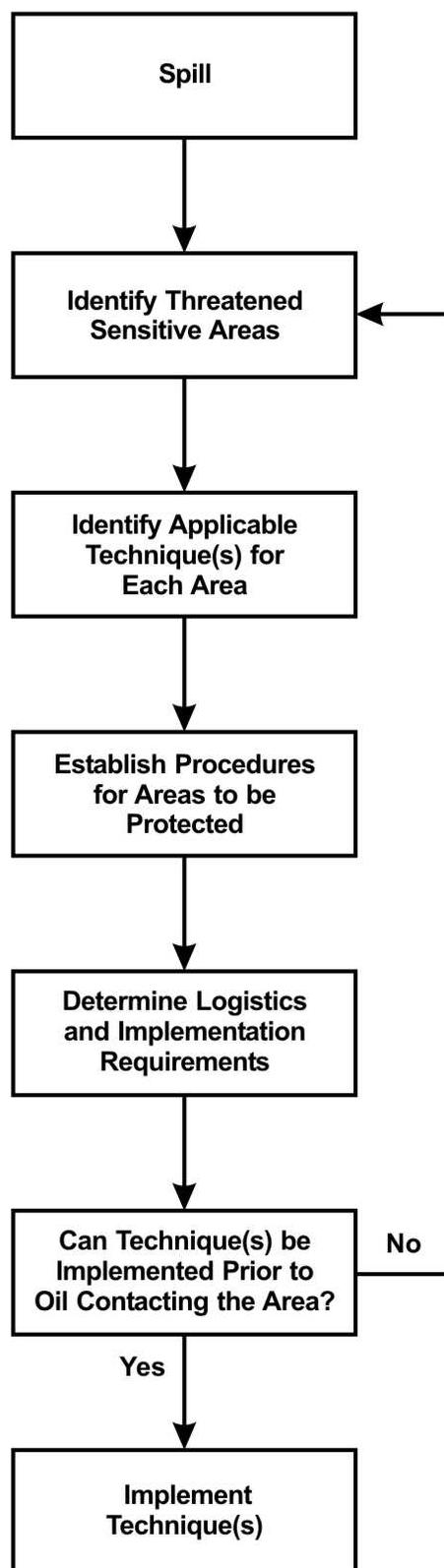


FIGURE 6.3-2 - SUMMARY OF SHORELINE AND TERRESTRIAL CLEANUP TECHNIQUES

TECHNIQUE	DESCRIPTION	RECOMMENDED	APPLICABILITY	POTENTIAL ENVIRONMENTAL
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		EQUIPMENT		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.	<u>Equipment</u> misc. hand tools <u>Personnel</u> 10-20 workers	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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.	<u>Equipment</u> motor grader, backhoe, dump truck elevating scrapers <u>Personnel</u> 2-4 workers plus equipment operators	<ul style="list-style-type: none"> • On land, wherever surface sediments are accessible to heavy equipment • Large amounts of oiled materials 	<ul style="list-style-type: none"> • Removes upper 2 to 12 inches of sediments
3. Sorbent Use	Sorbents are applied manually to oil accumulations, coatings, sheens, etc. to remove and	<u>Equipment</u> misc. hand tools misc. sorbents <u>Personnel</u> 2-10 workers	<ul style="list-style-type: none"> • Can be used on all habitat types • Free-floating oil close to 	<ul style="list-style-type: none"> • Sediment disturbance and erosion potential • Trampling of vegetation and

	recover the oil.		<p>shore or stranded on shore, secondary treatment method after gross oil removal</p> <ul style="list-style-type: none"> • Sensitive areas where access is restricted 	<p>organisms</p> <ul style="list-style-type: none"> • Foot traffic can work oil deeper into soft sediments
4. Vacuum / Pumps / Skimmers	Pumps, vacuum trucks, skimmers are used to remove oil accumulations from land or relatively thick floating layers from the water.	<p><u>Equipment</u> 1-2 50- to 100-bbl vacuum trucks w/ hoses 1-2 nozzle screens or skimmer heads</p> <p><u>Personnel</u> 2-6 workers plus truck operators</p>	<ul style="list-style-type: none"> • Can be used on all habitat types • Stranded oil on the substrate • Shoreline access points 	<ul style="list-style-type: none"> • 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.	<p><u>Equipment</u> 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</p> <p><u>Personnel</u> 6-8 workers per system</p>	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Can impact clean downgradient areas • Can displace some surface organisms if present • Sediments transported into water can affect water quality

techniques

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 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.	<u>Equipment</u> 1-5 50- to 100-gpm/ 100-psi pumping systems with manifold 1-4 100-ft hoses and nozzles per system 1-2 200-ft containment booms per system 1 oil recovery device per system <u>Personnel</u> 8-10 workers per system	<ul style="list-style-type: none"> • Substrates, riprap, and solid man-made structures • Oil stranded onshore • Floating oil on shallow intertidal areas 	<ul style="list-style-type: none"> • Can impact clean downgradient areas • Will displace many surface 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	<u>Equipment</u> 1-5 1,200- to 4,000-psi units with hose and spray wand 1-2 100-ft containment booms per unit	<ul style="list-style-type: none"> • Bedrock, man-made structures, and gravel substrates • When low-pressure flushing is 	<ul style="list-style-type: none"> • Will remove most organisms if present • Can damage surface being cleaned • Can affect

	is ineffective.? Oil is directed back into water or collection point for subsequent recovery.	1 oil recovery device per unit <u>Personnel</u> 2-4 workers per unit	not effective <ul style="list-style-type: none"> Directed water jet can remove oil from hard to reach sites 	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.	<u>Equipment</u> 1,000-2,000 ft sorbent/snare boom 200-400 stakes or anchor systems <u>Personnel</u> 4-10 workers	<ul style="list-style-type: none"> All shoreline types Calm wave action Slow removal process 	<ul style="list-style-type: none"> 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 sediments to maximize natural degradation processes.	<u>Equipment</u> 1 tractor fitted with tines, dicer, ripper blades, etc. or 1-4 rototillers or 1 set of hand tools <u>Personnel</u> 2-10 workers	<ul style="list-style-type: none"> Any sedimentary substrate that can support heavy equipment Sand and gravel beaches with subsurface oil Where sediment is stained or lightly oiled Where oil is stranded above normal high waterline 	<ul style="list-style-type: none"> Significant amounts of oil can remain on the shoreline for extended periods of time Disturbs surface 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.	<u>Equipment</u> 1-2 fertilizer applicators 1 tilling device if required <u>Personnel</u> 2-4 workers	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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 burned to minimize material handling and disposal requirements.? Material should be stacked in tall piles and fans used to ensure a hot,	<u>Equipment</u> 1 set of fire control equipment 2-4 fans 1 supply of combustion promoter <u>Personnel</u> 2-4 workers	<ul style="list-style-type: none"> • On most habitats except dry muddy substrates where heat may impact the biological productivity of the habitat • Where heavily oiled items 	<ul style="list-style-type: none"> • Heat may impact local near-surface organisms • Substantial smoke may be generated • Heat may impact adjacent vegetation

	clean burn.		are difficult or impossible to move <ul style="list-style-type: none"> • Many potential applications on ice 	
12. Natural Recovery	No action is taken and oil is allowed to degrade naturally.	None required	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Oil may persist for significant periods of time • Remobilized oil or sheens may impact other areas • Higher probability of impacting wildlife

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

TECHNIQUE	DESCRIPTION	RECOMMENDED EQUIPMENT	APPLICABILITY	POTENTIAL ENVIRONMENTAL EFFECTS
In Situ, Continued				
13. Dispersants (use of dispersants)	Dispersants are used to reduce the oil/water	Dispersants Boat or aircraft	<ul style="list-style-type: none"> • Water bodies with sufficient depth and 	<ul style="list-style-type: none"> • Use in shallow water could affect benthic

requires Federal or State approval)	interfacial tension thereby decreasing the energy needed for the slick to break into small particles and mix into the water column. Specially formulated products containing surface-active agents are sprayed from aircraft or boats onto the slick.		volume for mixing and dilution <ul style="list-style-type: none"> • When the impact of the floating oil has been determined to be greater than the impact of dispersed oil on the water-column community 	resources <ul style="list-style-type: none"> • May adversely impact organisms in the upper 30 feet of the water column • Some water-surface and shoreline impacts could 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, and assist in these efforts in alignment with local, state, and federal authorities and certified contractors.
- 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 is included in **FIGURE 3.1-4**.
- Wildlife rehabilitation specialists may be utilized to assist in capturing and rehabilitating oiled animals as well as deterring unaffected animals away from the spill site.

6.5 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE
Quillwort, Louisiana	<i>Isoetes louisianensis</i>	Shallow blackwater streams in riparian woodland	E	Louisiana
Chaffseed, American	<i>Schwalbea americana</i>	Acidic, sandy or peaty soils in open pine flatwoods	E	Louisiana
Manatee, West Indian	<i>Trichechus manatus</i>	Shallow coastal waters, estuaries, bays, rivers, and lakes	E	Louisiana
Mucket, pink (pearlymussel)	<i>Lampsilis abrupta</i>	Sand and gravel substrates	E	Louisiana
Pocketbook, fat	<i>Potamilus capax</i>	Sand, mud, and fine gravel substrates	E	Louisiana
Sawfish, smalltooth	<i>Pristis pectinata</i>	Shallow coastal waters of tropical seas and estuaries; sheltered bays, on shallow banks, and in estuaries or river mouths	E	Louisiana
Sea turtle, hawksbill	<i>Eretmochelys imbricata</i>	Clear offshore waters off the mainland and on island shelves	E	Louisiana
Sea turtle, Kemp's ridley	<i>Lepidochelys kempii</i>	Sand/duneShallow areas with sandy and muddy bottoms	E	Louisiana
Sea turtle, leatherback	<i>Dermochelys coriacea</i>	Warm sands of tropical beaches	E	Louisiana
Sturgeon, pallid	<i>Scaphirhynchus albus</i>	Free-flowing riverine	E	Louisiana
Tern, least interior pop.	<i>Sterna antillarum</i>	Open sandy or gravelly beach, dredge spoil and other open shoreline areas	E	Louisiana

Whale, finback	<i>Balaenoptera physalus</i>	Offshore ocean waters	E	Louisiana
Whale, humpback	<i>Megaptera novaeangliae</i>	Surface of the ocean	E	Louisiana
Woodpecker, red-cockaded	<i>Picoides borealis</i>	Open pine forests with large, widely-spaced older trees	E	Louisiana
(No common name)	<i>Geocarpon minimum</i>	Grazing land	T	Louisiana

E - Endangered

T - Threatened

6.5 ENDANGERED AND THREATENED SPECIES BY STATE, CONTINUED

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE
Bear, Louisiana black	<i>Ursus americanus luteolus</i>	Forest - mixed, woodland	T	Louisiana
Heelsplitter, Alabama (=inflated)	<i>Potamilus inflatus</i>	Sand, mud, silt, and sandy-gravel substrates	T	Louisiana
Pearlshell, Louisiana	<i>Margaritifera hembeli</i>	Small sandy creeks with stable sand and gravel substrates	T	Louisiana
Plover, piping except Great Lakes watershed	<i>Charadrius melodus</i>	Sandy beaches, islands	T	Louisiana
Sea turtle, green except where endangered	<i>Chelonia mydas</i>	Coasts, open sea	T	Louisiana
Sea turtle, loggerhead	<i>Caretta caretta</i>	Estuaries, coastal streams and salt marshes	T	Louisiana

Sturgeon, gulf	<i>Acipenser oxyrinchus desotoi</i>	Free-flowing riverine	T	Louisiana
Tortoise, gopher W of of Mobile/Tombigbee Rs.	<i>Gopherus polyphemus</i>	Grassland/herbaceous	T	Louisiana
Turtle, ringed map	<i>Graptemys oculifera</i>	Clean, clear, limestone, spring-fed rivers and their tributaries	T	Louisiana

E - Endangered

T - Threatened

6.6 VULNERABILITY ANALYSIS (DETAILED)

VULNERABILITY ANALYSIS (DETAILED)
--

(b) (7)(F)

None identified within the planning distance
--

Medical Facilities:

None identified within the planning distance
--

Residential Areas:

One residential property approximately .57 miles east of the facility on Port Hudson Cemetery Road. The driveway entry off main road to property would be impacted.

6.6 VULNERABILITY ANALYSIS (DETAILED), CONTINUED

VULNERABILITY ANALYSIS (DETAILED)**Businesses:**

The Port of Greater Baton Rouge

Wetlands or Other Sensitive Environments:

Environmentally sensitive areas that could realistically be impacted by the Port Hudson facility's AST 34101 include ravine habitats, the Mississippi River a protected waterway located .6 miles due west of the AST 34101 containment area. A wetlands area is located .14 miles southwest of the AST 34101 containment area.

Fish and Wildlife:

See SECTION 6.5 for a list of endangered and threatened species by state.

Below is listed by affected Parish:

THREATENED AND ENDANGERED SPECIES by Parish

E=Endangered T=Threatened C=Candidate CH=Critical Habitat

ASCENSION

MANATEE, WEST INDIAN POSSIBLE MAMMAL E
 MUSSEL, ALABAMA HEELSPLITTER KNOWN MOLLUSK T
 STURGEON, GULF KNOWN FISH T
 STURGEON, PALLID KNOWN FISH E

EAST BATON ROUGE

MANATEE, WEST INDIAN POSSIBLE MAMMAL E
 MUSSEL, ALABAMA HEELSPLITTER KNOWN MOLLUSK T
 STURGEON, GULF KNOWN FISH T
 STURGEON PALLID KNOWN FISH E

IBERVILLE

BEAR, LOUISIANA BLACK POSSIBLE MAMMAL T, CH

STURGEON, GULF POSSIBLE FISH T
STURGEON, PALLID KNOWN FISH E

WEST BATON ROUGE

STURGEON, PALLID KNOWN FISH E

Lakes and Streams:

None identified within the planning distance.

6.6 VULNERABILITY ANALYSIS (DETAILED), CONTINUED

VULNERABILITY ANALYSIS (DETAILED)

Endangered Flora and Fauna:

See SECTION 6.5 for a list of endangered and threatened species by state.

Below is listed by affected Parish:

ASCENSION: Louisiana quillwort, Geocarpon minimum, American chaffseed

Assumption: Louisiana quillwort, Geocarpon minimum, American chaffseed

EAST BATON ROUGE: Louisiana quillwort, Geocarpon minimum, American chaffseed

IBERVILLE: Louisiana quillwort, Geocarpon minimum, American chaffseed

WEST BATON ROUGE: Louisiana quillwort, Geocarpon minimum, American chaffseed

Recreational Areas:

East Baton Rouge Bridge Landing East side of river Mile Marker 228.

Port Allen Lock Landing West side of river Mile Marker 228.

PLAQUEMINE Launch Facility

Transportation Routes (Air, Water, Land):

Mississippi River

Unnamed gravel access road at the Pump Station.

Port Hudson Cemetery Road.

Highway 90 Old Mississippi Bridge.

I-10 Mississippi Bridge.

Port Allen Lock Landing

Utilities:

None identified within the planning distance

Other Applicable Areas:

None identified within the planning distance

6.7 TACTICAL OVERVIEW MAP

[Click to view/print Tactical Overview](#)

6.8 TACTICAL PLAN INDEX

SITE NAME
Truck Station 1
Pump Station
Port Hudson Dock Boom Deployment
St. Francisville
Ramp 1
Ramp 2
Ramp 3

Ramp 4
Ramp 5
Ramp 6

Port Hudson**Page 6 - 21**

6.9 TACTICAL PLANS

[Click here for Truck Station 1](#)

Port Hudson**Page 6 - 22**

6.9 TACTICAL PLANS , CONTINUED

[Click here for Pump Station](#)

Port Hudson**Page 6 - 23**

6.9 TACTICAL PLANS , CONTINUED

[Click here for Port Hudson Dock Boom Deployment](#)

Port Hudson**Page 6 - 24**

6.9 TACTICAL PLANS , CONTINUED

[Click here for St. Francisville](#)

Port Hudson**Page 6 - 25**

6.9 TACTICAL PLANS , CONTINUED

[Click here for Ramp 1](#)

Port Hudson**Page 6 - 26**

6.9 TACTICAL PLANS , CONTINUED

[Click here for Ramp 2](#)

6.9 TACTICAL PLANS , CONTINUED

[Click here for Ramp 3](#)

6.9 TACTICAL PLANS , CONTINUED

[Click here for Ramp 4](#)

6.9 TACTICAL PLANS , CONTINUED

[Click here for Ramp 5](#)

6.9 TACTICAL PLANS , CONTINUED

[Click here for Ramp 6](#)

6.10 SENSITIVITY MAPS

[Click to view/print INDEX.PDF](#)

6.10 SENSITIVITY MAPS, CONTINUED

[Click to view/print LEGEND.PDF](#)

6.10 SENSITIVITY MAPS, CONTINUED

[Click to view/print SEASON.PDF](#)

6.10 SENSITIVITY MAPS, CONTINUED

[Click to view/print 1. Port Hudson Start ESI 120.PDF](#)

6.10 SENSITIVITY MAPS, CONTINUED

[Click to view/print 2. Airline Bridge ESI112.PDF](#)

6.10 SENSITIVITY MAPS, CONTINUED

[Click to view/print 3. St. Gabriel ESI113.PDF](#)

6.10 SENSITIVITY MAPS, CONTINUED

[Click to view/print 4. McCall / End at Hester ESI109.PDF](#)

SECTION 7 Last Revised: February 21, 2013
SUSTAINED RESPONSE ACTIONS

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7.1 Response Resources

7.1.1 Facility Response Equipment

Figure 7.1-1 - Regional Company and Response Contractor's Equipment List / Response Time

7.1.2 Response Equipment Inspection and Maintenance

7.1.3 Contractors, Contractor Equipment, and Labor

7.1.4 Command Post

Figure 7.1-2 - Command Post Checklist

7.1.5 Staging Area

7.1.6 Communications Plan

Figure 7.1-3 - Communications Checklist

7.2 Public Affairs

Figure 7.2-1 - Incident Fact Sheet

7.3 Site Security Measures

Figure 7.3-1 - Site Security Checklist

Figure 7.3-2 - Facility Security

7.4 Waste Management

Figure 7.4-1 - Waste Management Flow Chart

Figure 7.4-2 - General Waste Containment and Disposal Checklist

SECTION 7

SUSTAINED RESPONSE ACTIONS, CONTINUED

7.4.1 Waste Storage

Figure 7.4-3 - Temporary Storage Methods

7.4.2 Waste Transfer

7.4.3 Waste Disposal

Figure 7.4-4 - Facility-Specific Disposal Locations

7.1 RESPONSE RESOURCES

7.1.1 Facility Response Equipment

***Note:** Company owned equipment is only maintained at the facility for back up purposes to the OSROs identified in **APPENDIX B.1.1**. Visual inspections will be conducted on response equipment annually.

SKIMMERS/PUMPS					
TYPE/MODEL/YEAR	QUANTITY	CAPACITY	DAILY EFFECTIVE RECOVERY RATE	DATE FUEL LAST CHANGED	STORAGE LOCATION
None					
BOOM					
TYPE/MODEL/YEAR	QUANTITY	SIZE	CONTAINMENT AREA (sq ft)	STORAGE LOCATION	
None					
CHEMICALS STORED					
TYPE	QUANTITY	DATE PURCHASED	TREATMENT CAPACITY	STORAGE LOCATION	
Drums	4		55 Gallons	Trailer	
DISPERSANT DISPENSING EQUIPMENT					
TYPE/YEAR	CAPACITY	STORAGE LOCATION	RESPONSE TIME (min)		
None					
SORBENTS					
TYPE/YEAR	QUANTITY	ABSORPTION CAPACITY (gal)	STORAGE LOCATION	OPERATIONAL STATUS	
Small Spill pack	1		Dockside	Operational	
55 gallon Spill Pack	1		At truck unloading area	Operational	
Oil Pad Bundle	1 Bundle		Pump Station Garage	Operational	
Oil Pad	1 Bundle		Dockside	Operational	
Oil Pad	1 bundle		Truck Station/garage	Operational	
COMMUNICATIONS EQUIPMENT					
TYPE/YEAR	QUANTITY	STORAGE LOCATION/NUMBER	OPERATIONAL STATUS		
Portable Cellular Telephone	2	Company Truck/Site Personnel	Operational		
Hand-Held Radios	4	Dock Office	Operational		
FIRE FIGHTING AND PERSONNEL PROTECTIVE EQUIPMENT					

TYPE/YEAR	QUANTITY	STORAGE LOCATION	OPERATIONAL STATUS		
20-lb Dry Chemical Fire Extinguisher, Type A-B-C 20A and 80BC Marine USCG Type A Size 2, Type BC Size 2	7	Truck Station	Operational		

7.1 RESPONSE RESOURCES

7.1.1 Facility Response Equipment

***Note:** Company owned equipment is only maintained at the facility for back up purposes to the OSROs identified in **APPENDIX B.1.1**. Visual inspections will be conducted on response equipment annually.

FIRE FIGHTING AND PERSONNEL PROTECTIVE EQUIPMENT					
TYPE/YEAR	QUANTITY	STORAGE LOCATION	OPERATIONAL STATUS		
150-lb Wheel Roll Dry Chemical Fire Extinguisher Type A-B-C 40A and 240BC Marine USCG Type A Size II, Type BC Size V	1	Pump Station	Operational		
23 # Nitrogen	1	Truck Station	Operational		
125-lb Wheel Roll Dry Chemical Fire Extinguisher Type A-B-C 40A	1	Truck Station	Operational		
FIRE EXTINGUISHER-10LB-ABC	1	Truck Station	Operational		
20-lb Dry Chemical Fire Extinguisher, Type A-B-C 20A and 80BC Marine	4	Pump Station	Operational		

USCG Type A Size 2, Type BC Size 2					
350-lb Wheel Roll Dry Chemical Fire Extinguisher Type A-B-C 40A	1	Pump Station	Operational		
FIRE EXTINGUISHER- 10LB-ABC	3	Pump Station	Operational		
15 LB. Carbon Dioxide Fire Extinguisher Rating B:C	3	Pump Station	Operational		
220# Nitrogen	1	Pump Station	Operational		
20-lb Dry Chemical Fire Extinguisher, Type A-B-C 20A and 80BC Marine USCG Type A Size 2, Type BC Size 2	5	Dock	Operational		
125-lb Wheel Roll Dry Chemical Fire Extinguisher Type A-B-C 40A and 240BC Marine USCG Type A Size II, Type BC Size V	1	Dock	Operational		
15 LB. Carbon Dioxide Fire Extinguisher	1	Dock	Operational		

7.1.1 Facility Response Equipment, Continued

***Note:** Company owned equipment is only maintained at the facility for back up purposes to the OSROs identified in **APPENDIX B.1.1**. Visual inspections will be conducted on response equipment annually.

FIRE FIGHTING AND PERSONNEL PROTECTIVE EQUIPMENT					
TYPE/YEAR	QUANTITY	STORAGE LOCATION	OPERATIONAL STATUS		
23 # Nitrogen	1	Dock	Operational		
OTHER					
TYPE/YEAR	QUANTITY	STORAGE LOCATION	OPERATIONAL STATUS		
5035 Mahindra Tractor/2010	1	Pumping Station	Operational		

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

* USCG Classified OSRO for facility

COMPANY/CONTRACTOR	EQUIPMENT	RESPONSE TIME
*Clean Harbors Environmental Services Inc. Baton Rouge, LA	Full Response Capability	hours
*OMIES Port Allen, LA	Full Response Capability	1 hours
*U.S. Environmental Services, LLC. Geismar, LOUISIANA	Full Response Capability	1 hours
*ES&H New Iberia , LA		1.5 hours

*Note: Response times are based on 35 mph for land (five knots for water) and take into account traffic, weather, and other environmental conditions that could restrict response efforts.

7.1.2 Response Equipment Inspection and Maintenance

Company response equipment is only used as a backup to the identified OSROs in **FIGURE 7.1-1**. It is the responsibility of the individual OSRO to maintain their equipment as described below:

Containment boom During boom deployment exercises, boom will be inspected by the OSRO 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 The individual OSRO will inventory test the stated quantities are in inventory and in proper working order. The equipment inspection and deployment exercises are recorded and maintained with the OSRO and retained for a period of five years. Exercise requirements are listed in **APPENDIX A.1**. A Spill/Exercise Documentation form is in **FIGURE A.1-3**.

7.1.3 Contractors, Contractor Equipment, and Labor

- The Company's primary response contractors' names and phone numbers, as well as other companies who can provide spill response services are provided in **FIGURE 3.1-4**.
- The Company has ensured by contract 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 without USCG classification deploy and inspect boom to meet PREP guidelines. Company requires that these exercises are 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 a Company off-site SMT Command Center and a Command Post (located close to but at a safe distance back from the incident scene) 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	INITIALS	DATE/TIME STARTED	DATE/TIME COMPLETED
Ensure adequate space for size of staff.			
Ensure 24-hour accessibility.			
Ensure personal hygiene facilities.			

Ensure suitability of existing communications resources (phone/fax/radio).			
Ensure suitability of private conference and briefing rooms.			
Identify Command Post security requirements, safe location.			
Notify other parties of Command Post location; provide maps/driving directions.			
Determine staging areas and incident base locations.			
Identify future need to move, upgrade facilities.			

Command Posts for this facility are located at "list location": At the Truck terminal office located: 769 Port Hudson Cemetery Road Zachary, Louisiana

7.1.5 Staging Area

According to the incident type and magnitude, numerous staging areas may be required to support containment and cleanup operations. The staging area should be located in the cold zone inside the delineated isolation perimeter.

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

- Accessibility to impacted areas;
- Proximity to secure parking, airports, docks, pier, or boat launches; and
- Accessibility to large trucks and trailers which may be used to transfer equipment.

In addition, the staging area should:

- Be in a large open area in order to provide storage for equipment and not interfere with equipment loading and offloading operations.
- Have a dock/pier on site for deploying equipment.
- Have moorage available for vessels to aid the loading/offloading of personnel.

Staging areas for this facility are located at "list location": At the Truck terminal turnaround area at the front of the facility located: 769 Port Hudson Cemetery Road Zachary, Louisiana

7.1.6 Communications Plan

Normal Company communications to the Facility are conducted via telephone lines, cellular telephones, two way radios, e-mail, fax machines, and pagers.

Company owned communications equipment and quantities commonly used to address response communications are listed below:

Port Hudson Terminal utilizes hand-held and portable radios that operate at 935.9 Mhz frequency.

The Terminal has Marine radios, which operate on the following frequencies and channels:

156.30000 Mhz Ch# 6, 156.65000 Mhz Ch# 13, 157.00000 Mhz Ch# 20, 156.80000 Mhz Ch# 16, 156.85000 Mhz Ch# 17, 156.97500 Mhz Ch# 79 Carr Sq.

Helicopter and patrol plane pilots operate on normal air frequencies and the 935.9 Mhz hand-held radio system.

Hand-held radios and marine radios are used. In addition, mobile telephone networks are used by staff. At the Terminal, one portable cellular telephone is located in a company truck. The mobile telephone, hand-held radios, and portable radios operational range covers the entire Port Hudson Terminal.

Hand-held radios and marine radios are used. In addition, mobile telephone networks are used by staff.

At the Terminal, terminal personnel (2) carry cell telephones.

The mobile telephone, hand-held radios, and portable radios operational range covers the entire Port Hudson Terminal.

Government response agencies are initially contacted with telephones. Upon arrival at the site, the main government agency responders may be assigned hand-held radios to ensure a closed loop communications system during a response.

Additional communications equipment (satellite phones, VHF portable radios with chargers and accessories, command post with UHF, VHF, single sideband, marine, aeronautical, telephone, and hard-line capability) may be provided by the Company or leased from a communications company in the area. Communications with government agencies, state police, and contractors can be conducted on portable radios. Refer to **FIGURE 7.1-3** for guidelines to setup communications.

The Communications Plan, written at the time of an incident, will identify telephone numbers and radio frequencies used by responders. This may also involve activation of multiple types of communications equipment and coordination among multiple responding agencies and contractors.

FIGURE 7.1-3 - COMMUNICATIONS CHECKLIST

COMMUNICATIONS CHECKLIST	INITIALS	DATE/TIME STARTED	DATE/TIME COMPLETED
Develop a Communications Plan.			
Ensure adequate phone lines per staff element - contact local provider.			
Ensure adequate fax lines - contact local			

provider.			
Evaluate need for internet access.			
Ensure recharging stations for cellular phones.			
VHF radio communications: <ul style="list-style-type: none"> • Establish frequencies. • Assign call signs. • Distribute radios. • Establish communications schedule. 			
Ensure recharging stations for VHF radios.			
Determine need for VHF repeaters.			
Ensure copy machine available.			
Ensure communications resource accountability.			
Ensure 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

This section contains guidelines for dealing with the media during an emergency. The Incident Commander will play a key role in providing the initial public assessment and taking the first steps to provide the Company's public response. Information in this section includes:

- Guidelines for dealing with the media
- Incident Fact Sheet (**FIGURE 7.2-1**)

7.2 PUBLIC AFFAIRS, CONTINUED

GUIDELINES FOR DEALING WITH THE MEDIA

- The Facility Supervisor or Vice President of HSSE are the most logical person reporters seek out for information.
- Reporters will look elsewhere to find out what happened if you do not answer their questions; however, if you do not have this information or are not prepared to answer a particular question, say so then say when they can expect the

answers to their questions (such as one hour).

- It is important to be courteous to all media representatives and to provide a safe place for them to wait until a Company representative can meet them; you may need to provide an initial statement.
- **IMPORTANT:** Notify Vice President of HSSE and/or Corporate Legal Counsel for guidance in addressing media inquiries. Only Vice President of HSSE and/or Corporate Legal Counsel are designated to talk to the media.
- Facility personnel and Genesis employees shall direct media to the Vice President of HSSE and/or Corporate Legal Counsel.

Provide

- A brief, general description of what happened.
- Number of injured or killed, if known.
- Steps being taken to handle the emergency.

Don't provide

- Names of deceased or seriously injured employees until the next of kin have been notified.
- Speculation about the cause of the emergency.
- Any statement implying personal or Company negligence.
- Cost estimates of damage.

Other considerations

- Safety considerations should always receive priority in determining access to Company property.
- Anticipate likely questions.
- There are only six questions that can be asked about any subject: who, what, when, where, why, and how.
- Keep answers short and understandable. Don't use industry jargon or acronyms.
- Answer only the question that is asked by the reporter.
- Give the most important facts first.
- Talk to the public's concern about the incident such as whether these were deaths, injuries, any threat to the public, or danger of explosion or fire.

7.2 PUBLIC AFFAIRS, CONTINUED

Other considerations, continued:

- If you don't know the answer to a question, don't be afraid to say "I don't know"; make note of the question and tell the reporter that you will try to get the answer - then do it. Don't use the phrase "No Comment".
- Don't be defensive.
- There is no such thing as "Talking off the record"; assume that anything and everything you say to a reporter is going to be printed and/or used in the story.
- Avoid "What If?" or speculative questions; these questions should be answered with a restatement of the problem and what is being done to control it.
- Don't speculate about the cause of the incident.
- Don't minimize the situation.

FIGURE 7.2-1 - INCIDENT FACT SHEET

What occurred:
When (time):
Where (location):
What are hazards:
How is the situation being handled:
How many people involved:
Confirmed injuries/fatalities:
Treatment location:
Name of injured (release only after next of kin are notified):
Name of fatalities (release only after next of kin are notified):
What agencies have been notified:
On scene? (yes/no):

Who is in charge:

Has outside help been requested:

Who:

On scene? (yes/no):

Is there danger to the plant:

Is there danger to the community:

What:

Is there an environmental hazard:

What is the environmental hazard:

What is being done to minimize environmental threat:

Is there a need for evacuation:

(b) (7)(F)



(b) (7)(F)

(b) (7)(F)

7.4 WASTE MANAGEMENT

Initial oil handling and disposal needs may be overlooked in the emergency phase of a response, which could result in delays and interruptions of cleanup operations. Initially, waste management concerns should address:

- Equipment capacity,
- Periodic recovery of contained oil, and
- Adequate supply of temporary storage capacity and materials.

The following action items should be conducted 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**.
- Continuous tracking of oil disposition in order to better estimate amount of waste

that could be generated over the short and long-term.

- Organization of waste collection, segregation, storage, transportation, and proper disposal.
- Minimization of risk of any additional pollution.
- Regulatory review of applicable laws to ensure compliance and (if appropriate) obtain permits.
- Documentation of all waste handling and disposal activities.
- Disposal of all waste in a safe and approved manner.

Good hazardous waste management includes:

- Reusing materials when possible.
- Recycling or reclaiming waste.
- Treating waste to reduce hazards or reducing amount of waste generated.

7.4 WASTE MANAGEMENT, CONTINUED

- The management of the wastes generated in cleanup and recovery activities must be conducted with the overall objective of ensuring:
 - Worker safety,
 - Waste minimization,
 - Cost effectiveness, and
 - Minimization of environmental impacts.
- Proper disposal.
- Minimization of present and future environmental liability.

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

Once this process is complete, the waste will be shipped off-site to an approved facility for required disposal.

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

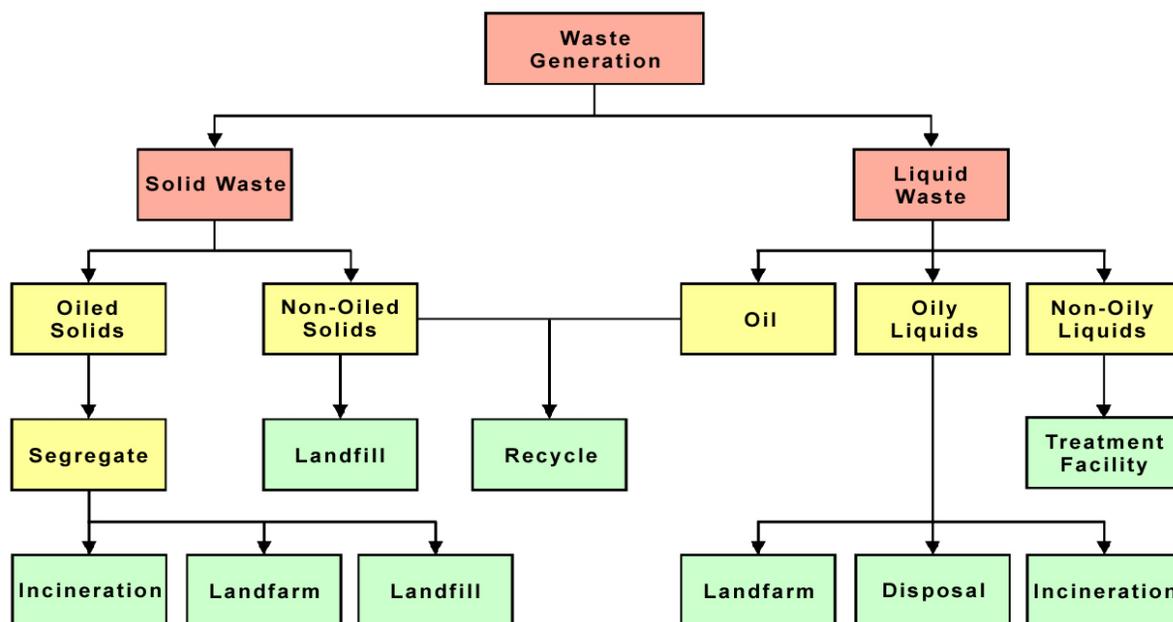


FIGURE 7.4-2 - GENERAL WASTE CONTAINMENT AND DISPOSAL CHECKLIST

CONSIDERATION	YES/NO/NA
Is the material being recovered a waste or reusable product?	
Has all recovered waste been containerized and secured so there is no potential for further leakage while the material is being stored?	
Has each of the discrete waste streams been identified?	
Has a representative sample of each waste stream been collected?	
Has the sample been sent to an approved 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?	
If the waste is nonhazardous, is the transporter registered?	
Is the waste being taken to an approved disposal site?	
Is the waste hazardous or Class I nonhazardous?	
If the waste is hazardous or Class I nonhazardous, is a manifest	

being used?	
Is the manifest properly completed?	
Are all federal, state, and local laws/regulations being followed?	
Are all necessary permits being obtained?	
Has a Disposal Plan been submitted for approval/review?	
Has PPE and waste-handling procedures been included in the Site Safety and Health Plan to protect the health and safety of waste handling personnel?	

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 bags or drums are used, the container should be clearly marked and/or color-coded to indicate the type of material or waste contained and/or the ultimate disposal option.

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

- Geology
- Soil
- Surface water
- Covered materials
- Climatic factor
- Toxic air emissions
- Access
- Ground water
- Flooding
- Slope
- Capacity
- Land use
- Security
- Public contact

FIGURE 7.4-3 - TEMPORARY STORAGE METHODS

CONTAINMENT	PRODUCT						CAPACITY
	OIL	OIL/WATER	OIL/SOIL	OIL/DEBRIS (Small)	OIL/DEBRIS (Medium)	OIL/DEBRIS (Large)	
Drums	X	X	X				0.2-0.5 yd ³
Bags		X	X	X			1.0-2.0 yd ³
Boxes		X	X	X			1-5 yd ³
Open top rolloff	X	X	X	X	X	X	8-40 yd ³
Roll top rolloff	X	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	X	1 yd ³
Bladders	X	X					25-1,500 gal

7.4.2 Waste Transfer

In most oil spill response operations, it would 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 in to impermeable bags that, in turn, are placed in impermeable containers.
- From a vacuum device storage tank to a truck.
- From containers to trucks.
- From trucks to lined pits.
- From lined pits to incinerators and/or landfills.
- 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 four general classes of transfer systems that could be employed to effect oily waste transfer operations. The following is a brief description of the four transfer systems:

Pumps

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

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

7.4.2 Waste Transfer, Continued

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.

Belt / Screw Conveyors

Conveyor may be used to transfer oily wastes containing a large amount of debris. These systems can transfer weathered debris laden oil either horizontally or vertically for short distances but are bulky and difficult to operate.

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.

7.4.3 Waste Disposal

In order to obtain the best overall Incident Disposal Plan, a combination of methods should be used. There is no template or combination of methods that can be used in every spill situation. Each incident should be reviewed carefully to ensure an appropriate combination of disposal 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. Permission for in-situ burning may be difficult to obtain when the burn takes place near populated areas.

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

Landfill Disposal

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

FIGURE 7.4-4 - FACILITY-SPECIFIC DISPOSAL LOCATIONS

MATERIAL	DISPOSAL FACILITY	LOCATION
Recovered Product	Oil Mop Inc.	Port Allen, LA
	U.S. Environmental Services, LLC.	Port Allen, LA
	Garner Environmental Services	Houston, TX
Contaminated Soil	Oil Mop Inc.	Port Allen, LA
	U.S. Environmental Services, LLC.	Port Allen, LA
	Garner Environmental Services	Houston, TX
Contaminated Equipment	Oil Mop Inc.	Port Allen, LA
	U.S. Environmental Services, LLC.	Port Allen, LA
	Garner Environmental Services	Houston, TX
Personnel Protective Equipment	Oil Mop Inc.	Port Allen, LA
	U.S. Environmental Services, LLC.	Port Allen, LA
	Garner Environmental Services	Houston, TX
	Oil Mop Inc.	Port Allen, LA

Decontamination Solutions	U.S. Environmental Services, LLC.	Port Allen, LA
	Garner Environmental Services	Houston, TX
Adsorbents and Spent Chemicals	Oil Mop Inc.	Port Allen, LA
	U.S. Environmental Services, LLC.	Port Allen, LA
	Garner Environmental Services	Houston, TX

SECTION 8 Last Revised: May 2006
DEMOBILIZATION / POST-INCIDENT REVIEW

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8.1 Terminating the Response

8.2 Demobilization

Figure 8.2-1 - Demobilization Checklist

8.3 Post-Incident Review

Figure 8.3-1 - Standard Incident Debriefing Form

8.3.1 Final Spill Cleanup Report

8.1 TERMINATING THE RESPONSE

- A team of federal, state, and Company personnel must certify that each area is clean before halting cleanup operations.
- Demobilize equipment and personnel at the first opportunity in order to reduce cost.
- Consider which resources should be demobilized first; for example, berthing expenses can be saved by demobilizing out-of-area contractors before local ones.
- Equipment may need both maintenance and decontamination before being demobilized.
- All facilities (staging area, Command Post, etc.) should be returned to their pre-spill condition before terminating operations.
- Determine what documentation should be maintained, where, and for how long.
- Contract personnel may be more susceptible to "suffering" injuries as they approach termination.
- Some activities 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

The Company can reduce costs considerably by developing a Demobilization Plan (**SECTION 5.8**). Therefore, emphasis must be placed on establishing efficient demobilization procedures. A Demobilization Checklist is provided in **FIGURE 8.2-1**.

FIGURE 8.2-1 - DEMOBILIZATION CHECKLIST

DEMOBILIZATION CHECKLIST	INITIALS	DATE/TIME STARTED	DATE/TIME COMPLETED
Assign personnel to identify surplus resources and probable release times.			
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

All Facility personnel involved in the incident shall be debriefed (by the Company) within two weeks after termination of operations. A Standard Incident Debriefing Form is provided in **FIGURE 8.3-1**. The primary purpose of the post-incident review is to identify actual or potential deficiencies in the Plan and determine the changes required to correct the deficiencies. The post-incident review also is intended to identify which response procedures, equipment, and techniques were effective and which were not and the reason(s) why. This type of information is very helpful in the development of a functional Plan by eliminating or modifying those response procedures that are less effective and emphasizing those that are highly effective. This process should also be used for evaluating training drills or exercises. Key agency personnel that were involved in the response will be invited to attend the post-incident review.

FIGURE 8.3-1 - STANDARD INCIDENT DEBRIEFING FORM

Name of incident:
Date:
PERSONNEL DEBRIEFED
Name:
Normal duty:
Summary of duties performed during incident (list date, time, and location):

Positive aspects of the response:
Aspects of the response which could be improved:
Name:
Title:
Signature:

8.3.1 Final Spill Cleanup Report

A final, comprehensive report shall be prepared by the Incident Commander or designee and forwarded to the Administrator within 90 days after completion of spill cleanup activities for internal use. It should be written in the narrative form and include the information listed below (as appropriate):

- Name, address, and telephone number of the owner or operator.
- Name, address, and telephone number of the Facility.
- 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 what actually caused the discharge and actions taken to control or stop the discharge.

- Estimated quantity and disposition of recovered material that resulted from the incident.
- Description of actual or potential hazards to human health or 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.
- The extent of injuries, if any.
- 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 major 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.

8.3.1 Final Spill Cleanup Report, Continued

- All other relative information.
- A final signature as follows:

The above information is true to the best of my knowledge and belief:

Name:

Title:
Signature:
Date:

Port Hudson

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A. TRAINING / EXERCISES**B. CONTRACTOR RESPONSE EQUIPMENT****C. SPCC PLANS****D. HAZARD EVALUATION AND RISK ANALYSIS****E. CROSS-REFERENCES****F. ACRONYMS AND DEFINITIONS****G. ADDITIONAL INFORMATION****APPENDICES**

APPENDIX A TRAINING / EXERCISES

Last Revised: February 2009

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A.1 Exercise Requirements and Schedules

Figure A.1-1 - PREP Response Plan Core Components

Figure A.1-2 - Exercise Requirements

Figure A.1-3 - Spill / Exercise Documentation Form

Figure A.1-4 - EPA Required Response Equipment
Testing and Deployment Drill Log

Figure A.1-5 - Qualified Individual Notification Drill Log

Figure A.1-6 - Spill Management Team Tabletop
Exercise Log

A.2 Training Program

Figure A.2-1 - Training Requirements

Figure A.2-2 - PREP Training Program Matrix

Figure A.2-3 - Personnel Response Training Log

A.1 EXERCISE REQUIREMENTS AND SCHEDULES

- The Company participates in the National Preparedness for Response Exercise Program (PREP).
- During each triennial cycle, all components of the Plan (**FIGURE A.1-1**) must be exercised at least once.
- The Environmental Department is responsible for the following aspects:
 - Scheduling,
 - Maintaining records,
 - Implementing,
 - Evaluation of the Company's training and exercise program, and
 - Post-drill evaluation improvements.
- **FIGURE A.1-2** provides descriptions of exercise requirements, **FIGURE A.1-3** provides a Spill/Exercise Documentation form or a corresponding Company form may be used, and **FIGURE A.1-4** provides a log for response equipment testing and deployment drill.

FIGURE A.1-1 - 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: <ul style="list-style-type: none"> • 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. Source 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, mitigate, and remove the discharged product includes mitigation and removal activities.
8. Protection	Demonstrate the ability of the spill response organization to protect the environmentally and economically sensitive areas identified in the NWACP 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 in compliance with guidance found in the NWACP.
10. Communications	Demonstrate the ability to establish an effective communications system throughout the scope of the Plan for the spill response organization.
11. Transportation	Demonstrate the ability to establish effective multi-mode transportation both for execution of the discharge and support functions.
12. Personnel support	Demonstrate the ability to provide the necessary logistical 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 an 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.1-2 - EXERCISE REQUIREMENTS

EXERCISE TYPE	EXERCISE CHARACTERISTICS
Facility/QI notification	<ul style="list-style-type: none"> • Conducted quarterly. • The facility initiates mock spill notification to QI. • The Qualified Individual documents time/date of notification, name, and phone number of individual

	<p>contacted.</p> <ul style="list-style-type: none"> Document in accordance with form in FIGURE A.1-5.
Equipment deployment	<ul style="list-style-type: none"> Response contractors listed in the plan must participate in annual deployment exercise. An exercise where response equipment is deployed to a specific site and operated in its normal operating medium. Document in accordance with form in FIGURE A.1-3.
SMT tabletop	<ul style="list-style-type: none"> Conducted annually. Tests SMT's 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 in accordance with form in FIGURE A.1-4.
Unannounced	<ul style="list-style-type: none"> 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.
Area	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Company conducts post-exercise meetings to discuss positive items, areas for improvement, and to develop action item checklist to be implemented later.
Records of drills	<ul style="list-style-type: none"> Company will maintain exercise records for five years following completion of each exercise. Records will be maintained in the Training/Exercise tool in the electronic interface. 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.). <ul style="list-style-type: none"> • Available to USCG for inspection upon request. |
|--|--|

FIGURE A.1-3 - SPILL / EXERCISE DOCUMENTATION FORM

Retain this form for a minimum of five years.

1. Date(s) performed:		
2. <input type="checkbox"/> Exercise <input type="checkbox"/> Actual spill		
If exercise:		
<input type="checkbox"/> Announced <input type="checkbox"/> Unannounced <input type="checkbox"/> Deployment <input type="checkbox"/> Notification <input type="checkbox"/> Tabletop		
If exercise, frequency:		
<input type="checkbox"/> Quarter <input type="checkbox"/> 1st <input type="checkbox"/> 2nd <input type="checkbox"/> 3rd <input type="checkbox"/> 4th <input type="checkbox"/> Annual		
3. Location of exercise/spill:		
4. Time started:		
5. Description of scenario or spill including volume and content (crude oil, condensate, etc.):		
6. Describe how the following objectives were exercised:		
Team's knowledge of the Oil Spill Response Plan:		
	Yes	No
Was briefing meeting conducted:	<input type="checkbox"/>	<input type="checkbox"/>
Established field Command Post:	<input type="checkbox"/>	<input type="checkbox"/>
Confirmed source was stopped:	<input type="checkbox"/>	<input type="checkbox"/>
Developed Site Safety and Health Plan:	<input type="checkbox"/>	<input type="checkbox"/>
Prepared ICS 201:	<input type="checkbox"/>	<input type="checkbox"/>
Established work zones and perimeter security:	<input type="checkbox"/>	<input type="checkbox"/>

Developed short range tactical plan:	<input type="checkbox"/>	<input type="checkbox"/>
Developed long range tactical plan:	<input type="checkbox"/>	<input type="checkbox"/>
Proper Notifications:		
Qualified Individual (or designee):	<input type="checkbox"/>	<input type="checkbox"/>
Terminal Manager:	<input type="checkbox"/>	<input type="checkbox"/>
Release/Spill Report Form completed:	<input type="checkbox"/>	<input type="checkbox"/>
Notification to agencies completed (attach log):	<input type="checkbox"/>	<input type="checkbox"/>
Transportation/Communication System:		
Established primary/secondary communication system:	<input type="checkbox"/>	<input type="checkbox"/>
Primary: <input type="checkbox"/> cellular phone <input type="checkbox"/> two way radio <input type="checkbox"/> land telephone line		
Secondary: <input type="checkbox"/> cellular phone <input type="checkbox"/> two way radio <input type="checkbox"/> land telephone line		
<input type="checkbox"/> Other		

FIGURE A.1-3 - SPILL / EXERCISE DOCUMENTATION FORM, CONTINUED

Transportation/Communication System, Continued:		
	Yes	No
Motor vessel deployed:	<input type="checkbox"/>	<input type="checkbox"/>
Provider name:		
Helicopter/Sea plane deployed:	<input type="checkbox"/>	<input type="checkbox"/>
Call sign:		
Describe function (i.e., transportation, surveillance, dispersant application):		
Ability to access contracted Oil Spill Removal Organizations (OSROs):		

Who contacted - (name of individual and OSRO):		
When contacted:		
Response time projection for deployment:		
Type and amount of containment used:		
Spill material recovered:	<input type="checkbox"/>	<input type="checkbox"/>
Spilled material disposed:	<input type="checkbox"/>	<input type="checkbox"/>
Where?		
Ability to coordinate spill response with on-scene coordinator, state, and applicable agencies:		
Was regulatory on-scene coordinator(s) contacted:	<input type="checkbox"/>	<input type="checkbox"/>
List person and agency represented:		
Ability to access sensitive site and resource information in the Area Contingency Plan (ACP):		
Was pre-impact assessment conducted:	<input type="checkbox"/>	<input type="checkbox"/>
Were pre-impact samples taken:	<input type="checkbox"/>	<input type="checkbox"/>
Were pre-impact photographs taken:	<input type="checkbox"/>	<input type="checkbox"/>
Were NRDA specialists mobilized:	<input type="checkbox"/>	<input type="checkbox"/>
Were deficiencies identified:	<input type="checkbox"/>	<input type="checkbox"/>
If yes, changes implemented:	<input type="checkbox"/>	<input type="checkbox"/>
If no, why were changes not implemented:		
LESSONS LEARNED	PERSON RESPONSIBLE FOR FOLLOW-UP OF CORRECTIVE MEASURES	

	Name:
	Position:
	Certifying Signature:

FIGURE A.1-4 - EPA REQUIRED RESPONSE EQUIPMENT TESTING AND DEPLOYMENT DRILL LOG

Item:	Date of Last Update:
ACTIVITY	INFORMATION
Last inspection or response equipment test date	
Inspection frequency	
Last deployment drill date	
Deployment frequency	
OSRO Certification (if applicable)	

Item:	Date of Last Update:
ACTIVITY	INFORMATION
Last inspection or response equipment test date	
Inspection frequency	
Last deployment drill date	
Deployment frequency	
OSRO Certification (if applicable)	

Item:	Date of Last Update:
ACTIVITY	INFORMATION
Last inspection or response equipment test date	
Inspection frequency	
Last deployment drill date	
Deployment frequency	
OSRO Certification (if applicable)	

Item:	Date of Last Update:

ACTIVITY	INFORMATION
Last inspection or response equipment test date	
Inspection frequency	
Last deployment drill date	
Deployment frequency	
OSRO Certification (if applicable)	

FIGURE A.1-5 - QUALIFIED NOTIFICATION DRILL LOG

NOTIFICATION EXERCISE		
1. Date Performed:	2. Exercise or actual response?	3. Vessel/Facility/Pipeline/Offshore Facility Initiating exercise:
4. Name of person notified:		
Is this person identified in your response plan as qualified individual or designee?		
5. Time Initiated:		
Time in which qualified individual or designee responded:		
6. Method used of contact:		
<input type="checkbox"/> Phone <input type="checkbox"/> Pager <input type="checkbox"/> Radio <input type="checkbox"/> Other _____		
7. Description of notification procedures:		
8. Identify which of the 15 core components of your response plan were exercised during this particular exercise:		
Organizational Design	Operational Response	Response Support
<input type="checkbox"/> Notifications <input type="checkbox"/> Staff mobilization <input type="checkbox"/> Ability to operate within the response management system described in the plan	<input type="checkbox"/> Discharge control <input type="checkbox"/> Assessment of discharge <input type="checkbox"/> Containment of discharge <input type="checkbox"/> Recovery of spilled material <input type="checkbox"/> Protection of economically and environmentally sensitive areas <input type="checkbox"/> Disposal of recovered	<input type="checkbox"/> Communications <input type="checkbox"/> Transportation <input type="checkbox"/> Personnel Support <input type="checkbox"/> Equipment Maintenance and support <input type="checkbox"/> Procurement <input type="checkbox"/> Documentation

	product
Certifying Signature	Date

FIGURE A.1-6 - SPILL MANAGEMENT TEAM TABLETOP EXERCISE LOG

Company:	Date:
ACTIVITY	INFORMATION
Emergency Scenario	
Evaluation	
Changes to be Implemented	
Time Table for Implementation	

Company:	Date:
ACTIVITY	INFORMATION
Emergency Scenario	
Evaluation	
Changes to be Implemented	
Time Table for Implementation	

Company:	Date:
ACTIVITY	INFORMATION
Emergency Scenario	
Evaluation	
Changes to be Implemented	
Time Table for Implementation	

Company:	Date:
ACTIVITY	INFORMATION
Emergency Scenario	
Evaluation	
Changes to be Implemented	
Time Table for Implementation	

A.2 TRAINING PROGRAM

FIGURE A.2-1 provides training requirements for spill responders. **FIGURE A.2-2** provides the program matrix. **FIGURE A.2-3** provides an example personnel response training log.

FIGURE A.2-1 - TRAINING REQUIREMENTS

TRAINING TYPE	TRAINING CHARACTERISTICS
Training in use of spill response plan	<ul style="list-style-type: none"> All field personnel will be trained to properly report/monitor spills. Plan will be reviewed annually with all employees and contract personnel. The Personnel Response Training Log is located in FIGURE A.2-3.
OSHA training requirements	<ul style="list-style-type: none"> All Company responders designated in Plan must have 24 hours of initial spill response training. Laborers having potential for minimal exposure must have 24 hours of initial oil spill response instruction and eight hours of actual field experience. Spill responders having potential exposure to hazardous substances at levels exceeding permissible exposure limits must have 40 hours of initial training offsite and 24 hours of actual field experience. On-site management/supervisors required to receive same training as equipment operators/general laborers plus eight hours of specialized hazardous waste management training. Managers/employees require eight hours of annual refresher training.
Spill management team personnel training	<ul style="list-style-type: none"> See recommended PREP Training Matrix (FIGURE A.2-2).
Training for casual laborers or volunteers	<ul style="list-style-type: none"> Company will not use casual laborers/volunteers for operations requiring HAZWOPER training.
Wildlife	<ul style="list-style-type: none"> Only trained personnel approved by USFWS and appropriate state agency will be used to treat oiled wildlife.
Training documentation and record maintenance	<ul style="list-style-type: none"> Training activity records will be retained for five years for all personnel following completion of training.

- Company will retain training records indefinitely for individuals assigned specific duties in the Plan.
- Available to USCG for inspection upon request.

FIGURE A.2-2 - PREP TRAINING PROGRAM MATRIX

TRAINING ELEMENT	QUALIFIED INDIVIDUAL (QI)	SPILL MANAGEMENT TEAM (SMT)	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 which may be available to mitigate or prevent an oil discharge	X	X	X
Operational capabilities of the contracted OSROs to respond small,	X	X	X

medium, and large discharges			
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: <ul style="list-style-type: none"> • 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 Spill Management Team (SMT) 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

FIGURE A.2-2 - PREP TRAINING PROGRAM MATRIX, CONTINUED

TRAINING ELEMENT	QUALIFIED INDIVIDUAL (QI)	SPILL MANAGEMENT TEAM (SMT)	FACILITY PERSONNEL
The National Contingency Plan (NCP)	X	X	X
Roles and responsibilities of federal and state agencies in pollution response	X	X	X
Available response resources identified in the Plan	X	X	
Contracting and ordering procedures	X	X	

to 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 in-situ 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 SMT		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 cleanup technology including: <ul style="list-style-type: none"> • Oil containment • Oil recovery methods and devices • Equipment limitations and uses • Shoreline cleanup and protection • Spill trajectory analysis • Use of dispersants, in-situ 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

FIGURE A.2-2 - PREP TRAINING PROGRAM MATRIX, CONTINUED

TRAINING ELEMENT	QUALIFIED INDIVIDUAL (QI)	SPILL MANAGEMENT TEAM (SMT)	FACILITY PERSONNEL
Procedures to follow in the event of discharge, potential discharge, or emergency involving the following equipment or scenarios: <ul style="list-style-type: none"> • Tank overfill • Tank rupture • Piping or pipeline rupture • Piping or pipeline leak, both under pressure or not under pressure, if applicable • Explosion or fire • Equipment failure • Failure of secondary containment system 			X
QI's name and how to contact him or her			X
Port Hudson		Page A - 14	

FIGURE A.2-3 - PERSONNEL RESPONSE TRAINING LOG

Training records are maintained at the terminal office.

NAME	RESPONSE TRAINING/DATE AND NUMBER OF HOURS	PREVENTION TRAINING/DATE AND NUMBER OF HOURS

*Qualified Individual

APPENDIX B Last Revised: April 3, 2012
CONTRACTOR RESPONSE EQUIPMENT
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B.1 Cooperatives and Contractors

B.1.1 OSRO Classification

Figure B.1-1 - Evidence of Contracts and Equipment Lists

B.1 COOPERATIVES AND CONTRACTORS

The Company has contracted with additional 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. For a detailed listing of USCG classified OSROs and other contractors by terminal, refer to **FIGURE 3.1-4** and **FIGURE 7.1-1**.

COMPANY / CONTRACTOR / TERM	APPLICABLE COTP ZONE (S)	USCG CLASSIFICATIONS								RESPONSE TIME		
			Facilities			Vessels						
			MM	W1	W2	W3	MM	W1	W2	W3		
Clean Harbors Environmental Services Inc. 13351 Scenic Highway Baton Rouge LA 70807 Term of contract: To	Lower Mississippi - DISTRICT 8	River/Canal	✓	✓	✓	✓	✓	✓	✓	✓	hours	
		Inland	✓		✓	✓	✓	✓	✓	✓		
		Open Ocean										
		Offshore										
		Nearshore										
		Great Lakes										
OMIES 5227 N. River Road Port Allen LA 70767 Term of contract: To	New Orleans	River/Canal	✓	✓	✓	✓	✓	✓	✓	✓	1 hours	
		Inland	✓	✓	✓	✓	✓	✓	✓	✓		
		Open Ocean										
		Offshore										
		Nearshore										
		Great Lakes										
U.S. Environmental Services, LLC. 6338 Highway		River/Canal	✓	✓	✓	✓	✓	✓	✓	✓	1 hours	
		Inland	✓	✓	✓	✓	✓	✓	✓	✓		

73 Geismar LOUISIANA 70734 Term of contract: To		<table border="1"> <tr> <td>Open Ocean</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>Offshore</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>Nearshore</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>Great Lakes</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table>	Open Ocean									Offshore									Nearshore									Great Lakes																																													
Open Ocean																																																																											
Offshore																																																																											
Nearshore																																																																											
Great Lakes																																																																											
ES&H 2917 Fairchild Dr. New Iberia LA 70562 Term of contract: To		<table border="1"> <tr> <td></td> <td colspan="4">Facilities</td> <td colspan="4">Vessels</td> </tr> <tr> <td></td> <td>MM</td><td>W1</td><td>W2</td><td>W3</td> <td>MM</td><td>W1</td><td>W2</td><td>W3</td> </tr> <tr> <td>River/Canal</td> <td>✓</td><td>✓</td><td>✓</td><td>✓</td> <td>✓</td><td>✓</td><td>✓</td><td>✓</td> </tr> <tr> <td>Inland</td> <td>✓</td><td>✓</td><td>✓</td><td>✓</td> <td>✓</td><td>✓</td><td>✓</td><td>✓</td> </tr> <tr> <td>Open Ocean</td> <td></td><td></td><td></td><td></td> <td></td><td></td><td></td><td></td> </tr> <tr> <td>Offshore</td> <td></td><td></td><td></td><td></td> <td></td><td></td><td></td><td></td> </tr> <tr> <td>Nearshore</td> <td></td><td></td><td></td><td></td> <td></td><td></td><td></td><td></td> </tr> <tr> <td>Great Lakes</td> <td></td><td></td><td></td><td></td> <td></td><td></td><td></td><td></td> </tr> </table>		Facilities				Vessels					MM	W1	W2	W3	MM	W1	W2	W3	River/Canal	✓	✓	✓	✓	✓	✓	✓	✓	Inland	✓	✓	✓	✓	✓	✓	✓	✓	Open Ocean									Offshore									Nearshore									Great Lakes									1.5 hours
	Facilities				Vessels																																																																						
	MM	W1	W2	W3	MM	W1	W2	W3																																																																			
River/Canal	✓	✓	✓	✓	✓	✓	✓	✓																																																																			
Inland	✓	✓	✓	✓	✓	✓	✓	✓																																																																			
Open Ocean																																																																											
Offshore																																																																											
Nearshore																																																																											
Great Lakes																																																																											

The following contractors are retained by the Company, but are not USCG classified OSROs within this Area:

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 AND EQUIPMENT LISTS

- **Clean Harbors Environmental Services Inc., Baton Rouge,LA**
- **OMIES, Port Allen,LA**
- **U.S. Environmental Services, LLC. , Geismar,LOUISIANA**
- **ES&H , New Iberia ,LA**

APPENDIX C
SPCC PLANS

Last Revised: February 22, 2013

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Figure C-1 - Professional Engineer Certification

Figure C-2 - Management Approval and Review

Figure C-3 - Record of Reviews

Figure C-4 - SPCC Plan

Figure C-5 - Tank Tables

Figure C-6 - Addendum

Figure C-7 - Drainage Diagram

Figure C-8 - Evacuation Diagram

Figure C-9 - Piping Diagram

Figure C-10 - Containment Calculation

Figure C-11 - Discharge Prevention Meeting Log

Figure C-12 - Inspection Procedures

Figure C-13 - Secondary Containment Drainage Log

Figure C-14 - Reportable Spill History

Figure C-15 - Containment and Drainage Planning

FIGURE C-1 - PROFESSIONAL ENGINEER CERTIFICATION

40 CFR, Part 112.3(d) Professional Engineer Certification

Being familiar with the provisions of 40 CFR, Part 112, I attest to the following:

- I am familiar with the requirements of this part.
- I or my agent has visited and examined the Facility.
- The Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards, and with the requirements of this part.
- Procedures for required inspections and testing have been established.
- The Plan is adequate for the Facility.

Note: Certification is conditional pending satisfactory resolution of the required improvements listed in FIGURE C-6.

Printed Name of Registered Professional Engineer:	Daniel P. McRea
Signature of Registered Professional Engineer:	
Date:	2/21/2013
Registration No.:	106168
Seal:	

Engineering Cert.

FIGURE C-2 - MANAGEMENT APPROVAL AND REVIEW

I hereby approve the contents of the Facility's Spill Prevention, Control, and Countermeasure Plan (SPCC Plan) and have the authority to commit the necessary resources to implement the SPCC Plan, as set forth in this document, in accordance with the federal requirements of 40 CFR Part 112.

Name:	Mike Moore	Signature:	
--------------	------------	-------------------	--

			
Title:	Vice President and General Manager of Pipelines and Terminals	Date:	2/21/2013

FIGURE C-3 - RECORD OF REVIEWS

RECORD OF REVIEWS					
Date of Review ¹		Will Plan Need Amendment? ²	Reviewer's Signature ³	Reason for Amendment ⁴	Date of Amendment (or N/A)
Full	Partial	Yes / No			
2/17/2010		No	Tricia Petty		
3/21/2011		Yes	Tricia G Petty	Update to containment	3/22/2011
	8/9/2012	No	Bruce McElheny	Update to addendum deficiencies of 3/21/2011: Items (2) have been corrected and validated.	8/9/2012
2/21/2013		No	Bruce McElheny		

¹ A full review of the plan must be performed at least once every five years.

² The SPCC plan must be amended when there is a change in the facility design, construction, operation, or maintenance that materially affects its potential for a discharge. Examples include, but are not limited to: commissioning or decommissioning containers; replacement, reconstruction, or movement of containers; reconstruction, replacement, or installation of piping systems; construction or demolition that might alter secondary containment structures; changes of product or service; or revision of standard operation or maintenance procedures.

³ Reviewer's signature indicates that he/she has completed review and evaluation of the SPCC plan for [name of facility] on the date indicated and will or will not amend the plan as a result, as indicated.

⁴ Briefly describe reasons for plan amendment. These may include one or more of the

reasons in footnote 2, above, administrative changes such as updates to names or phone numbers, regulatory changes, or changes in Company policies.

FIGURE C-4 - SPCC PLAN

FACILITY INFORMATION			
Name of Facility:	Port Hudson	Type of Facility:	Onshore/Non-Production
Location of Facility:	769 Port Hudson Cemetery Road, P.O. Box 1326 Zachary (East Baton Rouge Parish), Louisiana 70791	Name & Address of Owner or Operator:	Genesis Crude Oil, L.P. 919 Milam, Suite 2100 Houston, TX 77002
(b) (7)(F)		Designated Personnel Accountable for Oil Spill Prevention at the Facility:	Clint Murray
General Facility Description:	<p>The Port Hudson Facility located on the Mississippi River includes a Barge Dock, associated piping, and a single welded steel tank with an external floating roof, located within a secondary containment dike. (b) (7)(F)</p> <p>Also included is a trucking terminal located in East Baton Rouge Parish, Louisiana, on Highway 3113 approximately 0.75 miles west of Highway 64 and 13.5 miles northwest of Baton Rouge, LA.</p> <p>The gathering system, beginning at the trucking terminal and consisting of a (b) (7)(F) oil tank and a (b) (7)(F) tank with a 4" pipeline, runs in a westerly direction for approximately 1,147'. It then enlarges to 8" and runs in a southerly direction for 9,761' ending at the Port Hudson Marine Terminal. A 3" gathering line 403' in length runs from Flash Exploration to the manifold for the (b) (7)(F)</p> <p>A 16" line beginning at the terminal runs in a southerly then westerly direction for a distance of 8,246' ending at the dock facility.</p> <p>The dock is located on the left (east) descending bank of the Mississippi River at River Mile Post 253.6, East Baton Rouge Parish, LA. The lines from the terminal to the dock consist mainly of 8,246' of 16" line, along with several smaller lengths of line. A total of 2,488.64 bbls of product is contained within these lines. The lines from trucking to the terminal consist mainly of 1,147' of 4" line and 9,761' of 8" line, along with a 3", 403' gathering line. A total of 625.72 bbls of product is contained within these three lines. A 16"</p>		

line consists of 1,862.92 bbls of product.

Substantial expansion occurred in 1986 when the (b) (7)(F) was added to the Truck Terminal and again in 2010 when a (b) (7) was added to the Truck Terminal for refueling trucks.

FIGURE C-4 - SITE SPECIFIC SPCC PLAN, CONTINUED

40 CFR, 112.7

(a) GENERAL REQUIREMENTS

(1) Include a discussion of your facility's conformance with the requirements listed in this part

- The specific requirements are detailed in bulleted responses below.

(2) Comply with all applicable requirement listed in this part. Your Plan may deviate from some requirements if you provide additional protection or explanation

- All requirements are addressed below. Where deviations occur, an equivalent environmental protection is described in detail.

(3) You must also address in your plan:

- The facility is an Onshore/Non-Production facility where crude oil is received via truck at the truck station and pumped to a (b) (7)(F). The crude oil from the tank is transferred by pipeline to the Pumping station and a (b) (7)(F) for storage and later movement to barges. refer to FIGURE C-7 for the facility diagram

i. The type of oil in each container and its storage capacity

- Refer to FIGURE C-5 for the Tank Table.

ii. Discharge prevention measures

- Entire plan.

iii. Discharge or drainage controls such as secondary containment around containers and other structures, equipment, and procedures for the control of a discharge

- Refer to APPENDIX C Section 40 CFR 112.8 (b).

iv. Countermeasures for discharge discovery, response, and cleanup (both the facility's capability and those that might be required of a contractor)

- Refer to SECTION 2 of the FRP.

v. Methods of disposal of recovered materials

- Refer to FIGURE 7.4 Waste Management.

vi. Contact list and phone numbers for responding to a spill or emergency

- Refer to FIGURE 3.1-3 and FIGURE 3.1-4.

(4) Unless you have submitted a response plan, provide information and procedures to report a discharge

- A Facility Response Plan (FRP) has been submitted to the regional administrator.

(5) Unless you have submitted a response plan, describe procedures you will use when a discharge occurs

- A Facility Response Plan (FRP) has been submitted to the regional administrator.

(b) PREDICTION OF THE DIRECTION, RATE OF FLOW, AND TOTAL QUANTITY OF OIL WHICH COULD BE DISCHARGED FROM THE FACILITY AS A RESULT OF EACH TYPE OF MAJOR EQUIPMENT FAILURE

- Refer to Tank Table, FIGURE C-5, and 40 CFR 112.8(d).

<ul style="list-style-type: none"> • Truck Unloading Spill: <p>If a oil spill were to occur during truck unloading due to an open valve or unconnected hose it would be at a rate of 234 gallons per minute (gpm). Material would flow onto the dirt truck unloading area and across the drive area towards the road; unrestricted flow would be southwest. Flow time until isolation is estimated at 1 minute; total volume estimated at 234 gallons.</p>
<ul style="list-style-type: none"> • Diesel Tank Overfill: <p>If the diesel tank were to be overfilled, which is unlikely due to overfill alarms, it would be at a rate of 234 gallons per minute (gpm). Material would flow into the berm unrestricted, with the flow Northeast. Flow time until isolation is estimated at one minute; total volume estimated at 234 gallons.</p>
<ul style="list-style-type: none"> • Tank 10400 Overfill: <p>If tank 10400 were to be overfilled, which is unlikely due to overfill alarms; it would be at a rate of 234 gallons per minute (gpm). Material would flow into the berm unrestricted, with the flow Northeast. Flow time until isolation is estimated at 3 minutes; total volume estimated at 702 gallons.</p>
<ul style="list-style-type: none"> • Tank 34101 Overfill: <p>If tank 34101 were to be overfilled, which is unlikely due to overfill alarms, it would be at a rate of 630 gallons per minute (gpm). Material would flow into the berm unrestricted, with the flow Northeast. There is a low high level alarm and a max high level alarm. When first alarm would be tripped the control room would notify Operations at the site who would investigate and ensure flow wqas stopped. Fill time for the high level alarm is an additional 4 hours fill time. Flow time until isolation is estimated at 1 hour; total volume estimated at 37,800 gallons.</p>
<p>(c) Provide appropriate containment and/or diversionary structures or equipment to prevent a discharge</p>
<ul style="list-style-type: none"> • Refer to Tank Table, FIGURE C-5, and 40 CFR 112.8(b) and (c).
<p>Port Hudson</p>
<p>Page C - 8</p>

FIGURE C-4 - SITE SPECIFIC SPCC PLAN, CONTINUED

<p>40 CFR, 112.7</p>
<p>(c) Provide appropriate containment and/or diversionary structures or equipment to prevent a discharge</p>
<ul style="list-style-type: none"> • Truck Unloading Spill: <p>Material would flow onto the truck unloading area and across the drive area towards the road; unrestricted flow would be southwest. At the edge of the area is a dirt berm north and south as well as east to west preventing the flow from leaving the property.</p>
<ul style="list-style-type: none"> • Diesel Tank Overfill: <p>If the diesel tank were to be overfilled, (b) (7)(F)). Oil would flow into the berm unrestricted, with the flow Northeast. The diesel would be contained within the berm, which provides (b) (7)(F) .</p>

- Tank 10400 Overfill:

If tank 10400 were to be (b) (7)(F)). Material would flow into the berm unrestricted, with the flow Northeast. The oil would be contained within the berm, which provides (b) (7)(F)

- Tank 34101 Overfill:

If tank 34101 were to be overfilled (b) (7)(F) d. Oil would flow into the berm unrestricted, with the flow Northeast. The oil would be contained within the berm, which provides (b) (7)(F)

(d) CONTINGENCY PLANNING

(1) An oil spill contingency plan following the provisions of part 109 of this chapter

- This is not applicable because a response plan under 112.20 has been submitted for this Facility.

(e) Inspections, Tests, and Records (maintained for at least 3 years)

- Monthly inspections are performed which include checklist items covering storage tanks, pumps, pipelines, valves, fittings, fence perimeter and general security.

- Product handling equipment is inspected for signs of leakage or potential leakage. Spill containment impoundments are inspected to verify for the presence of oil.

- Inspections are performed in accordance with written procedures detailed on each inspection sheet.

- The Company has developed a tank inspection program for all storage tanks in accordance with the API 653 Standard. As tanks become available, clean and gas free, the Company will contract with a certified API 653 inspector to perform a complete thorough inspection of the tank.

- An API 653 inspection includes performing non-destructive testing of the tank steel to verify corrosion conditions. The API 653 inspection reports are maintained at the office of the terminal manager.

- When measurements or tank conditions are found to be out of API 653 specifications, the necessary repair work will be completed prior to returning the tank to operational service.

- Inspection and testing records are made part of this plan, but kept at the office of the terminal manager. All inspection records associated with this SPCC plan will be maintained for a period of three years.

- The facility manager or his designee will sign the inspections required by this SPCC Plan. Examples of these inspections can be found in this plan.

- Integrity testing will follow the guidelines listed above and examples of these records documenting the testing can be found in the appendices to this plan.

- High liquid level alarms are tested annually, including the manipulation of switches at the Dock Facility only.

- The fast response system is tested monthly, including the checking of gauge reading and calibrating at the Truck Facility, Pump Station and Dock Facility.

(f) PERSONNEL TRAINING AND DISCHARGE PREVENTION PROCEDURES

(1) PERSONNEL TRAINING

- Qualified and experienced personnel conduct on-the-job training of new and/or inexperienced employees.

FIGURE C-4 - SITE SPECIFIC SPCC PLAN, CONTINUED

40 CFR, 112.7	
(f) PERSONNEL TRAINING AND DISCHARGE PREVENTION PROCEDURES	
(1) PERSONNEL TRAINING	
	<ul style="list-style-type: none"> The Company has developed an employee-training program that addresses proper operation and maintenance of equipment to prevent oil discharges.
	<ul style="list-style-type: none"> The overall purpose of this training program is ensuring that employees are kept informed of current operational procedures, and applicable spill prevention methods and pollution control laws, rules, and regulations.
	<ul style="list-style-type: none"> Pollution prevention and applicable regulatory requirements are brought to the attention of employees on a continuing basis in safety meetings, personal consultations, posters, literature distribution, etc.
(2) DESIGNATED PERSON	
	<ul style="list-style-type: none"> Refer to Facility Information above for the ?Designated Personnel Accountable for Oil Spill Prevention at the Facility?
(3) SPILL PREVENTION BRIEFINGS	
	<ul style="list-style-type: none"> In addition to the regular employee training, the Company will schedule annual briefings to assure that employees have current knowledge of spill prevention techniques and associated equipment.
	<ul style="list-style-type: none"> The record of these briefings will be documented using the form included with this SPCC Plan. Documentation will be maintained for a minimum period of three years.
	<ul style="list-style-type: none"> Employees are instructed in applicable pollution control laws, rules, and regulations.
	<ul style="list-style-type: none"> Briefings are given as necessary at tailgate meetings as part of an incident review or at other meetings as necessary. Operation and maintenance procedures are explained and problems with existing equipment are discussed.
	<ul style="list-style-type: none"> Examples of any recent spill events, malfunctioning equipment, etc., are described, along with any resulting or otherwise recently developed precautionary measures.

(b) (7)(F)

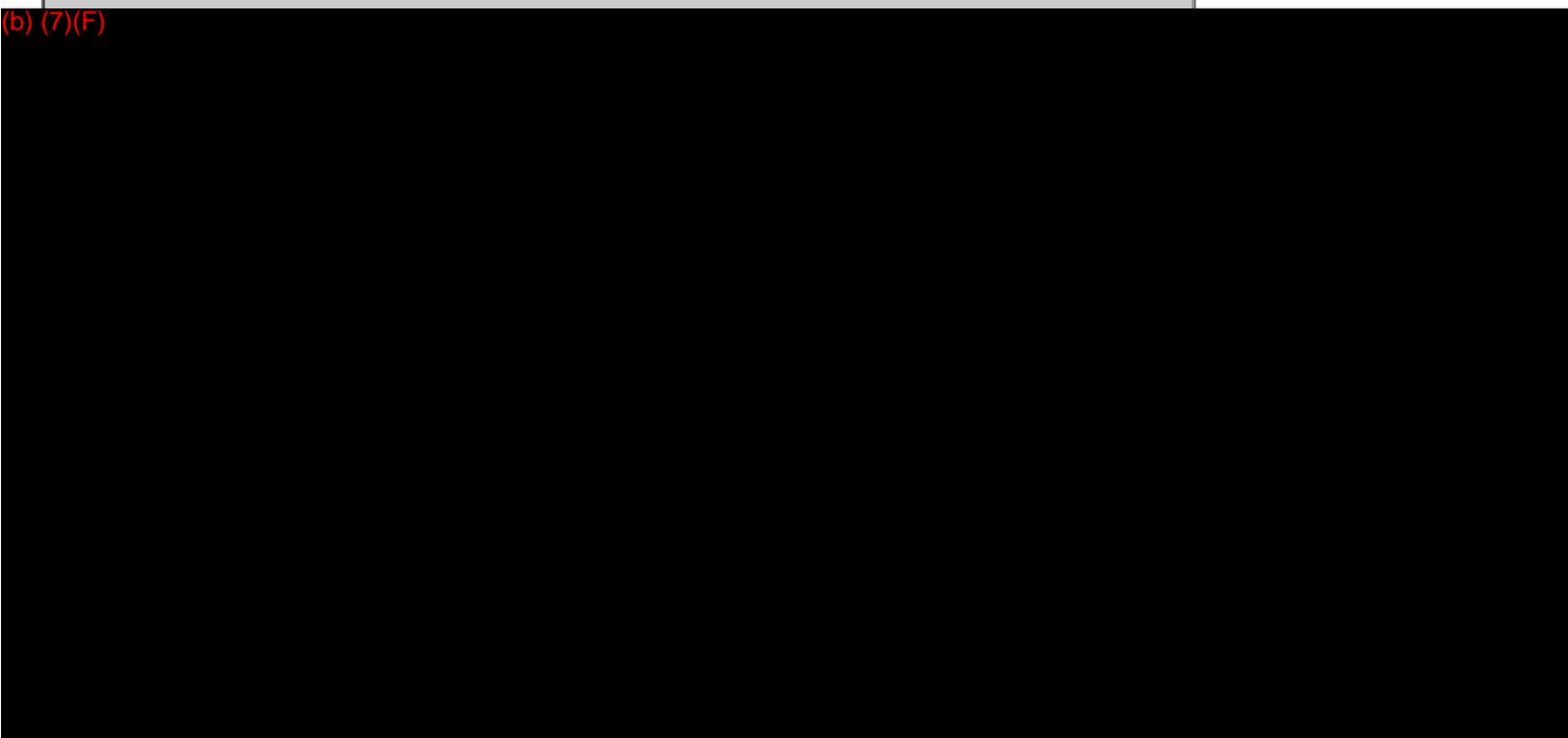


FIGURE C-4 - SITE SPECIFIC SPCC PLAN, CONTINUED

(h) FACILITY TANK CAR AND TANK TRUCK LOADING/UNLOADING RACK

(1) TRANSFER AREA DRAINAGE

- The Truck Station has an unloading area, receiving crude oil for one 10,097 bbl tank via two tank truck unloading areas. The drainage for this area is southeast towards the road where it is detained within two earthen berms one running north to south and one east to west at the edge of the property.

(2) INTERLOCKED WARNING LIGHT OR PHYSICAL BARRIER

- Warning signs and wheel chocks are used to prevent premature vehicular

departure.
<ul style="list-style-type: none"> • Unloading operations are a manually achieved operation at the facility.
<ul style="list-style-type: none"> • The truck driver is trained for this purpose and adheres to DOT rules and regulations.
(3) TRUCK DRAIN / OUTLET EXAMINATION
<ul style="list-style-type: none"> • Prior to and during filling of tanks or tank trucks, piping, connections, and outlets are visually examined for leakage and are tightened, adjusted, or replaced as necessary to prevent liquid leakage.
(i) BRITTLE FRACTURE EVALUATION REQUIREMENTS
<ul style="list-style-type: none"> • The Facility follows a program to inspect all storage tanks according to API 653 standards. The API 653 inspections will include structural steel evaluation.
<ul style="list-style-type: none"> • Field constructed tanks are present at the Facility. However, Facility management is aware that in the event modifications are made to storage containers, an evaluation must occur to determine if the structural integrity of the container is sufficient to safely manage the material to be stored and prevent brittle fracture or catastrophic failure.
(j) STATE DISCHARGE PREVENTION REQUIREMENTS
<ul style="list-style-type: none"> • The Louisiana Oil Spill Prevention and Response Act requires spill prevention and response plans. The Louisiana Spill Prevention and Control (SPC) Regulations (Title 33, Part IX, Ch. 9) mirrors the Federal SPCC Rule
Port Hudson
Page C - 11

FIGURE C-4 - SITE SPECIFIC SPCC PLAN, CONTINUED

40 CFR, 112.7
(j) STATE DISCHARGE PREVENTION REQUIREMENTS
<ul style="list-style-type: none"> • Operators of facilities must review the plan every five years and amend the plan, if necessary, within 90 days of the review.
<ul style="list-style-type: none"> • Louisiana ? 1 hour allowed for reporting a release or spill.
(k) QUALIFIED OIL-FILLED OPERATIONAL EQUIPMENT
(1) Qualification Criteria?Reportable Discharge History
<ul style="list-style-type: none"> • Not Applicable
(2) Alternative Requirements to General Secondary Containment
<ul style="list-style-type: none"> • Plan has been submitted under 112.20
(i) Facility Procedures for Inspections / Monitoring
<ul style="list-style-type: none"> • Inspections are conducted as noted in Section 40 CFR, 112.7(e) Inspections, Tests, and Records. <p>At the truck unloading site there are three pumps with 1 gallon each in the gear box.</p> <p>For the Dock/Pump Station area the large pump has 5 gallons in the gear box.</p> <p>Dock-Crane ? 40 gallons of Hydraulic Oil</p> <p>Pump Station ?Transformer ? 60 gallons of oil.</p>

(ii) Unless you have submitted a response plan under ?112.20, provide Contingency Planning:
• Plan has been submitted under 112.20
(A) An oil spill contingency plan following the provisions of part 109 of this chapter.
• Plan has been submitted under 112.20
(B) A written commitment of manpower, equipment, and materials required to expeditiously control and remove any quantity of oil discharged that may be harmful.
• Plan has been submitted under 112.20

FIGURE C-4 - SITE SPECIFIC SPCC PLAN, CONTINUED

40 CFR, 112.8
(a) GENERAL REQUIREMENTS
• The specific requirements are detailed in bulleted responses below.
(b) FACILITY DRAINAGE
(1) DRAINAGE FROM DIKED AREAS
• Berms that can collect rainwater are observed periodically, particularly following major rainfall events. Water is not allowed to accumulate to the point where required capacity for a spill would be reduced, and should be drained as soon as practical.
• Drainage valves are closed and sealed.
• A log is kept showing the dates that drainage was conducted from diked areas. Documentation also is kept showing that the facility's equipment and containers are regularly inspected for the presence of a discharge.
• The accumulated rainwater in the diked area must be visually inspected for the presence of a sheen, discoloration, or other sign of contamination. Any such observed contamination must be removed from the water prior to draining. Any covered substance accumulated in a diked area will be recovered using absorbent material, or vacuum truck.
• Site drainage ditches, road ditches, etc, are inspected monthly for accumulations of oil. If oil is detected in a ditch, the source of the discharge will be found and stopped.
• A single manually operated pump is utilized to drain the bermed area at the Truck Facility, which is the containment for the crude oil tank and diesel tank. If no sheen or oil is present, the pump is activated and the water discharge to the stormwater system which drains to the outlet at the southeast of the property then into a ditch traveling east along the road. If the water is not clean, it is not released but removed by vacuum truck and properly disposed of.
• The truck unloading area drains southeast with a berm that runs east to west and north to south at the east and south edge of the property. There are three outlet valves from this area that are kept closed. If water is present and there is no sheen or oil is present, the gate valves are opened and the water is allowed to discharge to a ditch that drains east along the road. If the water is not clean, it is removed by a vacuum truck and properly disposed of.
• The berm for Tank # 34101 is equipped with an 8 inch drainage pipe which leads to a closed gate valve on the outside of the bermed area. If no sheen or oil is present, the gate valve is opened and the water is allowed to discharge to the

ground surface. If the water is not clean, it is not released but removed by vacuum truck and properly disposed of.
<ul style="list-style-type: none"> The Pump Station's pump, meter, and receiver area has a dirt containment berm to contain any potential releases. There are two outlet valves from this area that are kept closed. If water is present and there is no sheen or oil present, the gate valves are opened and the water is allowed to discharge to a ditch which drains to the southeast through a culvert under the road then south via a ditch. If the water is not clean, it is removed by vacuum truck and properly disposed of.
(2) DRAIN VALVES AND DROP PIPES
<ul style="list-style-type: none"> Manually operated valves are maintained in a closed position except when discharging. When closed the valves will be locked to prevent unauthorized discharge of the diked areas. All diked areas are visually inspected prior to opening the drain valves.
(3) FACILITY DRAINAGE SYSTEM FROM UNDIKED AREAS
<ul style="list-style-type: none"> Any release from above ground piping is reported as soon as it is discovered. Adequate sorbent material are available to handle what would normally be expected to be accidentally released during an unloading operation. Should the spill exceed this amount, the Company has spill responders that can respond in a timely manner. The area in front of the office is used for parking and refueling the diesel tank. There is a storm drain in front of the office and north east of the number two truck unload station (see drainage diagram). The water discharge's to a ditch that drains east along the road. If there were to be a release active containment would be implemented placing sandbags around the drain areas. Any discharge would be removed via absorbents or vacuum truck. The area would be clean prior to removing the sandbags.
(4) DIVERSION SYSTEM
<ul style="list-style-type: none"> The Facility does not have a diversion system.
(5) TREATED DRAINAGE WATERS
<ul style="list-style-type: none"> The Facility does not treat water prior to discharge off-site.
(c) BULK STORAGE CONTAINERS
(1) CONTAINER CONSTRUCTION AND MATERIALS
<ul style="list-style-type: none"> The material and construction of bulk storage containers are compatible with the material stored and conditions of storage, such as pressure and temperature. These tanks are made of carbon steel in accordance of industry specifications. Drums used for storage of chemicals are made of carbon steel in accordance of industry specifications.
(2) SECONDARY CONTAINMENT
<ul style="list-style-type: none"> All bulk storage container installations are constructed so that the capacity of the secondary containment area for storage containers will be at least the capacity of the largest single container within that secondary containment area plus 10 %. Dikes are constructed of compacted soil, concrete walls/curbs and compacted soil floors, or of concrete walls and floors. Secondary containment is impervious to retain a release long enough for operating personnel to discover, respond to, and remove any discharged oil.

FIGURE C-4 - SITE SPECIFIC SPCC PLAN, CONTINUED

40 CFR, 112.8**(c) BULK STORAGE CONTAINERS****(2) SECONDARY CONTAINMENT**

- Drums used for storage of chemicals have their own secondary drum containment if they are a hazardous or a petroleum based product.

(3) RAINWATER DRAINAGE

- A single manually operated pump is utilized to drain the Tank 10400 and Diesel Tank containment area at the Truck Facility. If no sheen or oil is present, the pump is activated and the water discharge to the stormwater system. If the water is not clean, it is not released but removed by vacuum truck and properly disposed of.

- A valve is manually opened at the berm for the Tank 34101 to drain the containment area. If no sheen or oil is present, discharging the water onto the ground surface. After the area is drained the valve is then closed and locked. If the water is not clean, it is not released but removed by vacuum truck and properly disposed of.

- The Secondary Containment Drainage Log, FIGURE C-14, is used to record all dike draining events and is kept at the facility.

- Berm water that has a sheen is removed by a Company contracted by Genesis to send the waste water to a treatment facility .

(4) BURIED METALLIC STORAGE TANKS

- There are no completely buried metallic storage containers at this facility.

(5) PARTIALLY BURIED METALLIC STORAGE TANKS

- There are no partially buried or bunkered metallic containers at this facility.

(6) ABOVEGROUND CONTAINERS

- Tanks are observed by Genesis personnel during operating hours and monthly examinations are conducted, however any visible discharge that is observed will be promptly corrected.

- External condition examinations are conducted annually on container exteriors.

- Periodic external and/or internal inspections by qualified inspection personnel are scheduled on the basis of corrosion rate and remaining life in accordance with industry standards (API 653).

(7) INTERNAL HEATING COILS

- Internal heating coils are not utilized at this facility.

(8) FAIL SAFE ENGINEERING

- A high liquid level alarm is installed on Tank #34101 and Tank #10400 and are tested on a regular basis.

- A fast response system for determining the liquid level of each crude oil bulk storage container, e.g., digital computer, telepulse, direct vision gauge. Note: If this alternative is used, a person must be present to monitor gauges and the bulk container. Tank meters are present.

- The 300 bbl diesel tank is gauged just prior to the unloading of fuel to ensure there is adequate space to receive the product.

(9) FACILITY EFFLUENTS

- Prior to the discharge of storm water from the dike field areas, Company personnel visually inspect the effluent.

- Storm water is not discharged if there is a visible sheen.

- Effluent water that has a sheen is removed by a Company contracted by Genesis to send the waste water to be treatment facility .

(10) VISIBLE OIL LEAKS

- Visible discharges, which result in a loss of product from containers, will be

promptly corrected and any accumulations of oil in the diked areas will be promptly removed.

(11) MOBILE/PORTABLE STORAGE CONTAINERS

- The facility has mobile/portable storage containers at the Hazard Huts, including two 55-gallon containers with oily debris/crude oil/oil filters/spent absorbent, rags and one drum of Mineral Spirits.

(d) FACILITY TRANSFER OPERATIONS, PUMPING, AND FACILITY PROCESSES

(1) BURIED PIPING INSTALLATIONS

- Buried piping is wrapped and coated for corrosion protection for new and replaced buried piping.

FIGURE C-4 - SITE SPECIFIC SPCC PLAN, CONTINUED

40 CFR, 112.8

(d) FACILITY TRANSFER OPERATIONS, PUMPING, AND FACILITY PROCESSES

(1) BURIED PIPING INSTALLATIONS

- All new and replaced buried piping has cathodic or other protection to satisfy corrosion protection standards in 40 CFR Part 280 or 281.
- When a buried pipe section is exposed, it is examined and corrective action is taken as necessary.
- Underground piping extends from the unloading areas to the storage tanks. Other piping is DOT regulated.
- Cathodic protection is provided using (DC) (direct current) rectifiers to protect all below grade piping and tank bottoms.
- Exposed piping is inspected for corrosion and corrective action is taken when necessary

(2) PIPELINE OUT OF SERVICE

- If piping terminal connections are out of service or in stand by for more than six months, they are capped or blank-flanged and marked as out-of-service.
- Any piping considered to be out of service will be disconnected from product transfer equipment and identified as such by the installation of caps and/or blind flanges.

(3) PIPING SUPPORTS

- Pipe supports are designed to minimize abrasion and corrosion and allow for expansion and contraction.
- Pipes have some means of protection between the pipe and support, such as Teflon or rubber.

(4) ABOVEGROUND VALVES AND PIPELINES

- All aboveground valves and piping (include flange joints, valve glands and bodies, catch pans, pipe supports, locking of valves, and metal surfaces) are regularly examined.
- Refer to FIGURE C-12, Inspection Procedures.

(5) VEHICULAR TRAFFIC

- Most of the piping at the stations is buried. There is minimal traffic where piping is exposed.
- Bumper guards and signs are present at the loading areas to protect the

unloading pipes.

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FIGURE C-5 - TANK TABLES

Container/ Source	Failure/Cause	Total Capacity (gal)	Secondary Containment Volume Type (gal)	Tank Type	Year Constructed/ Installed	Quantity Stored (gal)	Direction of Flow/Rate (See Plot Plan)	Product Stored
ABOVEGROUND CONTAINERS - (b) (7)(F)								
# 10400	Overfill / Rupture / Leakage	(b) (7)(F)	(b) (7)(F)	W/IF	1986	(b) (7)(F)	Area Containment	Crude Oil / Condensate Mix
Diesel Tank	Overfill / Rupture / Leakage	(b) (7)(F)	(b) (7)(F)	Welded / Steel	2010	(b) (7)(F)	Area Containment	Diesel
# 34101	Overfill / Rupture / Leakage	(b) (7)(F)	(b) (7)(F)	External Floating Roof	1980	(b) (7)(F)	Area Containment	Crude Oil / Condensate Mix
DRUM STORAGE AREA - Total: 55								
Mineral Spirit Drum	Leak/ Rupture	55	61/5	Drums		55	Southeast/ Instantaneous	Mineral Spirits
Facility Total: (b) (7)(F)								

Containment Type: 1=Earthen Berm and Floor, 2=Concrete Berm and Floor, 3=Earthen Berm and Concrete Floor, 4=Metal Berm and Floor, 5=Portable Containment or Inside Building, 6=Double Walled, 7=Coated Asphalt Materials, 8=Concrete Berm and Earthen Floor * Not in Containment Area, ** Curbing and containment system

Port Hudson

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FIGURE C-6 - ADDENDUM

Certification of this Spill Prevention, Control, and Countermeasure Plan is contingent upon correction of all discrepancies listed in this Addendum. The discrepancies for this facility are:

This terminal has no discrepancies.

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FIGURE C-7 - DRAINAGE DIAGRAM

[Click to view/print Drainage](#)

marks).				
Weather stripping or flashing tight against shell?				
Is there any weather stripping or flashing missing? Repairs?				
Tank condition good (no rustling, corrosion, pitting).				
Bolts, rivets or seams are not damaged.				
Tank foundation intact.				
Level guages and alarms working properly.				
Vents are not obstructed.				
Valves, flanges and gaskets are free from leaks and in place.				
Ladder appear to roll easily or need repairs?				
Roof free of oil and water.				
Ground and/or anode straps in place?				
High Level alarms functioning properly? Tested?				
Remote and side gauges working?				
Pipelines:				
No signs of corrosion damage to pipelines or supports.				
Buried pipelines are not exposed.				
Out-of-service pipes capped.				

FIGURE C-12 - INSPECTION PROCEDURES, CONTINUED

INSPECTION PROCEDURE	REVIEWED			Corrective action needed, Remarks
	Y	N	N/A	
Signs/barriers to protect pipelines from vehicles are in place.				
No leaks at valves, flanged, or other fittings.				
Truck Loading/Unloading Area:				
No standing water in rack area.				
Warning signs posted.				
No leaks in hoses.				
Drip pans not overflowing.				
Catch basins free of contamination.				
Containment curbing or trenches intact.				
Connections are capped or blank-flanged.				
Security:				

Fence and gates intact.				
Gates have locks.				
ASTs locked when not in use.				
Starter controls for pumps locked when not in use.				
Lighting is working properly.				
Training:				
Spill prevention briefing held.				
Training records are in order.				
Facility:				
Fire extinguishers charged and in operable condition.				
Safety signs, equipment, stairways, electrical in good condition.				
Oil spill clean-up material on hand during loading / unloading.				
Other:				

REMARKS/COMMENTS:

Note: These documents must be retained for five (5) years.

Inspector Signature: _____

District Manager Signature: _____

FIGURE C-13 - SECONDARY CONTAINMENT DRAINAGE LOG

Dike Drainage or Storm Water Discharge

Location: _____ Date & Time: _____

Inspector Name: _____

MONTH	OUTFALL	TIME START	TIME STOP	OIL REMOVED	EST. RELEASED	VALVES OPENED	VALVES CLOSED	INITIALS

VERIFY	Y	N	N/A	CORRECTIVE ACTION / REMARKS
1. Water checked for contamination?				
Any found?				
Oil removed?				
If Yes, explain what was done to clean it up.				
2. Water sample taken?				
3. Results Received?				
4. Time Dike Valve Opened				
5. Time Drain Checked				
6. Check #2				
7. Check #3				
8. Time Drain Closed				
9. Estimated amount released				
COMMENTS:				

Note: This document must be retained for five (5) years.

Inspector Signature: _____
 District Manager Signature: _____

FIGURE C-14 - REPORTABLE SPILL HISTORY*

Date of Discharge(s):	February 11, 2013
List of Discharge Causes:	Cause of the leak was due to barge tankerman not retightening the elbow after loosening elbow to line it up with header for hose hook-up after re-positioning the barge.
Material(s) Discharged:	Crude Oil
Amount of Discharges in Gallons:	Approximately 7 gallons.
Amount That Reached Navigable Waters (if applicable):	Less than 2 gallons in the Mississippi River
Effectiveness and Capacity of Secondary Containment:	Occured on barge approximately 7 gallons spilled , 5 gallons retained
Cleanup Actions Taken:	The barge was cleaned up using sorbent pads and placed in plastic bags for disposal.
Steps Taken to Reduce Possibility of Reoccurrence:	Check of the pump/hose connection by the tankerman to ensure properly tightened.
Total Oil Storage Capacity of Tank(s) or Impoundment(s) From Which Material Discharged:	(b) (7)(F)
Enforcement Actions:	N/A
Effectiveness of Monitoring Equipment:	N/A
Spill Detection:	N/A

*Reportable spill, as defined in 40 CFR Part 110, is a discharge of oil that violates applicable water quality standards or a discharge into or upon the navigable waters of the United States or adjoining shorelines in harmful quantities.

FIGURE C-15 - CONTAINMENT AND DRAINAGE PLANNING

FACTORS
Available Volume of Containment
Refer to FIGURE C-5.
Route(s) of Drainage
Construction Materials Used in Drainage Troughs
N/A
Type and Number of Valves Separators
N/A

Sump Pump Capacities

The following area sump pump capacities are as follows:

Truck Terminal sump pump 37 gpm.

Pump Station sump pump 15gpm.

Dock Sump pump is 15 gpm.

Containment Capacity of Weirs and Booms

N/A

Other Clean Up Materials

Refer to SECTION 7.1.1.

APPENDIX D Last Revised: February 21, 2013
HAZARD EVALUATION AND RISK ANALYSIS
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D.1 Facility Hazard Evaluation

D.2 Vulnerability Analysis

D.2.1 Analysis of the Potential for a Spill

D.3 Inspection and Spill Detection

Figure D.3-1 - Response Equipment Inspection

D.4 Planning Distance Calculations

Figure D.4-1 - Planning Distance Calculations

D.5 Discharge Scenarios

D.5.1 Small and Medium Discharge Scenarios

D.5.2 Worst Case Discharge (WCD) Scenario Discussion

D.5.3 Description of Factors Affecting Response Efforts

D.6 Planning Volume Calculations

D.7 Spill Volume Calculations

D.7.1 USCG Portion of Facility

D.7.2 EPA Portion of the Facility (non-transportation related)

Figure D.7-1 - Worst Case Discharge (WCD) Calculations (in bbls)

D.7.3 DOT/PHMSA Portion of Pipeline/Facility

D.8 Product Characteristics and Hazards

Figure D.8-1 - Summary of Commodity Characteristics

Figure D.8-2 - MSDS

D.1 FACILITY HAZARD EVALUATION

A list of potential spill sources is identified in **FIGURE C-5**. This figure describes type and volumes of secondary containment areas along with tank manufacturer dates. All liquid storage tanks are visually inspected on a monthly basis. A description of facility operations is included in **FIGURE 1-2**.

D.2 VULNERABILITY ANALYSIS

A vulnerability analysis was performed to address the potential effects of an oil spill within the planning distance of this facility. Refer to **SECTION 6.6** for a detailed list of vulnerabilities. The following features may be impacted by a spill:

Water Intakes	Schools	Medical Facilities	Residential Areas	Businesses	Wetlands or other Sensitive Environments	Fish and Wildlife	Lakes and Streams	Endangered Flora and Fauna	Recreational Areas	Transportation Routes (air, land, water)	Utilities	Other Applicable Areas
x			x	x	x	x		x	x	x		

D.2.1 Analysis of the Potential for a Spill

The probability of a spill occurring at this facility is minimal for the following reasons:

- Tanks are constructed in accordance with applicable engineering standards.
- Tank age is reviewed as a potential factor (refer to **FIGURE C-5**).
- Truck loading facilities are equipped with concrete pads with a spill collection drain system which returns spills to the recovery system.
- All trucks are monitored during tank unloading procedures.
- Non-SCADA product transfers are monitored and only conducted when facilities are manned.
- SCADA product transfers are monitored via pipeline Control Center SCADA.
- Facilities are inspected frequently for evidence of corrosion and leaks according to applicable API standards.
- Personnel are trained in procedures to prevent pollution.
- The horizontal range of a spill is dependent upon the topography and distance to the nearest water body described in more detail in **FIGURE D.4-1**.
- Natural disasters are not likely at these facilities; however, these facilities may experience flooding, tornadoes or a lightning strike.
- Company personnel prepare for natural disasters by monitoring weather reports and warnings and taking appropriate safety precautions.
- The potential for a natural disaster is acknowledged, as appropriate, during drills and exercises.

D.3 INSPECTION AND SPILL DETECTION

Inspection

In accordance with 40 CFR 112.7 (e)(8), each Facility includes written procedures and records of inspection. The inspection shall include tanks, secondary containment, and response equipment at the Facility.

Facility self-inspection requires two steps:

- Checklist of items to inspect.
- Method of recording the actual inspection and its findings; records must be maintained for five years.

Facility-specific procedures for transfer and secondary containment inspections are provided in **APPENDIX C**. Response equipment inspection information is provided in **SECTION 7.1.2. FIGURE D.3-1** may be used to record equipment inspection information.

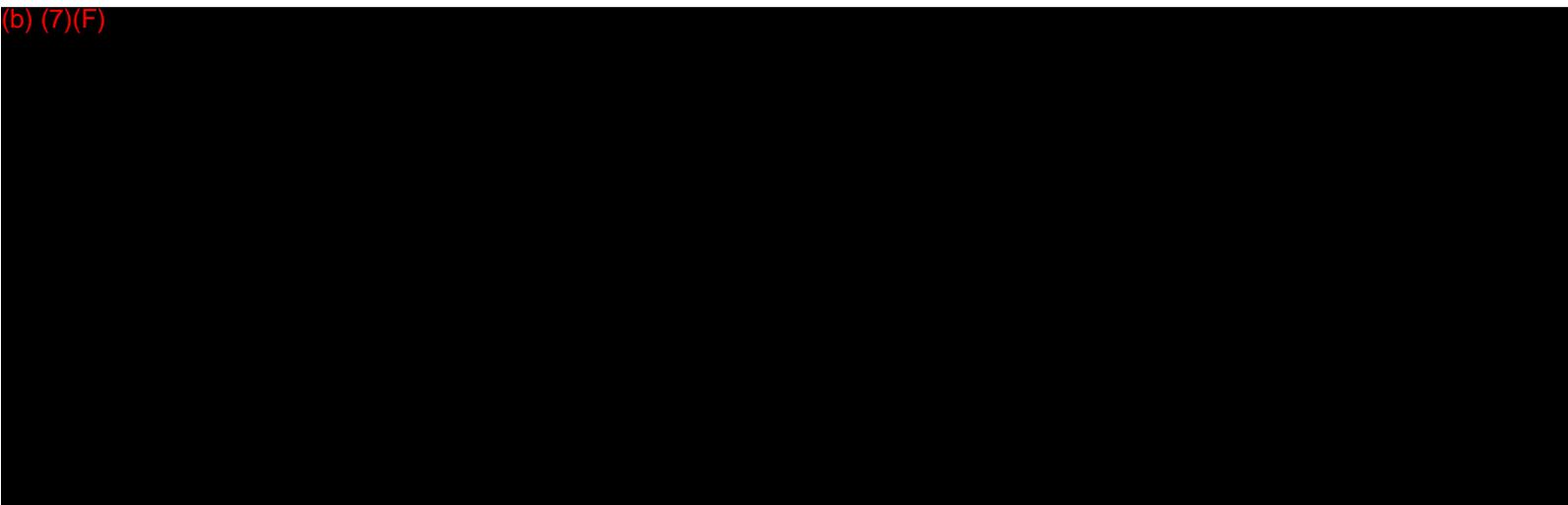
D.3 INSPECTION AND SPILL DETECTION, CONTINUED

Detection

Detection of a discharge from the Company facility or pipeline may occur in a number of ways including:

- Automated detection by the Supervisory Control and Data Acquisition (SCADA) system.
- Local alarm notification.
- Visual detection by Company personnel.
- Visual detection by the public.

(b) (7)(F)



(b) (7)(F)

(b) (7)(F)

- **Training**

All operators are required to take training modules including emergency responses.

Visual detection by Company personnel

The facility personnel will walk or drive the right-of-way on a regular basis for pipelines subject to 49 CFR 194 and 195. The intent of the patrol is to observe the area directly over the pipeline right-of-way for leaks, exposed pipes, washes, missing markers and other unusual conditions. Construction on either side of the pipeline right-of-way is also monitored.

Discharges to the land or surface waters may also be detected by Company personnel during regular operations and inspections. If a leak is detected, the appropriate actions are taken, including, but not limited to:

- Notifications as per **SECTION 3**.
- A preliminary assessment of the incident area.
- If appropriate, initiate initial response actions per **SECTION 2**.

FIGURE 2.1-1 provides a checklist for initial response actions.

D.3 INSPECTION AND SPILL DETECTION, CONTINUED

Visual detection by the public

Right-of-way marker signs are installed and maintained at road crossing and other noticeable points and provide an Operations Control 24-hour number for reporting emergency situations. Also, Facility signs are installed and maintained on perimeter fencing. The Company also participates in the "call before you dig" or "One Call" utility notification services which can be contacted to report a leak and determine the owner/operator of the pipeline. If the notification is made to a local office or pump station, the Company representative receiving the call generally will implement the following actions:

- Notify the Operations Control Center and regional/designated office (as applicable).
- Dispatch Company field personnel to the site to confirm discharge and conduct preliminary assessment.
- Notify their immediate area supervisor and provide assessment results.

 Inspector's Signature

D.4 PLANNING DISTANCE CALCULATIONS

To evaluate the potential risk to sensitive resources in the area, should a spill occur, a planning distance was calculated based on the following characteristics of this Facility and vicinity according to 40 CFR 112, Attachment C-III. Factors utilized include distance to the nearest body of moving water/storm sewer/drainage ditch or swale, geology, and topography of the area.

FIGURE D.4-1 provides the planning distance calculation worksheets for this Facility.

FIGURE D.4-1 - PLANNING DISTANCE CALCULATIONS

Intermediate Calculations

α = elevation (in feet) = [stream elevation @ facility] - [stream elevation @ receptor (or 20 mile point)]

β = horizontal distance from facility to receptor (or 20 mile point) in miles

s = average stream slope = $\alpha / \beta / 5280$

r = hydraulic radius (in feet) = average mid channel depth x 0.667

n = Manning's roughness coefficient from Table B

To calculate stream velocity (in ft./sec.), use: $v = 1.49/n \times r^{2/3} \times s^{1/2}$

Calculation of PLANNING DISTANCE

d = calculated planning distance (miles)

v = Chezy-Manning based stream velocity (ft./Sec.)

t = spill response time interval (from Table A)

c = 0.68 (sec-mile/hr-ft conversion factor)

$d = v \times t \times c$ = planning distance equation

Table A	
Substantial Harm Planning Time (hours) Port Areas as Identified in 40 CFR § 112	
Boston, MA	15

Table B	
Manning's Roughness Coefficient for Various Natural Stream Types (n)	
Minor Streams (Top width < 100 ft.)	
Clean:	
Straight	.03

New York, NY	15
Delaware Bay and River to Philadelphia	15
St. Croix, VI	15
Pascagoula, MS	15
Mississippi River from Southwest Pass, LA to Baton Rouge, LA	15
Louisiana Offshore Oil Port (LOOP)	15
Lake Charles, LA	15
Sabine-Natchez River, TX	16
Galveston Bay and Houston Ship Channel	16
Corpus Christi, TX	16
Los Angeles/Long Beach Harbor, CA	16
San Francisco Bay, San Pablo Bay, Carquinez Strait, and Suisun Bay to Antioch, CA	16
Straits of Juan de Fuca from Port Angeles, WA to and including Puget Sound	16
Prince William Sound, AK	16
Others are specified by RA for EPA Region	16
Allow other lakes, rivers canals inland and near shore areas	27

Winding	.04
Sluggish (woody, deep pools):	
No trees/brush	.06
Trees and/or brush	.10
Major Streams (Top width > 100 ft.)	
Regular section:	
No boulders/brush	.036
Irregular section:	
Brush	.06

FIGURE D.4-1 - PLANNING DISTANCE CALCULATIONS, CONTINUED

Site Investigation

The following information is utilized to calculate the planning distance for each facility.

From USGS Quad/Topo Sheets

- Delineate watershed and downgradient receptor streams for runoff/release.
- Determine whether navigable water is within 0.5 miles of the facility (or would be in worst case discharge scenario).

From Facility

- Identify alternate drainage pathways to navigable waters; namely storm drainage system/piping.
- Establish list of soil or other factors effecting transport of oil over land.

From maps, local/state authorities or investigation

- Identify fish/wildlife sensitivities and habitats in downgradient areas along with public drinking water intake locations.
- Determine stream pool elevations at facility and at receptor points or at 20 miles downstream (maximum) for more distant receptors.
- Characterize stream properties for accurate determination of roughness coefficient (n) and average mid-channel depth or hydraulic radius (r).

The total planning distance equals d.

	Port Hudson - 1. Over Land
First receptor	n/a
First receptor location (miles)	n/a
∞ (feet)	n/a
β (miles)	n/a
s (feet/mile)	n/a
Avg. mid-channel depth (feet)	n/a
r (feet)	n/a
n	n/a
v (feet/second)	n/a
t (hours)	n/a
c (seconds per mile/hours per foot)	n/a
d (total planning distance)	Refer to next page with uploaded planning distance calculation

Port Hudson **Page D - 11**

FIGURE D.4-1 - PLANNING DISTANCE CALCULATIONS, CONTINUED

The total planning distance equals d.

	Port Hudson - 2. Mississippi River
First receptor	n/a
First receptor location (miles)	n/a
∞ (feet)	n/a
β (miles)	n/a
s (feet/mile)	n/a

Avg. mid-channel depth (feet)	n/a
r (feet)	n/a
n	n/a
v (feet/second)	3.6 USGS
t (hours)	26.09
c (seconds per mile/hours per foot)	0.68
d (total planning distance)	63.9 miles

FIGURE D.4-1 - PLANNING DISTANCE CALCULATIONS

[Click to view/print Overland Planning Distance Calculation](#)

FIGURE D.4-1 - PLANNING DISTANCE CALCULATIONS, CONTINUED

If Tidally Influenced

Planning distance calculations are based on the following factors and guidelines in accordance with 40 CFR Part 112 Attachment C-III, 4.2:

- The horizontal range of a potential oil spill is influenced by the wind direction and tidal stage; however, it is expected to spread quickly.
- Tidally influenced waters.
- Persistent and non-persistent product.
- Resulting planning distance is 15 miles persistent oils or 5 miles for non-persistent oils from each Facility down current during ebb tide and to the point of maximum tidal influence or 15 miles persistent oils or 5 miles for non-persistent oils, whichever is less, during flood tide.

D.5 DISCHARGE SCENARIOS

The equipment and personnel to respond to a spill are available from several sources and are provided with the equipment and contractors in **SECTION 7.1.1** and **APPENDIX B.1.1**. The following sections are discussions of these scenarios.

D.5.1 Small and Medium Discharge Scenarios

- The purpose of this section is to identify the sources and sizes of small and

medium discharges as defined by OPA 90 regulations.

- Potential spill scenarios may include tank overflow, valve failure, tank failure, pipe failure, hose failure, or pump seal failure; these spills would likely be in contained areas and would be unlikely to travel off-site.
- The Company would respond to these types of incidents in the same manner as a worst case discharge, but at a level appropriate to the incident size; differences in response are described in the worst case scenario discussion described in this Appendix. The Company's response in such an event would in no way obviate the liability of any other responsible parties.
- Resources are identified in **FIGURE 3.1-4**, **SECTION 7.1.1**, and **APPENDIX B.1.1**.
- All resources shall be capable of arriving at the Facility within the applicable response tier requirements (Tier 1 = 12 hours; Tier 2 = 36 hours; Tier 3 = 60 hours).

The following table lists various facility operations and corresponding components which might be the source of a small, medium, and worst case discharge:

FACILITY OPERATIONS AND COMPONENTS	SMALL DISCHARGE (up to 2,100 gallons)	MEDIUM DISCHARGE (2,100 to 36,000 gallons)	WORST CASE DISCHARGE (volume largest tank)
Oil transfer operations	Hose failure	Hose failure	Not applicable
Facility maintenance operations	Leak from periodic maintenance, line not completely drained when opened	Seal failure Overfill	Not applicable
Facility piping	Flange, gasket, threaded connection	Seal failure Overfill	Not applicable
Pumps and sumps	Seal failure Overfill	Seal failure Overfill	Not applicable
Oil storage tanks	Overfill	Overfill	Catastrophic failure of largest tank
Age and condition of facility and components	Flange, gasket, threaded connector	Pipeline failure Seal failure	Catastrophic failure of largest tank

D.5.1 Small and Medium Discharge Scenarios, Continued

The following table describes the Facility-specific small discharge scenario.

SMALL DISCHARGE SCENARIO

A small discharge would most likely be :

1. At the Truck Station unloading area due to pump seal leak, line rupture, valve leak, not closing the valve prior to disconnecting the hose and spills 1,200 gallons. The discharge flows southeast across the dirt hard pack facility drive and is not likely to travel offsite. There is a dirt berm at the edge of the property running north/south and east/west which will contain the release. There is a drainage ditch located between the south edge of the property and Port Hudson Cemetery Road. There are no downgradient wells or water drinking intakes at risk by a release at the Truck Station unloading area.
2. At the Pumping Station tank, which is within a secondary containment area; cause of a release would be due to a leaking valve or overflow of the tank. Flow would be across the dirt berm containment floor to the Northeast towards the drainage outlet, where it would be contained within the secondary containment.
3. Dock/Barge loading during the disconnecting of the hose or drips and leaks during the loading process. There are no downgradient wells, or water drinking intakes, that would be impacted by a small release; however the Mississippi river and habitats along the shore could be impacted putting fish, wildlife or sensitive environment areas at risk..

Note: Equipment and manpower resources are detailed in **FIGURE 3.1-4, SECTION 7.1.1, and APPENDIX B.1.1.**

D.5.1 Small and Medium Discharge Scenarios, Continued

The following table describes the Facility-specific small discharge scenario.

SMALL DISCHARGE RESPONSE RESOURCE

Facility Response Resources / Capability:

The regulatory requirement is that the facility identifies sufficient response resources to respond to a small discharge, equal to or less than 2,100 gallons (50 bbls). The facility must identify the source of 1,000 feet of containment boom and a means of deploying it within one (1) hour of the discovery of the discharge. The facility must also identify oil recovery devices with an effective daily recovery capacity equal to the amount of oil discharged in a small discharge or greater which is available at the facility within two (2) hours of the detection of an oil discharge. A combination of terminal and OSRO resources will be used, as necessary, to meet these requirements. Sufficient response resources and storage capacities are described below.

Containment Boom (1 hour deployment)

- OMI Environmental Solutions is the primary responder the terminal will use to satisfy this requirement. This company is located at 5227 N. River Road Port Allen, LA (less than one hour from facility) within the 1-hour deployment time range.

- U.S. Environmental Services (USES) has a facility at 6338 Highway 73 Geismar, LA 70734 that is capable of supporting this terminal.
- Copies of this company's response equipment and capabilities are included as Appendix B to this plan.

Oil Recovery Devices (2 hour deployment)

- OMI Environmental Solutions is the primary responder the terminal will use to satisfy this requirement. This company is located at 5227 N. River Road Port Allen, LA (less than one hour from facility) within the 2-hour recovery time range.
- U.S. Environmental Services (USES) has a facility at 6338 Highway 73 Geismar, LA 70734 that is capable of supporting this terminal.
- Copies of these companies' response equipment and capabilities are included as Appendix B to this plan.

Oil Storage Capacity

The facility can utilize existing tank storage capacity to satisfy the need of 50 bbls of oil storage capacity. If additional storage capacity is needed there an immediately available is Frac Tank Rental.

Implementation of this plan utilizing the response resources identified in this section is described in Section 2.

Note: Equipment and manpower resources are detailed in **FIGURE 3.1-4, SECTION 7.1.1, and APPENDIX B.1.1.**

D.5.1 Small and Medium Discharge Scenarios, Continued

The following table describes the Facility-specific small discharge scenario.

SMALL DISCHARGE RESPONSE RESOURCE

A worst case discharge at this facility would be the catastrophic failure of the oil storage tanks (b) (7)(F)) and the secondary containment surrounding that tank.

The cleanup of the spill should start as soon as possible after it has been contained. In the event of a large scale spill an OSRO will be notified to bring additional equipment to remove product. Licensed waste disposal contractors will be used for disposal of liquid and absorbent wastes.

Note: Equipment and manpower resources are detailed in **FIGURE 3.1-4, SECTION 7.1.1, and APPENDIX B.1.1.**

D.5.1 Small and Medium Discharge Scenarios, Continued

The following table describes the Facility-specific medium discharge scenario.

MEDIUM DISCHARGE SCENERIO
<p>A medium discharge occurs at:</p> <p>The Truck unloading area when a hose breaks and the valve won't close, releasing 36,000 gallons crude. The discharge flows southeast across the dirt hard pack facility drive being contained within the dirt berm area. If an area drainage valve is left opened the product would flow east along the drainage ditch. There are no downgradient wells, or water drinking intakes that would be affected. However a drainage ditch, fish, local wildlife could be impacted.</p> <p>The Pumping Station most likely would be at the tank, which is within the secondary containment area. The discharges occurring within the tank area are not likely to travel off-site unless the secondary containment fails or the drainage valve was left opened releasing 36,000 gallons crude that would flow to the Northeast towards the drainage outlet, from the drainage outlet to the ditch which would run southeast. The flow would continue northeast or through a culvert and head south then west to the Mississippi River. There are no downgradient wells, or water drinking intakes, that would be impacted by a release of this size; however the Mississippi river and habitats along the shore could be impacted putting fish, wildlife and sensitive environment areas at risk. There are wetlands within .5 mile of the tank that would be impacted.</p> <p>The Dock a most likely discharge would be a release of 2,100 gallons from a broken hose where product would flow into the Mississippi River There are no downgradient wells that would be impacted by a release of this size. However the Mississippi river and habitats along the shore would be impacted putting fish, wildlife and other shoreline sensitive environment areas at risk.</p>

Note: Equipment and manpower resources are detailed in **FIGURE 3.1-4, SECTION 7.1.1, and APPENDIX B.1.1.**

D.5.1 Small and Medium Discharge Scenarios, Continued

The following table describes the Facility-specific medium discharge scenario.

MEDIUM DISCHARGE RESPONSE RESOURCE
<p>Facility Response Resources / Capability</p> <p>The regulatory requirement is that the facility identifies response resources capable of containing and collecting 36,000 gallons of oil. Oil recovery devices with an effective daily recovery capacity (EDRC) of half the planning volume, or 18,000 gallons per day, must be located such that they are capable of arriving on-scene within 12 hours. Regulations also require the facility to identify sufficient quantity of containment boom available to arrive within 12 hours for oil collection and containment and for protection of fish and wildlife and sensitive environments. Refer to Section 6.6 for a discussion of potentially affected fish and wildlife and sensitive environments and Section 6.9 of this plan that summarizes containment strategies and locations.</p>

Sufficient temporary storage to contain twice the EDRC, or 36,000 gallons of oil, must be provided. A combination of terminal and OSRO resources will be used, as necessary. Sufficient response resources and storage capacities are described below.

Containment Boom (12 hour deployment)

OMI Environmental Solutions located in Port Allen, LA and U.S. Environmental Services (USES) located in Geismar, LA, respectively, are the responders the terminal would use to satisfy this requirement. OMIES, Clean Harbors and USES have 20 facilities between them that are located within 6 hours of the site meeting the 12-hour deployment time range. The combined inventories of these companies comprise several thousand feet of containment boom.

- Copies of the companies' response equipment and capabilities are included as Appendix B to this plan.

Oil Recovery Devices (12 hour deployment)

OMIES located in Port Allen, LA and USES located in Geismar, LA, respectively, are the responders the terminal would use to satisfy this requirement. OMIES and USES have numerous facilities between them that are located within 6 hours of the site meeting the 12-hour deployment time range.

- The combined inventories of these companies comprise Oil recovery devices with EDRC over 18,000 gallons per day.

Oil Storage Capacity

The facility can utilize existing tank storage capacity to satisfy the need of (b) (7)(F) of oil storage capacity. Crude could be blended directly back into existing storage tanks for reuse. If additional storage capacity is needed; Frac Tank Rental is available.

Note: Equipment and manpower resources are detailed in **FIGURE 3.1-4, SECTION 7.1.1, and APPENDIX B.1.1.**

D.5.2 Worst Case Discharge (WCD) Scenario Discussion

APPENDIX D.7 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 Facility Supervisor 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.
 - Direct Facility personnel to position resources in accordance with **SECTION 6.9**.
 - Complete spill report form in accordance with **FIGURE 3.1-2**.
 - Ensure regulatory agencies are notified (**FIGURE 3.1-4**).
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 Spill Management Team. However, for a large spill, the Qualified Individual would assume the role of Incident Commander and would activate the entire Spill 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 Spill 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.

D.5.2 Worst Case Discharge (WCD) Scenario Discussion, Continued

The following table describes the Facility-specific worst case discharge scenario.

WORST CASE Discharge Scenario

A worst case discharge at this facility would be:

1. Truck station with a catastrophic failure of the storage tank (b) (7)(F)) and spills (b) (7)(F) of crude flows south/southeast off-site to the drainage ditch flowing east along Port Hudson Cemetery road. A spill of this magnitude would likely impact all the areas listed in the vulnerability analysis. There are no downgradient wells or drinking water intakes located downstream of the drainage ditch within the projected pathway for a WCD discharge.

2. Pump Station with a catastrophic failure of the storage tank # (b) (7)(F) capacity) containing Crude oil and the secondary containment surrounding that tank. A release of (b) (7)(F) would flow northeast towards the drainage outlet, from the drainage outlet to a ditch which runs southeast to a dirt road. The flow would continue northeast or through a culvert under the road and head south then west to the Mississippi River impacting a wetlands. A spill of this magnitude would likely impact all the areas listed in the vulnerability analysis. There are no downgradient wells or drinking water intakes located downstream within the immediate projected pathway for a WCD discharge. Areas of immediate concern are Mississippi River, critical habitat for endangered species and recreational areas (refer to SECTION 6.6). However there are a number of water intakes located on the Mississippi River and identified in SECTION 6.6 with notifications noted in Section 3 FIGURE 3.1-4 - EXTERNAL NOTIFICATIONS

3. Dock with a failure of a hose during the transfer operation from tank to (b) (7)(F) and impact the Mississippi River, critical shoreline habitat for endangered species and recreational areas (refer to SECTION 6.6), there are a number of water intakes located on the Mississippi River and identified in SECTION 6.6 with notifications noted in Section 3 FIGURE 3.1-4 - EXTERNAL NOTIFICATIONS.

Note: Equipment and manpower resources are detailed in **FIGURE 3.1-4, SECTION 7.1.1,** and **APPENDIX B.1.1.**

D.5.2 Worst Case Discharge (WCD) Scenario Discussion, Continued

The following table describes the Facility-specific worst case discharge response resource.

WORST CASE Discharge RESPONSE RESOURCE

Facility Response Resources / Capability

This facility is required by regulation to identify and ensure the availability of sufficient response resources to respond to the worst case discharge of oil to the maximum extent practicable. Worst case discharge planning volumes for response capacities are calculated in accordance with the procedures outlined in 40 CFR Part 112, Appendix E, and shown on Attachment E-1 in Appendix C to this plan. Volumes are

given in barrels (bbl) or barrels per day (bpd).

On-Water Oil Recovery Capacity: The terminal must contract for resources with the EDRC noted below to arrive on scene within the time specified. At least 20 percent of the on-water response equipment shall be capable of operating in water of 6 feet or less depth.

- Tier 1 resources of 30,591 bpd capacity (on scene in 12 hrs)
- Tier 2 resources of 50,985 bpd capacity (on scene in 36 hrs)
- Tier 3 resources of 81,576 bpd capacity (on scene in 60 hrs)

Shoreline Cleanup: The terminal must identify an OSRO with shoreline cleanup capacity of 61,800 bbl.

On-Water Recovery Capacity Needed to be Identified, but not Contracted for in Advance: The terminal must identify, but is not required to contract for in advance, resources with the EDRC noted below to arrive on scene within the time specified.

- Tier 1 resources of 18,091 bpd capacity (on scene in 12 hrs)
- Tier 2 resources of 25,985 bpd capacity (on scene in 36 hrs)
- Tier 3 resources of 31,576 bpd capacity (on scene in 60 hrs)

The facility contracts with OSRO's OMIES located in Port Allen, LA., USES located in Geismar, LA and Clean Harbors located in New Iberia, LA. to respond to a worst case discharge within the required response tiers.

Required Storage capacity would be met via the following:

- Frac Tank Rental Local
- Barge Storage: Genesis Energy owns its own fleet of barges and has the capabilities to make available a barge for storage of cleaned up material if a spill should occur.
- Movement of recovered material to offsite company tankage via trucks.

Note: Equipment and manpower resources are detailed in **FIGURE 3.1-4, SECTION 7.1.1**, and **APPENDIX B.1.1**.

D.5.3 Description of Factors Affecting Response Efforts

There are many factors which may affect the ability to respond to an incident. These factors are described in the following table:

FACTORS	CONSIDERATIONS AFFECTING RESPONSE EFFORTS
Size of spill	<ul style="list-style-type: none"> • Location of spill in relation to identified sensitivities and/or sensitive areas. • Spread and spill movement.

Proximity to down gradient water intakes	<ul style="list-style-type: none"> Refer to SECTION 6.7 for maps showing proximity to down gradient water intakes.
Proximity to fish and wildlife and sensitive environments	<ul style="list-style-type: none"> A release could impact fish, wildlife and sensitive environments as described in SECTION 6.4 and SECTION 6.5.
Likelihood that discharge will travel offsite	<ul style="list-style-type: none"> A small spill is unlikely to travel off-site. A medium spill has the potential to travel off-site via adjacent waterways. A worst case discharge has the greatest potential to travel off-site if secondary containment is breached.
Location of material spilled	<ul style="list-style-type: none"> See facility information and drainage located in FIGURE 1-2 and FIGURE C-7. Facility tankage, piping, and transfer areas are displayed on drawings provided in FIGURE C-7 and FIGURE C-9.
Material discharged	<ul style="list-style-type: none"> Typically Crude Oil Product is considered non-persistent but not volatile.
Weather or aquatic conditions	<ul style="list-style-type: none"> The areas have the potential to be affected by tornadoes, flooding, and lightning strikes.
Available remediation equipment	<ul style="list-style-type: none"> The Company has response equipment available. Resources are available through oil spill response contractors in quantities sufficient to meet applicable planning standards.
Probability of a chain reaction or failures	<ul style="list-style-type: none"> Potential for a chain reaction or failure is remotely possible but not anticipated; secondary containment, response contractors and trained personnel minimize the potential of such events.
Direction of spill pathway	<ul style="list-style-type: none"> Refer to sensitivity maps in the SECTION 6.7 Wind direction and speed combined with currents, will determine spill trajectory.

D.6 PLANNING VOLUME CALCULATIONS

Once the worst case discharge volume has been calculated, response resources must be identified to meet the requirements of 40 CFR 112.20(h). 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.

D.7 SPILL VOLUME CALCULATIONS

D.7.1 USCG Portion of Facility

The Worst Case Discharge was formulated assuming a release from the Marine Transportation Related portion of the Facility, as directed by 33 CFR 154.1029.

The Worst Case Discharge is based on a catastrophic failure of all piping carrying oil between the marine transfer manifold(s) and the non-transportation related portion(s) of the Facility. For the Port Hudson, this volume is calculated as noted below. Actual Worst Case Discharge volumes for all facilities are provided in **FIGURE D.7-1**. Oil spill response equipment available to respond to this spill is included in **SECTION 7.1.1**, and **APPENDIX B.1.1**.

- (b) (7)(F) [Redacted]

- **Average Most Probable Discharge**

The Average Most Probable Discharge (AMPD) is defined by 33 CFR 154 as the lesser of 50 barrels or 1% of the Worst Case Discharge. One percent of the Worst Case Discharge is approximately (b) (7)(F), therefore, the average most probable discharge is 50 barrels.

- **Maximum Most Probable Discharge**

The Maximum Most Probable Discharge (MMPD) is defined by 33 CFR 154 as the discharge of the lesser of 1,200 barrels or (b) (7)(F) of the Worst Case Discharge. (b) (7)(F)

D.7.2 EPA Portion of the Facility (non-transportation related)

The WCD for the EPA portion of the facility, as defined in 40 CFR 112, Appendix D, Part A, is calculated as:

- For multiple tank facilities with adequate secondary containment, the WCD is calculated as the capacity of the largest single aboveground oil storage tank within an adequate secondary containment area or the combined capacity of a group of aboveground oil storage tanks permanently manifolded together, whichever is greater.

TYPE	DESCRIPTION	PRODUCT	WCD VOLUME (BBLs)

(b) (7)(F)

Because the discharge for the EPA portion of the facility is greater than the USCG definition for a worst case discharge, response resources are planned for the greater of the two volumes.

FIGURE D.7-1 - WORST CASE DISCHARGE (WCD) CALCULATIONS (IN BBLs)

WCD	USCG		EPA
	Avg. Most Probable	Max. Most Probable	
(b) (7)(F)	50	(b) (7)(F)	

EPA PLANNING VOLUME DATA

STEP	PARAMETER	Port Hudson
(A)	WCD (bbls)	(b) (7)(F)
(B)	Oil group	2?Light crudes
(C)	*Geographic area	Nearshore/Inland
(D1)	Percent lost to natural dissipation	50
(D2)	Percent recovered floating oil	55
(D3)	Percent oil onshore	30
(E1)	On water recovery (bbls)	113300
(E2)	Shoreline recovery (bbls)	61800
(F)	Emulsification Factor	1.8
(G)	On water recovery resource mobilization factor	
(G1)	Tier I	0.15
(G2)	Tier II	0.25
(G3)	Tier III	0.40
Part II	On water recovery capacity (bbls/day)	
	Tier I	30591
	Tier II	50985
	Tier III	81576
Part	Shoreline cleanup volume	111240

III	(bbls/day)	
Part IV	On water response capacity by operating area (bbls/day)	
(J1)	Tier I	12,500
(J2)	Tier II	25,000
(J3)	Tier III	50,000
Part V	On water amount needed to be identified, but not contracted for in advance	
	Tier I	18,091
	Tier II	25,985
	Tier III	31,576

* R = Rivers and canals
 N = Nearshore/Inland

D.7.3 DOT/PHMSA Portion of Pipeline/Facility

The worst case discharge (WCD) for the DOT portion of the pipeline and/or facility, as defined in 49 CFR 194.105(b), as the largest volume of the following:

1. The pipeline’s maximum shut-down 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 their 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.

D.7.3 DOT/PHMSA Portion of Pipeline/Facility, 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 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.

These tank volumes are as follows:

LOCATION	VOLUME (BBLs)
----------	---------------

(b) (7)(F)

D.7.3 DOT/PHMSA Portion of Pipeline/Facility, 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 25% and the worst case discharge volume is 75% of the total volume.

(b) (7)(F)

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D.7.3 DOT/PHMSA Portion of Pipeline/Facility, Continued

The worst case discharge for the pipeline segment is calculated at the 16" line .

(b) (7)(F)

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D.8 PRODUCT CHARACTERISTICS AND HAZARDS

This Facility may store various types of commodities including but not limited to:

- Crude Oil

The key chemical and physical characteristics of each of these oils and/or other small quantity products/chemicals are identified in MSDS. MSDS can be reviewed in **FIGURE D.8-2**.

FIGURE D.8-1 describes primary oils handled.

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FIGURE D.8-1 - SUMMARY OF COMMODITY CHARACTERISTICS

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COMMON NAME	MSDS NAME	HEALTH HAZARD	FLASH POINT	SPECIAL HAZARD	REACTIVITY	HEALTH HAZARD WARNING STATEMENT
Crude Oil	Appropriate Product Name	1	3	C, H2S	0	Flammable liquid and vapor. May release highly toxic and flammable hydrogen sulfide (H2S) gas. Cancer hazard. May cause respiratory and eye irritation. Harmful/fatal if swallowed; can cause lung damage.
Health Hazard	4 = Extremely Hazardous 3 = Hazardous 2 = Warning 1 = Slightly Hazardous 0 = No Unusual Hazard			Fire Hazard (Flash Point)	4 = Below 73? F, 22? C 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 ₂ S = 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	

FIGURE D.8-2 - MSDS

[Click to view/print C080 Crude Oil - Sweet BP](#)

APPENDIX E
CROSS-REFERENCES

Last Revised:

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Figure E-1 - EPA / FRP Cross-Reference

Figure E-2 - EPA / SPCC Cross-Reference

Figure E-3 - USCG / FRP Cross-Reference

Figure E-4 - EPA / RCRA Cross-Reference

Figure E-5 - DOT / PHMSA Cross-Reference

Figure E-6 - OSHA Cross-Reference

Figure E-7 - EPA Response Plan Cover Sheet

FIGURE E-1 - EPA / FRP CROSS-REFERENCE

EPA FRP REQUIREMENTS	LOCATION
Facility Information	
General Information (1.0)	
• Facility Name	<u>Figure 1-2</u>
• FRP #	<u>Figure 1-2</u>
• Facility Address	<u>Figure 1-2</u>
• Facility Telephone	<u>Figure 1-2</u>
• Facility Owner	<u>Figure 1-2</u>
• Owner Address	<u>Figure 1-2</u>
• Owner Telephone	<u>Figure 1-2</u>
• Name of Protected Waterway / Environmentally Sensitive Area	<u>Section 6.6</u>
• Distance from Facility	<u>Figure D.4-1</u>
Standard Facility Response Plan (sec. 1.0)	
Emergency Response Action Plan (ERAP) (sec. 1.1)	
Qualified Individual (QI) information (sec. 1.2) partial	<u>ERAP - Figure 3-2</u>
Emergency notification phone list (sec. 1.3.1) partial	<u>ERAP - Figure 3-2, Figure 3-3</u>
Spill response notification form (sec. 1.3.1) partial	<u>ERAP - Figure 3-1</u>
Response equipment list and location (sec. 1.3.2) complete	<u>ERAP - Figure 4-2, Figure 4-3</u>
Response equipment testing and deployment (sec. 1.3.4) complete	<u>ERAP - Figure 4-4</u>
Facility response team list (sec. 1.3.4) partial	<u>ERAP - Figure 3-2</u>
Facility evacuation plan (sec. 1.3.5) condensed	<u>ERAP - Section 2.2</u>
Immediate actions (sec. 1.7.1) complete	<u>ERAP - Section 2.0</u>
Facility diagrams (sec. 1.9) complete	<u>ERAP - Section 5.0</u>
Facility Information (sec. 1.2)	
Facility name and location (sec. 1.2.1)	<u>Figure 1-2</u>
Latitude and longitude (sec. 1.2.2)	<u>Figure 1-2</u>

Wellhead protection area (sec. 1.2.3)	Figure 1-2
Owner/ operator (both names included, if different (sec. 1.2.4)	Figure 1-2
Qualified Individual (sec. 1.2.5) (name, position, home and work address, phone numbers) and specific response training experience	Figure 1-2
Date of oil storage start-up (sec. 1.2.6)	Figure 1-2
Current operation (sec. 1.2.7)	Figure 1-2
Date and type of substantial expansion (sec. 1.2.8)	Figure 1-2

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FIGURE E-1 - EPA / FRP CROSS-REFERENCE, CONTINUED

EPA FRP REQUIREMENTS	LOCATION
Emergency Response Information (sec. 1.3)	
Notification (sec. 1.3.1)	
National Response Center phone number	Figure 3.1-4
Qualified Individual (day and evening) phone numbers	Figure 1-2 , Figure 3.1-3
Company Response Team (day and evening) phone numbers	Figure 3.1-3
Federal On-Scene Coordinator (FOOSC) and/ or Regional Response Center (day and evening) phone numbers	Figure 3.1-4
Local response team phone numbers (fire department/ cooperatives)	Figure 3.1-4
Fire marshal (day and evening) phone numbers	Figure 3.1-4
State Emergency Response Commission (SERC) phone number	Figure 3.1-4
State police phone number	Figure 3.1-4
Local Emergency Planning Committee (LEPC) phone number	Figure 3.1-4
Local water supply system (day and evening) phone numbers	Figure 3.1-4
Weather report phone number	Figure 3.1-4
Local TV/ radio phone number(s) for evacuation notification	Figure 3.1-4
Hospital phone number	Figure 3.1-4
Spill Response Notification Form	
• Reporter's name	Figure 3.1-2
• Company information	Figure 3.1-2
• Incident description	Figure 3.1-2

• Materials	Figure 3.1-2
• Response actions	Figure 3.1-2
• Impact	Figure 3.1-2
Response Equipment List (Identify if Facility, OSRO, CO-OP owned by letters O, F, or C) (sec. 1.3.2)	
Equipment list	Figure 7.1-1
Equipment location	Figure 7.1-1
Release handling capabilities and limitations	Figure 7.1-1
Response Equipment Testing/ Deployment (sec. 1.3.3)	
Last inspection or equipment test date	Figure A.1-4
Inspection frequency	Figure A.1-4
Last deployment drill date	Figure A.1-4
Deployment frequency	Figure A.1-4
OSRO certification (if applicable)	Figure A.1-4

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FIGURE E-1 - EPA / FRP CROSS-REFERENCE, CONTINUED

EPA FRP REQUIREMENTS	LOCATION
Response Personnel (sec. 1.3.4)	
Emergency response personnel list	Figure 3.1-3
Emergency response contractors	Figure 3.1-3 , Figure 7.1-1 , Appendix B
Evidence of response capability	Appendix B
Facility response team list (sec. 1.3.4)	Figure 3.1-3
Evacuation Plans (sec. 1.3.5)	
Facility-wide evacuation plan	Section 2.2
Reference to existing community evacuation plans (sec. 1.3.5.3)	Section 2.2
Evacuation routes shown on diagram	Evacuation Diagram "Figure C-8"
Qualified Individual's Duties (sec. 1.3.6)	
Description of duties	Section 4.5
Consistent with requirements	Section 4.5
Hazard Evaluation (sec. 1.4)	
Hazard Identification (sec. 1.4.1)	

Schematic Diagram	
Labeled schematic drawing	<u>Drainage Diagram "Figure C-7"</u>
Above-ground tanks identified separately	<u>Drainage Diagram "Figure C-7"</u>
Below-ground tanks identified separately	<u>Drainage Diagram "Figure C-7"</u>
Surface impoundments identified separately	N/A
Tank Form:	
Tank number	<u>Figure C-5</u>
Substance stored	<u>Figure C-5</u>
Quantity stored	<u>Figure C-5</u>
Tank type and year installed	<u>Figure C-5</u>
Maximum capacity	<u>Figure C-5</u>
Failure/ Cause	<u>Figure C-5</u>
Surface Impoundment Form:	
Surface impoundment number	N/A
Substance stored	N/A
Quantity stored	N/A
Surface area/ year	N/A
Maximum capacity	N/A
Failure/ Cause	N/A

Port Hudson

FIGURE E-1 - EPA / FRP CROSS-REFERENCE, CONTINUED

EPA FRP REQUIREMENTS	LOCATION
Facility Operations Description:	
Loading and unloading procedures	<u>Figure 1-2</u>
Day to day operations	<u>Figure 1-2</u>
Secondary containment	<u>Figure C-5</u>
Daily throughput	<u>Figure 1-2</u>
Vulnerability Analysis (sec. 1.4.2)	
Vulnerability of:	
<ul style="list-style-type: none"> Water intakes 	<u>Section 6.6, Section 6.7</u>
<ul style="list-style-type: none"> Schools 	<u>Section 6.6, Section 6.7</u>

• Medical facilities	Section 6.6 , Section 6.7
• Residential areas	Section 6.6 , Section 6.7
• Business	Section 6.6 , Section 6.7
• Wetlands or other environmentally sensitive areas	Section 6.6 , Section 6.7
• Fish and wildlife	Section 6.6 , Section 6.7
• Lakes and streams	Section 6.6 , Section 6.7
• Endangered flora and fauna	Section 6.6 , Section 6.7
• Recreational areas	Section 6.6 , Section 6.7
• Transportation routes (air, land, and water)	Section 6.6 , Section 6.7
• Utilities	Section 6.6 , Section 6.7
• Other applicable areas (List below)	Section 6.6 , Section 6.7
• Other areas:	Section 6.6 , Section 6.7
Analysis of Potential for a Spill (sec. 1.4.3)	
Probability of spill occurring at the facility	Appendix D.2.1
Incorporates Factors:	
Tank age	Figure C-5
Spill history	Figure C-14
Horizontal range of a potential spill	Figure D.4-1
Vulnerability to natural disaster	Appendix D.2.1
Facility Reportable Oil Spill History Description (sec. 1.4.4)	
Date of discharge	Figure C-14
List of discharge causes	Figure C-14
Materials discharged	Figure C-14
Amount discharged in gallons	Figure C-14
Amount of discharge that reached navigable waters	Figure C-14
Effectiveness and capacity of secondary containment	Figure C-14
Clean-up actions taken	Figure C-14

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FIGURE E-1 - EPA / FRP CROSS-REFERENCE, CONTINUED

EPA FRP REQUIREMENTS	LOCATION
Facility Reportable Oil Spill History Description (sec. 1.4.4), Continued	
Steps taken to reduce possibility of reoccurrence	Figure C-14
Total oil storage capacity of tank(s) or impoundment(s) from which material is discharged	Figure C-14
Effectiveness of monitoring equipment	Figure C-14
Description of how each spill was detected	Figure C-14
Discharge Scenarios (sec. 1.5)	
Small and Medium Volume Discharges (sec. 1.5.1)	
Small Volume Discharges	
Small volume discharge calculation for a facility	Appendix D.5
Facility-specific spill potential analysis	Appendix D.5
Average most probable discharge for "complexes"	N/A
1,000 feet of boom (1 hour deployment time)	Section 7.1.1, Figure 7.1-1, Appendix B
Correct amount of boom for "complexes"	N/A
Oil recovery devices equal to small discharge (2 hour recovery time)	Section 7.1.1, Figure 7.1-1, Appendix B
Oil storage capacity for recovered material	Section 7.1.1, Figure 7.1-1, Appendix B
Medium Volume Discharges	
Medium volume discharge calculation for a facility	Appendix D.5
Facility-specific spill potential analysis	Appendix D.5
Maximum most probable discharge for "complexes"	N/A
Oil recovery devices equal to medium discharge	Section 7.1.1, Figure 7.1-1, Appendix B
Availability of sufficient quantity of boom	Section 7.1.1, Figure 7.1-1, Appendix B
Oil storage capacity for recovered material	Section 7.1.1, Figure 7.1-1, Appendix B
Worst Case Discharge (WCD) (sec. 1.5.2)	
Correct WCD calculations	Appendix D.7
Correct WCD for "complexes"	N/A
Sufficient response resources for WCD	Appendix D.7, Figure 7.1-1, Appendix B

Sources and quantity of equipment for response to WCD	Appendix D.7, Section 7.1.1, Figure 7.1-1, Appendix B
Oil storage capacity for recovered material	Appendix D.7, Figure 7.1-1, Appendix B
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FIGURE E-1 - EPA / FRP CROSS-REFERENCE, CONTINUED

EPA FRP REQUIREMENTS	LOCATION
Discharge Detection Systems (sec. 1.6)	
Discharge Detection by Personnel (sec. 1.6.1)	
Detection procedures	Appendix D.3
Discussion of facility inspections	Figure C-12, Appendix D.3
Initial response actions	Figure 2.1-1
Automated Discharge Detection (sec. 1.6.2)	
Equipment description	Appendix D.3
Alarm verification procedures	Appendix D.3
Initial response actions	Figure 2.1-1
Plan Implementation (sec. 1.7)	
Response Resources (sec. 1.7.1)	
Demonstration of accessibility of proper response personnel and equipment	Appendix B
Emergency plans for spill response	Section 2
Additional training	Appendix A.2
Additional contracted help	Appendix B
Access to additional equipment/ experts	Appendix B
Ability to implement plan, including training and practice drills	Appendix A
Immediate Actions Form for small, medium, and worst-case spills	Figure 2.1-1
Disposal Plans (sec. 1.7.2)	
How and where materials will be disposed	Section 5.6, Section 7.4
Disposal permits	Section 5.6, Section 7.4
Containment and Drainage Planning (sec. 1.7.3)	
Containment and drainage plan available	Appendix C
Incorporates Factors:	

Available volume of containment	Figure C-5
Route(s) of drainage	Figure C-15
Construction materials used in drainage troughs	Figure C-15
Type and number of valves separators	Figure C-15
Sump pump capacities	Figure C-15
Containment capacity of weirs and booms	Figure C-15
Other clean up materials	Figure C-15

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FIGURE E-1 - EPA / FRP CROSS-REFERENCE, CONTINUED

EPA FRP REQUIREMENTS	LOCATION
Self-Inspection, Drills/ Exercises, and Response Training (sec. 1.8)	
Facility Self-Inspection (sec. 1.8.1)	
Inspection checklist (with dates)	Figure C-12
Records maintained for five years	Figure C-12
Tank Inspection (sec. 1.8.1.1)	
Tank leaks	Figure C-12
Tank foundations	Figure C-12
Tank piping	Figure C-12
Response Equipment Inspection (sec. 1.8.1.2)	
Inventory (item and quantity)	Section 7.1.1
Storage location (time to access and respond)	Section 7.1.1
Operation status/ condition	Section 7.1.1
Actual use/ testing (last test date and frequency of testing)	Maintain On-Site
Shelf life	Section 7.1.2
Secondary Containment Inspection (sec. 1.8.1.3)	
Dike or berm system	Figure C-12
Secondary containment	Figure C-12
Retention and drainage ponds	Figure C-12
Facility Drills/ Exercises (sec. 1.8.2)	
Facility drills/ exercise description	Appendix A.1
Equipment deployment exercise	Appendix A.1
Unannounced exercise	Appendix A.1
Area exercises	Appendix A.1
Qualified Individual Notification Drills	Appendix A.1

Qualified Individual Notification Drill Log (sec. 1.8.2.1) (date, company, qualified individual, other contacted, emergency scenario, evaluation)	Appendix A.1
Spill Management Team Tabletop Exercises	Appendix A.1
Spill Management Team Tabletop Drill Log (sec. 1.8.2.2) (date, company, qualified individual, participants, emergency scenario, evaluation, changes to be implemented, time table for implementation)	Appendix A.1
Response Training (sec. 1.8.3)	
Description of response training program (including topics)	Section A.2
Personnel Response Training Logs (name, response training date/ and number of hours, prevention training date/ and number of hours)	Section A.2
Discharge Prevention Meeting Log (date, attendees)	Section A.2

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FIGURE E-1 - EPA / FRP CROSS-REFERENCE, CONTINUED

EPA FRP REQUIREMENTS	LOCATION
Diagrams (sec. 1.9)	
Site Diagram includes:	
Entire facility to scale	Site Plan "Figure 1-5"
Above and below-ground bulk storage tanks	Site Plan "Figure 1-5"
Contents and capacities of bulk storage tanks	Site Plan "Figure 1-5"
Contents and capacities of drum storage areas	Site Plan "Figure 1-5"
Contents and capacities of surface impoundments	Site Plan "Figure 1-5"
Process buildings	Site Plan "Figure 1-5"
Transfer areas	Site Plan "Figure 1-5"
Secondary containment systems	Site Plan "Figure 1-5"
Structures where hazardous materials are used and capacity	Site Plan "Figure 1-5"
Location of communication and emergency response equipment	Site Plan "Figure 1-5"
Location of electrical equipment which contains oil	Site Plan "Figure 1-5"
If a "complex" facility, interface between EPA and other regulating agencies	Site Plan "Figure 1-5"
Site Drainage Diagram	
Major sanitary and storm sewers, manholes, and drains	Drainage Diagram "Figure C-7"
Weirs and shut-off valves	Drainage Diagram "Figure C-7"

Surface water receiving streams	<u>Drainage Diagram</u> <u>"Figure C-7"</u>
Fire fighting water sources	<u>Drainage Diagram</u> <u>"Figure C-7"</u>
Other utilities	<u>Drainage Diagram</u> <u>"Figure C-7"</u>
Response personnel ingress and egress	<u>Evacuation Diagram</u> <u>"Figure C-8"</u>
Equipment transportation routes	<u>Drainage Diagram</u> <u>"Figure C-7"</u> , <u>Evacuation Diagram</u> <u>"Figure C-8"</u>
Direction of spill flow from release points	<u>Drainage Diagram</u> <u>"Figure C-7"</u>
Site Evacuation Diagram includes:	
Site plan diagram with evacuation routes	<u>Evacuation Diagram</u> <u>"Figure C-8"</u>
Location of evacuation regrouping areas	<u>Evacuation Diagram</u> <u>"Figure C-8"</u>

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FIGURE E-1 - EPA / FRP CROSS-REFERENCE, CONTINUED

EPA FRP REQUIREMENTS	LOCATION
Site Security (sec. 1.10)	
Emergency cut-off locations	<u>Figure 7.3-2</u>
Enclosure	<u>Figure 7.3-2</u>
Guards and their duties, day and night	<u>Figure 7.3-2</u>
Lighting	<u>Figure 7.3-2</u>
Valve and pump locks	<u>Figure 7.3-2</u>
Pipeline connection caps	<u>Figure 7.3-2</u>
Response Plan Cover Sheet (sec. 2.0)	
Owner/ operator of facility	<u>Figure E-7</u>
Facility name	<u>Figure E-7</u>
Facility address	<u>Figure E-7</u>
Facility phone number	<u>Figure E-7</u>
Latitude and longitude	<u>Figure E-7</u>
Dun and Bradstreet number	<u>Figure E-7</u>
Response Plan Cover Sheet (sec. 2.0), Continued	

North American Industrial Classification System (NAICS) Code	Figure E-7
Largest oil tank storage capacity	Figure E-7
Maximum oil storage capacity	Figure E-7
Number of oil storage tanks	Figure E-7
Worst case discharge amount	Figure E-7
Facility distance to navigable waters	Figure E-7
Applicability of substantial harm criteria	Figure E-7
Certification	Figure E-7

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FIGURE E-2 - EPA / SPCC CROSS-REFERENCE

EPA SPCC REQUIREMENTS (40 CFR 112.7 and 112.8)	LOCATION
112.7 General requirements for Spill Prevention, Control, and Countermeasure Plans	
a. General requirements	
1. Include a discussion of your facility's conformance with the requirements listed in this part	<u>Appendix C</u>
3. Describe in your Plan the physical layout of the facility and include a facility diagram	<u>Figure 1-5, Figure C-4, Figure C-7, Figure C-8</u>
i. The type of oil in each container and its storage capacity	<u>Figure C-5</u>
ii. Discharge prevention measures	<u>Section 2, Figure C-4</u>
iii. Discharge or drainage controls	<u>Figure C-4, Figure C-7</u>
iv. Countermeasures for discharge	<u>Section 2</u>
v. Methods of disposal	<u>Section 7.4</u>
vi. Contact list and phone numbers	<u>Figure 3.1-3, Figure 3.1-4</u>
4. Unless you have submitted a response plan, provide information and procedures to report a discharge	N/A
5. Unless you have submitted a response plan, describe procedures you will use when a discharge	N/A

OCURS	
b. Prediction of the direction, rate of flow, and total quantity of oil which could be discharged from the facility as a result of each type of major equipment failure	Figure C-5
c. Provide appropriate containment	Figure C-5
d. If you determine that the installation of any of the structures or pieces of equipment is not practicable, you must clearly explain in your Plan why such measures are not practicable; for bulk storage containers, conduct both periodic integrity testing of the containers and periodic integrity and leak testing of the valves and piping; and, unless you have submitted a response plan under § 112.20, provide in your Plan the following:	Appendix C
1. An oil spill contingency plan following the provisions of part 109 of this chapter	N/A
2. A written commitment of manpower, equipment, and materials	N/A
e. Inspections, tests, and records	Appendix C
f. Personnel, training, and discharge prevention procedures	Appendix C
1. Oil-handling personnel training	Figure C-4 , Appendix A.2
2. Person accountable for discharge prevention	Figure C-4
3. Schedule and conduct discharge prevention briefings	Figure C-11

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FIGURE E-2 - EPA / SPCC CROSS-REFERENCE, CONTINUED

EPA SPCC REQUIREMENTS (40 CFR 112.7 and 112.8)	LOCATION
112.7 General requirements for Spill Prevention, Control, and Countermeasure Plans, continued	
g. Security (excluding oil production facilities)	Figure C-4
1. Facility fencing	Figure C-4

2. Master flow, drain valves, and other valves remain in closed position	Figure C-4
3. Lock the starter control on each oil pump in "off" position	Figure C-4
4. Securely cap or blank-flange the loading/ unloading connections	Figure C-4
5. Provide facility lighting	Figure C-4
i. Discovery of discharges occurring during hours of darkness	Figure C-4
ii. Prevention of discharges occurring through acts of vandalism	Figure C-4
h. Facility tank car and tank truck loading/ unloading rack (excluding offshore facilities)	Figure C-4
1. Catchment basin, treatment facility, or quick drainage system	Figure C-4
2. Provide vehicular disconnect warning system	Figure C-4
3. Inspect for discharges of the lower most drain	Figure C-4
i. Aboveground container brittle fracture evaluation	Figure C-4
j. Discussion of conformance with the applicable requirements	Figure C-4
112.8 Spill Prevention, Control, and Countermeasure Plan requirements for onshore facilities (excluding production facilities)	
b. Facility drainage	Figure C-4
1. Restrain drainage from diked storage areas except where facility systems are designed to control such discharge	Figure C-4
2. Use valves of manual, open-and-closed design, for the drainage of diked areas	Figure C-4
3. Design facility drainage systems from undiked areas with a potential for a discharge to flow into ponds, lagoons, or catchment basins designed to retain oil	Figure C-4

or return it to the facility	
4. Equip the final discharge of all ditches inside the facility with a diversion system that would, in the event of an uncontrolled discharge, retain oil in the facility	Figure C-4
5. Where drainage waters are treated in more than one treatment unit and such treatment is continuous, and pump transfer is needed, provide two "lift" pumps and permanently install at least one of the pumps	Figure C-4

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FIGURE E-2 - EPA / SPCC CROSS-REFERENCE, CONTINUED

EPA SPCC REQUIREMENTS (40 CFR 112.7 and 112.8)	LOCATION
112.8 Spill Prevention, Control, and Countermeasure Plan requirements for onshore facilities (excluding production facilities), continued	
c. Bulk storage containers	Figure C-4
1. Not use a container for the storage of oil unless its material and construction are compatible with the material stored and conditions of storage such as pressure and temperature	Figure C-4
2. Provide a secondary means of containment for the entire capacity of the largest single container and sufficient freeboard to contain precipitation	Figure C-4
3. Not allow drainage of uncontaminated rainwater from the diked area into a storm drain or discharge of an effluent into an open watercourse, lake, or pond, bypassing the facility treatment system unless you:	Figure C-4
i. Normally keep the bypass valve sealed closed	Figure C-4
ii. Inspect the retained rainwater to ensure that its presence will not cause a discharge as described in § 112.1(b)	Figure C-4
iii. Open the bypass valve and reseal it following drainage under responsible supervision; and	Figure C-4
iv. Keep adequate records of such events, for example, any records required under permits	Figure C-4

issued in accordance with §§ 122.41(j)(2) and 122.41(m)(3) of this chapter	
4. Protect completely buried metallic storage tanks from corrosion	<u>Figure C-4</u>
5. Protect partially buried and bunkered tanks from corrosion	<u>Figure C-4</u>
6. Test each aboveground container for integrity on a regular schedule	<u>Figure C-4</u>
7. Control leakage through defective internal heating coils	<u>Figure C-4</u>
8. Engineer or update each container installation in accordance with good engineering practice to avoid discharges. You must provide at least one of the following devices:	<u>Figure C-4</u>
i. High liquid level alarms with an audible or visual signal	<u>Figure C-4</u>
ii. High liquid level pump cutoff devices	<u>Figure C-4</u>
iii. Direct audible or code signal communication between the container gauger and the pumping station	<u>Figure C-4</u>
iv. A fast response system	<u>Figure C-4</u>
v. Regularly test liquid level sensing devices to ensure proper operation	<u>Figure C-4</u>
9. Observe effluent treatment facilities frequently enough to detect possible system upsets that could cause a discharge as described in § 112.1(b)	<u>Figure C-4</u>

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FIGURE E-2 - EPA / SPCC CROSS-REFERENCE, CONTINUED

EPA SPCC REQUIREMENTS (40 CFR 112.7 and 112.8)	LOCATION
112.8 Spill Prevention, Control, and Countermeasure Plan requirements for onshore facilities (excluding production facilities), continued	
10. Promptly correct visible discharges which result in a	<u>Figure C-4</u>

loss of oil from the container	
11. Position or locate mobile or portable oil storage containers to prevent a discharge	Figure C-4
d. Facility transfer operations, pumping, and facility process	Figure C-4
1. Provide protection of buried piping that is installed or replaced on or after August 16, 2002	Figure C-4
2. Cap or blank-flange the terminal connection at the transfer point	Figure C-4
3. Properly design pipe supports to minimize abrasion and corrosion and allow for expansion and contraction	Figure C-4
4. Regularly inspect all aboveground valves, piping, and appurtenances	Figure C-4
5. Warn all vehicles entering the facility to be sure that no vehicle will endanger aboveground piping or other oil transfer operations	Figure C-4

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FIGURE E-3 - USCG / FRP CROSS-REFERENCE

USCG OPA 90 REQUIREMENTS (33 CFR 154.1035)	LOCATION IN THIS PLAN
<i>a) Introduction and Plan Content</i>	
1. Facility Name and Location (address, city, county, state, zip, phone number, fax number).	Figure 1-2
2. Facility Directions (including but not limited to maps, landmarks and river mile that could aid a responder and reviewer).	Figure 1-2 , Figure 1-3
3. Name, address and procedures for contacting the facility's owner or operator on a 24 hour basis.	Figure 1-2 , Figure 3.1-3
4. Table of contents.	Table of Contents
5. Period when submitted plan does not have to conform to the subpart, a cross index, if appropriate.	Figure E-3

6. Record of change(s) to record information on plan updates.	Table of Contents
b) Emergency Response Action Plan	
1. Notification procedures <ul style="list-style-type: none"> • Prioritized list of facility response personnel. • Federal, State or local agencies, as required • Spill response notification forms to Federal, State, local agencies. Form must state that initial notification must not be delayed by collection of data. • Notification of the National Response Center. 	Section 3
2. Facility's spill mitigation procedures <ul style="list-style-type: none"> • Describe volume and oil groups that would be involved in the following: <ul style="list-style-type: none"> • Average, maximum and worse discharge from the MTR facility. • Where applicable, the worst case discharge from the non-transportation-related facility. • Prioritized list of procedures and facility personnel (identified by job title). Procedures must address actions to be taken in the event of a discharge, potential discharge or emergency involving the following equipment and scenarios: • Transfer equipment <ul style="list-style-type: none"> • Tank overfill or failure • Piping rupture, leak both under pressure and not under pressure • Explosion or fire • Equipment failure • Listing of equipment and the responsibilities of facility personnel to mitigate an average most probable discharge 	Section 2.1.1, Figure 2.1-2, Appendix D
3. Facility's response activities	
i. Responsibilities of facility personnel to initiate a response and supervise response resources pending arrival of qualified individuals.	Figure 2.1-1
ii. Responsibilities and authority of the qualified individual and alternate as required in § 154.1026.	Section 4.5

FIGURE E-3 - USCG / FRP CROSS-REFERENCE, CONTINUED

USCG OPA 90 REQUIREMENTS (33 CFR 154.1035)	LOCATION IN THIS PLAN
<p>iii. Apply the following organizational structure to manage response actions:</p> <ul style="list-style-type: none"> • Command and control • Public information • Safety • Liaison with government agencies • Spill operations • Planning • Logistics support • Finance 	<p><u>Section 4.6, Figure 4.5-2</u></p>
<p>iv. Identify oil spill removal organizations and the spill management teams to be capable of providing the following response resources:</p> <ul style="list-style-type: none"> • Equipment and supplies to meet § 154.1045, 154.1047, as appropriate • Trained personnel for response to be on hand for the first 7 days of the response • Job descriptions for each spill management team member within the organizational structure in a response action. 	<p><u>Figure 3.1-3, Section 7.1, Appendix B</u></p>
<p>v. For mobile facilities in more than one COTP zone, oil spill removal organizations and the spill management teams must be identified from paragraph (3)(iv) and included in each COTP zone.</p>	<p>N/A</p>
<p>4. Sensitive areas</p>	
<p>i. Identify areas of economic importance and environmental sensitivities as identified in the ACP, which are potentially impacted by a worst case discharge.</p>	<p><u>Section 6.6</u></p>
<p>ii. For a worst case discharge the plan must address the following:</p> <ul style="list-style-type: none"> • List all sensitive elements identified in ACP that are potentially impacted by a discharge. • Describe all response actions anticipated to protect sensitive elements. • Contain map or chart that depicts each 	<p><u>Appendix D.5</u></p> <p><u>Section 6</u></p>

response action anticipated.	
<p>iii. Identify appropriate equipment and personnel as described in § 154.1028 to protect sensitive elements by one of the following calculations:</p> <ul style="list-style-type: none"> Persistent oils and non-petroleum oils discharged into non-tidal waters, the distance from the facility reached in 48 hours at maximum current. 	<u>Section 7.1, Appendix B, Appendix D</u>
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FIGURE E-3 - USCG / FRP CROSS-REFERENCE, CONTINUED

USCG OPA 90 REQUIREMENTS (33 CFR 154.1035)	LOCATION IN THIS PLAN
<ul style="list-style-type: none"> Persistent and non-petroleum oils discharged into tidal waters, 15 miles from the facility down current during ebb tide and to the point of maximum tidal influence or 15 miles, whichever is less, during flood tide. Non-persistent oils discharged into non-tidal waters, the distance from the facility reached in 24 hours at maximum current. Non-persistent oils discharged into tidal waters, 5 miles from the facility down current during ebb tide and to the point of maximum tidal influence or 5 miles, whichever is less, during flood tide. Spill trajectory or model maybe substituted if acceptable to COTP. Procedures contained in the Environmental Protection's Agency's regulations on oil pollution prevention may be substituted for non-tidal and tidal waters. COTP may require additional sensitive elements to be protected depending on trajectory. 	<u>Section 7.1, Appendix B, Appendix D</u>
<p>5. Disposal plan Describe actions and procedures that adhere to Federal, state or local requirements.</p>	<u>Section 5.6, Section 7.4</u>
c) Training and Exercises	
<p>1. Training procedures of the facility owner or operator must meet requirements of § 154.1050.</p>	<u>Appendix A</u>
<p>2. Drill procedures of the facility owner or operator must</p>	<u>Appendix A</u>

meet requirements of § 154.1055.	
d) Plan Review and Update Procedures	
Plan review and update procedures of the facility owner or operator must meet requirements of §154.1065 and any post-discharge review of the plan to evaluate and validate its effectiveness.	<u>Section 1.2</u>
e) Appendices	
1. Facility-specific information - principal characteristics	
i. Identify sizes, types and number of vessels the facility can transfer oil to or from simultaneously.	<u>Figure 1-2</u>
ii. Identify the first valve(s) on piping separating transportation-related and non-transportation-related areas. If piping serves tank vessels from a manifold it is considered the first valve.	<u>Figure C-9</u>
iii. The oil(s) and hazardous material handled, stored or transported in bulk must be documented and include the following: <ul style="list-style-type: none"> • Generic/chemical name • Description of appearance and odor • Hazards involved with handling or discharge • Firefighting procedures and extinguishing agents for oil/hazardous materials 	<u>Appendix D.8</u>

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FIGURE E-3 - USCG / FRP CROSS-REFERENCE, CONTINUED

USCG OPA 90 REQUIREMENTS (33 CFR 154.1035)	LOCATION IN THIS PLAN
2. List of contacts must include primary and alternate personnel, personnel from paragraph (b) (3) (iv), and Federal, state and local officials.	<u>Figure 3.1-3, Figure 3.1-4</u>
3. Equipment list and records must include the following: <ul style="list-style-type: none"> • List of equipment and facility personnel required to respond to an average most probable discharge, as defined by §154.1020 • List of equipment belonging to an oil spill 	<u>Section 7.1, Appendix B</u>

<p>removal organization as described in §154.1028; unless the organization has been classified by the Coast Guard to equal or exceed the response capability needed by the facility</p> <ul style="list-style-type: none"> • When it is necessary for the appendix to contain a listing of response equipment, it shall include the following: skimmers; booms; dispersant application; in-situ burning; bioremediation equipment and supplies and other equipment used to apply other chemical agents on the NCP Product Schedule; communications, firefighting and beach cleaning equipment; boats and motors; and heavy equipment • This list must also include specifications for each piece of equipment as follows: <ol style="list-style-type: none"> 1. type, make, model and year of manufacture, 2. for oil recovery devices, the effective daily recovery rate, 3. for containment boom, the overall boom height and type of end connectors, 4. spill scenario in which the equipment will be used, 5. total daily capacity for storage and disposal of recovered daily oil 6. for communication equipment, the type and amount of equipment intended for use during response activities, 7. location of equipment, and 8. date of last inspection. 	
<p>4. Communications plan must describe the primary and alternate method of communication during discharges, including communications at the facility and at remote locations.</p>	<p><u>Section 7.1.6</u></p>
<p>5. Site specific safety and health plan must describe the safety and health plan to be implemented. This appendix may reference another existing plan requiring under 29 CFR 1910.120</p>	<p><u>Section 5.4</u></p>
<p>6. List of acronyms and definitions must include all definitions that are critical to understanding the response plan.</p>	<p><u>Appendix F</u></p>

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FIGURE E-4 - EPA / RCRA CROSS-REFERENCE

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.	<u>Section 1.1</u>
§ 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.	<u>Section 1.1</u>
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.	<u>Section 1.1</u>
§ 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.	<u>Section 2</u>
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.	<u>Section 7.4</u>
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.	<u>Section 3.1</u>
d	The plan must list names, addresses, and phone numbers (office and home) of all persons qualified	<u>Figure 3.1-3</u>

	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.	
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 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.	<u>Section 7.1.1</u>

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FIGURE E-4 - 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).	<u>Section 2.2</u>
§ 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	<u>Figure 1-1</u>
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.	<u>Figure 1-1</u>
§ 265.54	Amendment of Contingency Plan	
	The contingency plan must be reviewed, and immediately amended, if necessary, whenever:	-----
a	Applicable regulations are revised;	<u>Section 1.2</u>
b	The plan fails in an emergency;	<u>Section 1.2</u>
c	The facility changes in its design, construction, operation, maintenance, or other circumstances in a	<u>Section 1.2</u>

	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;	
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	
	<p>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 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.</p> <p><i>[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].</i></p>	Figure 1-2; Section 4.5; Appendix A

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FIGURE E-4 - 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:	-----
a(1)	Activate internal facility alarms or communication systems, where applicable, to notify all facility personnel; and	Section 4.5
a(2)	Notify appropriate State or local agencies with designated response roles if their help is needed.	Section 4.5
b	Whenever there is a release, fire, or explosion, the emergency coordinator must immediately identify	Section 4.5

	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.	
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).	<u>Section 4.5</u>
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:	<u>Section 4.5</u>
d(1)	If his assessment indicates that evacuation of local areas may be advisable, he must immediately notify appropriate local authorities. He must be available to help appropriate officials decide whether local areas should be evacuated; and	<u>Section 4.5</u>
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:	<u>Section 4.5; Figure 3.1-4</u>
d(2)(i)	Name and telephone number of reporter:	<u>Figure 3.1-2</u>
d(2)(ii)	Name and address of facility;	<u>Figure 3.1-2</u>
d(2)(iii)	Time and type of incident (e.g., release, fire);	<u>Figure 3.1-2</u>
d(2)(iv)	Name and quantity of material(s) involved, to the extent known;	<u>Figure 3.1-2</u>
d(2)(v)	The extent of injuries, if any; and	<u>Figure 3.1-2</u>
d(2)(vi)	The possible hazards to human health, or the environment, outside the facility.	<u>Figure 3.1-2</u>

FIGURE E-4 - 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.	<u>Section 2; Figure 2.1-1</u>
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.	<u>Section 2; Figure 2.1-1</u>
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 release, fire, or explosion at the facility. <i>[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].</i>	<u>Section 7.4; Section 5.6</u>
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	<u>Section 7.4; Section 5.6</u>
h(2)	All emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.	<u>Section 5.5</u>
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.	<u>Figure 3.1-4</u>
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	<u>Section 8.3</u>

	Administrator. The report must include:	
j(1)	Name, address, and telephone number of the owner or operator;	<u>Section 8.3</u>
j(2)	Name, address, and telephone number of the facility;	<u>Section 8.3</u>
j(3)	Date, time, and type of incident (e.g., fire, explosion);	<u>Section 8.3</u>

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FIGURE E-4 - EPA / RCRA CROSS-REFERENCE, CONTINUED

EPA / RCRA REQUIREMENTS (40 CFR PART 265.50 - 265.56)		LOCATION
§ 265.56	Emergency Procedures (Cont'd)	
j(4)	Name and quantity of material(s) involved;	<u>Section 8.3</u>
j(5)	The extent of injuries, if any;	<u>Section 8.3</u>
j(6)	An assessment of actual or potential hazards to human health or the environment, where this is applicable; and	<u>Section 8.3</u>
j(7)	Estimated quantity and disposition of recovered material that resulted from the incident.	<u>Section 8.3</u>

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FIGURE E-5 - DOT / PHMSA CROSS-REFERENCE

OPA 90 REQUIREMENTS (49 CFR 194)	LOCATION
Information Summary	
<ul style="list-style-type: none"> For the core plan: 	
<ul style="list-style-type: none"> Name and address of operator 	<u>Figure 1-2</u>
<ul style="list-style-type: none"> 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) 	<u>Figure 1-2</u>
<ul style="list-style-type: none"> For each Response Zone appendix: 	
<ul style="list-style-type: none"> Information summary for core plan 	<u>Figure 1-2</u>
<ul style="list-style-type: none"> QI names and telephone numbers, available on 	<u>Figure 1-2</u>

24-hr basis	
<ul style="list-style-type: none"> 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
<ul style="list-style-type: none"> List of line sections contained in Response Zone, identified by milepost or survey station or other operator designation 	Figure 1-2
<ul style="list-style-type: none"> Basis for operator's determination of significant and substantial harm 	Figure 1-2
<ul style="list-style-type: none"> The type of oil and volume of the worst case discharge 	Figure 1-2 , Appendix D.7
<ul style="list-style-type: none"> 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 1.3 , Appendix B
Notification Procedures	
<ul style="list-style-type: none"> Notification requirements that apply in each area of operation of pipelines covered by the plan, including applicable state or local requirements 	Figure 3.1-3
<ul style="list-style-type: none"> Checklist of notifications the operator or Qualified Individual is required to make under the response plan, listed in the order of priority 	Figure 3.1-3
<ul style="list-style-type: none"> Name of persons (individuals or organizations) to be notified of discharge, indicating whether notification is to be performed by operating personnel or other personnel 	Figure 3.1-1 , Figure 3.1-3 , Figure 3.1-4
<ul style="list-style-type: none"> Procedures for notifying Qualified Individuals 	Figure 3.1-1 , Section 4.5 , Figure 4.5-1
<ul style="list-style-type: none"> Primary and secondary communication methods by which notifications can be made 	Section 7.1.6

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FIGURE E-5 - DOT / PHMSA CROSS-REFERENCE, CONTINUED

OPA 90 REQUIREMENTS (49 CFR 194)	LOCATION
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Notification Procedures, Continued	
<ul style="list-style-type: none"> • Information to be provided in the initial and each follow-up notification, including the following: <ul style="list-style-type: none"> • 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 3.1-2
Spill Detection and On-Scene Spill Mitigation Procedures	
<ul style="list-style-type: none"> • Methods of initial discharge detection 	Section 2.1.1 , Appendix D.2.1 , Appendix D.3
<ul style="list-style-type: none"> • 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
<ul style="list-style-type: none"> • List of equipment that may be needed in response activities based on land and navigable waters including: <ul style="list-style-type: none"> • Transfer hoses and pumps • Portable pumps and ancillary equipment • Facilities available to transport and receive oil from a leaking pipeline 	Section 7.1.1 , Figure 7.1-1 , Figure 7.4-4 , Appendix B
<ul style="list-style-type: none"> • Identification of the availability, location, and contact phone numbers to obtain equipment for response activities on a 24-hour basis 	Figure 3.1-3 , Figure 3.1-4 , Appendix B
<ul style="list-style-type: none"> • Identification of personnel and their location, telephone numbers, and responsibilities for use of equipment in response activities on a 24-hour basis 	Figure 3.1-3 , Figure 3.1-4 , Appendix B
Response Activities	
<ul style="list-style-type: none"> • 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 4.6
<ul style="list-style-type: none"> • Qualified Individual's responsibilities and authority, including notification of the response resources 	Section 4.5

identified in the response plan	
<ul style="list-style-type: none"> 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, Figure 4.5-2
<ul style="list-style-type: none"> 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

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FIGURE E-5 - DOT / PHMSA CROSS-REFERENCE, CONTINUED

OPA 90 REQUIREMENTS (49 CFR 194)	LOCATION
Response Activities, Continued	
<ul style="list-style-type: none"> For each organization identified under paragraph (d), a listing of: <ul style="list-style-type: none"> 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
List of Contacts	
<ul style="list-style-type: none"> List of persons the Plan requires the operator to contact 	Figure 3.1-3, Figure 3.1-4
<ul style="list-style-type: none"> Qualified individuals for the operator's areas of operation 	Figure 1-2, Figure 3.1-3
<ul style="list-style-type: none"> Applicable insurance representatives or surveyors for the operator's areas of operation 	Figure 3.1-4
<ul style="list-style-type: none"> Persons or organizations to notify for activation of response resources 	Figure 3.1-3
Training Procedures	
<ul style="list-style-type: none"> Description of training procedures and programs of the operations 	Appendix A.2
Drill Procedures	
<ul style="list-style-type: none"> Announced and unannounced drills 	Figure A.1-2
<ul style="list-style-type: none"> Types of drills and their frequencies; for example: 	Figure A.1-2

<ul style="list-style-type: none"> • 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 	
Response Plan review and update procedures	
<ul style="list-style-type: none"> • Procedures to meet §194.121 	<u>Section 1.2</u>
<ul style="list-style-type: none"> • Procedures to review plan after a worst case discharge and to evaluate and record the plan's effectiveness 	<u>Section 1.2, Section 8.3</u>
Response zone appendices	
Each response zone appendix would provide the following information:	
<ul style="list-style-type: none"> • Name and telephone number of the qualified individual 	<u>Figure 1-2, Figure 3.1-3</u>
<ul style="list-style-type: none"> • Notification procedures 	<u>Section 3</u>
<ul style="list-style-type: none"> • Spill detection and mitigation procedures 	<u>Appendix D.2.1, Appendix D.3</u>

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FIGURE E-5 - DOT / PHMSA CROSS-REFERENCE, CONTINUED

OPA 90 REQUIREMENTS (49 CFR 194)	LOCATION
Response zone appendices, Continued	
<ul style="list-style-type: none"> • Name, address, and telephone number of oil spill response organization 	<u>Figure 3.1-3, Appendix B</u>
<ul style="list-style-type: none"> • Response activities and response resources including: <ul style="list-style-type: none"> • Equipment and supplies necessary to meet §194.115 • Trained personnel necessary to sustain operation 	<u>Appendix A, Appendix B, Section 7.1.1, Figure 7.1-1</u>

of the equipment and to staff the oil spill response organization and spill management team for the first seven days of the response	
<ul style="list-style-type: none"> Names and telephone numbers of federal, state, and local agencies which the operator expects to assume pollution response responsibilities 	Figure 3.1-4
<ul style="list-style-type: none"> Worst case discharge volume 	Appendix D.7
<ul style="list-style-type: none"> Method used to determine the worst case discharge volume, with calculations 	Appendix D.7
<ul style="list-style-type: none"> A map that clearly shows: <ul style="list-style-type: none"> Location of worst case discharge Distance between each line section in the Response Zone: <ul style="list-style-type: none"> 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 1-6, Section 6.10
<ul style="list-style-type: none"> 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
<ul style="list-style-type: none"> For every oil transported by each pipeline in the response zone, emergency response data that: <ul style="list-style-type: none"> 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 	Appendix D.8

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FIGURE E-6 - OSHA CROSS-REFERENCE

EAP REQUIREMENTS (29 CFR 1910.38)	LOCATION
(a) Application. An employer must have an emergency action plan whenever an OSHA standard in this part requires one. The requirements in this section apply to each such emergency action plan.	

(b) Written and oral emergency action plans. An emergency action plan must be in writing, kept in the workplace, and available to employees for review. However, an employer with 10 or fewer employees may communicate the plan orally to employees.	Figure 1-1
(c) Minimum elements of an emergency action plan. An emergency action plan must include at a minimum:	
(1) Procedures for reporting a fire or other emergency;	Section 2.7
(2) Procedures for emergency evacuation, including type of evacuation and exit route assignments;	Section 2.2
(3) Procedures to be followed by employees who remain to operate critical plant operations before they evacuate;	Section 2.2
(4) Procedures to account for all employees after evacuation;	Section 2.2
(5) Procedures to be followed by employees performing rescue or medical duties; and	Section 2.5
(6) The name or job title of every employee who may be contacted by employees who need more information about the plan or an explanation of their duties under the plan.	Figure 3.1-3
(d) Employee alarm system. An employer must have and maintain an employee alarm system. The employee alarm system must use a distinctive signal for each purpose and comply with the requirements in §1910.165.	Section 2.2
(e) Training. An employer must designate and train employees to assist in a safe and orderly evacuation of other employees.	Figure A.2-1
(f) Review of emergency action plan. An employer must review the emergency action plan with each employee covered by the plan:	
(1) When the plan is developed or the employee is assigned initially to a job;	Figure A.2-1
(2) When the employee's responsibilities under the plan change; and	Figure A.2-1
(3) When the plan is changed.	Figure A.2-1

FIGURE E-6 - OSHA CROSS-REFERENCE, CONTINUED

ERP REQUIREMENTS (29 CFR 1910.120 [q])	LOCATION
(q) Emergency response to hazardous substance releases. This paragraph covers employers whose employees are engaged in emergency response no matter where it occurs except that it does not cover employees engaged in operations specified in paragraphs (a)(1)(i) through (a)(1)(iv) of this section. Those emergency response organizations who have developed and implemented programs equivalent to this paragraph for handling releases of hazardous substances pursuant to section 303 of the Superfund Amendments and Reauthorization Act of 1986 (Emergency Planning and Community Right-to-Know Act of 1986, 42 U.S.C. 11003) shall be deemed to have met the requirements of this paragraph.	
(1) Emergency response plan. An emergency response plan shall be developed and implemented to handle anticipated emergencies prior to the commencement of emergency response operations. The plan shall be in writing and available for inspection and copying by employees, their representatives and OSHA personnel. Employers who will evacuate their employees from the danger area when an emergency occurs, and who do not permit any of their employees to assist in handling the emergency, are exempt from the requirements of this paragraph if they provide an emergency action plan in accordance with 29 CFR 1910.38.	
(2) Elements of an emergency response plan. The employer shall develop an emergency response plan for emergencies which shall address, as a minimum, the following to the extent that they are not addressed elsewhere:	
(i) Pre-emergency planning and coordination with outside parties.	Section 2.1 , Section 3 , Appendix C
(ii) Personnel roles, lines of authority, training, and communication.	Figure 3.1-3 , Figure 4.5-2 , Section 4.6 , Appendix A.2
(iii) Emergency recognition and prevention.	Appendix C , Appendix D.3
(iv) Safe distances and places of refuge.	Section 2.2
(v) Site security and control.	Section 5.7 , Section 7.3
(vi) Evacuation routes and procedures.	Section 2.2
(vii) Decontamination.	Section 5.5

(viii) Emergency medical treatment and first aid.	<u>Section 2.5</u>
(ix) Emergency alerting and response procedures.	<u>Section 2.1, Section 2.2</u>
(x) Critique of response and follow-up.	<u>Section 8</u>
(xi) PPE and emergency equipment.	<u>Section 7.1.1, Appendix B</u>
(xii) Emergency response organizations may use the local emergency response plan or the state emergency response plan or both, as part of their emergency response plan to avoid duplication. Those items of the emergency response plan that are being properly addressed by the SARA Title III plans may be substituted into their emergency plan or otherwise kept together for the employer and employee's use.	

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FIGURE E-7 - EPA RESPONSE PLAN COVER SHEET

Owner/ operator of facility:	Genesis Crude Oil, L.P.
Facility name:	Port Hudson
Facility address (street address or route):	769 Port Hudson Cemetery Road, P.O. Box 1326
City, state, and U.S. zip code	Zachary (East Baton Rouge Parish), Louisiana 70791
Facility mailing address:	As above
Facility phone number.:	(225) 654-0085, Control Room: (800) 806-5463
(b) (7)(F)	
Dun & Bradstreet number:	01-006-5894
(b) (7)(F)	
Number of above ground oil storage tanks:	4 (including additive tanks)
North American Industrial Classification System (NAICS):	424710
(b) (7)(F)	
Facility distance to navigable water; mark the appropriate line.	
0-1/4 <input checked="" type="checkbox"/>	1/4-1/2 mile <input type="checkbox"/>
1/2 - 1 mile <input type="checkbox"/>	> 1 mile <input type="checkbox"/>

APPLICABILITY OF SUBSTANTIAL HARM CRITERIA

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

YES NO

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

YES NO

Does the facility have a total oil storage capacity greater than or equal to one million gallons and is the facility located at a distance (as calculated using the appropriate formula in or a comparable formula) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments?

YES NO

Does the facility have a total oil storage capacity greater than or equal to one million gallons and is the facility located at a distance (using the appropriate formula in or a comparable formula) such that a discharge from the facility would shut down a drinking water intake?

YES NO

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

YES NO

CERTIFICATION

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

 Signature:	Date: 9/4/2012
Name: Mike Moore	Title: Vice President and General Manager of Pipelines and Terminals

APPENDIX F
ACRONYMS AND DEFINITIONS

Last Revised: February 2009

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F.1 Acronyms

F.2 Definitions

F.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
FRP	Facility 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
IAP	Incident Action Plan

IC	Incident Commander
ICS	Incident Command System
JIC	Joint Information Center

F.1 ACRONYMS, CONTINUED

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 (USDH)
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
RSPA	Research and Special Programs Administration (DOT)
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

F.1 ACRONYMS, CONTINUED

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 (USDOJ)
USGS	U.S. Geological Survey (USDOJ)

F.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.

F.2 DEFINITIONS, CONTINUED**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.

F.2 DEFINITIONS, CONTINUED

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.

F.2 DEFINITIONS, CONTINUED

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-Natchez 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.

F.2 DEFINITIONS, CONTINUED

Hyperthermia

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 cleanup 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.

F.2 DEFINITIONS, CONTINUED

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.

F.2 DEFINITIONS, CONTINUED**Owner or Operator**

Any person, individual, partnership, corporation, association, governmental unit, or public or private organization of any character.

PPE - Level A

Offers the highest level of respiratory, skin, eye and mucous membrane protection. Intended for IDLH or near IDLH conditions. Level A consists of the following:

- Positive pressure self contained breathing apparatus (SCBA)

- Fully encapsulated chemical resistant unit
- Inner and outer chemical resistant gloves
- Chemical resistant boots with steel toe and shank
- Hard hat
- Other accessories as required

PPE - Level B

Offers the highest degree of respiratory protection, but a lesser level of skin and eye protection. Level B is the minimum level recommended on initial site entries until the hazards have been further identified and defined by monitoring sampling, and other methods. Level B protection may be used where confined space entry conditions exist and existing gases or vapors are not harmful to the skin. Level B consists of the following:

- Positive pressure self contained breathing apparatus (SCBA)
- Chemical resistant clothing appropriate for hazard
- Inner and outer chemical resistant gloves
- Chemical resistant boots with steel toe and shank
- Hard hat
- Other accessories as required

PPE - Level C

May be used when the type of airborne substance is known, its concentration has been measured, and criteria for using air-purifying respirators have been met. Also, skin and eye exposure is unlikely. Level C consists of the following:

- Full-face, air purifying respirator appropriate for contaminant
- Chemical, fire and/or heat resistant clothing appropriate for hazard
- Inner and outer chemical resistant gloves
- Chemical resistant boots with steel toe and shank
- Hard hat
- Other accessories as required

PPE - Level D

Standard minimum level of protection required during routine operations or incidents with no known hazards. Level D consists of the following:

- Flame retardant clothing
- Safety glasses
- Leather boots or shoes
- Hard hat
- Fire fighting protective clothing

F.2 DEFINITIONS, CONTINUED

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 FOCS 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.

F.2 DEFINITIONS, CONTINUED

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.

Sloper

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.



F.2 DEFINITIONS, CONTINUED

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 G

Last Revised: February 2009

ADDITIONAL INFORMATION

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**Port Hudson
Emergency Response Action Plan**

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Developed by:



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EMERGENCY RESPONSE ACTION PLAN

Last Revised: February 2009

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1.0 INTRODUCTION

1.1 Purpose / Scope of Plan

This Port Hudson Emergency Response Action Plan (ERAP) provides guidelines to assist in managing an emergency. The primary goal of this Plan is to provide tools to enable an efficient, coordinated, and effective response to emergencies.

The ERAP is not meant to replace common sense or actions not specifically described herein. Responders should continually evaluate the effectiveness of actions called for in this Plan and make the appropriate adjustments based on past experience and training.

This ERAP contains tactical response plans that identify site-specific potential response strategies. Response strategies, equipment and manpower requirements, and site conditions are based on conditions that were present during site assessments. Actual conditions at the time of a response may vary significantly and may necessitate the need for a different strategy and/or equipment requirements. The strategies and equipment lists contained in this plan should be used as guidelines only.

This document is intended to satisfy the requirements of 29 CFR 1910.38(a)(2) and 1910.120(l)(2) (OSHA Emergency Response Plan and Emergency Action Plan) and 40 CFR Part 112.20 (EPA Emergency Response Action Plan). Cross-references for these regulations are located in **APPENDIX E** of the Spill Response Plan.

1.2 Plan Review and Updating Procedures

The ERAP will be reviewed and modified as appropriate to address new information.

Plan revisions will be numbered sequentially and entered on the Record of Changes Form. The change numbers, date, and description of change will also be entered on the form. These changes are then to be distributed to all plan holders on the Distribution List.

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1.3 Facility Description

The Port Hudson Facility located on the Mississippi River includes a Barge Dock, associated piping, and a single welded steel tank with an external floating roof, located within a secondary containment dike. The tank (b) (7)(F) and contains group II crude oil/condensate mix.

Also included is a trucking terminal located in East Baton Rouge Parish, Louisiana, on Highway 3113 approximately 0.75 miles west of Highway 64 and 13.5 miles northwest of Baton Rouge, LA.

The gathering system, beginning at the trucking terminal and consisting of a (b) (7)(F) diesel tank with a 4" pipeline, runs in a westerly direction for approximately 1,147'. It then enlarges to 8" and runs in a southerly direction for 9,761' ending at the Port Hudson Marine Terminal. A 3" gathering line 403' in length runs from Flash Exploration to the manifold for the (b) (7)(F).

A 16" line beginning at the terminal runs in a southerly then westerly direction for a distance of 8,246' ending at the dock facility.

The dock is located on the left (east) descending bank of the Mississippi River at River Mile Post 253.6, East Baton Rouge Parish, LA. The lines from the terminal to the dock consist mainly of 8,246' of 16" line, along with several smaller lengths of line. A total of 2,488.64 bbls of product is contained within these lines. The lines from trucking to the terminal consist mainly of 1,147' of 4" line and 9,761' of 8" line, along with a 3", 403' gathering line. A total of 625.72 bbls of product is contained within these three lines. A 16" line consists of 1,862.92 bbls of product.

Substantial expansion occurred in 1986 when the (b) (7)(F) was added to the Truck Terminal and again in 2010 when a (b) (7)(F) was added to the Truck Terminal for refueling trucks.

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FIGURE 1-1 - FACILITY AREA MAP

(b) (7)(F)

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2.0 RESPONSE STEPS

2.1 SPILL / RELEASE RESPONSE

RESPONSE ACTION	
First Person to Discover Spill	
Immediately notify Facility Supervisor. Take appropriate action to protect life and ensure safety of personnel. Contact the appropriate local emergency responders or request the office to do so.	<input type="checkbox"/>
Immediately shut down terminal operations (if applicable). (b) (7)(F) Manual operated valves should be closed if safe to do so.	<input type="checkbox"/>
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.	<input type="checkbox"/>
Facility Management	
Assume role of Incident Commander until relieved by Vice President of HSSE.	<input type="checkbox"/>
Conduct preliminary assessment of health and safety hazards.	<input type="checkbox"/>

Evacuate nonessential personnel, notify emergency response agencies to provide security, and evacuate surrounding area (if necessary).	<input type="checkbox"/>
Provide an incident briefing.	<input type="checkbox"/>
Notify the HSSE Manager and Vice President of HSSE. Operation Management and Environmental Spill Response coordination.	<input type="checkbox"/>
If safe to do so, direct facility responders to shut down potential ignition sources in the vicinity of the spill, including motors, electrical pumps, electrical power, flairs, etc. Keep drivers away from truck rack if spill occurs there.	<input type="checkbox"/>
If safe to do so, direct facility responders to shut down and control 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.	<input type="checkbox"/>
If safe to do so, direct facility responders to stabilize and contain the situation. This may include construction of minor earthen berms and/or sorbent boom and pads.	<input type="checkbox"/>
For low flash oil (<100°F), consider applying foam over the oil, using water spray to reduce vapors, grounding all equipment handling the oil, and using non-sparking tools.	<input type="checkbox"/>
If there is a potential to impact shorelines, consider lining shoreline with sorbent or diversion boom to reduce impact.	<input type="checkbox"/>
Obtain the information necessary to complete the Oil Spill Report Form (FIGURE 3-1).	<input type="checkbox"/>
Make local notifications: <ul style="list-style-type: none"> • LEPC • Police • Fire • Sheriff 	<input type="checkbox"/>
Vice President of HSSE	
Callout Spill Management Team and primary spill responders, as appropriate (FIGURE 3-2)	
Make appropriate notifications: <ul style="list-style-type: none"> • National Response Center (800) 424-8802 • External regulatory notifications (FIGURE 3-3) 	<input type="checkbox"/>

2.1 SPILL/RELEASE RESPONSE, CONTINUED

RESPONSE ACTION, CONTINUED	
Spill Management Team	
Activate all or a portion of Spill Management Team (SMT) (as necessary). HSSE Department will maintain contact with notified regulatory agencies.	<input type="checkbox"/>

Mobilize spill response contractors (if necessary). It is much better to demobilize equipment and personnel if not needed than to delay contacting them if they are needed.	<input type="checkbox"/>
Document all response actions taken, including notifications, agency/media meetings, equipment and personnel mobilization and deployment, and area impacted.	<input type="checkbox"/>
Water-based Spills: Initiate spill tracking and surveillance operations. Determine extent of pollution via surveillance aircraft or vehicle. Estimate volume of spill utilizing information in SECTION 2.1.3 of the FRP. Send photographer / videographer, if safe. Use of dispersants requires Federal or State approval.	<input type="checkbox"/>
Land-based Spills: Initiate spill tracking and surveillance, if applicable.	<input type="checkbox"/>
SECONDARY RESPONSE ACTIONS (Refer to SMT job descriptions in SECTION 4.6 of the FRP)	
FACILITY-SPECIFIC RESPONSE CONSIDERATIONS (Refer to SECTIONS 7.0, 8.0, 9.0, 10.0, and 11.0 for maps, tactical plans, and sensitivity information.)	

SITE-SPECIFIC ACTIONS	
DOCUMENT ALL ACTIONS TAKEN	
First Priority	
Account for all personnel and visitors.	<input type="checkbox"/>
Identify and assess fire/safety hazards.	<input type="checkbox"/>
Second Priority	
Secure spill source, if possible.	<input type="checkbox"/>
Assure all required notifications are conducted.	<input type="checkbox"/>
Secure all drainage leading from facility.	<input type="checkbox"/>
Third Priority	
The facilities truck unloading station and the large tank storage area?s drainage and secondary containment is adequate to contain a spill of small or medium size, preventing it from reaching the Mississippi River. Once the spill has been contained, resources are present at the Facility to recover spilled product safety conditions permitting and if required support from the OSRO?s will be used to recover released product.	<input type="checkbox"/>
Truck unloading Site Spill Shutdown unloading immediately. Shut the source of the spill off if safe to do. Use sorbents to help contain spilled oil. Place sand bags and sorbents around the storm water drains if threatened by flow. Follow spill notification process. OSRO response will be initiated for support	<input type="checkbox"/>

and clean up.	
Trench an area to change/contain the flow if required.	
The OSRO will remove contaminated soil and dispose of it in accordance with state regulations.	
Tank Storage Area---Small/medium Spill	
Shut the source of the spill off if safe to do.	
Use sorbents to help contain spilled oil if small spill/leak.	
Follow the spill notification process. The OSRO response will be initiated for support and clean up.	
The OSRO will remove contaminated soil and dispose of it in accordance with state or federal regulations.	<input type="checkbox"/>
For a Large Spill follow the spill notification process.	
The OSRO response will be initiated for response and clean up.	
The OSRO will remove contaminated soil and dispose of it in accordance with state or federal regulations.	
Dock Area ---Small/medium Spill	
Shut the source of the spill off, if safe to do.	
Use sorbents to help contain spilled oil if small spill/leak.	
Follow the spill notification process. The OSRO response will be initiated for response and cleanup.	<input type="checkbox"/>
Large Spill- Follow the spill notification process.	
The OSRO response will be initiated for response, clean up and disposal.	
Once deployment of response equipment has been completed, initiate recovery of product.	<input type="checkbox"/>
Upon arrival of SMT, assure all information is accurate and complete prior to being released.	<input type="checkbox"/>
Assure proper documentation has been completed from initial discovery of spill to finish; reference SECTION 5 in the Spill Response Plan.	<input type="checkbox"/>

2.2 EVACUATION

EVACUATION CHECKLIST

TASK	
Request assistance from off-site response organizations; convey Command Post's location. Notify appropriate agencies (if appropriate).	<input type="checkbox"/>
Assemble personnel at predetermined safe location: upwind/up gradient of release (assembly area).	<input type="checkbox"/>
Account for Company and contractor personnel.	<input type="checkbox"/>
Assess casualties (number/type/location).	<input type="checkbox"/>
Determine probable location of missing personnel.	<input type="checkbox"/>
Secure site, establish re-entry point and check-in/check-out procedures.	<input type="checkbox"/>
Develop list of known hazards (confined spaces, electrical hazards, physical hazards, vapors, oxygen deficiency, fire/explosion, etc.).	<input type="checkbox"/>
Monitor situation (weather, vapors, product migration) for significant changes.	<input type="checkbox"/>
Assist in developing a Rescue Plan, if necessary.	<input type="checkbox"/>

2.2 EVACUATION, CONTINUED

EVACUATION FACTORS	
FACTOR	DESCRIPTION
Stored material location	<ul style="list-style-type: none"> • Located in oil storage area • Identified in Facility Plot Plan (FIGURE 5-1)
Spilled material hazards	<ul style="list-style-type: none"> • Hazard is fire/explosion
Water currents, tides or wave conditions	<ul style="list-style-type: none"> • N/A
Evacuation routes	<ul style="list-style-type: none"> • Routes are summarized on Evacuation Plan Diagram (FIGURE 5-2) • Criteria for determining safest evacuation routes from facility may include: wind direction, potential exposure to toxins and carcinogens, intense heat, potential for explosion/fire, and blockage of planned route by fire, debris, or released liquid
Alternate evacuation routes	<ul style="list-style-type: none"> • Alternate routes may exist; refer to Evacuation Plan Diagram (FIGURE 5-2)
Injured personnel transportation	<ul style="list-style-type: none"> • Emergency services can be mobilized to the facility (FIGURE 3-3)

Alarm/Notification system location	<ul style="list-style-type: none"> Control building on site and control center in Houston, TX
Community evacuation plans	<ul style="list-style-type: none"> Company may request local police, county sheriff and/or state police assistance (FIGURE 3-3). Community evacuations are the responsibility of these agencies.
Spill flow direction	<ul style="list-style-type: none"> South toward the Mississippi River Identified in facility drainage diagram (FIGURE 5-1)
Prevailing wind direction and speed	<ul style="list-style-type: none"> East Southeast at 8 mph (November 1998 Climatic Wind Data for Baton Rouge, LA according to the National Climatic Data Center) Because wind direction varies with weather conditions, consideration for evacuation routing will depend in part on wind direction
Emergency personnel/response equipment arrival route	<ul style="list-style-type: none"> Highway 64 to Highway 61 to private land on the left. Directions to nearest medical facility provided below

2.2 EVACUATION, CONTINUED

EVACUATION FACTORS	
FACTOR	DESCRIPTION
Centralized check-in area	<ul style="list-style-type: none"> Field East of the facility Supervisor is responsible for head count
Mitigation Command Center location	<ul style="list-style-type: none"> Initial Command Center located at Trucking facility Mobile Command Posts may be established as necessary
Facility Shelter Location	<ul style="list-style-type: none"> Control building Not a safe harbor from fires, explosions, vapor clouds, or other significant emergencies; however, may be used for temporary shelter from inclement weather
Directions to nearest medical facility	<p>Directions to Lane Memorial :</p> <ul style="list-style-type: none"> Take HWY 61 South to Mt. Pleasant - Zachary Rd / LA 64. Slight Right on to High Street, Left onto Main Street.

2.3 TORNADO

TORNADO CHECKLIST	
TASK	
Monitor news media reports (FIGURE 3-3). <ul style="list-style-type: none"> • Tornado watch means conditions are favorable for tornadoes. • Tornado warning means a tornado has been sighted. 	<input type="checkbox"/>
When a tornado warning is issued, sound the local alarm. Notify off site personnel of the situation (Control Center or Regional Management).	<input type="checkbox"/>
Take shelter: <ul style="list-style-type: none"> • Go to an interior room on the lowest floor. • Get under a sturdy piece of furniture or solid structure. • Use your arms to protect head and neck. 	<input type="checkbox"/>
Have location personnel report to the designated area.	<input type="checkbox"/>
Account for all personnel on duty.	<input type="checkbox"/>
Look for funnel formations on the ground or in the clouds; listen for a roar that sounds like a jet aircraft or rail traffic.	<input type="checkbox"/>
If the facility is damaged by the tornado, notify Management.	<input type="checkbox"/>
Go to the scene of the incident to evaluate the situation. <ul style="list-style-type: none"> • Be aware of broken glass and downed power lines. • Assess the area for damaged equipment or product releases. • Check for injuries. • Use caution entering a damaged building. 	<input type="checkbox"/>
Update Supervisory Personnel/Management.	<input type="checkbox"/>
Perform Initial Response Actions functions as stated in SECTION 2.1 .	<input type="checkbox"/>
Conduct post-emergency evaluation and report.	<input type="checkbox"/>

2.4 FLOOD



FLOOD CHECKLIST	
TASK	
Perform continuous monitoring of the situation by listening to radio and/or television reports (FIGURE 3-3).	<input type="checkbox"/>
<ul style="list-style-type: none"> • Flash flood watch means flooding is possible. • Flash flood warning means flooding is occurring or is imminent. 	<input type="checkbox"/>
Update Supervisory Personnel when flooding is imminent.	<input type="checkbox"/>
Establish an evacuation plan (SECTION 2.2).	<input type="checkbox"/>
Take preliminary actions to secure the facility before flooding and mandatory evacuation.	<input type="checkbox"/>
Consider having sandbags brought to sites that could be affected by the flooding.	<input type="checkbox"/>
Consider obtaining portable pumps and hoses from local suppliers or from other petroleum service locations in the area.	<input type="checkbox"/>
Remove product from underground storage tanks (i.e., sumps and separators, if applicable) and replace with water to prevent them from floating out of the ground.	<input type="checkbox"/>
If additional new product is available fill each tank to the minimum level necessary to prevent buoyancy in the event of flooding (Rule of thumb is 30% of the safe fill height). If additional product is not available, transfer appropriate product among tanks to prevent buoyance. If minimum levels cannot be reached through product transfer, add water bottoms.	<input type="checkbox"/>
Plug all rack drains and facility drains connected to the sump.	<input type="checkbox"/>
Empty all dikes of water.	<input type="checkbox"/>
Ensure that tank roof drains are working properly.	<input type="checkbox"/>
Anchor all bulk additive tanks, fuel barrels, empty drums, and propane tanks (if applicable).	<input type="checkbox"/>
Notify Supervisory Personnel/Management that the facility will be closed. Customer should be notified.	<input type="checkbox"/>
Back up computer files.	<input type="checkbox"/>
Remove assets such as files, computers, spare parts, and vehicles.	<input type="checkbox"/>
Shut off high voltage power and natural gas lines.	<input type="checkbox"/>
Close all valves on product and additive storage tanks.	<input type="checkbox"/>
Before evacuation, know where all the employees will be residing and obtain phone numbers so they can be contacted if additional emergencies occur.	<input type="checkbox"/>

2.4 FLOOD, CONTINUED

FLOOD CHECKLIST	
TASK	
Conduct a post-emergency evacuation and report.	<input type="checkbox"/>
Maintain hazards awareness: <ul style="list-style-type: none"> • Structural damage; • Equipment damage and product release; • Downed power lines; • Leaking natural gas, water, and sewer lines; • Poisonous snakes and other wildlife sheltering in structures, vehicles, and furniture; and • Avoid direct contact with flood water, mud, and animal carcasses. 	<input type="checkbox"/>

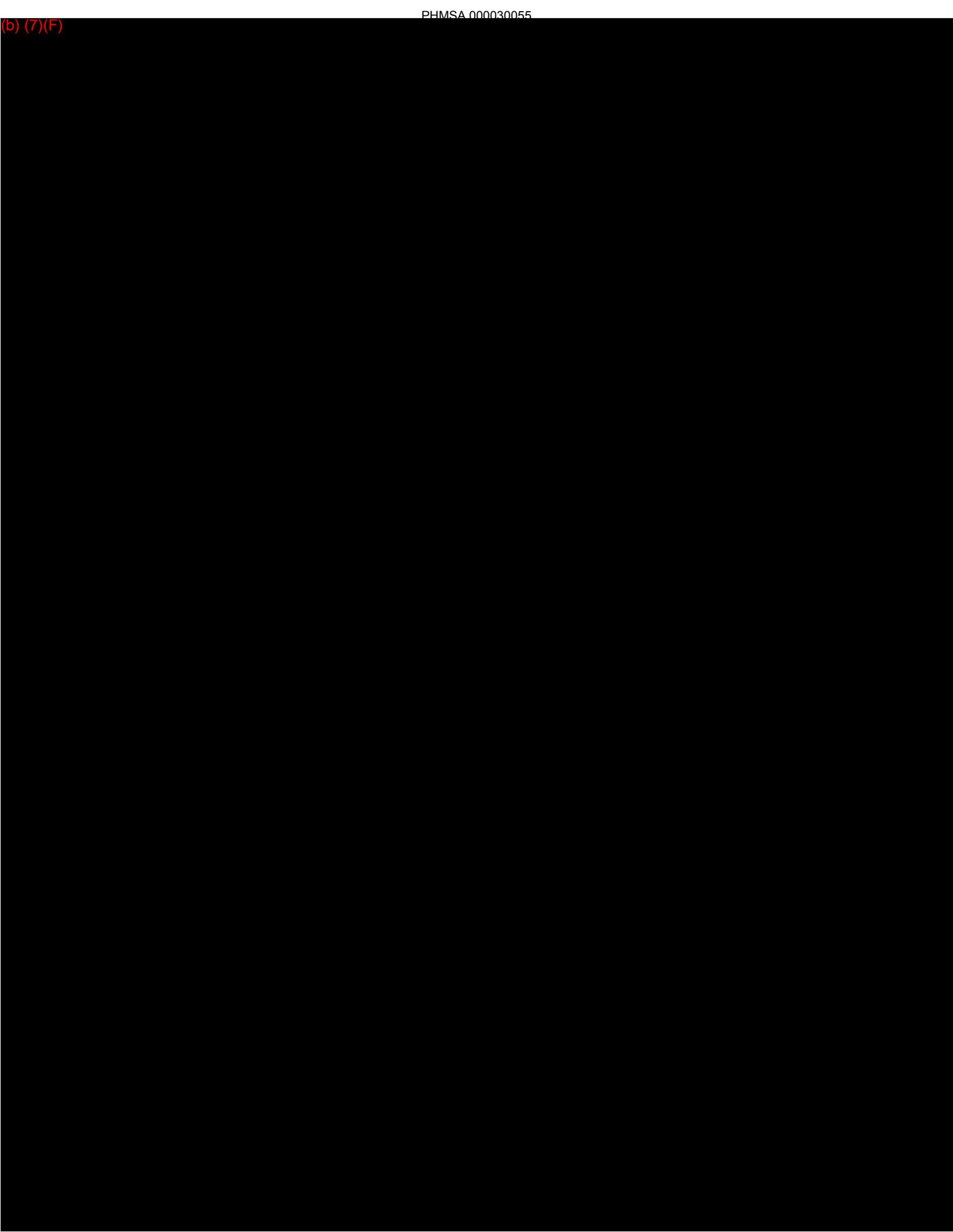
2.5 MEDICAL

MEDICAL CHECKLIST	
TASK	
Summon Emergency Medical Services (EMS) to the scene (FIGURE 3-3).	<input type="checkbox"/>
Do not move the patient unless a situation (such as a fire) threatens patient's life.	<input type="checkbox"/>
If trained, provide appropriate first aid for both injury and shock until the EMS arrives at the scene.	<input type="checkbox"/>
As the situation warrants, try to stop the bleeding and keep the patient breathing until the EMS arrives at the scene.	<input type="checkbox"/>
The rescuer's role includes: <ul style="list-style-type: none"> • 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. 	<input type="checkbox"/>

• Administering care as indicated or instructed.	
Notify Supervisory Personnel and/or Regional Management.	<input type="checkbox"/>
Notify victim's immediate family.	<input type="checkbox"/>
Complete follow-up and written reporting, as the situation demands.	<input type="checkbox"/>

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2.7 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.	<input type="checkbox"/>
Notify the local police and fire departments (Dial 911).	<input type="checkbox"/>
Sound the facility alarm and push the red emergency shutdown switch (if equipped).	
Notify Qualified Individual and Operations Control (if applicable).	<input type="checkbox"/>
Appropriately trained personnel may attempt to extinguish the fire if it is in the incipient (early) stage and if it can be done safely .	<input type="checkbox"/>
In the event the fire is too large for an individual to fight alone, the individual sounding the alarm or making the phone call should stand by at a safe distance to direct the fire department to the scene of the fire and keep personnel and vehicles from entering the danger area.	<input type="checkbox"/>
Alert all Facility areas of the exact location and extent of the fire.	<input type="checkbox"/>
Instruct all drivers to discontinue loading, disconnect loading arms, and tell all drivers present to stand by the trucks (if safe to do so) and wait for instruction to remove same to safe area.	<input type="checkbox"/>
Shut off all pumps.	<input type="checkbox"/>
If the fire/explosion is a result of a pipe rupture, isolate product release by closing valves.	<input type="checkbox"/>
If product is being received from pipelines, notify the appropriate pipeline personnel of the fire and request that the pipeline be shut down. The tank which is receiving product from the pipeline must not be closed until assurance is received that the pipeline is shut down, unless that tank is on fire.	<input type="checkbox"/>
After confirmation has been received that pipelines have been shut down, close the pipeline header valves.	<input type="checkbox"/>

Undertake basic site control: <ul style="list-style-type: none"> • Make an assessment of hazards. • Isolate the area. • Keep people away from the scene and outside the safety perimeter. • Establish safety zones and escape routes. 	<input type="checkbox"/>
Respond to the fire: <ul style="list-style-type: none"> • Establish a Command Post and lines of communication. • Maintain site control. • Establish Incident Command/Unified Command as necessary (SECTION 4.4). 	<input type="checkbox"/>
Call in additional resources if on-scene personnel and equipment are inadequate to handle the emergency.	<input type="checkbox"/>
Conduct a post-emergency evaluation and report.	<input type="checkbox"/>

2.7 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.	<input type="checkbox"/>
Notify the local police and fire departments.	<input type="checkbox"/>
Notify Qualified Individual and Operations Control.	<input type="checkbox"/>
Go to the incident scene to evaluate the situation; approach cautiously from upwind; do not rush in.	<input type="checkbox"/>
Undertake basic site control: <ul style="list-style-type: none"> • Make an assessment of hazards. • Isolate the area. • Keep people away from the scene and outside the safety perimeter. 	<input type="checkbox"/>

<ul style="list-style-type: none"> Establish safety zones and escape routes. 	
If roads or railroads are in the affected area, assist the sheriff or local emergency officials with halting traffic.	<input type="checkbox"/>
Update the next level manager.	<input type="checkbox"/>
If the fire/explosion is a result of a pipe rupture, isolate the product release by closing valves.	<input type="checkbox"/>
Respond to the fire: <ul style="list-style-type: none"> Establish a Command Post and lines of communication. Maintain site control. Establish Incident Command/Unified Command as necessary, refer to SECTION 4.4 in the Spill Response Plan. 	<input type="checkbox"/>
Call in additional resources if on-scene personnel and equipment are inadequate to handle the emergency.	<input type="checkbox"/>
Conduct a post-emergency evaluation and report.	<input type="checkbox"/>

2.8 VAPOR CLOUD

VAPOR CLOUD CHECKLIST	
TASK	
The person who discovers the vapor cloud will sound the alarm and notify the supervisor on duty and vacate the area.	<input type="checkbox"/>
Remember: the only proper action in the presence of a vapor cloud is to get away from it. Do not shut off electrical equipment.	<input type="checkbox"/>
All personnel will report to the evacuation muster point for roll call and further instructions.	<input type="checkbox"/>
After all personnel have been accounted for, the Facility Management, the Facility Supervisor or a Facility Operator will initiate the following actions as deemed necessary: <ul style="list-style-type: none"> Shut down pipeline. Evacuation of adjacent property. Only the fire department will be permitted to enter the Facility. 	<input type="checkbox"/>
Contact the appropriate agencies and potentially affected neighbors (refer to FIGURE 3-3).	<input type="checkbox"/>

3.0 NOTIFICATIONS

FIGURE 3-1 - OIL SPILL REPORT FORM

INVOLVED PARTIES			
Reporting Party		Suspected Responsible Party	
Name:		Name:	
Phone:	(Day)	Phone:	(Day)
	(Evening)		(Evening)
Position:		Company:	
Company:		Organizational Type: <input type="checkbox"/> Private Citizen <input type="checkbox"/> Private Enterprise <input type="checkbox"/> Public Utility <input type="checkbox"/> Local Government <input type="checkbox"/> State Government <input type="checkbox"/> Federal Government	
Address:			
Person Discovering Incident			
Name:			
Company/Organization:			
City:	State:	Zip:	
Were materials released? <input type="checkbox"/> Yes <input type="checkbox"/> No		Calling for Responsible Party <input type="checkbox"/> Yes <input type="checkbox"/> No	
INCIDENT DESCRIPTION			
Date:	Time: <input type="checkbox"/> AM <input type="checkbox"/> PM	Weather:	
Incident Address/Location:		Latitude: _____ degrees _____ min _____ sec N	
		Longitude: _____ degrees _____ min _____ sec W	
Mile Post/River Marker:			
City/County:		Distance from City:	
State:		Direction from City:	
Source and Cause of Incident:			
Storage Tank Type: <input type="checkbox"/> Above Ground <input type="checkbox"/> Below Ground <input type="checkbox"/> Unknown			
Tank Capacity:		Facility Capacity:	
MATERIAL INFORMATION			
CHRIS Code	Product Released	Released Quantity (Include units of measure)	Quantity in Water (Include units of measure)

Note: Refer to the Incident Database for spill history and spill reporting.

*** INITIAL NOTIFICATION SHOULD NOT BE DELAYED PENDING COLLECTION OF ALL INFORMATION**

FIGURE 3-1 - OIL SPILL REPORT FORM, CONTINUED

INITIAL IMPACT	
Number of Injuries:	Number of Deaths:
Were there Evacuations? <input type="checkbox"/> Yes <input type="checkbox"/> No	Number Evacuated:
Was there any Damage? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Damage in dollars (estimate):	
Is the Spill Contained within the boundaries of the facility? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Direction of Flow:	
RESPONSE ACTION(S)	
Action(s) Taken to Correct, Control or Mitigate Incident:	
ADDITIONAL INFORMATION	
Any information about the incident not recorded elsewhere in the report (e.g., duration of spill, treatment or disposal measures).	

COMPLETED NOTIFICATIONS						
Report	Phone Number	Date	Case Number	Time	Name	Title
NRC <input type="checkbox"/>	(800) 424-8802*					

Note: Refer to the Incident Database for spill history and spill reporting.

*** INITIAL NOTIFICATION SHOULD NOT BE DELAYED PENDING COLLECTION OF ALL INFORMATION**

FIGURE 3-2 - INTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS

*24-Hour Number

FACILITY RESPONSE TEAM		
NAME/TITLE	PHONE NUMBER	RESPONSE TIME (hours)
Clint Murray Port Hudson Supervisor Louisiana Primary Qualified Individual	(225) 654-0085 (Office) (b) (6) (225) 993-2364 *(Mobile)	0.75
John Mansur Terminal Operator	(225) 654-0085 (Office) (b) (6) (225) 993-2065 *(Mobile)	1

Refer to **FIGURE A.2-3** in the Spill Response Plan for personnel training records

FIGURE 3-2 - INTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED

*24-Hour Number

--

EMERGENCY RESPONSE PERSONNEL AND BUSINESS UNIT NOTIFICATIONS						
NAME/TITLE	PHONE NUMBER	RESPONSE TIME (hours)	ICS POSITION	RESPONSE TRAINING TYPE ¹		
				1	2	3
Tom Boyd Pipeline Operations Manager (USA) MS Alternate Qualified Individual	(601) 729-3587 (Office) (b) (6) (Home) (601) 319-4004 *(Mobile)			x	x	x
Genesis Control Room Pipeline Emergency	(800) 806- 5463/(713) 849-5928 (Office) (713) 875-2042 *(Mobile)					
Chris Kuhn Control Center Supervisor	(713) 860-2754 (Office) (713) 545-2984 *(Mobile)			x	x	x
Bruce McElheny Environmental Compliance	225-216-5909 (Office) (b) (6) (Home) 225-281-7740 *(Mobile)		Logistics Section Chief	x	x	x
Dean Duplantis Environmental Specialist	(832) 280-3013 (Office) (281) 900-4077 *(Mobile)				x	x
Steve Hinton HSSE Manager	(318) 242-5283 (Office) (b) (6) (Home) (318) 548-2419 *(Mobile)			x	x	x
Trey Fegley Director of Optimization	(318) 607-4177 *(Mobile)		TPT Operations Section Chief			

Kristi Unzicker Manager Environmental and Marine Compliance	(713) 860-2606 (Office) (b) (6) (Home) (832) 506-5903 *(Mobile)		Planning Section Chief	x	x	x
John Jewett Manager, DOT Compliance and Security	713-860-2605 (Office) (713) 292-3881 *(Mobile)		Liaison Officer			
Mike Moore Vice President and General Manager of Pipelines and Transportation	(713) 860-2760 (Office) (832) 250-0348 *(Mobile)			x	x	x
Jeff Gifford VP HSSE	713-860-2542 (Office) 281-753-8891 *(Mobile)		Incident Commander			
Steve Nathanson President/COO	(713) 860-2660 (Office) (225) 603-8220 *(Mobile)					
Grant Sims Chief Executive Officer	(713) 860-2525 (Office) (b) (6) (Home) (713) 253-2684 *(Mobile)					
Bob Deere CFO	(713) 860-2516 (Office) (b) (6) (Home) (713) 392-2330 *(Mobile)					
Karen Pape Corp. Controller/Exec. V.P.	(713) 860-2926 (Office) (b) (6) (Home) (713) 304-3287 *(Mobile)					

Kristen Jesulaitis General Counsel	(713) 860-2684 (Office) (b) (6) (Home) (281) 753-8891 *(Mobile)				
Kathy Vicory Director of Human Resources	(713) 860-2546 (Office)				
EMERGENCY RESPONSE TRAINING TYPE					
TYPE	DESCRIPTION				
1	29 CFR 1910.120 HAZWOPER				
2	OPA (Training Reference for Oil Spill Response) All Facility Personnel, SMT, QI Components				
3	Qualified Individual/Incident Command Training				

Note: Refer to **APPENDIX A** in the Spill Response Plan for training dates.

FIGURE 3-2 - INTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS,
CONTINUED

*24-Hour Number

EMERGENCY RESPONSE CONTRACTORS						
NAME/TITLE	PHONE NUMBER	RESPONSE TIME (hours)	RESPONSIBILITY DURING RESPONSE ACTION	RESPONSE TRAINING TYPE ¹		
				1	2	3
Clean Harbors Environmental Services Inc.	(800) 645-8265*			x	x	
OMIES	(800) 645-6671*	1	Support-Clean-up-disposal	x	x	x
U.S. Environmental Services, LLC.	(888) 279-9930* 225-673-4200	1	Support-Clean-up-disposal	x		
ES&H	(877) 437-2634	1.5	Clean up	x	x	x
EMERGENCY RESPONSE TRAINING TYPE						
TYPE	DESCRIPTION					
1	29 CFR 1910.120 HAZWOPER					
	OPA (Training Reference for Oil Spill Response) All Facility					

2	Personnel, SMT, QI Components
3	Qualified Individual/Incident Command Training

Note: Refer to **APPENDIX A** in the Spill Response Plan for training dates.

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FIGURE 3-3 - EXTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS

*24-Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Initial		
National Response Center	(800) 424-8802* (202) 267-2180 (202) 267-1322 (fax)	
Recommended		
Federal Agencies		
EPA Region VI Spill Hotline	(866) 372-7745*	
U.S. Coast Guard - 8th District - COTP New Orleans	(504)365-2542 emergency 24/7	
State Agencies		
Louisiana Department of Environmental Quality Single Point of Contact	(225) 219-3640	
Louisiana Office of Fire Marshal	(225) 925-4911	
Louisiana State Police - Spill/Emergency Reporting	(225) 925-6595*	
Water Intake notification Louisiana Department of Health and Hospitals Office of Public Health Center for Environmental Health Services	225-342-7521 225-342-7148	
Local Agencies		
L E P C	(225) 389-2100	
Fire Departments		
Baton Rouge Fire	(225) 389-4600 911*	
Emergency Medical Services		

East Baton Rouge EMS	225-389-3300 911*	
Hospitals		
Lane Regional Medical Center	(225) 658-4335 emergency	
Law Enforcement		
Baton Rouge Police	(225) 389-2000 911*	
USCG CLASSIFIED OSRO		
Clean Harbors Environmental Services Inc.	(800) 645-8265*	
ES&H	(877) 437-2634	
OMIES	(800) 645-6671*	
Port Hudson		Page ERAP - 26

FIGURE 3-3 - EXTERNAL NOTIFICATIONS AND TELEPHONE NUMBERS

*24-Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
Recommended, Continued		
USCG CLASSIFIED OSRO		
U.S. Environmental Services, LLC.	(888) 279-9930* 225-673-4200	
Radio Stations		
KRVE (96.1 FM)	(225)499-9610	
WDGL (98.1 FM)	(225) 388-9898	
WJBO (1150 AM)	225-231-1860	
Television Stations		
9 WAFB	225-215-4800	
WBRZ (Ch. 2)	225.387.2222	
Transport Companies		

The Port of Greater Baton Rouge	225-342-5378 24 Hour	
Water Intakes		
Dow Chemical	(225) 685-2369	
Exxon-Refinery Superintend	225-977-7641*	
Honeywell	(225) 642-8311	
Weather		
National Weather Service, New Orleans/Baton Rouge Forecast Office	(504) 522-7330 (985) 649-0357	

4.0 RESOURCES

FIGURE 4-1 - Spill Management Team (SMT) ORGANIZATION CHART*

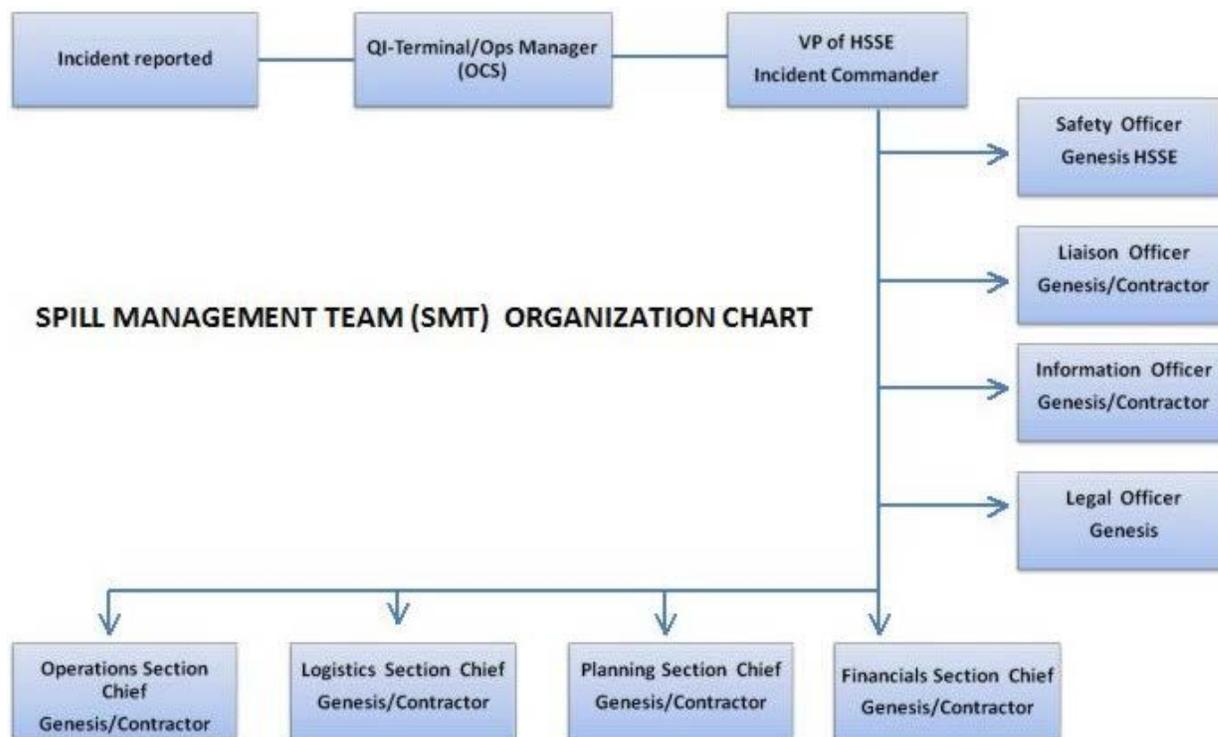


FIGURE 4-2 - FACILITY EQUIPMENT*

***Note:** Company owned equipment is only maintained at the facility for back up purposes to the OSROs identified in **FIGURE 4-3**. Visual inspections will be conducted on response equipment annually.

SKIMMERS/PUMPS					
TYPE/MODEL/YEAR	QUANTITY	CAPACITY	DAILY EFFECTIVE RECOVERY RATE	DATE FUEL LAST CHANGED	STORAGE LOCATION
None					
BOOM					
TYPE/MODEL/YEAR	QUANTITY	SIZE	CONTAINMENT AREA (sq ft)	STORAGE LOCATION	
None					
CHEMICALS STORED					
TYPE	QUANTITY	DATE PURCHASED	TREATMENT CAPACITY	STORAGE LOCATION	
Drums	4		55 Gallons	Trailer	
DISPERSANT DISPENSING EQUIPMENT					
TYPE/YEAR	CAPACITY	STORAGE LOCATION	RESPONSE TIME (min)		
None					
SORBENTS					
TYPE/YEAR	QUANTITY	ABSORPTION CAPACITY (gal)	STORAGE LOCATION	OPERATIONAL STATUS	
Small Spill pack	1		Dockside	Operational	
55 gallon Spill Pack	1		At truck unloading area	Operational	
Oil Pad Bundle	1 Bundle		Pump Station Garage	Operational	
Oil Pad	1 Bundle		Dockside	Operational	
Oil Pad	1 bundle		Truck Station/garage	Operational	
COMMUNICATIONS EQUIPMENT					
TYPE/YEAR	QUANTITY	STORAGE LOCATION/NUMBER	OPERATIONAL STATUS		
Portable Cellular Telephone	2	Company Truck/Site Personnel	Operational		
Hand-Held Radios	4	Dock Office	Operational		
FIRE FIGHTING AND PERSONNEL PROTECTIVE EQUIPMENT					
TYPE/YEAR	QUANTITY	STORAGE LOCATION	OPERATIONAL STATUS		
20-lb Dry Chemical Fire Extinguisher,	7	Truck Station	Operational		

Type A-B-C 20A and 80BC Marine USCG Type A Size 2, Type BC Size 2					
150-lb Wheel Roll Dry Chemical Fire Extinguisher Type A-B-C 40A and 240BC Marine USCG Type A Size II, Type BC Size V	1	Pump Station	Operational		

***Note:** Response equipment is tested and deployed as described in **APPENDIX A** of the Spill Response Plan.

FIGURE 4-2 - FACILITY EQUIPMENT*

***Note:** Company owned equipment is only maintained at the facility for back up purposes to the OSROs identified in **FIGURE 4-3**. Visual inspections will be conducted on response equipment annually.

FIRE FIGHTING AND PERSONNEL PROTECTIVE EQUIPMENT					
TYPE/YEAR	QUANTITY	STORAGE LOCATION	OPERATIONAL STATUS		
23 # Nitrogen	1	Truck Station	Operational		
125-lb Wheel Roll Dry Chemical Fire Extinguisher Type A-B-C 40A	1	Truck Station	Operational		
FIRE EXTINGUISHER-10LB-ABC	1	Truck Station	Operational		
20-lb Dry Chemical Fire Extinguisher, Type A-B-C 20A and 80BC Marine USCG Type A Size 2, Type BC Size 2	4	Pump Station	Operational		
350-lb Wheel Roll Dry Chemical Fire Extinguisher	1	Pump Station	Operational		

Type A-B-C 40A					
FIRE EXTINGUISHER-10LB-ABC	3	Pump Station	Operational		
15 LB. Carbon Dioxide Fire Extinguisher Rating B:C	3	Pump Station	Operational		
220# Nitrogen	1	Pump Station	Operational		
20-lb Dry Chemical Fire Extinguisher, Type A-B-C 20A and 80BC Marine USCG Type A Size 2, Type BC Size 2	5	Dock	Operational		
125-lb Wheel Roll Dry Chemical Fire Extinguisher Type A-B-C 40A and 240BC Marine USCG Type A Size II, Type BC Size V	1	Dock	Operational		
15 LB. Carbon Dioxide Fire Extinguisher	1	Dock	Operational		
23 # Nitrogen	1	Dock	Operational		
OTHER					
TYPE/YEAR	QUANTITY	STORAGE LOCATION	OPERATIONAL STATUS		
5035 Mahindra Tractor/2010	1	Pumping Station	Operational		

***Note:** Response equipment is tested and deployed as described in **APPENDIX A** of the Spill Response Plan.

FIGURE 4-3 - REGIONAL COMPANY AND RESPONSE CONTRACTOR'S EQUIPMENT LIST / RESPONSE TIME

*USCG Classified OSRO for facility

--	--	--

COMPANY/CONTRACTOR	EQUIPMENT	RESPONSE TIME
*Clean Harbors Environmental Services Inc. Baton Rouge, LA	Full Response Capability	hours
*OMIES Port Allen, LA	Full Response Capability	1 hours
*U.S. Environmental Services, LLC. Geismar, LOUISIANA	Full Response Capability	1 hours
*ES&H New Iberia , LA		1.5 hours

Note: Response equipment is tested and deployed as described in **APPENDIX A** of the Spill Response Plan.

FIGURE 4-4 - EPA REQUIRED RESPONSE EQUIPMENT TESTING AND DEPLOYMENT DRILL LOG

Item:	Date of Last Update:
ACTIVITY	INFORMATION
Last inspection or response equipment test date	
Inspection frequency	
Last deployment drill date	
Deployment frequency	
OSRO Certification (if applicable)	

Item:	Date of Last Update:
ACTIVITY	INFORMATION
Last inspection or response equipment test date	
Inspection frequency	
Last deployment drill date	
Deployment frequency	
OSRO Certification (if applicable)	

Item:	Date of Last Update:
ACTIVITY	INFORMATION

Last inspection or response equipment test date	
Inspection frequency	
Last deployment drill date	
Deployment frequency	
OSRO Certification (if applicable)	

Item:	Date of Last Update:
ACTIVITY	INFORMATION
Last inspection or response equipment test date	
Inspection frequency	
Last deployment drill date	
Deployment frequency	
OSRO Certification (if applicable)	

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5.0 Plot Plans / Tank Table

FIGURE 5-1 - DRAINAGE DIAGRAM

[Click to view/print Drainage](#)

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FIGURE 5-2 - EVACUATION DIAGRAM

[Click to view/print Evacuation](#)

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FIGURE 5-3 - TANK TABLE

Container/ Source	Major Type of Failure	Total Capacity (gal)	Secondary Containment Volume Type (gal)	Tank Type	Year Constructed/ Installed	Quantity Stored (gal)	Direction of Flow/Rate (See Plot Plan)	Product Stored
ABOVEGROUND CONTAINERS - (b) (7)(F)								
# 10400	Overfill / Rupture / Leakage	(b) (7)(F)		W/IF	1986	(b) (7)(F)	Area Containment	Crude Oil / Condensate Mix

Diesel Tank	Overfill / Rupture / Leakage	(b) (7)(F)	Welded / Steel	2010	(b) (7)(F)	Area Containment	Diesel
# 34101	Overfill / Rupture / Leakage	(b) (7)(F)	External Floating Roof	1980	(b) (7)(F)	Area Containment	Crude Oil / Condensate Mix
DRUM STORAGE AREA - Total: 55							
Mineral Spirit Drum	Leak/ Rupture	55	61/5	Drums	55	Southeast/ Instantaneous	Mineral Spirits
Facility Total: (b) (7)(F)							

Containment Type: 1=Earthen Berm and Floor, 2=Concrete Berm and Floor, 3=Earthen Berm and Concrete Floor, 4=Metal Berm and Floor, 5=Portable Containment or Inside Building, 6=Double Walled, 7=Coated Asphalt Materials, * Not in Containment Area, ** Curbing and containment system

Tank / Roof Type: C=Cylinder, CR=Cone Roof, DW=Double Wall, EFR=External Floating Roof, FG=Fiberglass, GD=Geodesic Dome, H=Horizontal, HSM=Horizontal Skid Mounted, IF=Internal Floater, OOS=Out of Service, OT=Open Top, R=Riveted, S=Steel, SM=Skid Mounted, V=Vertical, W=Welded

6.0 ENDANGERED AND THREATENED SPECIES BY STATE

ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE
Quillwort, Louisiana	<i>Isoetes louisianensis</i>	Shallow blackwater streams in riparian woodland	E	Louisiana
Chaffseed, American	<i>Schwalbea americana</i>	Acidic, sandy or peaty soils in open pine flatwoods	E	Louisiana
Manatee, West Indian	<i>Trichechus manatus</i>	Shallow coastal waters, estuaries, bays, rivers, and lakes	E	Louisiana
Mucket, pink (pearlymussel)	<i>Lampsilis abrupta</i>	Sand and gravel substrates	E	Louisiana
Pocketbook, fat	<i>Potamilus capax</i>	Sand, mud, and fine gravel substrates	E	Louisiana
Sawfish, smalltooth	<i>Pristis pectinata</i>	Shallow coastal waters of tropical seas and estuaries; sheltered bays, on shallow banks, and in estuaries or river mouths	E	Louisiana
Sea turtle, hawksbill	<i>Eretmochelys imbricata</i>	Clear offshore waters off the mainland and on island	E	Louisiana

		shelves		
Sea turtle, Kemp's ridley	<i>Lepidochelys kempii</i>	Sand/duneShallow areas with sandy and muddy bottoms	E	Louisiana
Sea turtle, leatherback	<i>Dermochelys coriacea</i>	Warm sands of tropical beaches	E	Louisiana
Sturgeon, pallid	<i>Scaphirhynchus albus</i>	Free-flowing riverine	E	Louisiana
Tern, least interior pop.	<i>Sterna antillarum</i>	Open sandy or gravelly beach, dredge spoil and other open shoreline areas	E	Louisiana
Whale, finback	<i>Balaenoptera physalus</i>	Offshore ocean waters	E	Louisiana
Whale, humpback	<i>Megaptera novaeangliae</i>	Surface of the ocean	E	Louisiana
Woodpecker, red-cockaded	<i>Picoides borealis</i>	Open pine forests with large, widely-spaced older trees	E	Louisiana
(No common name)	<i>Geocarpon minimum</i>	Grazing land	T	Louisiana
Bear, Louisiana black	<i>Ursus americanus luteolus</i>	Forest - mixed, woodland	T	Louisiana
Heelsplitter, Alabama (=inflated)	<i>Potamilus inflatus</i>	Sand, mud, silt, and sandy- gravel substrates	T	Louisiana
Pearlshell, Louisiana	<i>Margaritifera hembeli</i>	Small sandy creeks with stable sand and gravel substrates	T	Louisiana

6.0 ENDANGERED AND THREATENED SPECIES BY STATE

ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE
Plover, piping except Great Lakes watershed	<i>Charadrius melodus</i>	Sandy beaches, islands	T	Louisiana
Sea turtle, green except where endangered	<i>Chelonia mydas</i>	Coasts, open sea	T	Louisiana
Sea turtle,	<i>Caretta</i>	Estuaries, coastal streams		

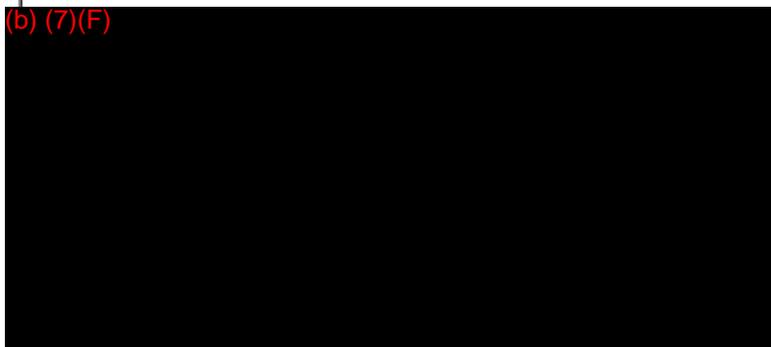
loggerhead	<i>caretta</i>	and salt marshes	T	Louisiana
Sturgeon, gulf	<i>Acipenser oxyrinchus desotoi</i>	Free-flowing riverine	T	Louisiana
Tortoise, gopher W of of Mobile/Tombigbee Rs.	<i>Gopherus polyphemus</i>	Grassland/herbaceous	T	Louisiana
Turtle, ringed map	<i>Graptemys oculifera</i>	Clean, clear, limestone, spring-fed rivers and their tributaries	T	Louisiana

7.0 VULNERABILITY ANALYSIS (DETAILED)

VULNERABILITY ANALYSIS (DETAILED)

Water Intakes:

(b) (7)(F)



Schools:

None identified within the planning distance

Medical Facilities:

None identified within the planning distance

Residential Areas:

One residential property approximately .57 miles east of the facility on Port Hudson Cemetery Road. The driveway entry off main road to property would be impacted.

7.0 VULNERABILITY ANALYSIS (DETAILED), CONTINUED

VULNERABILITY ANALYSIS (DETAILED)

Businesses:

The Port of Greater Baton Rouge

Wetlands or Other Sensitive Environments:

Environmentally sensitive areas that could realistically be impacted by the Port Hudson facility's AST 34101 include ravine habitats, the Mississippi River a protected waterway located .6 miles due west of the AST 34101 containment area. A wetlands area is located .14 miles southwest of the AST 34101 containment area.

Fish and Wildlife:

See SECTION 6.5 for a list of endangered and threatened species by state.

Below is listed by affected Parish:

THREATENED AND ENDANGERED SPECIES by Parish

E=Endangered T=Threatened C=Candidate CH=Critical Habitat

ASCENSION

MANATEE, WEST INDIAN POSSIBLE MAMMAL E
 MUSSEL, ALABAMA HEELSPLITTER KNOWN MOLLUSK T
 STURGEON, GULF KNOWN FISH T
 STURGEON, PALLID KNOWN FISH E

EAST BATON ROUGE

MANATEE, WEST INDIAN POSSIBLE MAMMAL E
 MUSSEL, ALABAMA HEELSPLITTER KNOWN MOLLUSK T
 STURGEON, GULF KNOWN FISH T
 STURGEON PALLID KNOWN FISH E

IBERVILLE

BEAR, LOUISIANA BLACK POSSIBLE MAMMAL T, CH
 STURGEON, GULF POSSIBLE FISH T
 STURGEON, PALLID KNOWN FISH E

WEST BATON ROUGE

STURGEON, PALLID KNOWN FISH E

Lakes and Streams:

None identified within the planning distance.

7.0 VULNERABILITY ANALYSIS (DETAILED), CONTINUED

VULNERABILITY ANALYSIS (DETAILED)

Endangered Flora and Fauna:

See SECTION 6.5 for a list of endangered and threatened species by state.

Below is listed by affected Parish:

ASCENSION: Louisiana quillwort, Geocarpon minimum, American chaffseed

Assumption: Louisiana quillwort, Geocarpon minimum, American chaffseed

EAST BATON ROUGE: Louisiana quillwort, Geocarpon minimum, American chaffseed

IBERVILLE: Louisiana quillwort, Geocarpon minimum, American chaffseed

WEST BATON ROUGE: Louisiana quillwort, Geocarpon minimum, American chaffseed

Recreational Areas:

East Baton Rouge Bridge Landing East side of river Mile Marker 228.

Port Allen Lock Landing West side of river Mile Marker 228.

PLAQUEMINE Launch Facility

Transportation Routes (Air, Water, Land):

Mississippi River

Unnamed gravel access road at the Pump Station.

Port Hudson Cemetery Road.

Highway 90 Old Mississippi Bridge.

I-10 Mississippi Bridge.

Port Allen Lock Landing

Utilities:

None identified within the planning distance

Other Applicable Areas:

None identified within the planning distance

8.0 TACTICAL OVERVIEW MAP

[Click to view/print Tactical Overview](#)

9.0 TACTICAL PLAN INDEX

SITE NAME

[Truck Station 1](#)

[Pump Station](#)

[Port Hudson Dock Boom Deployment](#)

[St. Francisville](#)

[Ramp 1](#)

[Ramp 2](#)

[Ramp 3](#)

[Ramp 4](#)

[Ramp 5](#)

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10.0 TACTICAL PLANS

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10.0 TACTICAL PLANS , CONTINUED

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10.0 TACTICAL PLANS , CONTINUED

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10.0 TACTICAL PLANS , CONTINUED

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10.0 TACTICAL PLANS , CONTINUED

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11.0 SENSITIVITY MAPS

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11.0 SENSITIVITY MAPS, CONTINUED

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11.0 SENSITIVITY MAPS, CONTINUED

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11.0 SENSITIVITY MAPS, CONTINUED

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11.0 SENSITIVITY MAPS, CONTINUED

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11.0 SENSITIVITY MAPS, CONTINUED

[Click to view/print 3. St. Gabriel ESI113.PDF](#)

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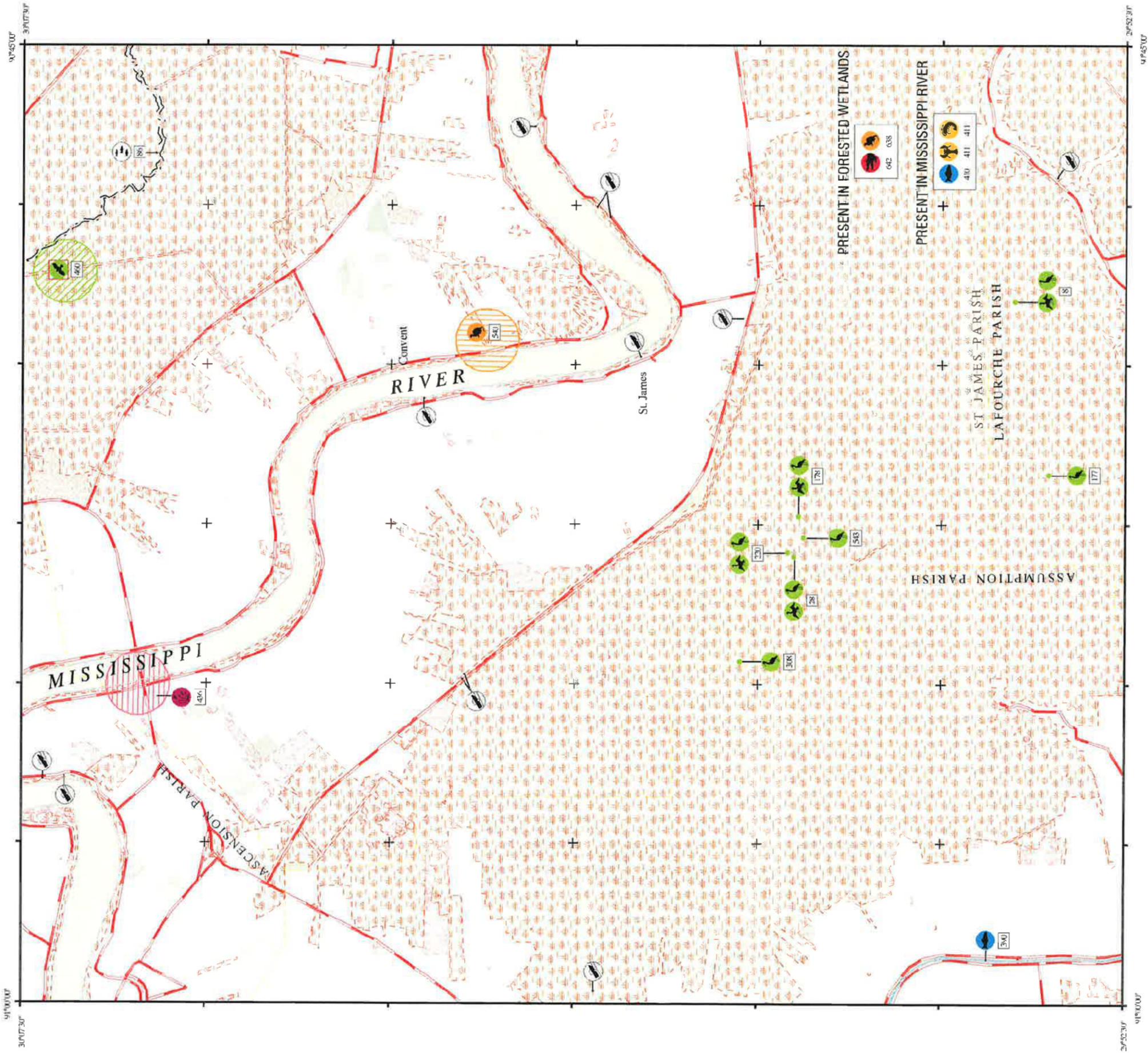
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11.0 SENSITIVITY MAPS, CONTINUED

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ENVIRONMENTAL SENSITIVITY INDEX MAP

PHMSA 000030081



NOTE FOR COASTAL MAPS:
Due to the dynamic nature of the Louisiana coastline, biological resources may represent historical locations that do not correspond with the depicted shoreline.

SHORELINE

- 1988 SHORELINE
- 2001 SHORELINE

SHORELINE HABITATS (ESI)

2001 ESI Shoreline Classification

- 1B EXPOSED, SOLID MAN-MADE STRUCTURES
- 2A EXPOSED WAVECUT PLATFORMS IN CLAY
- 2B EXPOSED SCARPS AND STEEP SLOPES IN CLAY
- 3A FINE- TO MEDIUM-GRAINED SAND BEACHES
- 3B SCARPS AND STEEP SLOPES IN SAND
- 4 COARSE-GRAINED SAND BEACHES
- 5 MIXED SAND AND GRAVEL BEACHES
- 6A GRAVEL BEACHES
- 6B RIPRAP
- 7 EXPOSED TIDAL FLATS
- 8A SHELTERED ROCKY SHORES AND SHELTERED SCARPS IN MUD OR CLAY
- 8B SHELTERED, MAN-MADE STRUCTURES
- 9C SHELTERED RIPRAP
- 9A SHELTERED TIDAL FLATS
- 9B SHELTERED, VEGETATED LOW BANKS
- 10A SALT- AND BRACKISH-WATER MARSHES
- 10B FRESHWATER MARSHES
- 10C FRESHWATER SWAMPS
- 10D SCRUB-SHRUB WETLANDS

COASTAL HABITATS

Based on 1988 Digital Shoreline

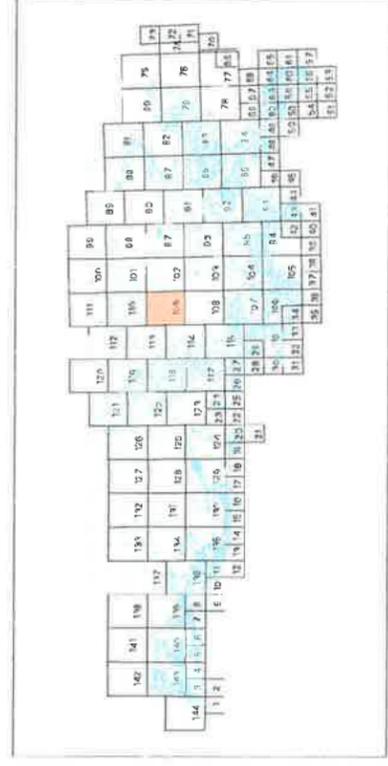
- 10A SALT MARSH
- 10A BRACKISH MARSH
- 10A INTERMEDIATE MARSH
- 10B FRESHWATER MARSH
- 10C FORESTED WETLAND
- 10D SCRUB-SHRUB WETLAND
- SEAGRASS



SCALE 1:100000



Not For Navigation



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National Ocean Service
Office of Response and Restoration
Hazardous Materials Response Division

PONCHATOLA LA-109

Louisiana ESI: ESIMAP 109
BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating	Molting
8	Anhinga			7 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	---	---	---
	Cattle egret			13 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	---	---	---
	Great blue heron			32 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	---	---	---
	Great egret			290 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	---	---	---
	Little blue heron			15 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	---	---	---
	Snowy egret			5 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	---	---	---
	White ibis			14 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	---	---	---
28	Anhinga			3 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	---	---	---
	Cattle egret			68 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	---	---	---
	Great blue heron			60 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	---	---	---
	Great egret			355 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	---	---	---
	Little blue heron			95 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	---	---	---
	Snowy egret			84 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	---	---	---
	Tricolored heron			23 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	---	---	---
	White ibis			40 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	---	---	---
	Yellow-crowned night-heron			9 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	---	---	---
177	Cattle egret			28 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	---	---	---
	Little blue heron			54 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	---	---	---
	Snowy egret			36 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	---	---	---
178	Yellow-crowned night-heron			2 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	---	---	---
	Anhinga			8 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	---	---	---
	Cattle egret			9 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	---	---	---
	Little blue heron			168 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	---	---	---
	Snowy egret			27 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	---	---	---
220	Yellow-crowned night-heron			6 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	---	---	---
	Anhinga			2 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	---	---	---
	Cattle egret			20 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	---	---	---
	Great blue heron			60 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	---	---	---
	Great egret			159 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	---	---	---
308	Cattle egret			40 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	---	---	---
	Little blue heron			105 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	---	---	---
	Snowy egret			85 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	---	---	---
460	Yellow-crowned night-heron			25 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	---	---	---
543	Threatened raptor		T		X	X	X	X	X	X	X	X	X	X	X	X	---	---	---
	Great blue heron			50 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	---	---	---
	Great egret			133 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	---	---	---

FISH:

RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
390	Largemouth bass			MED	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
410	Alligator gar			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Bantam sunfish			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Bighead carp			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Bigmouth buffalo			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Black buffalo			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Black crappie			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Bluegill			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Bowfin			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Catfish			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Chubsucker			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Common carp			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Freshwater drum			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Gizzard shad			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Grass carp			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Gulf menhaden			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Hybrid sunfish			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Largemouth bass			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Logperch			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Longear sunfish			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Minnows			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Orangespotted sunfish			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Paddlefish			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Redear sunfish			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	River carpsucker			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Shiners			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Shortnose gar			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Shovelnose sturgeon			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Silver carp			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Smallmouth buffalo			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Spotted gar			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Spotted sunfish			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Striped bass			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Striped mullet			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Threadfin shad			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	White bass			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	White crappie			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Yellow bass			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC

HABITAT:

RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D
436	Rare plant				X	X	X	X	X	X	X	X	X	X	X	X

INVERTEBRATE:

RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
411	River shrimp			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	White river crawfish			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC

Louisiana ESI: ESIMAP 109 (cont.)

BIOLOGICAL RESOURCES: (cont.)

TERRESTRIAL MAMMAL:

RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D
638	Muskrat			196 TO 53 AC/NEST	X	X	X	X	X	X	X	X	X	X	X	X
	Northern river otter			877 TO 728 AC/NEST	X	X	X	X	X	X	X	X	X	X	X	X
	Nutria			15 TO 3 AC/NEST	X	X	X	X	X	X	X	X	X	X	X	X

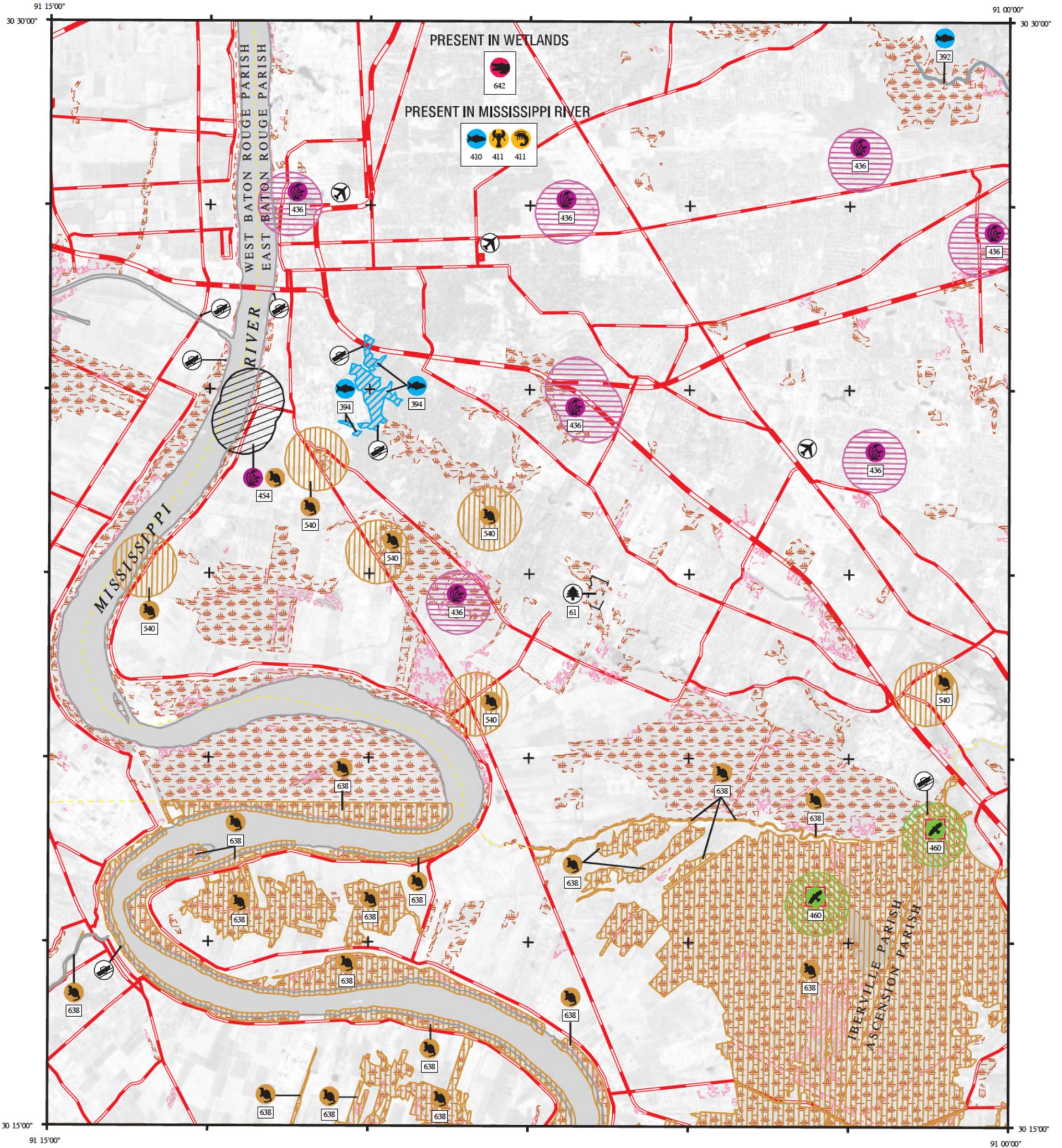
HUMAN USE RESOURCES:

SCENIC RIVER:

HUN#	Name	Owner	Contact	Phone
86	BLIND SCENIC RIVER		PRIVATE	

Biological information shown on the maps represents known concentration areas of occurrences, but does not necessarily represent the full distribution or range of each species. This is particularly important to recognize when considering potential impacts to protected species.

ENVIRONMENTAL SENSITIVITY INDEX MAP

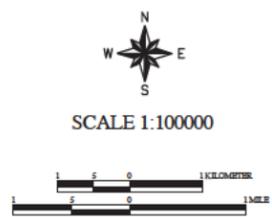
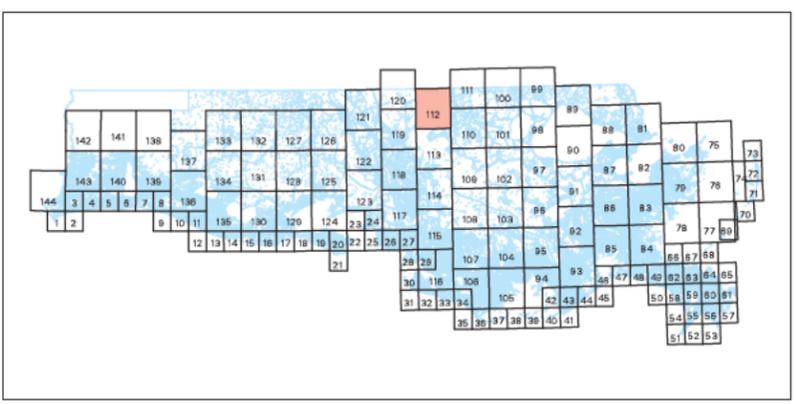


SHORELINE
 1988 SHORELINE
 2001 SHORELINE

NOTE FOR COASTAL MAPS:
 Due to the dynamic nature of the Louisiana coastline, biological resources may represent historical locations that do not correspond with the depicted shoreline.

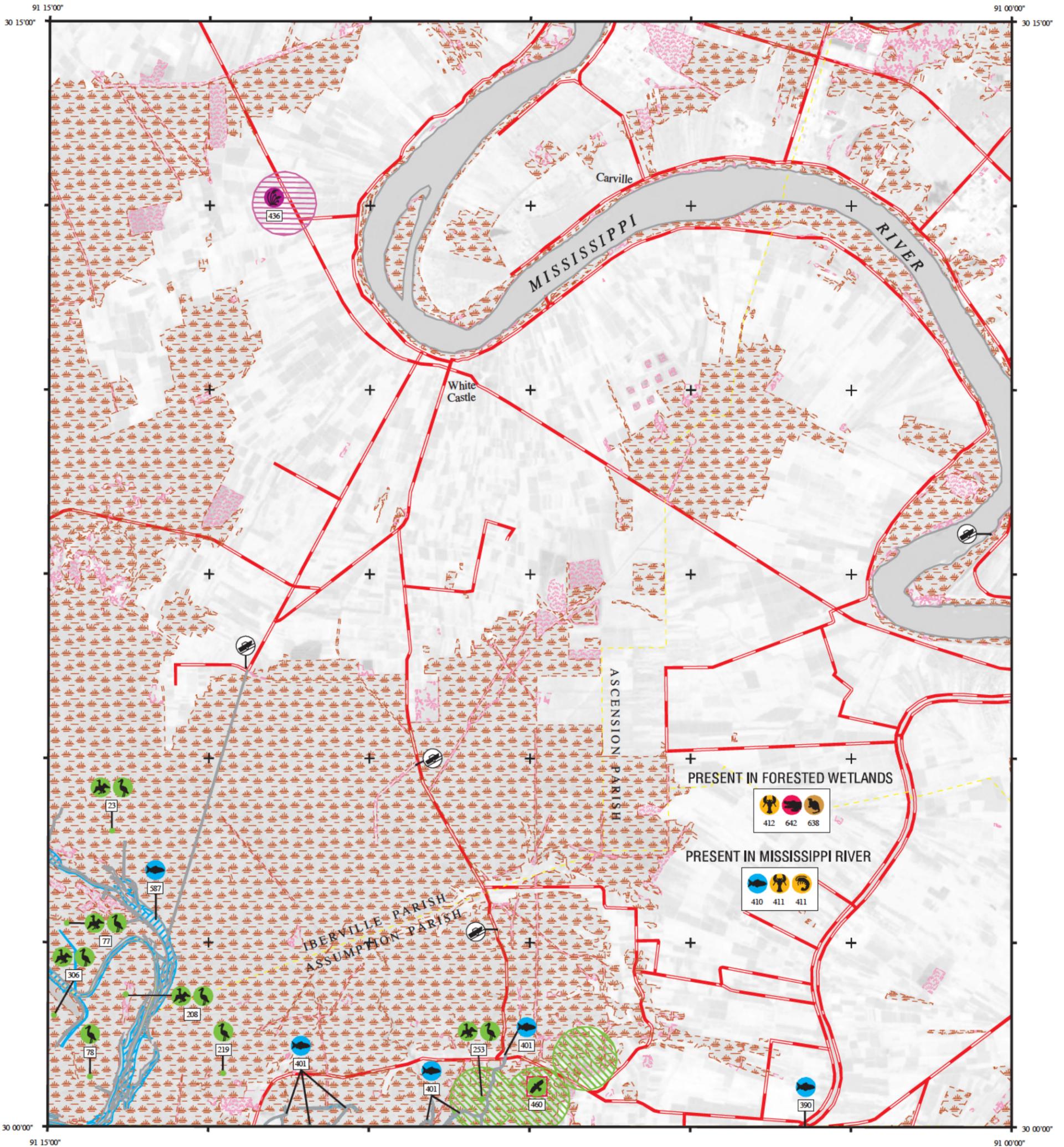
- SHORELINE HABITATS (ESI)**
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 - 2A EXPOSED WAVE-CUT PLATFORMS IN CLAY
 - 2B EXPOSED SCARPS AND STEEP SLOPES IN CLAY
 - 3A FINE- TO MEDIUM-GRAINED SAND BEACHES
 - 3B SCARPS AND STEEP SLOPES IN SAND
 - 4 COARSE-GRAINED SAND BEACHES
 - 5 MIXED SAND AND GRAVEL BEACHES
 - 6A GRAVEL BEACHES
 - 6B RIPRAP
 - 7 EXPOSED TIDAL FLATS
 - 8A SHELTERED ROCKY SHORES AND SHELTERED SCARPS IN MUD OR CLAY
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 - 10C FRESHWATER SWAMPS
 - 10D SCRUB-SHRUB WETLANDS

- COASTAL HABITATS**
 Based on 1988 Digital Shoreline
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 - 10A BRACKISH MARSH
 - 10A INTERMEDIATE MARSH
 - 10B FRESHWATER MARSH
 - 10C FORESTED WETLAND
 - 10D SCRUB-SHRUB WETLAND
 - SEAGRASS



December 2003
 Published at Seattle, Washington
 National Oceanic and Atmospheric Administration
 National Ocean Service
 Office of Response and Restoration
 Hazardous Materials Response Division

ENVIRONMENTAL SENSITIVITY INDEX MAP



SHORELINE
 1988 SHORELINE
 2001 SHORELINE

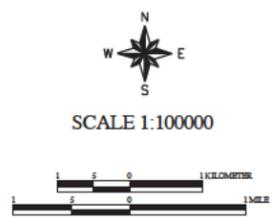
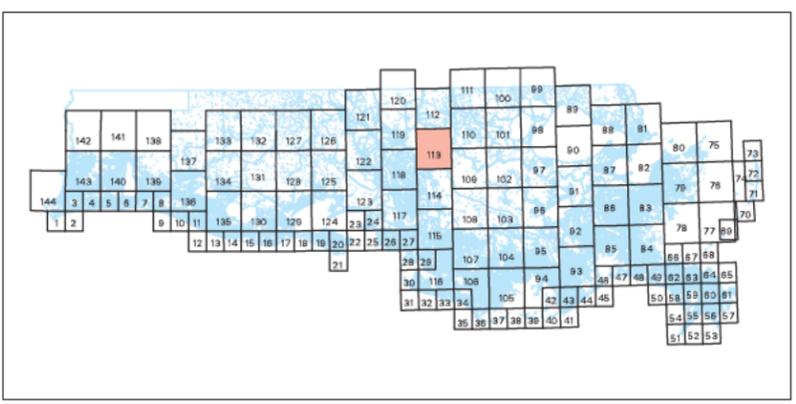
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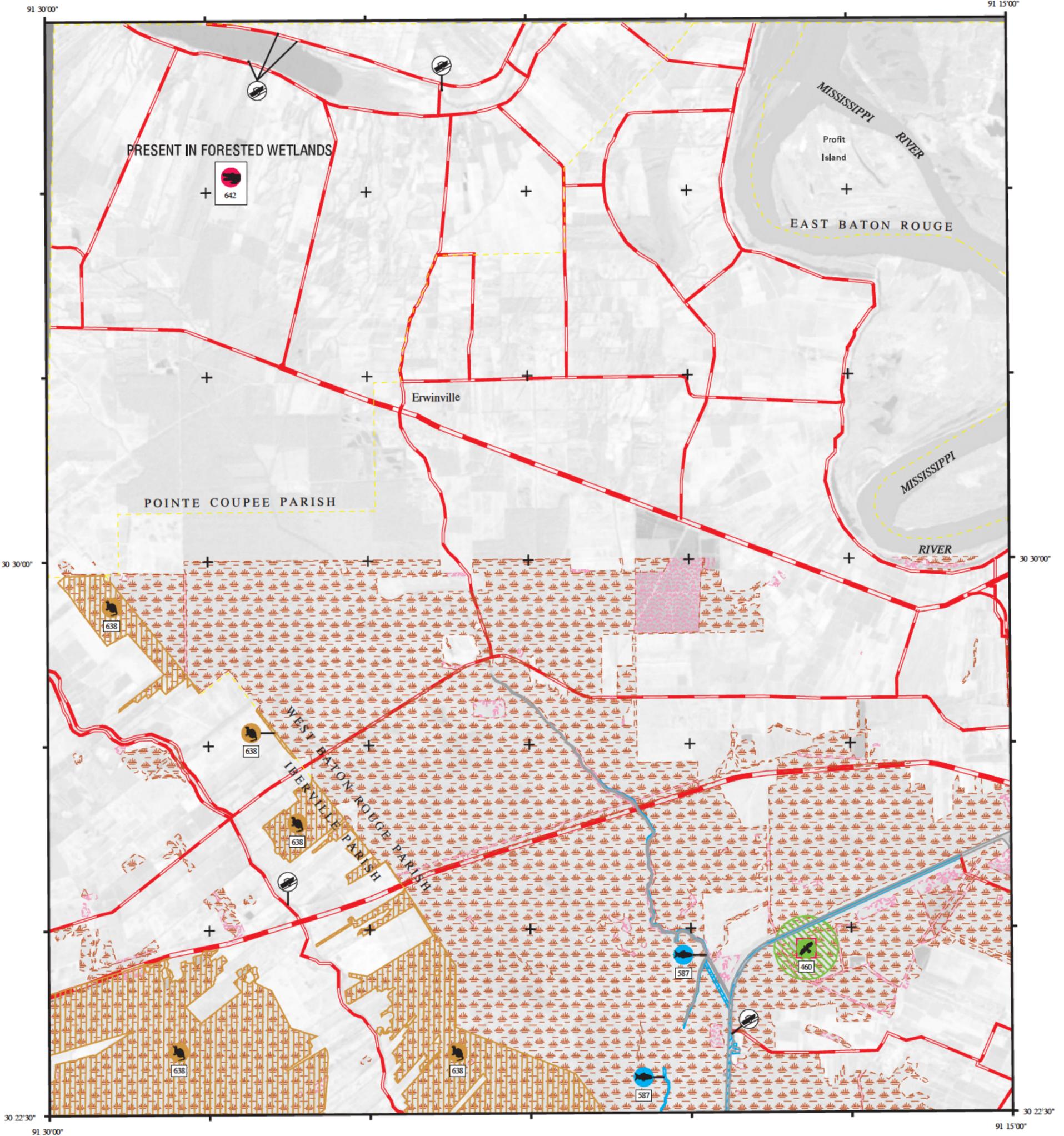
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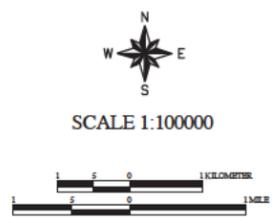
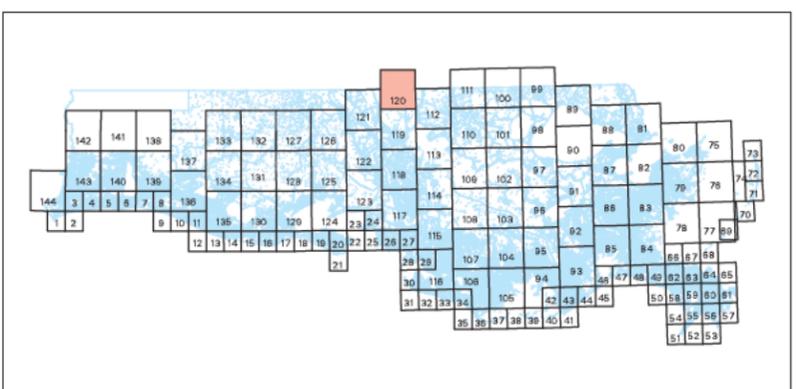
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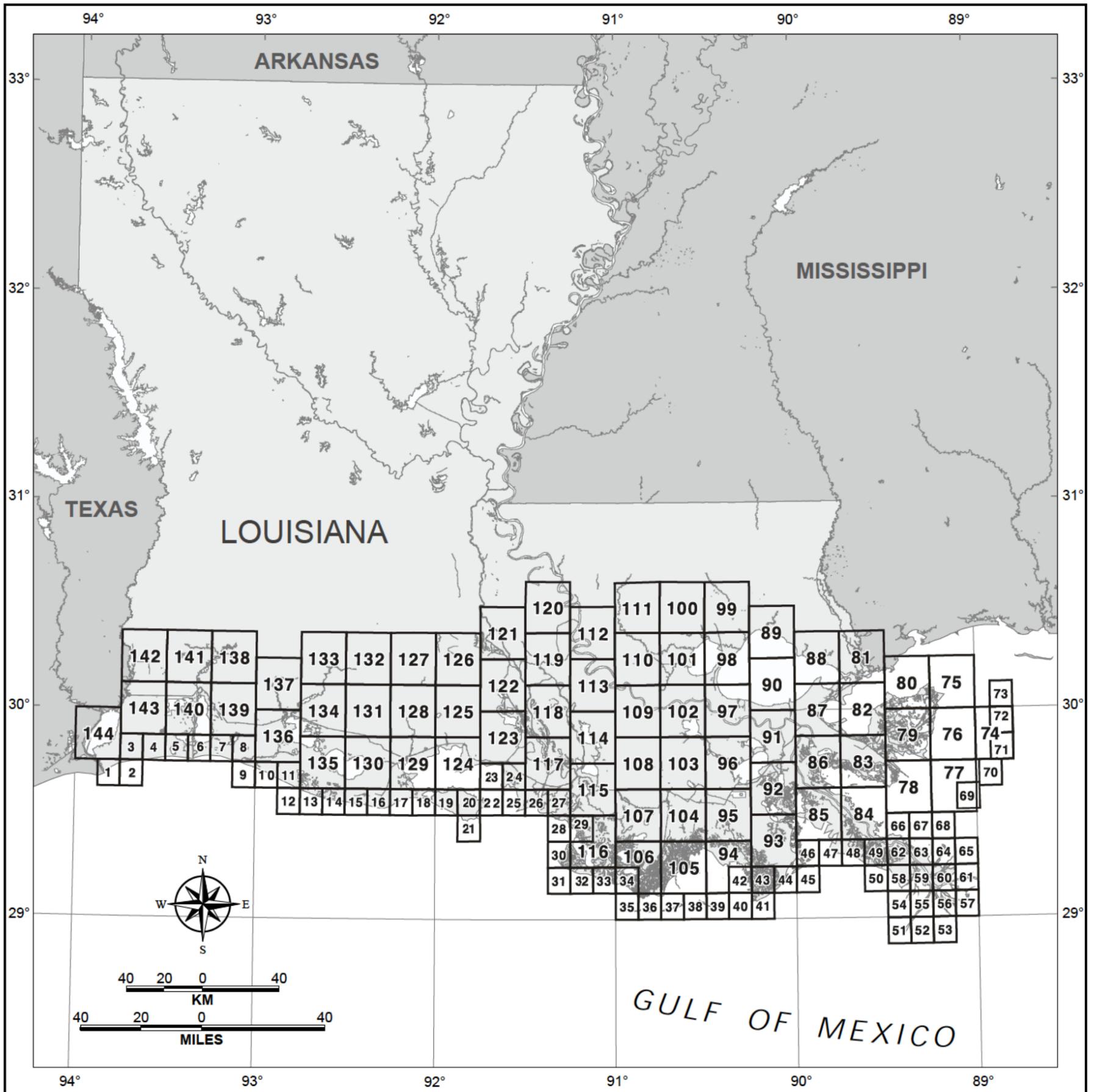
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Not For Navigation

BATON ROUGE LA-120

Sensitivity of Coastal Environments and Wildlife to Spilled Oil

LOUISIANA



Supported by:

In Cooperation with:



**National Oceanic and
Atmospheric Administration**

National Ocean Service

Office of Response and Restoration
Hazardous Materials Response Division
Seattle, Washington

Minerals Management Service (MMS)
New Orleans, Louisiana

U.S. Fish and Wildlife Service (USFWS)
Lafayette, Louisiana

The Louisiana Oil Spill Coordinator's Office (LOSCO)
Baton Rouge, Louisiana

Louisiana Department of Wildlife and Fisheries (LDWF)
Baton Rouge, Louisiana

Louisiana Department of Natural Resources (LDNR)
Baton Rouge, Louisiana

LOUISIANA

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COASTAL HABITATS From 1988 Digital Shoreline

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-  10C) FORESTED WETLAND
-  10D) SCRUB-SHRUB WETLAND
-  SEAGRASS

SENSITIVE BIOLOGICAL RESOURCES

- | | | |
|--|--|---|
|  BIRD |  TERRESTRIAL MAMMAL |  REPTILE / AMPHIBIAN |
|  DIVING BIRD |  BAT |  ALLIGATOR |
|  GULL / TERN |  BEAR |  TURTLE |
|  PASSERINE |  SMALL MAMMAL |  OTHER REPTILE / AMPHIBIAN |
|  RAPTOR |  INVERTEBRATE |  HABITAT |
|  SHOREBIRD |  BIVALVE |  PLANT |
|  WADING BIRD |  CEPHALOPOD |  SEAGRASS |
|  WATERFOWL |  CRAB |  MULTIPLE ELEMENTS |
|  NESTING SITE |  CRAYFISH |  THREATENED / ENDANGERED |
|  FISH |  INSECT |  RAR NUMBER |
|  FISH |  SHRIMP | |

HUMAN-USE FEATURES

- | | | |
|--|--|--|
|  AIRPORT / HELIPORT |  SENIC RIVER |  PARISH BOUNDARY |
|  BOAT RAMP |  STATE PARK |  MANAGEMENT BOUNDARY |
|  INDIAN RESERVATION |  WILDLIFE REFUGE |  MAJOR ROAD |
|  MARINA |  HUMAN-USE NUMBER |  MINOR ROAD |
|  NATIONAL PARK / NATURE CONSERVANCY | |  SHORELINE FROM 2001 PHOTO INTERPRETATION |
| | |  SHORELINE FROM 1988 DIGITAL DATA |

Guidelines for Interpreting ESI Maps

To help users interpret the ESI maps and tabular data, we offer the following guidelines for use in addition to the map legend:

- **Shoreline Habitats.** The “shoreline,” representing the boundary between land and water, is color-coded with the ESI classification. Most shoreline habitats are shown as a line, with no areal dimension. Where there is more than one shoreline type (e.g., a beach in front of a seawall), the colors for each habitat are shown, with the color for the landward habitat on the land side of the shoreline and the color for the seaward habitat on the water side. In areas where the intertidal zone is wide (e.g., wide tidal flats, wave-cut rocky platforms), the habitat from high to low water is filled with the ESI classification color. When data are available, the entire extent of wetlands are filled with colored patterns. The seaward edge of the wetland is color-coded with the ESI classification; the landward extent of the wetland is indicated by a dashed, colored line.
- **Biological Resources.** The distribution of biological resources is shown using many different conventions. The major convention is an icon associated with a point, line, or polygon that shows the species’ areal distribution. The icon’s reference number corresponds to a data table with details on species and life history. Biological resource data are organized into six major groups, each with a reference color: birds (green), mammals (brown), fish (blue), shellfish (orange), reptiles (red), and rare/endangered plants and special habitats (purple). These colors are used to fill hatched polygons and the icons. Each major group has subgroups with unique icons to visually indicate the type of organism or feature present. The icon or group of icons is usually located inside the polygon it represents; however, sometimes a line is connected between the icon and the polygon or point to make it easier to relate the two. Note that icons are used to indicate the types of resources present, but the actual data are the points and polygons. A red box around an icon indicates the presence of a species on the state or Federal list of threatened or endangered species.

The number listed below each icon refers to the first column of a data table for each map. The data tables, organized by group (birds, fish, etc.), include the following information: species name, status as threatened or endangered on state and Federal lists, concentration (specifically for each point or polygon), presence by month, and special life-history time periods. When a polygon contains multiple groups, the one number under the group of icons is listed under each group heading in the data tables. Where possible, the same number is used on multiple maps. For example, all bald eagle nests with the same seasonality could have the same number throughout the atlas, or the same assemblage of fish would have the same number wherever it occurred.

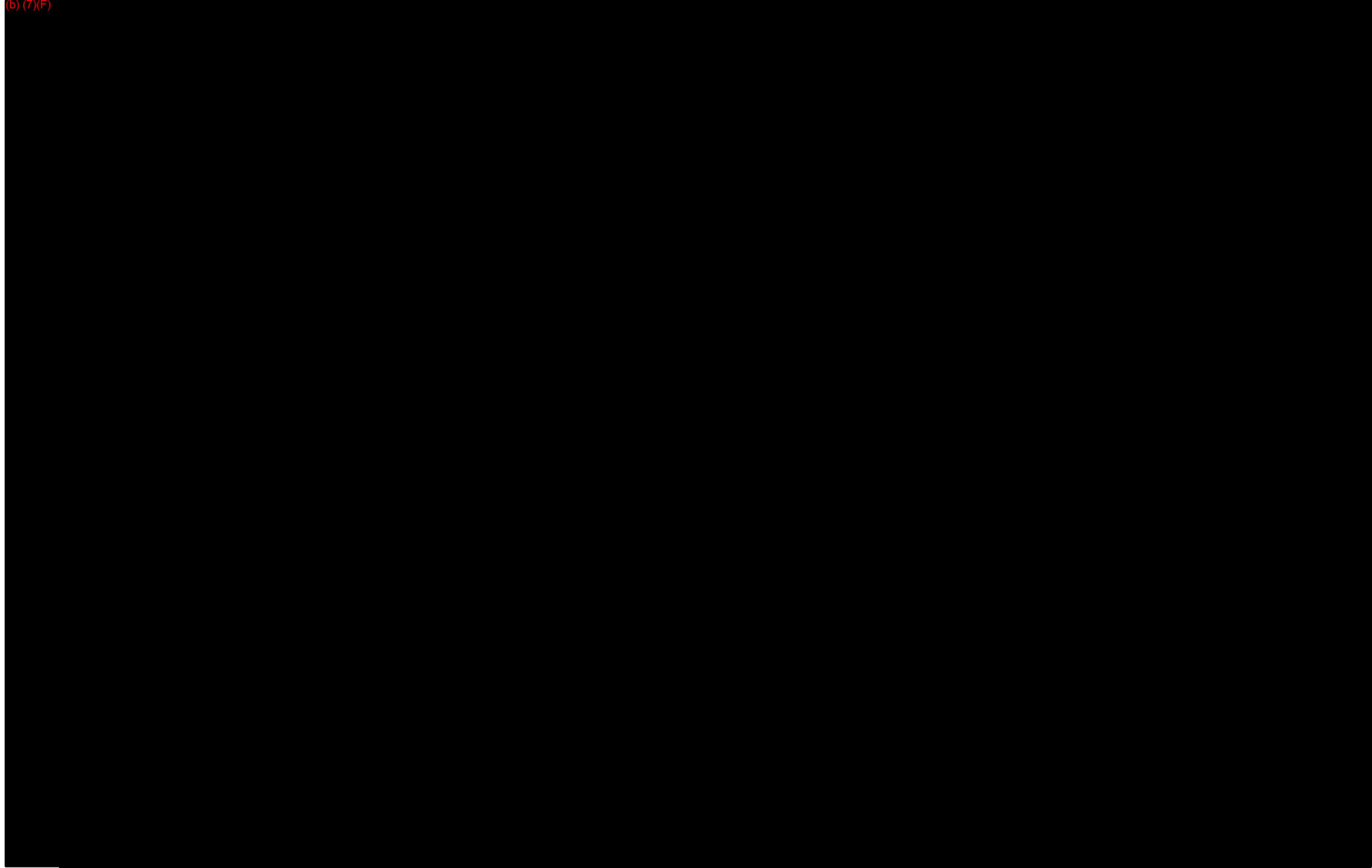
A data table has a separate listing for every unique combination of species, concentration, seasonality, life-history stage, and source. By looking at the monthly seasonality data in the table for each map, the species present at the time of concern can be easily identified. An ‘X’ or number is placed under each month in which any life stage of the species is present in the area represented by the point or polygon. Numbers are used typically for fish and shellfish where data on relative abundance are available. The final columns in the data tables include the months when reproductive activities occur or early life stages are present. Users should pay close attention to the data tables because they contain much of the information needed to identify the most sensitive resources at different times of the year.

Points, lines, and polygons on a map represent the distribution of the resources. Green points show bird nesting sites, including bald eagle nests and dense colonial nesters (e.g., heron rookeries and seabird nesting colonies). Animals and habitats are also represented as: 1) hatched polygons in the color for the animal group (e.g., green for birds); 2) black hatched polygons which contain multiple groups of resources (birds and fish in the same tidal channels); 3) solid lines (usually used for fish in small streams); or 4) in “common in ...” boxes. When showing the biological resource polygons would make the maps too difficult to read (usually when multiple polygons cover a large area), the polygons are not plotted and the presence of the resource is indicated by placing the icon in a box labeled “common in ...” The box contains an appropriate geographic reference. Different boxes can be used on the same map when, for example: “common in Winyah Bay” or “common in tidal creeks.” The data for these resources are still fully present in the database but are not shown to make the maps more readable.

- **Human-use Resources.** Most of the human-use resources are point features indicated by a black-and-white icon. Managed lands, such as refuges and sanctuaries, have their boundaries shown as a dot-dash line with an icon and name placed inside. Where the feature is a known point location (e.g., a drinking water intake, boat ramp, marina), the exact location is shown as a small black dot and a line is drawn from it to the icon. Activities such as commercial and recreational fishing and areas such as recreational beaches are also indicated by an icon placed in the general area without any lines to points or polygons since the boundaries are not readily defined.

Some features, like historic and archaeological sites, are location-sensitive: the agency managing the resource believes the exact location should not be shown in order to protect the site. In these cases, the icon is placed in the general area of the resource, but the exact location is not shown.





Louisiana ESI: ESIMAP 112

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating	Molting
460	Threatened raptor	T	X	X	X	X	X	X	X	X	X	X	X	X	OCT-MAY	-	-

FISH:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
392	Largemouth bass	LOW	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
394	Largemouth bass	HIGH	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
410	Alligator gar	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Bantam sunfish	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Bighead carp	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Bigmouth buffalo	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Black buffalo	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Black crappie	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Bluegill	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Bowfin	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Catfish	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Chubsucker	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Common carp	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Freshwater drum	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Gizzard shad	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Grass carp	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Gulf menhaden	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Hybrid sunfish	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Largemouth bass	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Logperch	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Longear sunfish	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Minnows	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Orangespotted sunfish	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Paddlefish	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Redear sunfish	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	River carpsucker	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Shiners	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Shortnose gar	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Shovelnose sturgeon	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Silver carp	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Smallmouth buffalo	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Spotted gar	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Spotted sunfish	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Striped bass	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Striped mullet	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Threadfin shad	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	White bass	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	White crappie	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Yellow bass	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-

HABITAT:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D
436	Rare plant		X	X	X	X	X	X	X	X	X	X	X	X
454	Rare plant		X	X	X	X	X	X	X	X	X	X	X	X

INVERTEBRATE:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
411	River shrimp	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	White river crawfish	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-

REPTILE:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Hatching	Interesting	Juveniles	Adults
642	American alligator	1000 TO 250 AC/NEST	X	X	X	X	X	X	X	X	X	X	X	X	JUN-AUG	AUG-SEP	-	JAN-DEC	JAN-DEC

TERRESTRIAL MAMMAL:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D
454	Rare small mammal		X	X	X	X	X	X	X	X	X	X	X	X
540	Rare small mammal		X	X	X	X	X	X	X	X	X	X	X	X
638	Common raccoon	25 TO 23 AC/NEST	X	X	X	X	X	X	X	X	X	X	X	X
	Mink	96 TO 56 AC/NEST	X	X	X	X	X	X	X	X	X	X	X	X
	Muskrat	196 TO 53 AC/NEST	X	X	X	X	X	X	X	X	X	X	X	X
	Northern river otter	877 TO 728 AC/NEST	X	X	X	X	X	X	X	X	X	X	X	X
	Nutria	15 TO 3 AC/NEST	X	X	X	X	X	X	X	X	X	X	X	X

HUMAN USE RESOURCES:

NATURE CONSERVANCY:

HUN#	Name	Owner	Contact	Phone
61	BLUEBONNET SWAMP PRESERVE		THE NATURE CONSERVANCY	

Biological information shown on the maps represents known concentration areas or occurrences, but does not necessarily represent the full distribution or range of each species. This is particularly important to recognize when considering potential impacts to protected species.

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BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating	Molting
23	Anhinga	1 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-
	Great blue heron	11 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
	Great egret	108 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
	Little blue heron	16 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-
	Snowy egret	4 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-
77	Anhinga	2 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-
	Great blue heron	83 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
	Great egret	250 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
78	Cattle egret	50 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Little blue heron	50 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-
	Snowy egret	25 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-
208	Anhinga	14 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-
	Black-crowned night-heron	20 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	-	-
	Cattle egret	92 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-	-
	Great egret	42 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
	Little blue heron	114 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-
	Roseate spoonbill	7 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	-	-
	Snowy egret	49 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-
	Tricolored heron	12 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-
	Yellow-crowned night-heron	34 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	-	-
219	Great egret	60 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
253	Anhinga	12 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-
	Great egret	48 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
306	Anhinga	133 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUN	-	-
	Great blue heron	83 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
	Great egret	210 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	-
	Little blue heron	100 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-
460	Threatened raptor	T	X	X	X	X	X	X	X	X	X	X	X	X	OCT-MAY	-	-

FISH:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
390	Largemouth bass	MED	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
401	American eel	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Atlantic needlefish	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Bantam sunfish	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Bay anchovy	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Bigmouth buffalo	MED	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Black buffalo	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Black bullhead	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Black crappie	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Blue catfish	HIGH	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Bluegill	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Bowfin	MED	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Channel catfish	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Common carp	MED	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Flathead catfish	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Freshwater drum	HIGH	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Gizzard shad	MED	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Gobies	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Golden shiner	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Goldfish	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Green sunfish	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Gulf menhaden	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Gulf pipefish	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Hogchoker	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Hybrid striped bass	MED	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Hybrid sunfish	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Largemouth bass	MED	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Longear sunfish	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Madtoms	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Minnows	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Orangespotted sunfish	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Paddlefish	MED	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Pirate perch	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Redear sunfish	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Skipjack herring	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Smallmouth buffalo	HIGH	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Spotted bass	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Spotted gar	HIGH	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Spotted sunfish	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Striped bass	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Striped mullet	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Threadfin shad	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Warmouth	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	White bass	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	White crappie	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Yellow bass	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Yellow bullhead	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
410	Alligator gar	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Bantam sunfish	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Bighead carp	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Bigmouth buffalo	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Black buffalo	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Black crappie	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Bluegill	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Bowfin	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Catfish	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Chubsucker	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Common carp	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Freshwater drum	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Gizzard shad	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Grass carp	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Gulf menhaden	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Hybrid sunfish	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Largemouth bass	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Logperch	PRESENT	X	X	X	X</													

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BIOLOGICAL RESOURCES: (cont.)

FISH:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
410	Shortnose gar	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Shovelnose sturgeon	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Silver carp	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Smallmouth buffalo	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Spotted gar	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Spotted sunfish	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Striped bass	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Striped mullet	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Threadfin shad	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	White bass	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	White crappie	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Yellow bass	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
587	Bay anchovy	2						2	2	2	2	2	2		-	APR-OCT	APR-OCT	-	-
	Gizzard shad	3	3	3	3	3	3	3	3	3	3	3	3	3	MAR-SEP	MAR-SEP	MAR-SEP	JAN-DEC	-
	Gulf menhaden	4	4	4	4	4	4	4	4	4	4	4	4	4	-	-	-	JAN-DEC	-
	Southern flounder	2	2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	JAN-DEC	-
	Striped mullet	3	3	3	3	3	3	3	3	3	3	3	3	3	-	-	-	JAN-DEC	-

HABITAT:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D
436	Rare plant		X	X	X	X	X	X	X	X	X	X	X	X

INVERTEBRATE:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
411	River shrimp	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	White river crawfish	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
412	Red swamp crawfish	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	White river crawfish	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-

REPTILE:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Hatching	Internesting	Juveniles	Adults
642	American alligator	1000 TO 250 AC/NEST	X	X	X	X	X	X	X	X	X	X	X	X	JUN-AUG	AUG-SEP	-	JAN-DEC	JAN-DEC

TERRESTRIAL MAMMAL:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D
638	Common raccoon	25 TO 23 AC/NEST	X	X	X	X	X	X	X	X	X	X	X	X
	Mink	96 TO 56 AC/NEST	X	X	X	X	X	X	X	X	X	X	X	X
	Muskrat	196 TO 53 AC/NEST	X	X	X	X	X	X	X	X	X	X	X	X
	Northern river otter	877 TO 728 AC/NEST	X	X	X	X	X	X	X	X	X	X	X	X
	Nutria	15 TO 3 AC/NEST	X	X	X	X	X	X	X	X	X	X	X	X

Biological information shown on the maps represents known concentration areas or occurrences, but does not necessarily represent the full distribution or range of each species. This is particularly important to recognize when considering potential impacts to protected species.

Louisiana ESI: ESIMAP 120

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating	Molting
460	Threatened raptor	T	X	X	X	X	X	X	X	X	X	X	X	X	OCT-MAY	-	-

FISH:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
587	Bay anchovy	2				2	2	2	2	2	2	2	2	2	-	APR-OCT	APR-OCT	-	-
	Gizzard shad	3	3	3	3	3	3	3	3	3	3	3	3	3	MAR-SEP	MAR-SEP	MAR-SEP	JAN-DEC	-
	Gulf menhaden	4	4	4	4	4	4	4	4	4	4	4	4	4	-	-	-	JAN-DEC	-
	Southern flounder	2	2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	JAN-DEC	-
	Striped mullet	3	3	3	3	3	3	3	3	3	3	3	3	3	-	-	-	JAN-DEC	-

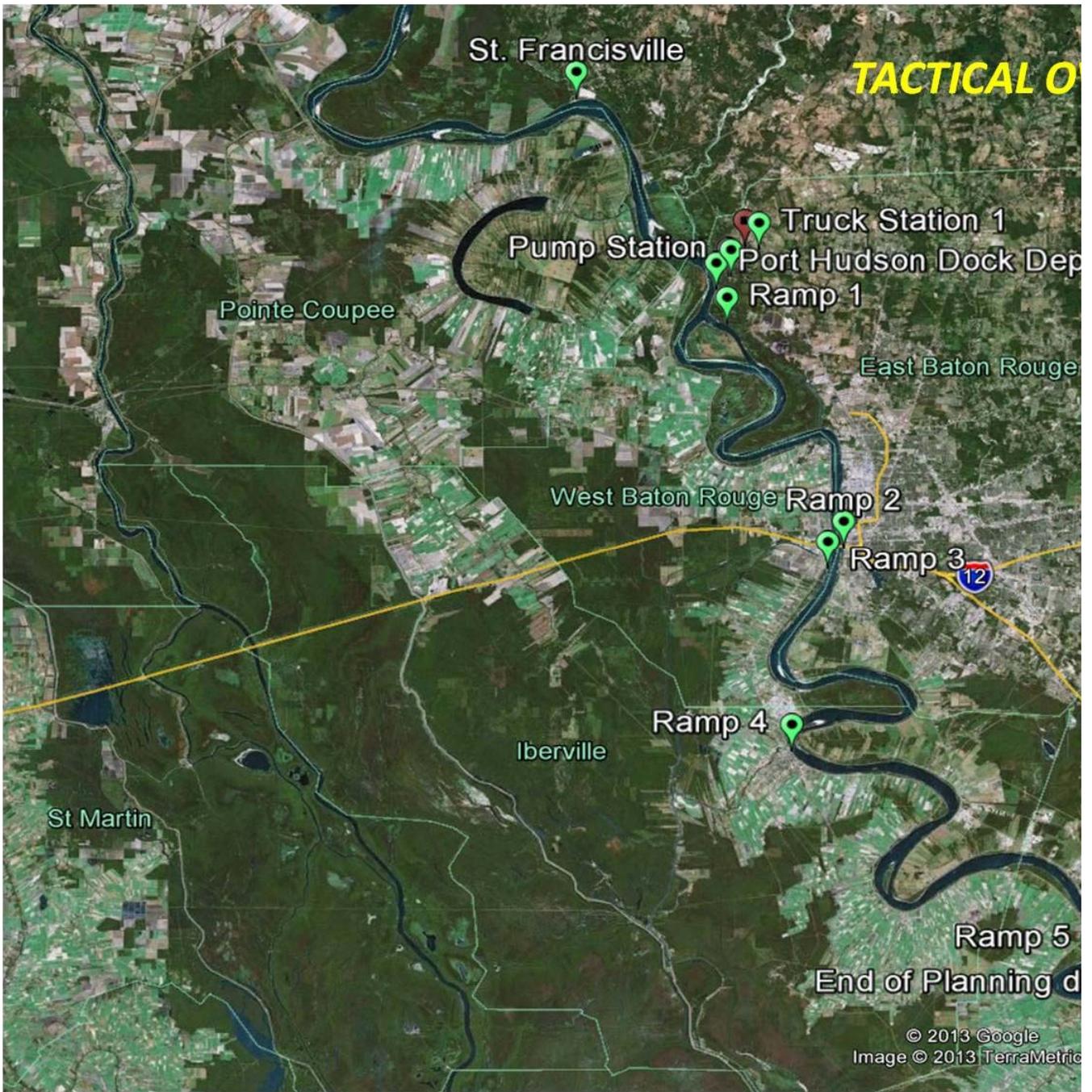
REPTILE:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Hatching	Interesting	Juveniles	Adults
642	American alligator	1000 TO 250 AC/NEST	X	X	X	X	X	X	X	X	X	X	X	X	JUN-AUG	AUG-SEP	-	JAN-DEC	JAN-DEC

TERRESTRIAL MAMMAL:

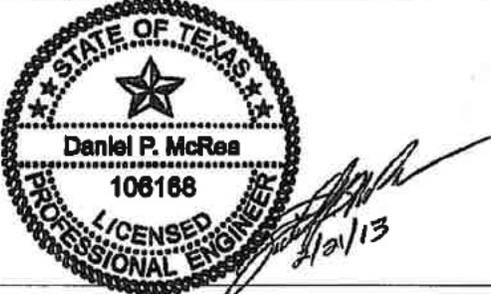
RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D
638	Common raccoon	25 TO 23 AC/NEST	X	X	X	X	X	X	X	X	X	X	X	X
	Mink	96 TO 56 AC/NEST	X	X	X	X	X	X	X	X	X	X	X	X
	Muskrat	196 TO 53 AC/NEST	X	X	X	X	X	X	X	X	X	X	X	X
	Northern river otter	877 TO 728 AC/NEST	X	X	X	X	X	X	X	X	X	X	X	X
	Nutria	15 TO 3 AC/NEST	X	X	X	X	X	X	X	X	X	X	X	X

Biological information shown on the maps represents known concentration areas or occurrences, but does not necessarily represent the full distribution or range of each species. This is particularly important to recognize when considering potential impacts to protected species.



LINK FILES

FIGURE C-1 - PROFESSIONAL ENGINEER CERTIFICATION

40 CFR, Part 112.3(d) Professional Engineer Certification	
Being familiar with the provisions of 40 CFR, Part 112, I attest to the following:	
<ul style="list-style-type: none"> • I am familiar with the requirements of this part. • I or my agent has visited and examined the Facility. • The Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards, and with the requirements of this part. • Procedures for required inspections and testing have been established. • The Plan is adequate for the Facility. 	
Note: Certification is conditional pending satisfactory resolution of the required improvements listed in <u>FIGURE C-6</u>.	
Printed Name of Registered Professional Engineer:	Daniel P. McRea
Signature of Registered Professional Engineer:	
Date:	2/21/13
Registration No.:	106168
Seal:	

Material Safety Data Sheet



1. Chemical product and company identification

Product name	Petroleum Crude Oil - Sweet
MSDS #	0000002895
Historic MSDS #:	None.
Code	0000002895
Synonyms	Crude oil, Sweet. Crude oil, Rock Oil, Seneca Oil
Supplier	BP America Production Company 501 WestLake Park Boulevard Houston TX 77079
EMERGENCY HEALTH INFORMATION:	1 (800) 447-8735 Outside the US: +1 703-527-3887 (CHEMTREC)
EMERGENCY SPILL INFORMATION:	1 (800) 424-9300 CHEMTREC (USA)
OTHER PRODUCT INFORMATION	1 (866) 4 BP - MSDS (866-427-6737 Toll Free - North America) email: bpcares@bp.com

2. Composition/information on ingredients

Ingredient name	CAS #	%
Crude oil	8002-05-9	98 - 100
Contains:		
n-Hexane	110-54-3	0 - 6
Toluene	108-88-3	0 - 5
xylene	1330-20-7	0 - 5
Benzene	71-43-2	0.1 - 1.8
Naphthalene	91-20-3	0 - 1
Ethylbenzene	100-41-4	0 - 0.4
Hydrogen Sulfide	7783-06-4	0 - 0.001

3. Hazards identification

Physical state	Liquid.
Color	Brown to Black.
Emergency overview	Danger! Extremely flammable liquid and vapor. Vapor may cause fire. Keep away from heat, sparks and flame. Avoid all possible sources of ignition (spark or flame). Avoid contact with eyes, skin and clothing. Causes eye irritation. Causes skin irritation. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness, and nausea, and may lead to unconsciousness or death. Harmful or fatal if liquid is aspirated into lungs. Can cause blood disorders Risk of cancer depends on duration and level of exposure. Danger! Contains Benzene. Cancer hazard. Harmful if absorbed through the skin.

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Contains n-hexane which may cause peripheral nerve damage.

Target Organ(s): Respiratory System, Central Nervous System, Peripheral Nervous System, Cardiovascular System, Blood, Liver, Kidney

If ingested do not induce vomiting. Harmful or fatal if liquid is aspirated into lungs. Avoid breathing vapor or mist. Do not puncture or incinerate. Keep container closed when not in use. Use only with adequate ventilation. Wash contaminated skin with soap and water. Avoid exposure during pregnancy.

Routes of entry

Skin contact or absorption. Eye contact. Inhalation. Ingestion.

Potential health effects

Eyes

Causes eye irritation.

Skin

Causes skin irritation. Prolonged or repeated contact can defat the skin and lead to irritation and/or dermatitis. Cancer hazard. Can cause cancer. Can cause blood disorders. Harmful if absorbed through the skin. See toxicological Information (section 11).

Inhalation

Harmful or fatal if inhaled. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness, and nausea, and may lead to unconsciousness or death. May cause respiratory tract irritation. Contains n-hexane which may cause peripheral nerve damage. Contains benzene. Cancer hazard. Can cause cancer. Can cause blood disorders. See toxicological Information (section 11).

Ingestion

Harmful or fatal if liquid is aspirated into lungs. Adverse effects could include chemical pneumonitis. Ingestion may cause gastrointestinal irritation and diarrhea. Exposure can cause nausea, headache and vomiting. Harmful: may cause lung damage if swallowed. Cancer hazard. Can cause cancer. See toxicological Information (section 11).

Medical conditions aggravated by over-exposure

None identified.

See toxicological Information (section 11).

4. First aid measures

Eye contact

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

Skin contact

Wash contaminated skin with soap and water. Do not use hot water. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Destroy contaminated leather items such as belts and shoes and other items that cannot be decontaminated. Get medical attention immediately.

Inhalation

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Ingestion

If swallowed, do NOT induce vomiting. Never give anything by mouth to an unconscious person. Aspiration hazard if swallowed- can enter lungs and cause damage. Get medical attention immediately.

5. Fire-fighting measures

Flammability of the product

Flammable.

Auto-ignition temperature

240 °C (464 °F) (Estimated. Based on n-Hexane)

Flash point

-18 °C (0 °F)

Explosion limits

Lower: 1.1 %
Upper: 5.9 %
(Estimated. Based on Crude oil)

Products of combustion

These products are carbon oxides (CO, CO₂) (carbon monoxide, carbon dioxide) and nitrogen oxides (NO, NO₂ etc.)

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Unusual fire/explosion hazards

Extremely flammable. Vapor may cause flash fire. Vapors may accumulate in low or confined areas, travel considerable distance to source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

Highly explosive in the presence of the following materials or conditions: heat, open flames, sparks and static discharge. Eliminate all ignition sources. Hot containers may explode.

Fire-fighting media and instructions

If involved in fire, shut off flow immediately if it can be done without risk. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. First move people out of line-of-sight of the scene and away from windows. Keep personnel removed and upwind of fire. Withdraw from fire and let it burn.

In case of fire, use water fog, foam, dry chemicals, or carbon dioxide. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment. This may include self-contained breathing apparatus to protect against the hazardous effects of combustion products and oxygen deficiencies. Cool tanks and containers exposed to fire with water. If firefighters cannot work upwind to the fire, respiratory protective equipment must be worn unless and until atmospheric monitoring indicates that such protection is not required. Improper use of water and extinguishing media containing water may cause frothing which can spread the fire over a larger area. Water fog or spray are of value for cooling tank shells and surfaces exposed to fire, but may not achieve extinguishment. Liquid will float and may reignite on surface of water. Use water spray to cool and disperse vapors and protect personnel. If this is impossible, withdraw from area and let fire burn.

Protective clothing (fire)

Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear. Be sure to use a MSHA/NIOSH approved respirator or equivalent.

6. Accidental release measures**Personal precautions**

Immediately contact emergency personnel. Eliminate all ignition sources. Stop leak if without risk. Keep unnecessary personnel away. Move upwind and away from spill. Use suitable protective equipment (See Section: "Exposure controls/personal protection"). Follow all fire fighting procedures (See Section: "Fire-fighting measures"). Do not touch or walk through spilled material. Liquid leaks generate large volumes of extremely flammable gas.

Environmental precautions and clean-up methods

If emergency personnel are unavailable, contain spilled material. Stop leak if without risk. For small spills add absorbent (soil may be used in the absence of other suitable materials) scoop up material and place in a sealed, liquid-proof container for disposal. For large spills dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal. Avoid contact of spilled material with soil and prevent runoff entering surface waterways. Exclude sources of ignition and ventilate the area. See Section 13 for Waste Disposal Information.

Personal protection in case of a large spill

Chemical splash goggles. Chemical resistant protective suit. Chemical resistant boots. Chemical resistant gloves (nitrile or viton). Wear MSHA/NIOSH approved self-contained breathing apparatus or equivalent and full protective gear. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

7. Handling and storage**Handling**

Aspiration hazard if swallowed- can enter lungs and cause damage. Do not ingest. If ingested do not induce vomiting. Do not get in eyes, on skin or on clothing. Wash thoroughly after handling. Do not breathe vapor or mist. Use only with adequate ventilation. Keep away from heat, sparks and flame. Exercise caution when opening to allow pressure release. Use appropriate respiratory protection if there is the potential to exceed the exposure limit(s). To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Electrical equipment should not be used unless it is intrinsically safe (i.e. will not produce sparks).

Storage

Store in a segregated and approved area. Keep container tightly closed and sealed until ready for use. Empty containers may contain harmful, flammable/combustible or explosive residue or vapors. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Do not smoke.

Do not enter storage areas and confined spaces unless adequately ventilated. Use appropriate respiratory protection if there is the potential to exceed the exposure limit(s).

Light hydrocarbon vapors can build up in the headspace of tanks. These can cause

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flammability/explosion hazards even at temperatures below the normal flash point (note: flash point must not be regarded as a reliable indicator of the potential flammability of vapor in tank headspaces). Tank headspaces should always be regarded as potentially flammable and care should be taken to avoid static electrical discharge and all ignition sources during filling, ullaging and sampling from storage tanks. When the product is pumped (e.g. during filling, discharge or ullaging) and when sampling, there is a risk of static discharge. Ensure equipment used is properly earthed or bonded to the tank structure.

This material may also contain benzene vapor, a known human carcinogen. Vapors containing benzene may accumulate in the headspace of storage tanks and during storage or transport. Where there is potential for exposure to benzene vapor in excess of the short-term or 8-hr permissible exposure limits, a NIOSH-approved respirator should be worn.

8. Exposure controls/personal protection

Occupational exposure limits

Ingredient name

Occupational exposure limits

Crude oil

ACGIH TLV (United States, 2005).

STEL: 10 mg/m³ 15 minute(s). Form: OIL MIST, MINERAL (Recommended)
 TWA: 5 mg/m³ 8 hour(s). Form: OIL MIST, MINERAL (Recommended)
 TWA: 100 ppm 8 hour(s). Form: Stoddard Solvent (Recommended)
 TWA: 525 mg/m³ 8 hour(s). Form: Stoddard Solvent (Recommended)

OSHA PEL (United States, 1971).

TWA: 5 mg/m³ 8 hour(s). Form: OIL MIST, MINERAL (Recommended)
 TWA: 2900 mg/m³ 8 hour(s). Form: Stoddard Solvent (Recommended)
 TWA: 500 mg/m³ 8 hour(s). Form: Stoddard Solvent (Recommended)

Contains:
 n-Hexane

ACGIH TLV (United States, 1/2007). Skin

TWA: 50 ppm 8 hour(s).

OSHA PEL (United States, 11/2006).

TWA: 1800 mg/m³ 8 hour(s).
 TWA: 500 ppm 8 hour(s).

Toluene

ACGIH TLV (United States, 1/2007).

TWA: 20 ppm 8 hour(s).

OSHA PEL Z2 (United States, 11/2006).

AMP: 500 ppm 10 minute(s).
 CEIL: 300 ppm
 TWA: 200 ppm 8 hour(s).

xylene

ACGIH TLV (United States, 1/2007).

STEL: 651 mg/m³ 15 minute(s).
 STEL: 150 ppm 15 minute(s).
 TWA: 434 mg/m³ 8 hour(s).
 TWA: 100 ppm 8 hour(s).

OSHA PEL (United States, 11/2006).

TWA: 435 mg/m³ 8 hour(s).
 TWA: 100 ppm 8 hour(s).

Benzene

ACGIH TLV (United States, 1/2007). Skin

STEL: 8 mg/m³ 15 minute(s).
 STEL: 2.5 ppm 15 minute(s).
 TWA: 1.6 mg/m³ 8 hour(s).
 TWA: 0.5 ppm 8 hour(s).

OSHA PEL (United States, 11/2006).

STEL: 5 ppm 15 minute(s).
 TWA: 1 ppm 8 hour(s).

OSHA PEL Z2 (United States, 11/2006).

AMP: 50 ppm 10 minute(s).
 CEIL: 25 ppm
 TWA: 10 ppm 8 hour(s).

Naphthalene

ACGIH TLV (United States, 1/2007).

STEL: 79 mg/m³ 15 minute(s).
 STEL: 15 ppm 15 minute(s).

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TWA: 52 mg/m³ 8 hour(s).

TWA: 10 ppm 8 hour(s).

OSHA PEL (United States, 11/2006).TWA: 50 mg/m³ 8 hour(s).

TWA: 10 ppm 8 hour(s).

Ethylbenzene

ACGIH TLV (United States, 1/2007).

STEL: 125 ppm 15 minute(s).

TWA: 100 ppm 8 hour(s).

OSHA PEL (United States, 11/2006).TWA: 435 mg/m³ 8 hour(s).

TWA: 100 ppm 8 hour(s).

Hydrogen Sulfide

ACGIH TLV (United States, 1/2007).STEL: 21 mg/m³ 15 minute(s).

STEL: 15 ppm 15 minute(s).

TWA: 14 mg/m³ 8 hour(s).

TWA: 10 ppm 8 hour(s).

OSHA PEL Z2 (United States, 11/2006).

AMP: 50 ppm 10 minute(s).

CEIL: 20 ppm

Some states may enforce more stringent exposure limits.

Control Measures

Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits. In accordance with good industrial hygiene and safety work practices, airborne exposures should be controlled to the lowest extent practicable. Use explosion-proof ventilation equipment. Keep away from sources of ignition.

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Personal protection**Eyes**

Avoid contact with eyes. Use goggles, face shield, or other full-face protection if potential exists for direct exposure to aerosols or splashes (chemical splash goggles).

Skin and body

Wear appropriate protective clothing to prevent skin contact. Remove contaminated clothing, including shoes, and thoroughly clean and dry before reuse. Thoroughly decontaminate clothing and discard contaminated leather goods and other items which cannot be decontaminated.

Respiratory

Do not breathe vapor or mist. A respirator is not needed under normal and intended conditions of product use. If operating conditions cause high vapor concentrations or TLV is exceeded, use NIOSH certified supplied-air respirator.

Hands

Avoid contact with skin. Wear chemical resistant gloves.
Recommended: Nitrile gloves or Viton Gloves.

The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

Consult your supervisor or S.O.P. for special handling directions

Consult local authorities for acceptable exposure limits.

9. Physical and chemical properties

Physical state	Liquid.
Odor	Petroleum Hydrocarbon, Rotten eggs. [Slight]
Color	Brown to Black.
Heat of combustion	Not available.
Boiling point / Range	-17.778 to 537.78°C (-0.0004 to 1000°F)
Melting point / Range	-60 to -20°C (-76 to -4°F)
Specific gravity	0.74 to 1.03 (Water = 1)

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Vapor pressure	>0.359 kPa (>2.7 mm Hg) at 20°C (68 °F)
Vapor Density (Air = 1)	>1
Solubility	Insoluble in cold water.
Viscosity	SUS: 31 to 9000 SUS at 20°C (68 °F)

10. Stability and reactivity

Stability and reactivity	Stable under recommended storage and handling conditions (See Section: "Handling and storage"). Extremely flammable liquid and vapor. Vapor may cause flash fire.
Conditions to avoid	Avoid all possible sources of ignition (spark or flame). Avoid excessive heat.
Incompatibility with various substances	Reactive or incompatible with the following materials: oxidizing materials.
Hazardous decomposition products	These products are carbon oxides (CO, CO ₂) (carbon monoxide, carbon dioxide) and nitrogen oxides (NO, NO ₂ etc.)
Hazardous polymerization	Will not occur.

11. Toxicological information

Acute toxicity Aspiration of this product into the lungs can cause chemical pneumonia and can be fatal. Aspiration into the lungs can occur while vomiting after ingestion of this product. Do not siphon by mouth.

Chronic toxicity

Carcinogenic effects

CANCER HAZARD
CONTAINS MATERIAL WHICH CAN CAUSE CANCER
Risk of cancer depends on duration and level of exposure.
Classified A1 (Confirmed for human.) by ACGIH: [Benzene]
Classified 1 (Proven for human.) by IARC: [Benzene]
Classified 2B (Possible for human.) by IARC: [Naphthalene; Ethylbenzene]
Classified 1 (Known To Be Human Carcinogens.) by NTP: [Benzene]
Classified 2 (Reasonably Anticipated To Be Human Carcinogens.) by NTP: [Naphthalene]
Classified + (Proven) by OSHA: [Benzene]

Other information

Benzene: Acute toxicity of benzene results primarily from depression of the central nervous system (CNS). Inhalation of concentrations over 50 ppm can produce headache, lassitude, weariness, dizziness, drowsiness, or excitation. Exposure to very high levels can result in unconsciousness and death.

Benzene: Long-term overexposure to benzene has been associated with certain types of leukemia in humans. In addition, the International Agency for Research on Cancer (IARC), the National Toxicology Program, and OSHA consider benzene to be a human carcinogen. Chronic exposures to high levels of benzene have been reported to cause adverse blood effects including anemia. Benzene exposure can occur by inhalation and absorption through the skin. Inhalation and forced feeding studies of benzene in laboratory animals have produced a carcinogenic response in a variety of organs, including possibly leukemia, other adverse effects on the blood, chromosomal changes and some effects on the immune system. Exposure to benzene at levels up to 300 ppm did not produce birth defects in animal studies; however, exposure to higher dosage levels resulted in a reduction of body weight of the rat pups (fetotoxicity). Changes in the testes have been observed in mice exposed to benzene at 300 ppm, but reproductive performance was not altered in rats exposed to benzene at the same level. Aspiration of this material into the lungs can cause chemical pneumonia and can be fatal. Aspiration into the lungs can occur while vomiting after ingestion of this material.

Benzene vapor may accumulate in the headspace of storage tanks and bulk transport compartments containing this material.

Toluene: Aspiration of this material into the lungs can cause chemical pneumonia and can be fatal. Aspiration into the lungs can occur while vomiting after ingestion of this material. Deliberate inhalation of high concentrations of toluene has been linked to damage of the brain, liver and kidney. Inhalation of very high concentrations of toluene, such as in cases of solvent abuse, has resulted in sudden death which may be a result of cardiac arrhythmia or central nervous system depression. Mental and/or growth retardation has been reported in children of women who

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deliberately inhale toluene during pregnancy (usually at thousands of ppm). Fetal developmental toxicity was observed when pregnant rats were exposed to toluene at levels of 1500 ppm. Maternal toxicity was also observed at this concentration. Prolonged, high level exposure to toluene in laboratory animals has resulted in hearing loss. Exposure studies in rats have resulted in adverse effects on the kidney, liver and central nervous system. Studies in occupationally exposed individuals indicate that toluene exposure has been associated with impaired color vision and decreased performance in some neurobehavioral tests. There are occupational studies which report an association between inhalation exposure to toluene and adverse effects on reproduction including spontaneous abortion. The methodology of these studies and the reliability of the results have been questioned. In a two-generation study in rats, inhalation of toluene at levels up to 2000 ppm did not produce adverse effects on fertility or reproductive performance.

Studies in occupationally exposed individuals indicate that toluene exposure has been associated with impaired color vision and decreased performance in some neurobehavioral tests.

Xylenes: Xylene has been reported to cause central nervous system effects at concentrations above the recommended exposure limit. Xylene vapor becomes irritating at relatively high levels. In one study, eye irritation was reported at exposures of 460 ppm and in one person at 230 ppm after 15 minutes. In another study, no one reported eyes, nose and throat irritation at mixed xylene exposures up to 230 ppm for 30 minutes. Dermal LD50 is expected to be greater than 10g/kg in rabbits, based on test results from similar materials.

Mixed xylenes caused slight hearing loss in rats exposed to 800 ppm in the air for 14 hours/day for six weeks. There is no information available for lower concentrations; however, similar chemicals that have caused these hearing effects at similar concentrations have not caused effects at lower concentrations.

Pregnant animals exposed to xylene or its isomers have been reported to cause development toxicity in rodents when exposed by inhalation. The developmental effects observed consisted of delayed development and minor skeletal variations, but no malformations. Because of the high exposure levels used in these studies, we do not believe that these results imply an increased risk of reproductive toxicity to workers exposed to xylene levels at or below the exposure limits.

Xylene and its isomers are not genotoxic.

Technical grade xylene has been tested in a National Toxicology Program carcinogenicity study in rats and mice dosed orally for two years. There was no evidence of carcinogenicity.

Ethylbenzene: The National Toxicology Program (NTP) conducted a 13-week inhalation study with male and female rats and mice at exposure concentrations ranging from 100 to 1000 ppm ethylbenzene. No rats or mice died during the study. Kidney, liver, and lung weights were increased in the exposed rats, while weight increases were observed only in the livers of exposed mice. Treatment-related histopathologic changes were not observed in any tissues of rats and mice.

NTP also exposed male and female rats and mice by inhalation to 0, 75, 250, or 750 ppm ethylbenzene for 2 years. There was a statistically significant increase in the number of kidney tumors in male and female rats at 750 ppm. There were also increased incidences of lung tumors in male mice and liver tumors in female mice that were statistically significant at 750 ppm. Except for the male rat kidney tumors, the incidence of the tumors were within the range observed for non-exposed animals from other studies conducted by NTP. The significance of these findings to humans is unknown. Ethylbenzene produced mixed results in in vitro genotoxicity studies, which were not confirmed when tested in vivo. The International Agency for Research on Cancer (IARC) has evaluated ethylbenzene and found it to be possibly carcinogenic to humans (Group 2B).

Ethylbenzene is not genotoxic.

This product contains n-hexane. Overexposure to n-hexane may cause progressive and potentially irreversible damage to the peripheral nervous system, particularly in the arms and legs. Animal studies have also shown that n-hexane overexposure may cause testicular injury. However, animal studies conducted with commercial hexane, containing 53% n-hexane, showed neither peripheral nervous system damage nor testicular injury at inhalation exposures up to 9000 ppm.

Naphthalene has been reported to cause developmental toxicity in mice after oral exposure to relatively high dose levels, but developmental toxicity was not observed in NTP (National Toxicology Program) sponsored studies in rats and rabbits. Ingestion or inhalation of naphthalene can result in hemolysis and other blood abnormalities, and individuals (and infants) deficient in

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glucose-6-phosphate dehydrogenase may be especially susceptible to these effects. Inhalation of naphthalene may cause headache and nausea. Airborne exposure can result in eye irritation. Naphthalene exposure has been associated with cataracts in animals and humans.

12. Ecological information

Ecotoxicity

No testing has been performed by the manufacturer.

13. Disposal considerations

Waste information

Avoid contact of spilled material and runoff with soil and surface waterways. Consult an environmental professional to determine if local, regional or national regulations would classify spilled or contaminated materials as hazardous waste. Use only approved transporters, recyclers, treatment, storage or disposal facilities. Dispose of in accordance with local, state and federal regulations.

Consult your local or regional authorities.

14. Transport information

International transport regulations

Regulatory information	UN number	Proper shipping name	Class	Packing group	Label	Additional information
DOT Classification	UN1267	PETROLEUM CRUDE OIL	3	I		Reportable quantity 10 lbs. (4.536 kg)
TDG Classification	UN1267	PETROLEUM CRUDE OIL	3	I		Not determined.
IMDG Classification	UN1267	PETROLEUM CRUDE OIL	3	I		Emergency schedules (EmS) 3-07
IATA/ICAO Classification	UN1267	PETROLEUM CRUDE OIL	3	I		Not determined.

15. Regulatory information

U.S. Federal regulations

United States inventory (TSCA 8b): All components are listed or exempted.

TSCA 12(b) one-time export notification: Naphthalene

TSCA 12(b) annual export notification: n-Hexane

This product is not regulated under Section 302 of SARA and 40 CFR Part 355.

SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Petroleum Crude Oil: Fire hazard, Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard

SARA 313

Product name

CAS number

Concentration

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		Build 5.3.5	(ENGLISH)	

Form R - Reporting requirements

n-Hexane	110-54-3	0 - 6
Toluene	108-88-3	0 - 5
xylene	1330-20-7	0 - 5
Benzene	71-43-2	0.1 - 1.8
Naphthalene	91-20-3	0 - 1
Ethylbenzene	100-41-4	0 - 0.4

Supplier notification

n-Hexane	110-54-3	0 - 6
Toluene	108-88-3	0 - 5
xylene	1330-20-7	0 - 5
Benzene	71-43-2	0.1 - 1.8
Naphthalene	91-20-3	0 - 1
Ethylbenzene	100-41-4	0 - 0.4

This product is specifically excluded from being a "Hazardous Substance" per CERCLA, Section 101(14)

State regulations**Massachusetts Substances**

Massachusetts RTK: The following components are listed: PETROLEUM CRUDE; HEXANE; TOLUENE; XYLENE; BENZENE;NAPHTHALENE

New Jersey Hazardous Substances

New Jersey Hazardous Substances: The following components are listed: PETROLEUM DISTILLATES; n-HEXANE; TOLUENE; XYLENES; BENZENE; NAPHTHALENE;ETHYL BENZENE

Pennsylvania RTK Hazardous Substances

Pennsylvania RTK: The following components are listed: PETROLEUM; HEXANE; BENZENE, METHYL-; BENZENE, DIMETHYL-; BENZENE; NAPHTHALENE;BENZENE, ETHYL-

WARNING: This product contains a chemical known to the State of California to cause cancer. Naphthalene; Ethylbenzene

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. Toluene

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm. Benzene

Inventories

Canada inventory: All components are listed or exempted.

Europe inventory: All components are listed or exempted.

Australia inventory (AICS): All components are listed or exempted.

China inventory (IECSC): All components are listed or exempted.

Japan inventory (ENCS): Not determined.

Korea inventory (KECI): All components are listed or exempted.

Philippines inventory (PICCS): All components are listed or exempted.

16. Other information**Label requirements**

Danger!

Extremely flammable liquid and vapor.

Vapor may cause fire.

Keep away from heat, sparks and flame. Avoid all possible sources of ignition (spark or flame).

Avoid contact with eyes, skin and clothing.

Causes eye irritation.

Causes skin irritation.

Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness, and nausea, and may lead to unconsciousness or death.

Harmful or fatal if liquid is aspirated into lungs.

Can cause blood disorders

Risk of cancer depends on duration and level of exposure.

Danger! Contains Benzene. Cancer hazard.

Harmful if absorbed through the skin.

Product name Petroleum Crude Oil - Sweet

Product code 0000002895

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(ENGLISH)

Contains n-hexane which may cause peripheral nerve damage.

Target Organ(s): Respiratory System, Central Nervous System, Peripheral Nervous System, Cardiovascular System, Blood, Liver, Kidney

HMIS® Rating :

Health * **2**
Flammability **3**
Physical Hazard **0**
Personal protection **X**

National Fire Protection Association (U.S.A.)



History

Date of issue 08/31/2007.
Date of previous issue No Previous Validation.
Prepared by Product Stewardship

Notice to reader

NOTICE : This Material Safety Data Sheet is based upon data considered to be accurate at the time of its preparation. Despite our efforts, it may not be up to date or applicable to the circumstances of any particular case. We are not responsible for any damage or injury resulting from abnormal use, from any failure to follow appropriate practices or from hazards inherent in the nature of the product.

Product name Petroleum Crude Oil - Sweet

Product code 0000002895

Page: 10/10

Version 1

Date of issue 08/31/2007.

Format US-COMP

Language ENGLISH.

Build 5.3.5

(ENGLISH)

CERTIFICATE OF QUALIFIED INDIVIDUAL AND ALTERNATE QUALIFIED INDIVIDUAL

Genesis Energy, LLC, hereby certifies to the USCG, PHMSA, US EPA, and State entities, that the individuals identified as Qualified Individual and Alternate Qualified Individual in this plan have the full authority in accordance with 33 CFR 154.1026 and this plan to:

- 1. Activate and engage in contracting with oil spill removal organizations (OSRO).
2. Act as a liaison with the pre-designated Federal On-Scene Coordinator (FOSC) and the State On-Scene Coordinator (SOSC).
3. Obligate funds to carry out spill response activities.

Antelope Refining, L.L.C.
Genesis Energy, L.L.C.
Genesis Pipeline Alabama, L.L.C.
Genesis C02 Pipeline, L.P.
Genesis Crude Oil, L.P.
Genesis Free State Pipeline, L.L.C
Genesis Natural Gas Pipeline L.P.
Genesis Pipeline Texas, L.P.
Genesis Pipeline USA, L.P.
TDC, L.L.C.
Thunder Basin Pipeline, L.L.C.

Date: 10/24/12

Jeff Gifford, Vice President HSSE

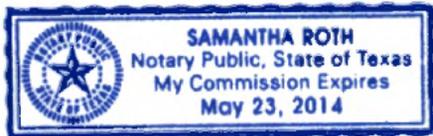
STATE OF TEXAS

COUNTY OF HARRIS

This certification of Qualified Individual and Alternate Qualified Individual was acknowledged before me on 10/24/2012, 2012, by Jeff Gifford, Vice President, Health, Safety, Security and Environmental for Genesis Energy, LLC on behalf of said company.

SEAL

Samantha Roth



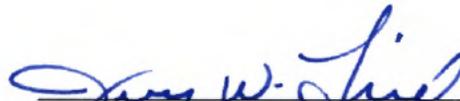
My Commission expires: May 23, 2014

**CERTIFICATE OF RESPONSE
PREPAREDNESS**

Genesis Energy, LLC, hereby certifies to the USCG, PHMSA, US EPA, and State entities, that it has identified, and ensured by contract, or by other means approved, the availability of private personnel and equipment to respond, to the maximum extent practicable, to a worst case discharge (WCD) or a substantial threat of such discharge.

Antelope Refining, L.L.C.
Genesis Energy, L.L.C.
Genesis Pipeline Alabama, L.L.C.
Genesis C02 Pipeline, L.P.
Genesis Crude Oil, L.P.
Genesis Free State Pipeline, L.L.C
Genesis Natural Gas Pipeline L.P.
Genesis Pipeline Texas, L.P.
Genesis Pipeline USA, L.P.
TDC, L.L.C.
Thunder Basin Pipeline, L.L.C.

Date: 10/24/12



Jeff Gifford, Vice President-HSSE

STATE OF TEXAS

COUNTY OF HARRIS

This certification of Qualified Individual and Alternate Qualified Individual was acknowledged before me on 10/24/2012 2012, by Jeff Gifford, Vice President, Health, Safety, Security and Environmental for Genesis Energy, LLC on behalf of said company.

SEAL





My Commission expires: May 23, 2014

SPCC Plan Containment Calculation

Location: Port Hudson
 Date: 8/9/2012
 Engineer: Kathryn Anderson

Containment Area	
Height	H 6.83 (ft)
Length	L 400.00 (ft)
Width	W 270.00 (ft)
Area Adjustment	A 85,065.00 (ft ²)

	Tank		Foundation			
	Diameter (ft)	Area (ft ²)	Diameter (ft)	Area (ft ²)	Height (ft)	Volume (BBL)
Largest Tank	Tank 1 175.00	24,052.82	Tank 2 176.16	24,372.75	1.00	
	Tank 2					
	Tank 3					

Gross Containment Volume	G	1,318,633.95 (ft ³)
Deductions	D	24,372.75 (ft ³)
Containment Volume	C	
Required Volume	R	

Criteria: C > R Adequate

(b) (7)(F)

(b) (7)(E)

(b) (7)(E)

Figure 2.1-5 - Containment Calculation

Port Hudson Truck Unload

Description of Site

The Port Hudson truck station has a (b) (7)(F) tank located inside a rectangular dike wall area. A (b) (7)(F) tank is to be added inside this containment.

WALL DIMENSIONS

H - Wall Height (Low Point) 5.50 ft
 L - Contain. Area Length (Toe) 118.00 ft
 W - Contain. Area Width (Toe) 118.00 ft

Non-rectangular Containment Adjustments

A - Area adjustments 0.00 ft²
 P - Perimeter adjustments 0.00 ft

TANK DATA	Tank Diameter (ft)	Tank Area (ft ²)	Tank Volume (BBL)	Foundation Diameter (ft)	Foundation Height (ft)	Foundation Volume (ft ³)
Tank 1 (Largest Tank)	24.00	452.39	(b) (7)(F)	0.00	0.00	0.00
Tank 2	12.00	113.10		0.00	0.00	0.00
Tank 3	0.00	0.00		0.00	0.00	0.00
Tank 4	0.00	0.00		0.00	0.00	0.00
Tank 5	0.00	0.00		0.00	0.00	0.00
Tank 6	0.00	0.00		0.00	0.00	0.00
Tank 7	0.00	0.00		0.00	0.00	0.00

G - Gross Containment Volume = H*(L x W + A) = 76,582.00 ft³

D - Total Deductions = T + F = 2,013.54 ft³

T - Tank Volume Deduction (all except largest tank) = 622.04 ft³

F - Foundation Volume Deduction (all foundations) = 0.00 ft³

R - Ramp Deduction (46' x 11' x H)/2 = 1,391.50 ft³

C - Containment Volume (ft) = G - D = (b) (7)(F) ft³

C - Containment Volume (BBL) = (G-D)*(0.178bb/ft³) = (b) (7)(F) BBL

R - Required Contain. Volume = V * 110% = (b) (7)(F) BBL

CRITERIA: If C > R then containment is adequate, C (BBL) (b) (7)(F) > R (BBL) (b) (7)(F)

Therefore, containment is adequate



MASTER SERVICE AGREEMENT

THIS MASTER SERVICE AGREEMENT (the "Agreement") made September 10, 2010 between Clean Harbors Environmental Services, Inc. called ("CONTRACTOR") and Genesis Crude Oil, L.P., Genesis Pipeline Texas, L.P, Genesis Pipeline USA, L.P., Genesis CO2 Pipeline, L.P., Genesis Natural Gas Pipeline, L.P., Genesis Free State Pipeline, LLC, Genesis Pipeline Alabama, LLC, Davison Transportation Services, Inc., Davison Petroleum Supply, LLC, Red River Terminals, L.L.C. and TDC, L.L.C. by and through the general partner, GENESIS ENERGY, LLC., hereinafter collectively called ("GENESIS"), covers all services and work ("Services") to be performed by CONTRACTOR for or on behalf of GENESIS.

1. **Contract Document.** This Agreement shall control and govern all Services to be provided by CONTRACTOR (except Emergency Response Services unless appropriate rider is attached) and shall define the rights and obligations of GENESIS and CONTRACTOR with regard to the matters covered hereby, to the exclusion of verbal or written work orders, purchase orders, bids or any other writings not specifically referring to this agreement and signed by each of the parties. This Agreement supersedes any agreement concerning work or services previously entered into between GENESIS and CONTRACTOR.
2. **Time and Manner.** GENESIS may from time to time by written notice request CONTRACTOR to perform Services. CONTRACTOR shall promptly advise GENESIS whether or not it is willing to perform the requested Services. If CONTRACTOR agrees to perform such Services, it shall notify GENESIS in writing and promptly commence after the same is ordered and shall render such services with due diligence until completion in a good and workmanlike manner in accordance with standard industry practice and to GENESIS's satisfaction. Any variances or exceptions to the scope of work specified shall be identified in writing by CONTRACTOR.
3. **Items Supplies; Liens.** Except as otherwise notified by GENESIS, CONTRACTOR shall furnish all labor, services, equipment, appliances, tools, facilities, supervision, and materials necessary for the complete performance of the Services to be performed hereunder.
4. **Contract Price; Billing.** GENESIS shall pay CONTRACTOR for the Services in accordance with schedules of rates and prices or lump sum amount as specified in Exhibits hereto or as otherwise agreed upon between GENESIS and CONTRACTOR, such agreement referencing this Agreement. Prices or rates shall not be increased without prior written approval from GENESIS. GENESIS shall pay CONTRACTOR for completed services within 30 days of receipt of the invoice The payment terms set forth herein are contingent upon the approval of Contractor's Credit Department. In the event of a change in Genesis' financial condition, Contractor reserves the right to alter, change, or modify payment terms,



and to immediately stop work. The failure of Contractor to exercise its rights under this article at any time shall not constitute a waiver of Contractor's continuing right to do so.

5. WASTE

During the term of this Agreement, Genesis may, from time to time, provide to Contractor certain waste materials. Waste materials to be handled pursuant to this Agreement shall be agreed upon in advance in writing by Contractor and Genesis. At the time Genesis requests the Services of Contractor, Genesis shall provide a Waste Profile Sheet or similar document ("Waste Profile") to Contractor completely and accurately describing the waste materials and its (their) characteristics. Upon approval by Contractor, the Waste Profile shall be incorporated into and become a part of this Agreement.

6. Transfer of Waste and Title

Title, risk of loss and all other incidents of ownership to the waste materials shall be transferred from Genesis to Contractor at the time Contractor takes possession of and removes waste materials from the place of transfer, or at the time Contractor accepts delivery of the waste materials at its TSD facility, whichever is applicable.

Waste materials which are discovered to be non-conforming may be rejected by Contractor. Title, risk of loss and all other incidents of ownership to non-conforming wastes shall remain at all times with Genesis. Waste materials shall be considered non-conforming for purposes of this Agreement if: (1) the waste materials are not properly packaged or labeled; or (2) the waste materials contain constituents or have characteristics or properties not disclosed on the Waste Profile, and such constituents, characteristics or properties increase the cost to Contractor or increase the risk of hazard to human health or the environment from the handling, transportation, storage or disposal of such materials; or (3) the designated disposal facility is not designed or permitted to dispose of waste materials with such undisclosed constituents, characteristics or properties.

Waste materials discovered by Contractor to be non-conforming, if in Contractor, possession, shall be prepared for lawful transportation by Contractor and returned to Genesis within a reasonable time after rejection by Contractor, unless the parties agree to an alternative and lawful manner to dispose of the waste materials. Genesis shall pay Contractor at agreed rates for the handling, loading, preparing, transporting, storing and caring for and, if applicable, disposing of such non-conforming waste materials.



7. Subsurface/Latent Condition

If Contractor encounters (a) subsurface or latent physical conditions at the site which differ materially from those indicated by a reasonably diligent inspection or (b) unknown physical conditions at the site, of an unusual nature, which differ materially from those ordinarily encountered and generally recognized as inherent in work of the character as provided for in this Agreement and/or applicable purchase or work order and/or Scope of Work, equitable adjustment to the price and/or schedule shall be mutually agreed to by the parties before Contractor shall proceed with the work.

8. **Inspection.** GENESIS and its representatives shall have the right to witness all Services being performed hereunder.
9. **Examination of Premises, etc.** Prior to the commencement of Services, CONTRACTOR will make sufficient examination and tests of the premises and facilities at which the Services are to be undertaken to determine the difficulties and hazards incident to rendering Services and to satisfy itself as to the procedures to be followed, the adequacy of available safety equipment and other requirements necessary or appropriate to the performance of the Services.
10. **Compliance with Laws.** CONTRACTOR will obtain all necessary permits and licenses and will comply with applicable government laws, rules, regulations, executive orders, priorities, ordinances and restrictions now or hereafter in force (including, but not limited to Federal and State labor, health and safety and nondiscrimination laws, regulations and executive orders) in rendering Services. CONTRACTOR will furnish GENESIS any documentation required to evidence such compliance and will file with governmental agencies any reports required to be filed by CONTRACTOR. If CONTRACTOR is required to meet the requirements of Title 49, Part 195, Subpart G Qualification of Pipeline Personnel, 195.501 – 195.509 to perform certain services on Genesis regulated property, CONTRACTOR shall subscribe to and shall maintain current records on ISNetworld so long as CONTRACTOR is performing such services for GENESIS.
11. **Insurance.** During the performance of the Services hereunder, CONTRACTOR shall take out, carry and maintain, with an insurance company or companies approved by GENESIS, and in policies of insurance acceptable to GENESIS, the following insurance sufficient to address the liabilities that may be generated by the Services. All liability policies shall be on an occurrence basis with limits not less than those shown below:
 - (a) Workers Compensation and Occupational Disease Insurance. Workers Compensation and Occupational Disease Insurance, including coverage under the



Longshoremen and Harbor Workers' Compensation Act and the Jones Act (if applicable) and Employer's Liability Insurance with limits complying with the laws of the State in which such Services are to be rendered.

(b) Comprehensive General Liability Insurance. Comprehensive General Liability Insurance, including Premises, Operations, Explosion, Collapse and Underground Damage, and Contractual Liability (including this Agreement with Genesis) with policy limits not less than \$2,000,000 in the aggregate, and \$1,000,000 combined single limit personal injury each occurrence and \$1,000,000 property damage each occurrence.

(c) Automobile Liability Insurance. Automobile Liability Insurance, including Contractual Liability, covering all motor vehicles owned, hired or used while rendering Services with limits not less than \$1,000,000, combined single limit personal injury and property damage each occurrence.

(d) Excess Liability. Excess Liability Insurance with a limit of at least \$4,000,000 per occurrence, including but not limited to (i) Excess Employers Liability Insurance, (ii) Commercial General Liability Insurance and (iii) Automobile Liability Insurance.

CONTRACTOR shall ensure all insurance policies mentioned above shall contain a waiver of subrogation in favor of GENESIS. Before commencing Services, CONTRACTOR shall furnish GENESIS for its approval and retention, Certificates of Insurance naming "Genesis Crude Oil, L.P., Genesis Pipeline Texas, L.P, Genesis Pipeline USA, L.P., Genesis CO2 Pipeline, L.P., Genesis Natural Gas Pipeline, L.P., Genesis Free State Pipeline, LLC, Genesis Pipeline Alabama, LLC, Genesis Energy, LLC, Davison Transportation Services, Inc., Davison Petroleum Supply, LLC, Red River Terminals, L.L.C. and TDC, L.L.C.." (hereinafter the "GENESIS ENTITIES") as the certificate holder and additional named insured, further providing that in the event of any material changes in or cancellation of the insurance thirty days advance written notice shall be given to GENESIS.

12. **INDEMNITY. CONTRACTOR SHALL INDEMNIFY, DEFEND AND HOLD HARMLESS GENESIS AND ITS OFFICERS, EMPLOYEES, AGENTS OR REPRESENTATIVES AND ANY AFFILIATED OR RELATED COMPANIES, FROM AND AGAINST ANY AND ALL SUITS, ACTIONS, LEGAL OR ADMINISTRATIVE PROCEEDINGS, CLAIMS, DEMANDS, DAMAGES, LIABILITIES, INTEREST, ATTORNEY'S FEES, COSTS AND EXPENSES OF WHATSOEVER KIND OR NATURE ARISING OUT OF ANY BODILY INJURY (INCLUDING DEATH), PROPERTY DAMAGE, OR ECONOMIC DAMAGE, WHETHER ARISING BEFORE OR AFTER COMPLETION OF THE SERVICES HEREUNDER AND TO THE EXTENT SUCH ARE CAUSED BY**



REASON OF ANY INTENTIONAL MISCONDUCT OR NEGLIGENCE, WHETHER ACTIVE OR PASSIVE, OF CONTRACTOR OR OF ANYONE ACTING UNDER ITS DIRECTION, CONTROL, OR ON ITS BEHALF IN CONNECTION WITH OR INCIDENT TO THE SERVICES PERFORMED UNDER THIS AGREEMENT.

NOTWITHSTANDING ANY OF THE FOREGOING, CONTRACTOR SHALL NOT BE OBLIGATED HEREUNDER TO HOLD HARMLESS OR INDEMNIFY GENESIS FOR LOSS, COST OR EXPENSE OF INCIDENT OR ACCIDENT ARISING OUT OF THE WORK AND PROXIMATELY CAUSED BY THE NEGLIGENCE OF GENESIS OR ITS EMPLOYEES.

Nothing herein shall prohibit GENESIS from filing suit or obtaining a judgment against CONTRACTOR for such claim, loss, injury or damage if such is necessary in order to collect or receive payment under any such insurance carried by CONTRACTOR.

Neither party shall be liable to the other for incidental, consequential or special damages.

13. **Safety.** CONTRACTOR shall maintain adequate protection of persons and property during CONTRACTOR's performance hereunder. Where Services are rendered on GENESIS'S premises, all of GENESIS'S safety rules shall be strictly observed and smoking shall be limited to such locations and occasions as are specifically authorized by GENESIS. Contractor shall be solely responsible for the safety of the work and its employees. The possession and/or use of illegal or unauthorized drugs, intoxicating beverages, firearms or other weapons is prohibited on all GENESIS property. To insure the safety of persons and to prevent the loss of GENESIS property, GENESIS may, but is not required to, conduct security inspections or searches at random. GENESIS shall have the right to search the person, personal effects or vehicle of any person on GENESIS property to enforce compliance with this policy. Persons found to be in violation of this policy will be immediately removed and barred from GENESIS property. Illegal or unauthorized drugs, intoxicating beverages, firearms, or other weapons discovered as a result of any such inspection may be confiscated and turned over to law enforcement officers at GENESIS's discretion.
14. **Termination.** GENESIS may, at its absolute discretion, direct the Services to be halted at any time, but where CONTRACTOR is not in default hereunder, GENESIS shall pay CONTRACTOR for all work completed in accordance with the approved price schedule.
15. **Independent Contractor.** In the performance of all Services, CONTRACTOR is an independent contractor, with the sole right to supervise, manage, control and direct the performance of the details. GENESIS is interested only in the results to



be obtained, but the Services must meet with the approval of GENESIS, whose representatives shall be entitled to make such inspections of the Services and of CONTRACTOR's records relating thereto as may be necessary to assure such results and compliance with the provisions hereof.

16. **Non-Assignability and Encumbrances.** This Agreement or any rights or interests or amounts which may be due hereunder shall not be transferred, assigned, sublet, pledged or encumbered without the advance written approval of GENESIS to be withheld or denied in its sole discretion. Any subcontracting permitted hereby shall not relieve CONTRACTOR of primary responsibility for any Services performed thereunder or hereunder. Any assignments, pledges, encumbrances, factoring agreements, security interests or mortgages in violation hereof shall in all respects be and remain subject to any and all claims, defenses, set offs or rights or remedies of GENESIS
17. **Interpretation and Integration.** This Agreement, together with the Exhibits which are attached hereto and incorporated herein by this reference, constitutes the entire agreement among the parties pertaining to the subject matter hereof and supersedes all prior agreements, understandings, negotiations and discussions, whether oral or written, of the parties. No supplement, modification or waiver of this Agreement shall be binding unless executed in writing by the parties hereto. No waiver of any of the provisions of this Agreement shall be deemed or shall constitute a waiver of any other provision hereof (regardless of whether similar), nor shall any such waiver constitute a continuing waiver unless otherwise expressly provided.
18. **Governing Law.** The parties hereto agree that all of the provisions of this Agreement and any questions concerning its interpretation and enforcement shall be governed by the laws of the state in which the services or work are performed, without regard to its principles of conflicts of law.
19. **Force Majeure.** Neither party shall be considered in default in performance of its obligation under the Agreement if delayed by Force Majeure (as herein defined). Force Majeure as used herein shall mean hostilities, restraint of rulers or people, revolution, civil commotion, strike, epidemic, fire, flood, windstorm, explosion, embargo, or any law, proclamation, regulation, or ordinance of any Government, or any cause, whether of the same or different nature, existing or future, which is beyond the reasonable control of the parties hereto. It will be the sole responsibility of the party so affected by Force Majeure to take all reasonable steps necessary to eliminate the cause of any delay but not to the extent of assenting to unreasonable demands of any third party. Nothing herein contained shall alter or vary Genesis's right to terminate this Agreement as hereinabove provided.



20. **Headings.** Section headings or titles are included for ease of reference and do not constitute any part of the text or affect its meaning or interpretation.
21. **Severability.** If any provision herein is or becomes invalid or illegal in whole or in part, such provisions shall be deemed amended, as nearly as possible to be consistent with the intent expressed in this Master Service Agreement, and if such is impossible, that provision shall fall by itself without invalidating any of the remaining provisions not otherwise invalid or illegal.
22. **Confidential Information.** In the performance of the Services, CONTRACTOR may be exposed to confidential information of GENESIS and others. CONTRACTOR shall not disclose to anyone not employed by GENESIS nor use, except on behalf of GENESIS, any such confidential information acquired by it in the performance of the Services except as authorized by GENESIS in writing, and regardless of the term of this Agreement, CONTRACTOR shall be bound by this obligation until such time as said confidential information shall become part of the public domain. Information regarding all aspects of GENESIS'S (including its parent and its affiliates) business and information concerning the Services (either directly or indirectly disclosed to it or developed by it in the performance of the Services) shall be presumed to be confidential except to the extent that same shall have been published or otherwise made freely available to the general public without restriction. CONTRACTOR also agrees that it will not disclose to GENESIS any information it holds subject to an obligation of confidence to any third persons. INFORMATION shall not be afforded the protection of this Section, if such INFORMATION is:
- (a) In the possession of CONTRACTOR prior to its receipt hereunder, as evidenced by written documentation;
 - (b) Rightly obtained by CONTRACTOR without restriction from a third party; or
 - (c) Publicly available other than through the fault or negligence of CONTRACTOR.
23. **Conflict of Interest and Ethics.** CONTRACTOR, in performing its obligations under this Agreement, shall establish and maintain appropriate business standards, procedures and controls including those necessary to avoid any real or apparent impropriety or adverse impact on the interests of GENESIS or its affiliates.

Executed this ____ day of _____, 2010.

Genesis Crude Oil, L.P., Genesis Pipeline Texas, L.P., Genesis Pipeline USA, L.P., Genesis CO2 Pipeline, L.P., Genesis Natural Gas Pipeline, L.P., Genesis Free State



Pipeline, LLC, Genesis Pipeline Alabama, LLC, Davison Transportation Services, Inc., Davison Petroleum Supply, LLC, Red River Terminals, L.L.C. and TDC, L.L.C., by and through the general partner, GENESIS ENERGY, LLC.

By: *[Handwritten Signature]*

Title: *Director, HSE*

Clean Harbors Environmental Services, Inc.

By: *Willie C. Carr*

Title: *Senior Vice President*



EMERGENCY RESPONSE RIDER

Rider A

The parties hereto acknowledge that under State and Federal Law, CONTRACTOR ("Contractor") is accorded certain protections when it responds to spills and discharges of oil or other hazardous materials ("Responder Immunity"). In a response, rapid and decisive action is necessary to contain a spill. In almost all actions, responders must initiate a response with no prior notice based on very limited information. Without Responder Immunity, the enormous financial and liability exposures associated with emergency response would make the business of responding to spills impracticable. Accordingly, the parties execute this Rider with the intent of preserving Contractor's statutorily conferred protections to the greatest extent possible.

1. SCOPE OF EMERGENCY RESPONSE SERVICES

1.1 Upon execution of this Emergency Response Services Rider ("Rider"), Contractor agrees to provide Emergency Response Services ("Services") for Genesis's accidental discharges of oil or other hazardous substances. Services may include, but are not limited to the following: Containment, recovery, repackaging and removal of materials; Site evaluation, decontamination and restoration; Transportation, storage, treatment or disposal of wastes; Technical services, including sampling, laboratory analysis, and other related services; Standby of personnel and equipment in anticipation of imminent activation; and Training and mock spill drill deployments.

2. COMPENSATION

2.1 The payment terms set forth herein are contingent upon the approval of Contractor's Credit Department. In the event of a change in Genesis's financial condition, Contractor reserves the right to alter, change, or modify payment terms, and to immediately stop work. The failure of Contractor to exercise its rights under this article at any time shall not constitute a waiver of Contractor's continuing right to do so.

2.2 Genesis agrees to pay Contractor for Services in accordance with Contractor's Rate Schedule for emergency response work ("Rates") in effect at the time Services are rendered. Genesis hereby assigns to Contractor all rights to any insurance payments that Genesis may be entitled to receive to pay for the Services provided under this Agreement and hereby authorizes its insurance company or agent to pay Contractor directly. Genesis's obligation to pay amounts due pursuant to this Agreement shall not be conditioned upon or limited by the types, amounts or availability of insurance coverage.

2.3 Contractor will present its first invoice to Genesis as soon as possible following commencement of Services provided hereunder, and may issue subsequent invoices every five (5) days thereafter. Genesis agrees to pay the full amount of each invoice



amount within fifteen (15) business days of the date of receipt of said invoice by Genesis's Representative.

2.4 Genesis agrees that interest shall accrue and will be paid to Contractor on any unpaid balance of any invoice after fifteen (15) business days of receipt of invoice by Genesis at the rate of one and one half percent (1.5%) per month or the maximum amount allowed by law.

2.5 In the event that legal or other action is required to collect unpaid balances of invoices due Contractor, Genesis agrees to pay all costs of collection, litigation or settlement incurred by Contractor, including reasonable attorneys fees. "Legal or other action" as used above shall include bankruptcy and insolvency proceedings.

2.6 In the event that work is suspended or terminated for without cause prior to the completion of the Services, Genesis agrees to pay for labor, equipment, materials, disposal and other costs incurred by Contractor at the Rates and for reasonable demobilization costs.

2.7 Genesis agrees to pay Contractor in accordance with the Rates for any litigation support or testimony provided by Contractor in connection with, or arising out of, the work performed by Contractor hereunder, except to the extent that such arises out of an alleged breach by Contractor.

3. INDEMNIFICATION

3.1 CONTRACTOR shall indemnify, defend and hold harmless GENESIS, its parent and affiliated companies and their respective directors, officers, employees and agents from and against any and all costs, liabilities, claims, demands and causes of action including, without limitation, bodily injury to or death of any person or destruction of or damage to any property, except natural resource and other damages as provided in Section 3.3, which GENESIS may suffer, incur, or pay out, to the extent such are caused by the negligence or willful misconduct of CONTRACTOR, its agents or employees during the performance of the Agreement or CONTRACTOR'S failure to comply with any laws, regulations or lawful authority, or failure to comply with its obligations under this Agreement; except to the extent such liabilities, claims, demands and causes of action result from (i) GENESIS'S failure to comply with any laws, regulations or other lawful authority; (ii) GENESIS'S failure to comply with its obligations under the Agreement or (iii) the negligence or willful misconduct of GENESIS, its employees or agents.

3.2 GENESIS shall indemnify, defend and hold harmless CONTRACTOR, its parent and affiliated companies and their respective directors, officers, employees and agents from and against any and all costs, liabilities, claims, demands and causes of action including, without limitation, any bodily injury to or death of any person or destruction of or damage to property which CONTRACTOR may suffer, incur, or pay out, to the extent



such are caused by the negligence or willful misconduct of GENESIS, its employees or agents or the failure of GENESIS to comply with any laws, regulations or other lawful authority or the failure of GENESIS to comply with its duties or obligations under the Agreement; except to the extent such liabilities, claims, demands and causes of action result from (i) CONTRACTOR'S failure to comply with any laws, regulations or lawful authority; (ii) CONTRACTOR'S failure to comply with its obligations under the Agreement; or (iii) the negligence or willful misconduct of CONTRACTOR, its employees or agents.

3.3 Notwithstanding the foregoing, GENESIS shall indemnify, defend and hold harmless CONTRACTOR, its parent and affiliated companies and their respective directors, officers, employees, agents and subcontractors from and against any and all costs, liabilities, claims, demands and causes of action for pollution damages; contamination or adverse effects on the environment; destruction of, damage to, or loss of, whether actual or alleged, any property or natural resources, including the cost of assessing the damage; injury to or economic losses resulting from destruction of real or personal property; damages for loss of subsistence use of natural resources; damages equal to the loss of profits or impairment of earning capacity due to the injury, destruction or loss of real property, personal property or natural resources; damages for net costs of providing increased or additional public services; removal costs; and any other costs assessable under the Oil Pollution Act of 1990, the Comprehensive Environmental Response, Compensation and Liability Act or other local, state or Federal law or lawful authority applicable to discharges or releases of oil or hazardous substances which CONTRACTOR, individually or collectively, may suffer, incur, or pay out in connection with, or arising out of, the release of oil or hazardous substances by GENESIS, except to the extent that such damages, injuries, or costs were caused by the gross negligence or willful misconduct of CONTRACTOR.

THE FOREGOING INDEMNITY SHALL ONLY APPLY TO THOSE CLAIMS, LIABILITIES OR CAUSES OF ACTION ARISING, DURING, OR AS A RESULT OF, EMERGENCY RESPONSE ACTIVITIES. THE INDEMNITY CONTAINED IN THE AGREEMENT SHALL GOVERN THE RIGHTS AND OBLIGATIONS OF THE PARTIES WITH REGARD TO THE TRANSPORTATION OR DISPOSAL OF WASTE MATERIALS BY CONTRACTOR.

4. TERMINATION

4.1 Work Orders issued for performance of services under this Rider may be terminated by either party upon forty-eight (48) hours prior notice to the other party.

Except as specifically amended herein, all other terms and conditions contained in the AGREEMENT shall remain in full force and effect.

IN WITNESS WHEREOF, the parties have caused this RIDER to be executed by their duly authorized representatives as of the day and year first above written.



ENVIRONMENTAL SERVICES®

CLEAN HARBORS ENVIRONMENTAL SERVICES, INC.

By: William O'Connor

Its: Senior Vice President

Date: 9/16/2010

COMPANY:

By: [Signature]

Its: Director, HSE

Date: Sept 21, 2011

1.800. OIL.TANK (1.800.645.8265) – 24-HR NATIONWIDE EMERGENCY RESPONSE

BATON ROUGE, LA SERVICE CENTER	(b) (7)(F)	24-Hr. #	225.778.3612
13351 Scenic Highway		24-Hr. #	800.645.8265
Baton Rouge, LA 70807		Fax #	225.778.3510

Jeff McGraw, General Manager

EPA / Federal ID #: LAD 010 395
127

Personnel Authorized to release equipment / materials / manpower, etc:

Jeff McGraw

40-Hour OSHA Trained Personnel:

Supervisor	2	Mechanic	1
Foreman	1		
Equipment Operator	3		
Field Technician	4		
Site Safety Officer	0		

Equipment List							
Item Description / Manufacturer	Location	Capacity / Size / Key Features	# of Units	A	T	P	D
(1) Vessels & Marine Support Equipment							
Power Workboat, Hanko	Baton Rouge	26', 2x115 HP, LA 7757 FE, HK043591H001, V232	1	Y	Y	N	N
Workboat	Baton Rouge	16', Jon Boat, FMC58174M82D	1	Y	Y	N	N
(2) Motor Vehicles & Vacuum Equipment							
Vacuum Trailer	Baton Rouge	130 bbl - 3146	1	Y	Y	N	N
High Powered Vacuum Truck, Liquid Ring	Baton Rouge	70 bbl - 4173	1	Y	Y	N	N
High Powered Vacuum Truck/Cusco	Baton Rouge	70 bbl - 4149	1	Y	Y	N	N
Straight Roll-off/Bin Rail Truck	Baton Rouge	4274	1	Y	Y	N	N
Straight Vacuum Truck	Baton Rouge	70 bbl - 4172	1	Y	Y	N	N
Crew Cab/Pickup	Baton Rouge	F350/Equivalent - 8586,8864,8584,8804,8805,8580	6	Y	Y	N	N
Gooseneck Trailer	Baton Rouge	CH346, CH370, CH2358	3	Y	Y	N	N
Spill Trailer	Baton Rouge	34' Oil Spill White Response Trailer - CH352	1	Y	Y	N	N
Spill Trailer	Baton Rouge	34' Haz Mat Red Response Trailer - CH374	1	Y	Y	N	N
Utility Trailer	Baton Rouge	16' Utility Trailer - CH460, CH319	2	Y	Y	N	N
(3) Pumps and Pressure Equipment							
Pressure Washer	Baton Rouge	5000 psi Mounted on roll around cart	1	Y	Y	N	N
Double Diaphragm Pump	Baton Rouge	3" Aluminum	2	Y	Y	N	N
Hale/Trash Pump	Baton Rouge	2" gas power	2	Y	Y	N	N
Pressure Washer	Baton Rouge	3000 psi	1	Y	Y	N	N
Hoses	Baton Rouge	3", Tank Truck	300'	Y	Y	N	N
Hoses	Baton Rouge	2", Tank Truck	100'	Y	Y	N	N

1.800. OIL.TANK (1.800.645.8265) – 24-HR NATIONWIDE EMERGENCY RESPONSE

Equipment List Cont.				
Item Description / Manufacturer	Location	Capacity / Size / Key Features	# of Units	A T P D
(4) Oil Spill Containment Booms				
Oil Containment Boom	Baton Rouge	18", New Acme Boom on black trailer CH346	2500	Y Y N Y
Oil Containment Boom	Baton Rouge	18", New Acme Boom on black trailer CH370	2500	Y Y N Y
Oil Containment Boom	Baton Rouge	18", New Acme Boom on Van Storage Trailer 7199	700	Y Y N Y
Oil Containment Boom	Baton Rouge	18", New Acme Boom, On black trailer CH2358	2300	Y Y N Y
Oil Containment Boom	Baton Rouge	18", New Acme Boom on green trailer CH333	2500	Y Y N Y
Oil Containment Boom	Baton Rouge	18", New Acme Boom on green trailer CH334	2500	Y Y N Y
Oil Containment Boom	Baton Rouge	18", Mix, on white trailer CH352, Enclosed	1000	Y Y N Y
(5) Environmental Monitoring Equipment				
5-Gas Meter	Baton Rouge		2	Y Y N N
(6) Recovery Equipment				
Drum Skimmer, Crucial	Baton Rouge	Air, 1D18P48, 2", 50 GPM	1	Y Y N Y
Slurp Skimmer	Baton Rouge	Static, 2"	1	Y Y N Y
Disk Skimmer	Baton Rouge	with power pack	1	Y Y N N
(7) Beach or Earth Cleaning and Excavating Equipment				
(8) Generators / Compressors / Light Towers				
Generator	Baton Rouge	5,000 Watt	1	Y Y N N
Compressor	Baton Rouge	Rigid, GP90150A	1	Y Y N N
Air Hose	Baton Rouge	3/4" by 50' Air Hose	400'	Y Y N N
(9) Health and Safety Equipment				
Confined Space Entry Gear	Baton Rouge	Complete Set	1	Y Y N N
(10) Communications				
2-Way Radio/Nextel	Baton Rouge		7	Y Y N N
(11) Miscellaneous				

1.800. OIL.TANK (1.800.645.8265) – 24-HR NATIONWIDE EMERGENCY RESPONSE

SULPHUR, LA/LAKE CHARLES SERVICE CENTER		(b) (7)(F)	24-Hr. #	337.882.1025		
3201 Petro Drive			24-Hr. #	800.645.8265		
Sulphur, LA 70663			Fax #	337.882.1029		
Peri Bryan, General Manager		EPA / Federal ID #:	N/A			
Personnel Authorized to release equipment / materials / manpower, etc:						
Peri Bryan Brad Dickes Marty Bienvenu Brady Cormier						
40-Hour OSHA Trained Personnel:						
Supervisor	3					
Foreman	1					
Field Technician	2					
Class B Driver	1					
Class A Driver	2					
Equipment List						
Item Description / Manufacturer	Location	Capacity / Size / Key Features	# of Units	A	T	P
(1) Vessels & Marine Support Equipment						
Power Workboat, Custom Flat	Sulphur	22', 115 HP, LA 1369 FB, SOM32780J809, V283, CH364	1	Y	Y	N
Power Workboat, Alweld	Sulphur	18', 25 HP, LA 1660 EM, AWLC0428D494, V291	1	Y	Y	N
Jon Boat, Alweld	Sulphur	18', LA 9691ET,	1	Y	Y	N
(2) Motor Vehicles & Vacuum Equipment						
Pickup	Sulphur	F250	3	Y	Y	N
Pickup	Sulphur	F350	1	Y	Y	N
ER/Spill Trailer	Sulphur	34' HAZMAT Response Trailer	1	Y	Y	N
Vacuum Truck	Sulphur	70 bbl, 791064	1	Y	Y	N
Bobtail Rolloff Truck	Sulphur	Tri-axle straight frame rolloff, #4272 & #4279	2	Y	Y	N
Bobtail Rolloff Truck	Sulphur	Straight frame rolloff truck, #55016	1	Y	Y	N
Tractor	Sulphur	Freightliner Daycab, #1645	1	Y	Y	N
Rolloff Trailer	Sulphur	Single box Benley Trailer, #7313	1	Y	Y	N
(3) Pumps and Pressure Equipment						
Double Diaphragm Pump	Sulphur	2"	3	Y	Y	N
Trash Pump	Sulphur	2"	3	Y	Y	N
Pressure Washer	Sulphur	5k self contained on trailer CH331	1	Y	Y	N
Pressure Washer	Sulphur	5k self contained on trailer CH335	1	Y	Y	N
(4) Oil Spill Containment Booms						
Oil Containment Boom	Sulphur	18", Mix, In Trailer CH345	2200	Y	Y	N
Oil Containment Boom	Sulphur	18", Mix, Storage	800	Y	Y	N

1.800. OIL.TANK (1.800.645.8265) – 24-HR NATIONWIDE EMERGENCY RESPONSE

Equipment List Cont.				
Item Description / Manufacturer	Location	Capacity / Size / Key Features	# of Units	A T P
(5) Environmental Monitoring Equipment				
4-Gas Meters		MSA Sirius	2	Y Y N
(6) Recovery Equipment				
Disc Skimmer, Crucial	Sulphur	Hydraulic, ORD, 3", 50 GPM No powerpack	1	Y Y N
(7) Beach or Earth Cleaning and Excavating Equipment				
(8) Generators / Compressors / Light Towers				
Power Generator	Sulphur	<10KW	2	Y Y N
10 CFM Compressor	Sulphur		2	Y Y N
(9) Health and Safety Equipment				
(10) Communications				
(11) Miscellaneous				
Roll-Off Container	Sulphur	25-Yard	2	Y Y N
Vacuum Boxes/Dewatering Vac Boxes	Sulphur	25-Yard	6	Y Y N
Emergency Response Subcontractors				
Hine Environmental 4309 Highway 27 South Sulpur, LA 70665 Office-337-558-5635 Cell-337-263-5800		Contact: Todd Hine/Owner	Services Provided: Vacuum, Rolloff Trucking & End Dump Trucks	
Waste Water Specialties 2205 Industrial Dr. Sulphur, LA 70665 Office-337-882-8044 Cell-337-540-5960		Contact: Brett Feldese/Owner	Services Provided: Labor, Rolloff trucks, and vacuum trucks	
Miller Environmental 2208 Industrial Dr. Sulphur, LA 70665 Office-337-882-9800 Cell-337-302-9012		Contact: Matt Dartez/General Manager	Services Provided: Labor, Rolloff, and vacuum services	

1.800. OIL.TANK (1.800.645.8265) – 24-HR NATIONWIDE EMERGENCY RESPONSE

PORT ARTHUR, TX SERVICE CENTER	(b) (7)(F)	24-Hr. #	409.796.1388
Highway #73 at Sabine Consolidated Road		24-Hr. #	800.645.8265
Port Arthur, TX 77640		Fax #	409.796.1133

Eddy Yates, General Manager

EPA / Federal ID #: TXD981598
246**Personnel Authorized to release equipment / materials / manpower, etc:**

Eddy Yates	Ryan Kees
Chris Dupuis	Peri Bryan
Harold Webster	Carla Williams
Brad Dickes	

40-Hour OSHA Trained Personnel:

Supervisor	5	Wastewater Treatment Operator	1
Foreman	5	Chemist	3
Equipment Operator	23	Project Manager	3
Field Technician	6	Welder	2
Site Safety Officer	1	Mechanic	1

Equipment List							
Item Description / Manufacturer	Location	Capacity / Size / Key Features	# of Units	A	T	P	D
(1) Vessels & Marine Support Equipment							
Power Workboat, Hanko	Port Arthur	26', 2x115 HP, LA 5881 ES, HK043022C696, V236	1	Y	Y	N	N
Power Workboat, Alumaweld	Port Arthur	16', 25 HP, TX 9968 EJ, JCB04623B888, V221	1	Y	Y	N	N
Power Workboat, Lowe	Port Arthur	16', 25 HP, TX 9969 EJ, LWN49045L889, V223	1	Y	Y	N	N
Power Workboat, Lowe	Port Arthur	16', 25 HP, TX 9973 EJ, LWN50840C989, V224	1	Y	Y	N	N
Power Workboat, Alweld	Port Arthur	16', 25 HP, TX 7258 JY, AWLC0652J304, V225	1	Y	Y	N	N
Power Workboat, Alweld	Port Arthur	16', 25 HP, TX 7263 JY, AWLC0656J304, V226	1	Y	Y	N	N
Power Workboat, Alweld	Port Arthur	16', 25 HP, TX 7261 JY, AWLC0657J304, V227	1	Y	Y	N	N
Power Workboat, Alweld	Port Arthur	16', LA 1656 EM, AWLC0459D494, V281	1	Y	Y	N	N
Power Workboat, Marco Skimmer	Port Arthur	30', 2X115HP, LA 6817 EA, V231	1	Y	Y	N	N
(2) Motor Vehicles & Vacuum Equipment							
Crew Cab Pickup	Port Arthur	F350/Equivalent	10	Y	Y	N	N
Crew Cab Pickup	Port Arthur	F250/Equivalent	5	Y	Y	N	N
Crew Cab Pickup	Port Arthur	F150/Equivalent	2	Y	Y	N	N
Road Tractor	Port Arthur		15	Y	Y	N	N
Straight Vacuum Truck, Mack	Port Arthur	80 bbl	12	Y	Y	N	N
High Powered Vacuum Truck/Air Mover	Port Arthur		2	Y	Y	N	N
Bobtail Roll-Off Truck	Port Arthur		10	Y	Y	N	N
(3) Pumps and Pressure Equipment							
Double Diaphragm Pump	Port Arthur	3" Versa-matic	2	Y	Y	N	N
Trash Pump	Port Arthur	4" Electric Gormon Rupp 14C20-B	1	Y	Y	N	N
Submersible Pump	Port Arthur	H&H Pump 2-27X6	1	Y	Y	N	N
Hydraulic Power Unit	Port Arthur	John Deere Power Unit	1	Y	Y	N	N

1.800. OIL.TANK (1.800.645.8265) – 24-HR NATIONWIDE EMERGENCY RESPONSE

Equipment List Cont.				
Item Description / Manufacturer	Location	Capacity / Size / Key Features	# of Units	A T P D
(4) Oil Spill Containment Booms				
Oil Containment Boom	Port Arthur	18", Mix, On Trailer CH2352	2500	Y Y N Y
Oil Containment Boom	Port Arthur	18", Acme, In Storage	500	Y Y N Y
(5) Environmental Monitoring Equipment				
(6) Recovery Equipment				
Drum Skimmer, Crucial	Port Arthur	Air, 1D18P48, 2", 50GPM, S235	1	Y Y N Y
Drum Skimmer, Crucial	Port Arthur	Air, 1D18P23, 2", 25GPM, S242	1	Y Y N Y
Drum Skimmer, Elastec	Port Arthur	Air, TDS118, 3", 35GPM, S211	1	Y Y N Y
(7) Beach or Earth Cleaning and Excavating Equipment				
(8) Generators / Compressors / Light Towers				
Generators	Port Arthur	9700kw/15000kw	2	Y Y N N
(9) Health and Safety Equipment				
Coppus Blower	Port Arthur	Coppus Blower	1	Y Y N N
Eye wash	Port Arthur	Portable (Handheld)	Assorted	Y Y N N
(10) Communications				
2-Way Radio	Port Arthur	Nextel	27	Y Y N N
Cellular Phones	Port Arthur	Cingular	12	Y Y N N
(11) Miscellaneous				
Hose	Port Arthur	3" Tank Truck Hose X 25'	3	Y Y N N
Hose	Port Arthur	4" Tank Truck Hose X 25'	20	Y Y N N
Hose	Port Arthur	1 1/2 " Water Hose X 50'	3	Y Y N N
Hose	Port Arthur	3/4" Air Hose X 50'	4	Y Y N N

1.800. OIL.TANK (1.800.645.8265) – 24-HR NATIONWIDE EMERGENCY RESPONSE

HOUSTON, TX SERVICE CENTER 2202 Genoa Red Bluff Road Houston, TX 77034	24-Hr. # 713.750.5800 24-Hr. # 800.645.8265 Fax # 713.750.5801
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Doug Harrell, General Manager

EPA / Federal ID #:

N/A

Personnel Authorized to release equipment / materials / manpower, etc:

Doug Harrell
John Schepis
Teresa Penn
Ben Aleman

Robert Shelton

40-Hour OSHA Trained Personnel:

Supervisor	4
Foreman	3
Equipment Operator	4
Field Technician	16
Site Safety Officer	2

Equipment List							
Item Description / Manufacturer	Location	Capacity / Size / Key Features	# of Units	A	T	P	D
(1) Vessels & Marine Support Equipment							
Power Workboat, Barge Boat	Houston	30' 2 115 HP, V331, CH599T	1	Y	Y	N	N
Power Workboat, Barge Boat	Houston	30' 2 115 HP, LA 1859 FD, V235, CH368T	1	Y	Y	N	N
Power Workboat, Flat Skiff	Houston	22', 90 HP, LA 5037 EJ, V233, CH338T	1	Y	Y	N	N
Power Workboat, Lowe	Houston	16', 25 HP, TX 9973 EJ, V224	1	Y	Y	N	N
Power Workboat, Alweld	Houston	16', 25 HP, LA 8960 EN, V284	1	Y	Y	N	N
(2) Motor Vehicles & Vacuum Equipment							
Straight Vacuum Truck	Houston	80 bbl 55041	1	Y	Y	N	N
Crew Cab Pickup	Houston	Ford F 250, F 350: 8526, 8616, 8629, 8631, 8618, , 8681, 8796, 8797, 8798, 8599, 8953,8960	12	Y	Y	N	N
Triton	Houston	CH482	1	Y	Y	N	N
Box Truck	Houston	Sk50106	1	Y	Y	N	N
Roll-Off Truck	Houston	Volvo US5264	1	Y	Y	N	N
Air Mover	Houston	791170	1				
Spill Trailer CH2355	Houston	38' Stocked with Absorbents & PPE	1	Y	Y	N	Y
Spill Trailer/Hose Trailer Transfers	Houston	CH344	1	Y	Y	N	Y
Tractor	Houston	CH1387/CH1388/CH1394	3				
Low boy Trailer	Houston	CH2334/Ch343/CH712	3				
Job Trailer	Houston	CH2334/Ch343/CH712	3				
Scrubber	Houston	CH607	1				

1.800. OIL.TANK (1.800.645.8265) – 24-HR NATIONWIDE EMERGENCY RESPONSE

(3) Pumps and Pressure Equipment							
Double Diaphragm Pump	Houston	2"	2	Y	Y	N	N
Double Diaphragm Pump	Houston	1"	2	Y	Y	N	N
Hale/Trash Pump	Houston	2"	4	Y	Y	N	N
Hot Pressure Washer	Houston	5000 psi CH610 Tag# 572-VVWR	2	Y	Y	N	N
Hot Pressure Washer	Houston	5000 psi CH481 Tag# 18-36806	2	Y	Y	N	N
(4) Oil Spill Containment Booms							
Oil Containment Boom	Houston	18", Abasco, In Trailer CH342	3000	Y	Y	N	Y
Oil Containment Boom	Houston	18", Mixed, In Trailer CH328	1000	Y	Y	N	Y
(5) Environmental Monitoring Equipment							
MSA Sirius	Houston	5 Gas Monitor	2				
(6) Recovery Equipment							
Drum Skimmer, Crucial	Houston	Air, 1D18P48, 2", 35 GPM, S212	1	Y	Y	N	Y
(7) Beach or Earth Cleaning and Excavating Equipment							
Equipment List Cont.							
Item Description / Manufacturer	Location	Capacity / Size / Key Features	# of Units	A	T	P	D
(8) Generators / Compressors / Light Towers							
Compressor	Houston	12 CFM, Gasoline Powered	1	Y	Y	N	N
Compressor	Houston	185 CFM, Diesel Powered	1	Y	Y	N	N
Generator	Houston	5KW, Gasoline Powered	3	Y	Y	N	N
(9) Health and Safety Equipment							
(10) Communications							
2-Way Radio/Nextel	Houston		16	Y	Y	N	N
(11) Miscellaneous							

1.800. OIL.TANK (1.800.645.8265) – 24-HR NATIONWIDE EMERGENCY RESPONSE #

NATIONAL RESPONSE CENTER INVENTORY	24-Hr. # 781.792.5000
Mailing Address: 101 Philip Drive Norwell, MA 02061	24-Hr. # 800.645.8265 Fax # 781.878.8090

Response centers hold dedicated response equipment to support the regional service centers in the event of a large spill, as well as specialty equipment to support a non-standard response. All equipment is readily available to be shipped to anywhere in the region.

Scott Metzger, VP Emergency Services	Billy Baker, Logistics Section Chief
Virgil Blanchard, CHES Incident Commander	Michael Murphy, Event Supervisor/Admin
Stephen Sheppard, Finance Section Chief	Andrew Christopher, Project Support Team
Steven Downs, EOC Mgmt. Section Chief	Alex Olson, Project Support Team
Lee Barfield, National Emergency Response Manager	Michael Brajer, Project Support Team
John Rodier, OPA 90 Preparedness Coordinator	Brian Smusz, Project Support Team
Rickie Garritt, Event Supervisor/Admin	Trevor Tanous, Project Support Team
James Godfrey, VP Emergency Response Services	Stephen Kastensmidt, VP Project Services Sales
Ralphie Vicente, Regional ER Project Manager	Rexby Stelly, Field Operations Manager
Barton Taylor, Director Line of Business	David O'Brian, Regional ER Project Manager
John DePeuter, Director Line of Business	TJ Engstrom, Field Operations Manager

Personnel Authorized to release equipment / materials / manpower, etc:

Scott Metzger	Billy Baker
Virgil Blanchard	Stephen Sheppard

40-Hour OSHA Trained Personnel:

Supervisor 5

Equipment List				A	T
Item Description / Manufacturer	Location	Capacity / Size / Key Features	# of Units		
(1) Vessels & Marine Support Equipment					
NAIAD	Providence, RI	19' 150hp Aluminum/Rib V310	1	Y	Y
ROV	Weymouth, MA	NA PVC/Aluminum V318	1	Y	Y
Stanley/LCM (Resolute)	Providence, RI	26' 2x115 Aluminum V320	1	Y	Y
JBF DIP420	Providence, RI	27' 2x115 Aluminum V334	1	Y	Y
JBF DIP420	Houston, TX	27' 2x115 Aluminum V335	1	Y	Y
Stanley/LCM	Bridgeport, NJ	26' 2x130 Aluminum V351	1	Y	Y
Stanley/LCM	Baton Rouge, LA	26' 250hp Aluminum V352	1	Y	Y
Stanley/LCM	Chicago, IL	28' 2x200 Aluminum V353	1	Y	Y
Stanley/LCM	Lake Charles, LA	26' 225hp Aluminum V354	1	Y	Y
Svendsen/LCM	Bridgeport, NJ	27' 2x150 Aluminum V355	1	Y	Y
ATEC/LCM	New Iberia, LA	32' 2x150 Aluminum V356	1	Y	Y
ATEC/LCM	Cincinnati, OH	28' 2x90 Aluminum V357	1	Y	Y
Reynolds/LCM	Chicago, IL	30' 2x225 Aluminum V358	1	Y	Y
ATEC/LCM (Rebecca Anne)	New Iberia, LA	41' 2x275 Aluminum V359	1	Y	Y
LCM8 (Olivia D)	New Iberia, LA	70' 2x471 Steel V360	1	Y	Y
B.Bros/LCM	Puerto Rico	30' 2x200 Aluminum V361	1	Y	Y
B.Bros/LCM	Memphis, TN	30' 2x200 Aluminum V362	1	Y	Y
B.Bros/LCM	New Iberia, LA	30' 2x200 Aluminum V363	1	Y	Y
B.Bros/LCM	North Dakota	30' 2x200 Aluminum V364	1	Y	Y
B.Bros/LCM	New Iberia, LA	30' 2x200 Aluminum V365	1	Y	Y
B.Bros/LCM	New Iberia, LA	30' 2x200 Aluminum V366	1	Y	Y
B.Bros/LCM	Puerto Rico	30' 2x200 Aluminum V367	1	Y	Y
B.Bros/LCM	Compton, CA	30' 2x200 Aluminum V368 2335720 ME	1	Y	Y
B.Bros/LCM	New Iberia, LA	30' 2x200 Aluminum V369 2335721 ME	1	Y	Y
B.Bros/LCM	Compton, CA	30' 2x200 Aluminum V370 2335722 ME	1	Y	Y
LCM6 (Chief)	New Iberia, LA	56' 2x471 Steel V371	1	Y	Y

1.800. OIL.TANK (1.800.645.8265) – 24-HR NATIONWIDE EMERGENCY RESPONSE #

Equipment List Cont.					
Item Description / Manufacturer	Location	Capacity / Size / Key Features	# of Units	A	T
(2) Motor Vehicles & Vacuum Equipment					
UTV	Chicago, IL	Polaris Ranger 400cc (Camo)	1	Y	Y
UTV	New Iberia, LA	Polaris Ranger 400cc (Red)	1	Y	Y
UTV	New Iberia, LA	Polaris Ranger 400cc (Red)	1	Y	Y
UTV	New Iberia, LA	Polaris Ranger XP 800cc (Camo)	1	Y	Y
UTV	New Iberia, LA	Polaris Ranger XP 800cc (Gray)	1	Y	Y
UTV	New Iberia, LA	Polaris Ranger XP 800cc (Red)	1	Y	Y
UTV	New Iberia, LA	Polaris Ranger XP 800cc (Camo)	1	Y	Y
UTV	New Iberia, LA	Polaris Ranger XP 800cc (Green)	1	Y	Y
UTV	New Iberia, LA	Polaris Ranger XP 800cc (Red)	1	Y	Y
UTV	New Iberia, LA	Polaris Ranger 500cc (Green)	1	Y	Y
UTV	New Iberia, LA	Honda Big Red 4x4 (Green)	1	Y	Y
UTV	New Iberia, LA	Honda Big Red 4x4 (Green)	1	Y	Y
UTV	New Iberia, LA	Honda Big Red 4x4 (Green)	1	Y	Y
(3) Pumps and Pressure Equipment					
Honda Trash Pump	Weymouth, MA	2", Cap 250, Weight 110	6	Y	Y
Single Diaphragm Mudhen Pump	New Iberia, LA	3", Cap 88, Weight 186	2	Y	Y
Hot Pressure Washer	New Iberia, LA	2500 psi	3	Y	Y
Hotsty and Trash Pumps	New Iberia, LA	on box van trailer 6158		Y	Y
Compressors and 2" Pumps (w/hoses)	Memphis, TN	on horse trailer CH727	3	Y	Y
(4) Oil Spill Containment Booms					
Hard Boom	New Iberia, LA	Box van trailer	7500	Y	Y
Hard Boom	New Iberia, LA	40ft flat bed	6800	Y	Y
Hard Boom	New Iberia, LA	48ft flat bed trl	5000	Y	Y
Hard Boom	New Iberia, LA	53ft box van	10000	Y	Y
Hard Boom	New Iberia, LA	16ft util trl	1000	Y	Y
Hard Boom	Houston, TX	Box van trailer	7200	Y	Y
Containment Boom	Carson, CA	Penske 1 284323	12000	Y	Y
Containment Boom	Carson, CA	Penske 2 535012	12100	Y	Y
Containment Boom	Carson, CA	Penske 3 533689	11500	Y	Y
Containment Boom	Carson, CA	Penske 4 535035	11200	Y	Y
Containment Boom	Carson, CA	Penske 5 535029	12000	Y	Y
Containment Boom	Carson, CA	Penske 6 539266	11900	Y	Y
Containment Boom	Carson, CA	Penske 7 535015	11700	Y	Y
Containment Boom	Carson, CA	Penske 8 539310	11500	Y	Y
Containment Boom	Carson, CA	Penske 9 539269	5800	Y	Y
Containment Boom	Carson, CA	On Trailer	21500	Y	Y
(5) Environmental Monitoring Equipment					
(6) Recovery Equipment					
Boom Ringer	New Iberia, LA	Crucial 210240	1	Y	Y
VOSS	Lake Charles, LA	JBF portable	1	Y	Y
VOSS	New Iberia, LA	JBF portable	1	Y	Y
Skim-Pak 4300	New Iberia, LA	Douglas Weir 2465	1	Y	Y
Skim-Pak 4300	New Iberia, LA	Douglas Weir 2463	1	Y	Y
Skim-Pak 4300	New Iberia, LA	Douglas Weir 2466	1	Y	Y
Skim-Pak 4300	New Iberia, LA	Douglas Weir 2481	1	Y	Y
Skim-Pak 4300	New Iberia, LA	Douglas Weir 2467	1	Y	Y
Skim-Pak 4300	New Iberia, LA	Douglas Weir 2468	1	Y	Y
Skim-Pak 4300	New Iberia, LA	Douglas Weir 2478	1	Y	Y
Skim-Pak 4300	New Iberia, LA	Douglas Weir 2473	1	Y	Y
Skim-Pak 4300	New Iberia, LA	Douglas Weir 2471	1	Y	Y
Skim-Pak 4300	New Iberia, LA	Douglas Weir 2406	1	Y	Y
Skim-Pak 4300	New Iberia, LA	Douglas Weir 2479	1	Y	Y
Brush Skimmer	New Iberia, LA	Hydraulic Lamor 5160	1	Y	Y

1.800. OIL.TANK (1.800.645.8265) – 24-HR NATIONWIDE EMERGENCY RESPONSE #

Brush Skimmer	New Iberia, LA	Hydraulic Lamor 5157	1	Y	Y
Brush Skimmer	New Iberia, LA	Hydraulic Lamor 5161	1	Y	Y
Brush Skimmer	New Iberia, LA	Hydraulic Lamor 5159	1	Y	Y
Hydraulic Power pack	New Iberia, LA	Hydraulic Lamor 5305	1	Y	Y
Hydraulic Power pack	New Iberia, LA	Hydraulic Lamor LPP6HA-2977-08	1	Y	Y
Hydraulic Power pack	New Iberia, LA	Hydraulic Lamor LPP6HA-2896-08	1	Y	Y
Hydraulic Power pack	New Iberia, LA	Hydraulic Lamor LPP6HA-2976-08	1	Y	Y
Hose for Lamor Power Pack	New Iberia, LA	Hydraulic Lamor 2 41EV Box Crates	1	Y	Y
Equipment List Cont.					
Drum Skimmer	Weymouth, MA	Crucial, 2", CAP 25	1	Y	Y
Drum Skimmers	Memphis, TN	on horse trailer CH727	3	Y	Y
Item Description / Manufacturer	Location	Capacity / Size / Key Features	# of Units	A	T
(7) Beach or Earth Cleaning and Excavating Equipment					
(8) Generators / Compressors / Light Towers					
Rigid Compressor for Skimmers	Weymouth, MA	10 CFM, Wheelbarrow	2	Y	Y
Wacker Light Tower	Norwell, MA/Weymouth, MA	LT4C, Diesel, 12.2 HP	2	Y	Y
(9) Health and Safety Equipment					
Portable Washroom Stations	Baton Rouge, LA	portable bathroom/shower	6	Y	Y
Portable Washroom Stations	New Iberia, LA	portable bathroom/shower	6	Y	Y
(10) Communications					
Satellite Phone	Norwell, MA	Iridium 9505A	4	Y	Y
Satellite Phone	Sparks, NV	Iridium 9505A	2	N	Y
Satellite System	Norwell, MA	Internet, Phone Capable	1	Y	Y
(11) Miscellaneous					
Fiat Bed	New Iberia, LA	40 ft 1990	1	Y	Y
Red enclosed trailer	New Iberia, LA	CH666 pace 30 ft	1	Y	Y
Red enclosed trailer	New Iberia, LA	CH672 pace 30 ft	1	Y	Y
Utility trailer	New Iberia, LA	CH718 pamu	1	Y	Y
Pace Command Trailer	Houston, TX	CH737 RED 24'	1	Y	Y
Pace Command Trailer	New Iberia, LA	CH736 24'	1	Y	Y
Pace Command Trailer	Chicago, IL	CH735 24'	1	Y	Y
Pace Command Trailer	New Iberia, LA	CH734 24'	1	Y	Y
Mobile Incident Command Unit	New Iberia, LA	40', Wired for Internet, Phone, UHF/VHF	1	Y	Y
Mobile Incident Command Unit	New Iberia, LA	40', Wired for Internet, Phone, UHF/VHF	1	Y	Y
Mobil Incident Command Unit	Houston, TX	40', Wired for Internet, Phone, UHF/VHF	1	Y	Y

MASTER SERVICE AGREEMENT

THIS MASTER SERVICE AGREEMENT (the "Agreement") made **October 14, 2011** between **Environmental Safety & Health Consulting Services, Inc. and their affiliates and subsidiaries, located at P.O. Box 9217; Houma, LA 70361 or 1730 Coteau Road; Houma, LA 70364** called ("CONTRACTOR") and **Genesis Energy, LLC, Genesis Energy, L.P., Genesis Crude Oil, L.P. and their affiliates and subsidiaries, hereinafter collectively called ("GENESIS")**, covers all services and work ("Services") to be performed by CONTRACTOR for or on behalf of GENESIS.

1. **Contract Document.** This Agreement shall control and govern all Services to be provided by CONTRACTOR and shall define the rights and obligations of GENESIS and CONTRACTOR with regard to the matters covered hereby, to the exclusion of verbal or written work orders, purchase orders, bids or any other writings not specifically referring to this agreement and signed by each of the parties. This Agreement supersedes any agreement concerning work or services previously entered into between GENESIS and CONTRACTOR.
2. **Time and Manner.** GENESIS may from time to time by written notice request CONTRACTOR to perform Services. CONTRACTOR shall promptly advise GENESIS whether or not it is willing to perform the requested Services. If CONTRACTOR agrees to perform such Services, it shall notify GENESIS in writing and promptly commence after the same is ordered and shall render such services with due diligence until completion in a good and workmanlike manner in accordance with standard industry practice and to GENESIS's satisfaction. Any variances or exceptions to the scope of work specified shall be identified in writing by CONTRACTOR.
3. **Items Supplies; Liens.** Except as otherwise notified by GENESIS, CONTRACTOR shall furnish all labor, services, equipment, appliances, tools, facilities, supervision, and materials necessary for the complete performance of the Services to be performed hereunder.
4. **Contract Price; Billing.** GENESIS shall pay CONTRACTOR for the Services in accordance with schedules of rates and prices or lump sum amount as specified in Exhibits hereto or as otherwise agreed upon between GENESIS and CONTRACTOR, such agreement referencing this Agreement. Prices or rates shall not be increased without prior written approval from GENESIS. GENESIS shall pay CONTRACTOR for completed services within 30 days of receipt of the invoice.
5. **Inspection.** GENESIS and its representatives shall have the right to witness all Services being performed hereunder.
6. **Examination of Premises, etc.** Prior to the commencement of Services, CONTRACTOR will make sufficient examination and tests of the premises and

facilities at which the Services are to be undertaken to determine the difficulties and hazards incident to rendering Services and to satisfy itself as to the procedures to be followed, the adequacy of available safety equipment and other requirements necessary or appropriate to the performance of the Services.

7. **Compliance with Laws.** CONTRACTOR will obtain all necessary permits and licenses and will comply with applicable government laws, rules, regulations, executive orders, priorities, ordinances and restrictions now or hereafter in force (including, but not limited to Federal and State labor, health and safety and nondiscrimination laws, regulations and executive orders) in rendering Services. CONTRACTOR will furnish GENESIS any documentation required to evidence such compliance and will file with governmental agencies any reports required to be filed by CONTRACTOR.

8. **Insurance.** During the performance of the Services hereunder, CONTRACTOR shall take out, carry and maintain, with an insurance company or companies approved by GENESIS, and in policies of insurance acceptable to GENESIS, the following insurance sufficient to address the liabilities that may be generated by the Services. All liability policies shall be on an occurrence basis with limits not less than those shown below:
 - (a) **Workers Compensation and Occupational Disease Insurance.** Workers Compensation and Occupational Disease Insurance, including coverage under the Longshoremen and Harbor Workers' Compensation Act and the Jones Act (if applicable) and Employer's Liability Insurance with limits complying with the laws of the State in which such Services are to be rendered.

 - (b) **Comprehensive General Liability Insurance.** Comprehensive General Liability Insurance, including Premises, Operations, Explosion, Collapse and Underground Damage, and Contractual Liability (including this Agreement with Genesis) with policy limits not less than \$2,000,000 in the aggregate, and \$1,000,000 combined single limit personal injury each occurrence and \$1,000,000 property damage each occurrence.

 - (c) **Automobile Liability Insurance.** Automobile Liability Insurance, including Contractual Liability, covering all motor vehicles owned, hired or used while rendering Services with limits not less than \$1,000,000, combined single limit personal injury and property damage each occurrence.

 - (d) **Excess Liability.** Excess Liability Insurance with a limit of at least \$4,000,000 per occurrence, including but not limited to (i) Excess Employers Liability Insurance, (ii) Commercial General Liability Insurance and (iii) Automobile Liability Insurance.

CONTRACTOR hereby waives rights of subrogation against GENESIS and all insurance policies mentioned above shall contain a waiver of subrogation in favor

of GENESIS. Before commencing Services, CONTRACTOR shall furnish GENESIS for its approval and retention, Certificates of Insurance naming "Genesis Energy, LLC, Genesis Energy, L.P., Genesis Crude Oil, L.P. and their affiliates and subsidiaries" (hereinafter the "GENESIS ENTITIES") as the certificate holder and additional named insured, further providing that in the event of any material changes in or cancellation of the insurance thirty days advance written notice shall be given to GENESIS. If CONTRACTOR cannot provide such thirty days advance written notice due to the revised Acord form which requires language substantially similar to "Should any of the above described policies be cancelled before the expiration date thereof, notice will be delivered in accordance with the policy provisions," then GENESIS reserves the right to require updated certificates of insurance prior to making payment(s) to CONTRACTOR for Services.

9. **INDEMNITY. CONTRACTOR SHALL INDEMNIFY, DEFEND AND HOLD HARMLESS GENESIS AND ITS OFFICERS, EMPLOYEES, AGENTS OR REPRESENTATIVES AND ANY AFFILIATED OR RELATED COMPANIES, FROM AND AGAINST ANY AND ALL SUITS, ACTIONS, LEGAL OR ADMINISTRATIVE PROCEEDINGS, CLAIMS, DEMANDS, DAMAGES, LIABILITIES, INTEREST, ATTORNEY'S FEES, COSTS AND EXPENSES OF WHATSOEVER KIND OR NATURE ARISING OUT OF ANY BODILY INJURY (INCLUDING DEATH), PROPERTY DAMAGE, OR ECONOMIC DAMAGE, WHETHER ARISING BEFORE OR AFTER COMPLETION OF THE SERVICES HEREUNDER AND WHICH ARE IN ANY MANNER DIRECTLY OR INDIRECTLY CAUSED OR OCCASIONED BY REASON OF ANY INTENTIONAL MISCONDUCT OR NEGLIGENCE, WHETHER ACTIVE OR PASSIVE, OF CONTRACTOR OR OF ANYONE ACTING UNDER ITS DIRECTION, CONTROL, OR ON ITS BEHALF IN CONNECTION WITH OR INCIDENT TO THE SERVICES PERFORMED UNDER THIS AGREEMENT.**

NOTWITHSTANDING ANY OF THE FOREGOING, CONTRACTOR SHALL NOT BE OBLIGATED HEREUNDER TO HOLD HARMLESS OR INDEMNIFY GENESIS FOR LOSS, COST OR EXPENSE OF INCIDENT OR ACCIDENT ARISING OUT OF THE WORK AND PROXIMATELY CAUSED BY THE GROSS NEGLIGENCE OF GENESIS OR ITS EMPLOYEES.

Nothing herein shall prohibit GENESIS from filing suit or obtaining a judgment against CONTRACTOR for such claim, loss, injury or damage if such is necessary in order to collect or receive payment under any such insurance carried by CONTRACTOR.

10. **Safety.** CONTRACTOR shall maintain adequate protection of persons and property during CONTRACTOR's performance hereunder. Where Services are

rendered on GENESIS'S premises, all of GENESIS'S safety rules shall be strictly observed and smoking shall be limited to such locations and occasions as are specifically authorized by GENESIS. Contractor shall be solely responsible for the safety of the work and its employees. The possession and/or use of illegal or unauthorized drugs, intoxicating beverages, firearms or other weapons is prohibited on all GENESIS property. To insure the safety of persons and to prevent the loss of GENESIS property, GENESIS may, but is not required to, conduct security inspections or searches at random. GENESIS shall have the right to search the person, personal effects or vehicle of any person on GENESIS property to enforce compliance with this policy. Persons found to be in violation of this policy will be immediately removed and barred from GENESIS property. Illegal or unauthorized drugs, intoxicating beverages, firearms, or other weapons discovered as a result of any such inspection may be confiscated and turned over to law enforcement officers at GENESIS's discretion.

11. **Termination.** GENESIS may, at its absolute discretion, direct the Services to be halted at any time, but where CONTRACTOR is not in default hereunder, GENESIS shall pay CONTRACTOR for all work completed in accordance with the approved price schedule.
12. **Independent Contractor.** In the performance of all Services, CONTRACTOR is an independent contractor, with the sole right to supervise, manage, control and direct the performance of the details. GENESIS is interested only in the results to be obtained, but the Services must meet with the approval of GENESIS, whose representatives shall be entitled to make such inspections of the Services and of CONTRACTOR's records relating thereto as may be necessary to assure such results and compliance with the provisions hereof.
13. **Non-Assignability and Encumbrances.** This Agreement or any rights or interests or amounts which may be due hereunder shall not be transferred, assigned, sublet, pledged or encumbered without the advance written approval of GENESIS to be withheld or denied in its sole discretion. Any subcontracting permitted hereby shall not relieve CONTRACTOR of primary responsibility for any Services performed thereunder or hereunder. Any assignments, pledges, encumbrances, factoring agreements, security interests or mortgages in violation hereof shall in all respects be and remain subject to any and all claims, defenses, set offs or rights or remedies of GENESIS.
14. **Interpretation and Integration.** This Agreement, together with the Exhibits which are attached hereto and incorporated herein by this reference, constitutes the entire agreement among the parties pertaining to the subject matter hereof and supersedes all prior agreements, understandings, negotiations and discussions, whether oral or written, of the parties. No supplement, modification or waiver of this Agreement shall be binding unless executed in writing by the parties hereto. No waiver of any of the provisions of this Agreement shall be deemed or shall constitute a waiver of any other provision hereof (regardless of whether similar),

nor shall any such waiver constitute a continuing waiver unless otherwise expressly provided.

15. **Governing Law.** The parties hereto agree that all of the provisions of this Agreement and any questions concerning its interpretation and enforcement shall be governed by the laws of the state in which the services or work are performed, without regard to its principles of conflicts of law.
16. **Force Majeure.** Neither party shall be considered in default in performance of its obligation under the Agreement if delayed by Force Majeure (as herein defined). Force Majeure as used herein shall mean hostilities, restraint of rulers or people, revolution, civil commotion, strike, epidemic, fire, flood, windstorm, explosion, embargo, or any law, proclamation, regulation, or ordinance of any Government, or any cause, whether of the same or different nature, existing or future, which is beyond the reasonable control of the parties hereto. It will be the sole responsibility of the party so affected by Force Majeure to take all reasonable steps necessary to eliminate the cause of any delay but not to the extent of assenting to unreasonable demands of any third party. Nothing herein contained shall alter or vary Genesis's right to terminate this Agreement as hereinabove provided.
17. **Headings.** Section headings or titles are included for ease of reference and do not constitute any part of the text or affect its meaning or interpretation.
18. **Severability.** If any provision herein is or becomes invalid or illegal in whole or in part, such provisions shall be deemed amended, as nearly as possible to be consistent with the intent expressed in this Master Service Agreement, and if such is impossible, that provision shall fall by itself without invalidating any of the remaining provisions not otherwise invalid or illegal.
19. **Confidential Information.** In the performance of the Services, CONTRACTOR may be exposed to confidential information of GENESIS and others. CONTRACTOR shall not disclose to anyone not employed by GENESIS nor use, except on behalf of GENESIS, any such confidential information acquired by it in the performance of the Services except as authorized by GENESIS in writing, and regardless of the term of this Agreement, CONTRACTOR shall be bound by this obligation until such time as said confidential information shall become part of the public domain. Information regarding all aspects of GENESIS'S (including its parent and its affiliates) business and information concerning the Services (either directly or indirectly disclosed to it or developed by it in the performance of the Services) shall be presumed to be confidential except to the extent that same shall have been published or otherwise made freely available to the general public without restriction. CONTRACTOR also agrees that it will not disclose to GENESIS any information it holds subject to an obligation of confidence to any third persons.

20. **Conflict of Interest and Ethics.** CONTRACTOR, in performing its obligations under this Agreement, shall establish and maintain appropriate business standards, procedures and controls including those necessary to avoid any real or apparent impropriety or adverse impact on the interests of GENESIS or its affiliates.

Executed this 14 day of October, 2011.

Genesis Energy, LLC, Genesis Energy, L.P., Genesis Crude Oil, L.P. and their affiliates and subsidiaries

By: Russell D. Miller

Title: Director, HSS E

CONTRACTOR

Environmental Safety & Health Consulting Services

By: Patrick J. Beyle

Title: Executive Vice President



**RESPONSE RESOURCES
LOCATION GUIDE**

**24-HOUR EMERGENCY HOTLINE
1-877-4ESANDH**

JULY 2012

***HOUMA*FOURCHON*GOLDEN MEADOW*MORGAN CITY*
*BELLE CHASSE*LAPLACE*MOBILE*LAFAYETTE*
*LAKE CHARLES*BOSSIER CITY*HOUSTON*DALLAS-FT. WORTH***

Specific Information on Resources

- Items 1 – 4:** Total amount of containment boom stored at each ES&H office location.
- Item 5:** **Oil Spill Response Trailer** – contains up to 500’ of containment boom, 1 drum skimmer package, 3 wash pump packages, PPE and various absorbent products. Designed to accommodate a 4 man crew working for 1 to 2 days on Average Most Probable Discharge (AMPD).
- Item 6:** **16’ Containment Boom Trailer** – contains 1000’ of 18” containment boom, anchors, anchor buoys and rope.
- Item 7:** **24’ Containment Boom Trailer** – contains 2000’ of 18” containment boom, anchors, anchor buoys and rope.
- Item 8:** **30’ Containment Boom Trailer** – contains 3000’ of 18” containment boom, anchors, anchor buoys and rope.
- Item 9:** **Haz-Mat Response Trailer** – contains specialized tools and equipment to respond to hazardous materials incidents; also contains chemical absorbent products and high level PPE. Designed to accommodate a 4 man crew responding to any hazardous materials incident.
- Item 10:** **Industrial Services Trailer** – contains specialized tools and equipment for industrial cleaning services, including confined space entry safety equipment and PPE.
- Item 11:** **Industrial Cleaning Trailer** – contains 350 gallon water storage tank and 4,000 psi hot water pressure washer. Self contained unit to perform industrial cleaning services.
- Item 12:** **Communications Trailer** – enclosed trailer with air conditioning; contains cellular and satellite communications and IT support. Self contained unit with generator and shore power capabilities.
- Item 13:** **Mobile Command Post Trailer** – enclosed trailer with air conditioning; contains work space for personnel on emergency response projects. Self contained unit with generator and shore power capabilities.
- Item 14:** **35’ PPE/Consumables Trailer** – enclosed trailer containing significant quantities of PPE and consumable items.
- Item 15:** **48’ Containment Boom Trailer** – 48’ box trailer containing 6,000’ of 18” containment boom, anchors, anchor buoys, and rope.
- Item 16:** **48’ PPE Trailer** – 48’ box trailer containing significant quantities of PPE (i.e., protective coveralls, inner and outer protective gloves, hard hats, safety glasses, etc.).
- Item 17:** **48’ Decon Trailer** – 48’ box trailer containing equipment decontamination supplies and equipment (i.e., decon pools, degreaser soap, hand tools, sorbent materials, etc.)
- Item 18:** **48’ Consumables Trailer** – 48’ box trailer containing variety of consumable items (i.e., pollution bags, poly sheeting, rope, degreaser soap, industrial carpet, etc.)
- Item 19:** **48’ Absorbent Materials Trailer** – 48’ box trailer containing oil absorbent materials (i.e., absorbent pads, 5” absorbent boom, etc.)

- Item 31:** **LORI Brush Skimmer** – 56' OSRV with shallow draft capabilities. 2 side mounted LORI Brush Skimmers with 45' skimming width. Capable of recovering spilled oil at rates up to 15 gpm. Storage capacity of 90 bbls.
- Item 32:** **JBF Skimmer** – 38' OSRV DIP 3003 with Filterbelt skimming module capable of recovering spilled oil at rates up to 400 gpm. Storage capacity of 95 bbls.
- Item 33:** **Marco Skimmer** - Harbor Class OSRV (30') with shallow draft capabilities. One foot (1') wide Filterbelt skimming module capable of recovering spilled oil at rates up to 427 bbls per day. Storage capacity of 25 bbls.
- Item 34:** **Sidewinder Belt Skimmer** – Sorbent Lifting Belt Skimmer. Designed to be installed on any suitable vessel as an over-the-side skimmer for stationary and advancing applications. Capable of recovering spilled oil at rates of up to 773 bbls per day.
- Item 35:** **Goo Gobbler Skimmer** – Harbor Class OSRV (32') with shallow draft capabilities. 30" aluminum cylinder skimmer capable of recovering spilled oil at rates up to 770 bbls per day.
- Item 36:** **Mobile Drum Skimmer Barge** – 8' X 16' shallow draft aluminum storage barge (25 bbl storage capacity) with Drum Skimmer Package.
- Item 37:** **Small Drum Skimmer** – Elastec MiniMax industrial skimmer. Recovery rate of up to 20 gpm.
- Item 38:** **Medium Drum Skimmer** – Elastec TDS 118 skimmer. Recovery rate of up to 35 gpm.
- Item 39:** **Large Drum Skimmer** – Elastec TDS 136 skimmer. Recovery rate of up to 70 gpm.
- Item 40:** **Small Skim Pak Skimmer** -- Skim Pak Model 2300-SH floating suction skimmer. Self-adjusting weir with recovery rate of up to 58 gpm.
- Item 41:** **Medium Skim Pak Skimmer** – Skim Pak Model 4300-SH floating suction skimmer. Self-adjusting weir with recovery rate of up to 95 gpm.
- Item 42:** **Large Skim Pak Skimmer** – Skim Pak Model 18300-SH floating suction skimmer. Self-adjusting weir with recovery rate of up to 420 gpm.
- Item 43:** **Manta Ray Skimmer** – Rigid Manta Ray floating suction skimmer. Recovery rate of up to 150 gpm.
- Item 44:** **Rope Mop Skimmer** – 4" X 50' Rope Mop (single roller). Recovery rate of up to 35 bbls per day.
- Item 45:** **30 bbl Oil Storage Barge** – 8' X 16' aluminum oil storage barge. 25 bbl storage capacity.
- Item 46:** **225 bbl Oil Storage Barges** – 8' X 40' aluminum oil storage barges (2 barges per set). Each set has 225 bbl storage capacity.
- Item 65:** **Triton Vacuum Unit** – 2500 Series (2500 cfm) Liquid Ring Vacuum Pump. Product intake through 6" inlet. Can load into collection tank or vacuum box, or alternatively into drums, supersacks, or open top boxes.
- Item 66:** **Portable Mini-Vac** – Mobile, portable vacuum system designed for spill recovery. Capable of recovering a wide range of liquids, oils and sludges with solids up to 2" diameter. Recovered material deposited into 500 gallon built-in storage tank.

- Item 67:** **Drum Head Vacuum Unit** - Mobile, portable vacuum system designed for spill recovery. Capable of recovering a wide range of liquids, oils and sludges with solids up to 2" diameter. Recovered material deposited into common open top drums.
- Item 90:** **4 Gas Air Monitoring Instrument** - Multi-gas detector used to monitor Oxygen, Lower Explosive Limit, Carbon Monoxide and Hydrogen Sulfide.
- Item 91:** **CMS Air Monitoring Instrument** – The Chip Measuring System (CMS) instrument provides a quantitative determination of hazardous gas or vapor concentrations in the air. Each chip is substance – specific and has 10 possible measurements per chip.
- Item 92:** **PID / FID** – Photoionization or Flame Ionization Detectors; used to measure volatile organic compounds and other gases in concentrations from sub parts per billion to 10,000 parts per million.
- Item 93:** **4 Gas PID + VOC** – 4 Gas Air Monitoring Instrument with Volatile Organic Compound measuring capabilities.
- Item 94:** **Chemical Specific PID** – Photoionization detector with specific chemical vapor or gas measuring ability.
- Item 95:** **NORM Survey Instrument** – Ludlum NORM Surveying Instrument calibrated to detect Radium 226.

MASTER SERVICE AGREEMENT

THIS MASTER SERVICE AGREEMENT (the "Agreement") made **February 28, 2012** between Oil Mop, LLC d/b/a OMI Environmental Solutions located at 145 Keating Drive, Belle Chasse, LA 70037 called ("CONTRACTOR") and **Genesis Energy, LLC, Genesis Energy, L.P., Genesis Crude Oil, L.P. and their affiliates and subsidiaries**, hereinafter collectively called ("GENESIS"), covers all services and work ("Services") to be performed by CONTRACTOR for or on behalf of GENESIS.

1. **Contract Document.** This Agreement shall control and govern all Services to be provided by CONTRACTOR and shall define the rights and obligations of GENESIS and CONTRACTOR with regard to the matters covered hereby, to the exclusion of verbal or written work orders, purchase orders, bids or any other writings not specifically referring to this agreement and signed by each of the parties. This Agreement supersedes any agreement concerning work or services previously entered into between GENESIS and CONTRACTOR.
2. **Time and Manner.** GENESIS may from time to time by written notice request CONTRACTOR to perform Services. CONTRACTOR shall promptly advise GENESIS whether or not it is willing to perform the requested Services. If CONTRACTOR agrees to perform such Services, it shall notify GENESIS in writing and promptly commence after the same is ordered and shall render such services with due diligence until completion in a good and workmanlike manner in accordance with standard industry practice and to GENESIS's satisfaction. Any variances or exceptions to the scope of work specified shall be identified in writing by CONTRACTOR.
3. **Items Supplies; Liens.** Except as otherwise notified by GENESIS, CONTRACTOR shall furnish all labor, services, equipment, appliances, tools, facilities, supervision, and materials necessary for the complete performance of the Services to be performed hereunder.
4. **Contract Price; Billing.** GENESIS shall pay CONTRACTOR for the Services in accordance with schedules of rates and prices or lump sum amount as specified in Exhibits hereto or as otherwise agreed upon between GENESIS and CONTRACTOR, such agreement referencing this Agreement. Prices or rates shall not be increased without prior written approval from GENESIS. GENESIS shall pay CONTRACTOR for completed services within 30 days of receipt of the invoice subject to 10% retention of invoice amount. Payment of the retainage will be made upon GENESIS's receipt of CONTRACTOR'S affidavit of completion including lien releases from Sub-Contractors and suppliers.
5. **Inspection.** GENESIS and its representatives shall have the right to witness all Services being performed hereunder.

6. **Examination of Premises, etc.** Prior to the commencement of Services, CONTRACTOR will make sufficient examination and tests of the premises and facilities at which the Services are to be undertaken to determine the difficulties and hazards incident to rendering Services and to satisfy itself as to the procedures to be followed, the adequacy of available safety equipment and other requirements necessary or appropriate to the performance of the Services.
7. **Compliance with Laws.** CONTRACTOR will obtain all necessary permits and licenses and will comply with applicable government laws, rules, regulations, executive orders, priorities, ordinances and restrictions now or hereafter in force (including, but not limited to Federal and State labor, health and safety and nondiscrimination laws, regulations and executive orders) in rendering Services. CONTRACTOR will furnish GENESIS any documentation required to evidence such compliance and will file with governmental agencies any reports required to be filed by CONTRACTOR. If CONTRACTOR is required to meet the requirements of Title 49, Part 195, Subpart G Qualification of Pipeline Personnel, 195.501 – 195.509 to perform certain services on Genesis regulated property, CONTRACTOR shall subscribe to and shall maintain current records on ISNetworld so long as CONTRACTOR is performing such services for GENESIS.
8. **Insurance.** During the performance of the Services hereunder, CONTRACTOR shall take out, carry and maintain, with an insurance company or companies approved by GENESIS, and in policies of insurance acceptable to GENESIS, the following insurance sufficient to address the liabilities that may be generated by the Services. All liability policies shall be on an occurrence basis with limits not less than those shown below:
 - (a) **Workers Compensation and Occupational Disease Insurance.** Workers Compensation and Occupational Disease Insurance, including coverage under the Longshoremen and Harbor Workers' Compensation Act and the Jones Act (if applicable) and Employer's Liability Insurance with limits complying with the laws of the State in which such Services are to be rendered.
 - (b) **Comprehensive General Liability Insurance.** Comprehensive General Liability Insurance, including Premises, Operations, Explosion, Collapse and Underground Damage, and Contractual Liability (including this Agreement with Genesis) with policy limits not less than \$2,000,000 in the aggregate, and \$1,000,000 combined single limit personal injury each occurrence and \$1,000,000 property damage each occurrence.
 - (c) **Automobile Liability Insurance.** Automobile Liability Insurance, including Contractual Liability, covering all motor vehicles owned, hired or used while rendering Services with limits not less than \$1,000,000, combined single limit personal injury and property damage each occurrence.

(d) Excess Liability. Excess Liability Insurance with a limit of at least \$4,000,000 per occurrence, including but not limited to (i) Excess Employers Liability Insurance, (ii) Commercial General Liability Insurance and (iii) Automobile Liability Insurance.

CONTRACTOR hereby waives rights of subrogation against GENESIS and all insurance policies mentioned above shall contain a waiver of subrogation in favor of GENESIS. Before commencing Services, CONTRACTOR shall furnish GENESIS for its approval and retention, Certificates of Insurance naming "Genesis Energy, LLC, Genesis Energy, L.P., Genesis Crude Oil, L.P. and their affiliates and subsidiaries" (hereinafter the "GENESIS ENTITIES") as the certificate holder and additional named insured, further providing that in the event of any material changes in or cancellation of the insurance thirty days advance written notice shall be given to GENESIS. If CONTRACTOR cannot provide such thirty days advance written notice due to the revised Acord form which requires language substantially similar to "Should any of the above described policies be cancelled before the expiration date thereof, notice will be delivered in accordance with the policy provisions." then GENESIS reserves the right to require updated certificates of insurance prior to making payment(s) to CONTRACTOR for Services.

9. **INDEMNITY. CONTRACTOR SHALL INDEMNIFY, DEFEND AND HOLD HARMLESS GENESIS AND ITS OFFICERS, EMPLOYEES, AGENTS OR REPRESENTATIVES AND ANY AFFILIATED OR RELATED COMPANIES, FROM AND AGAINST ANY AND ALL SUITS, ACTIONS, LEGAL OR ADMINISTRATIVE PROCEEDINGS, CLAIMS, DEMANDS, DAMAGES, LIABILITIES, INTEREST, ATTORNEY'S FEES, COSTS AND EXPENSES OF WHATSOEVER KIND OR NATURE ARISING OUT OF ANY BODILY INJURY (INCLUDING DEATH), PROPERTY DAMAGE, OR ECONOMIC DAMAGE, WHETHER ARISING BEFORE OR AFTER COMPLETION OF THE SERVICES HEREUNDER AND WHICH ARE IN ANY MANNER DIRECTLY OR INDIRECTLY CAUSED OR OCCASIONED BY REASON OF ANY INTENTIONAL MISCONDUCT OR NEGLIGENCE, WHETHER ACTIVE OR PASSIVE, OF CONTRACTOR OR OF ANYONE ACTING UNDER ITS DIRECTION, CONTROL, OR ON ITS BEHALF IN CONNECTION WITH OR INCIDENT TO THE SERVICES PERFORMED UNDER THIS AGREEMENT.**

NOTWITHSTANDING ANY OF THE FOREGOING, CONTRACTOR SHALL NOT BE OBLIGATED HEREUNDER TO HOLD HARMLESS OR INDEMNIFY GENESIS FOR LOSS, COST OR EXPENSE OF INCIDENT OR ACCIDENT ARISING OUT OF THE WORK AND PROXIMATELY CAUSED BY THE GROSS NEGLIGENCE OF GENESIS OR ITS EMPLOYEES.

Nothing herein shall prohibit GENESIS from filing suit or obtaining a judgment against CONTRACTOR for such claim, loss, injury or damage if such is necessary in order to collect or receive payment under any such insurance carried by CONTRACTOR.

10. **Safety.** CONTRACTOR shall maintain adequate protection of persons and property during CONTRACTOR's performance hereunder. Where Services are rendered on GENESIS'S premises, all of GENESIS'S safety rules shall be strictly observed and smoking shall be limited to such locations and occasions as are specifically authorized by GENESIS. Contractor shall be solely responsible for the safety of the work and its employees. The possession and/or use of illegal or unauthorized drugs, intoxicating beverages, firearms or other weapons is prohibited on all GENESIS property. To insure the safety of persons and to prevent the loss of GENESIS property, GENESIS may, but is not required to, conduct security inspections or searches at random. GENESIS shall have the right to search the person, personal effects or vehicle of any person on GENESIS property to enforce compliance with this policy. Persons found to be in violation of this policy will be immediately removed and barred from GENESIS property. Illegal or unauthorized drugs, intoxicating beverages, firearms, or other weapons discovered as a result of any such inspection may be confiscated and turned over to law enforcement officers at GENESIS's discretion.
11. **Termination.** GENESIS may, at its absolute discretion, direct the Services to be halted at any time, but where CONTRACTOR is not in default hereunder, GENESIS shall pay CONTRACTOR for all work completed in accordance with the approved price schedule.
12. **Independent Contractor.** In the performance of all Services, CONTRACTOR is an independent contractor, with the sole right to supervise, manage, control and direct the performance of the details. GENESIS is interested only in the results to be obtained, but the Services must meet with the approval of GENESIS, whose representatives shall be entitled to make such inspections of the Services and of CONTRACTOR's records relating thereto as may be necessary to assure such results and compliance with the provisions hereof.
13. **Non-Assignability and Encumbrances.** This Agreement or any rights or interests or amounts which may be due hereunder shall not be transferred, assigned, sublet, pledged or encumbered without the advance written approval of GENESIS to be withheld or denied in its sole discretion. Any subcontracting permitted hereby shall not relieve CONTRACTOR of primary responsibility for any Services performed thereunder or hereunder. Any assignments, pledges, encumbrances, factoring agreements, security interests or mortgages in violation hereof shall in all respects be and remain subject to any and all claims, defenses, set offs or rights or remedies of GENESIS.

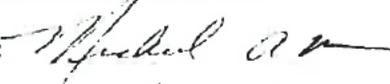
14. **Interpretation and Integration.** This Agreement, together with the Exhibits which are attached hereto and incorporated herein by this reference, constitutes the entire agreement among the parties pertaining to the subject matter hereof and supersedes all prior agreements, understandings, negotiations and discussions, whether oral or written, of the parties. No supplement, modification or waiver of this Agreement shall be binding unless executed in writing by the parties hereto. No waiver of any of the provisions of this Agreement shall be deemed or shall constitute a waiver of any other provision hereof (regardless of whether similar), nor shall any such waiver constitute a continuing waiver unless otherwise expressly provided.
15. **Governing Law.** The parties hereto agree that all of the provisions of this Agreement and any questions concerning its interpretation and enforcement shall be governed by the laws of the state in which the services or work are performed, without regard to its principles of conflicts of law.
16. **Force Majeure.** Neither party shall be considered in default in performance of its obligation under the Agreement if delayed by Force Majeure (as herein defined). Force Majeure as used herein shall mean hostilities, restraint of rulers or people, revolution, civil commotion, strike, epidemic, fire, flood, windstorm, explosion, embargo, or any law, proclamation, regulation, or ordinance of any Government, or any cause, whether of the same or different nature, existing or future, which is beyond the reasonable control of the parties hereto. It will be the sole responsibility of the party so affected by Force Majeure to take all reasonable steps necessary to eliminate the cause of any delay but not to the extent of assenting to unreasonable demands of any third party. Nothing herein contained shall alter or vary Genesis's right to terminate this Agreement as hereinabove provided.
17. **Headings.** Section headings or titles are included for ease of reference and do not constitute any part of the text or affect its meaning or interpretation.
18. **Severability.** If any provision herein is or becomes invalid or illegal in whole or in part, such provisions shall be deemed amended, as nearly as possible to be consistent with the intent expressed in this Master Service Agreement, and if such is impossible, that provision shall fall by itself without invalidating any of the remaining provisions not otherwise invalid or illegal.
19. **Confidential Information.** In the performance of the Services, CONTRACTOR may be exposed to confidential information of GENESIS and others. CONTRACTOR shall not disclose to anyone not employed by GENESIS nor use, except on behalf of GENESIS, any such confidential information acquired by it in the performance of the Services except as authorized by GENESIS in writing, and regardless of the term of this Agreement, CONTRACTOR shall be bound by this obligation until such time as said confidential information shall become part of the public domain. Information regarding all aspects of GENESIS'S (including its

parent and its affiliates) business and information concerning the Services (either directly or indirectly disclosed to it or developed by it in the performance of the Services) shall be presumed to be confidential except to the extent that same shall have been published or otherwise made freely available to the general public without restriction. CONTRACTOR also agrees that it will not disclose to GENESIS any information it holds subject to an obligation of confidence to any third persons.

20. **Conflict of Interest and Ethics.** CONTRACTOR, in performing its obligations under this Agreement, shall establish and maintain appropriate business standards, procedures and controls including those necessary to avoid any real or apparent impropriety or adverse impact on the interests of GENESIS or its affiliates.

Executed this 25th day of April, 2012.

Genesis Energy, LLC, Genesis Energy, L.P., Genesis Crude Oil, L.P. and their affiliates and subsidiaries

By: 

Title: VP/Gen OPERATIONS AND TRANSPORTATION

CONTRACTOR

Oil Mop, LLC d/b/a OMI Environmental Solutions

By: 

Title: Contract Administrator



EMERGENCY RESPONSE RIDER

Rider A

The parties hereto acknowledge that under State and Federal Law, Clean Harbors ("Contractor") is accorded certain protections when it responds to spills and discharges of oil or other hazardous materials ("Responder Immunity"). In a response, rapid and decisive action is necessary to contain a spill. In almost all actions, responders must initiate a response with no prior notice based on very limited information. Without Responder Immunity, the enormous financial and liability exposures associated with emergency response would make the business of responding to spills impracticable. Accordingly, the parties execute this Rider with the intent of preserving Contractor's statutorily conferred protections to the greatest extent possible.

1. SCOPE OF EMERGENCY RESPONSE SERVICES

1.1 Upon execution of this Emergency Response Services Rider ("Rider"), Contractor agrees to provide Emergency Response Services ("Services") for the Company's accidental discharges of oil or other hazardous substances. Services may include, but are not limited to the following: Containment, recovery, repackaging and removal of materials; Site evaluation, decontamination and restoration; Transportation, storage, treatment or disposal of wastes; Technical services, including sampling, laboratory analysis, and other related services; Standby of personnel and equipment in anticipation of imminent activation; and Training and mock spill drill deployments.

2. COMPENSATION

2.1 The payment terms set forth herein are contingent upon the approval of Contractor's Credit Department. In the event of a change in Customer's financial condition, Contractor reserves the right to alter, change, or modify payment terms, and to immediately stop work. The failure of Contractor to exercise its rights under this article at any time shall not constitute a waiver of Contractor's continuing right to do so.

2.2 Customer agrees to pay Contractor for Services in accordance with Contractor's Rate Schedule for emergency response work ("Rates") in effect at the time Services are rendered. Customer hereby authorizes its insurance company or agent to pay Contractor directly. Customer's obligation to pay amounts due pursuant to this Agreement shall not be conditioned upon or limited by the types, amounts or availability of insurance coverage.

2.3 Contractor will present its first invoice to Customer as soon as possible following commencement of Services provided hereunder, and may issue subsequent invoices every five (5) days thereafter. Customer agrees to pay the full amount of each invoice amount within thirty (30) business days of the date of receipt of said invoice by Customer's Representative.

2.4 Customer agrees that interest shall accrue and will be paid to Contractor on any unpaid balance of any invoice after thirty (30) business days of receipt of invoice by Customer at the rate of one and one half percent (1.5%) per month or the maximum amount allowed by law.

2.5 In the event that legal or other action is required to collect unpaid balances of invoices due Contractor, Customer agrees to pay all costs of collection, litigation or settlement incurred by Contractor, including reasonable attorneys fees. "Legal or other action" as used above shall include bankruptcy and insolvency proceedings.

2.6 In the event that work is suspended or terminated for any reason prior to the completion of the Services, Customer agrees to pay for labor, equipment, materials, disposal and other costs incurred by Contractor at the Rates and for reasonable demobilization costs.

2.7 Customer agrees to pay Contractor in accordance with the Rates for any litigation support or related testimony provided by Contractor in connection with, or arising out of, the work performed by Contractor hereunder.

3. INDEMNIFICATION

3.1 CONTRACTOR shall indemnify, defend and hold harmless COMPANY, its parent and affiliated companies and their respective directors, officers, employees and agents from and against any and all costs, liabilities, claims, demands and causes of action including, without limitation, bodily injury to or death of any person or destruction of or damage to any property, except natural resource and other damages as provided in Section 3.3, which COMPANY may suffer, incur, or pay out, to the extent such are caused by the negligence or willful misconduct of CONTRACTOR, its agents or employees during the performance of the Agreement or CONTRACTOR'S failure to comply with any laws, regulations or lawful authority, or failure to comply with its obligations under this Agreement; except to the extent such liabilities, claims, demands and causes of action result from (i) COMPANY'S failure to comply with any laws, regulations or other lawful authority; (ii) COMPANY'S failure to comply with its obligations under the Agreement or (iii) the negligence or willful misconduct of COMPANY, its employees or agents.

3.2 COMPANY shall indemnify, defend and hold harmless CONTRACTOR, its parent and affiliated companies and their respective directors, officers, employees and agents from and against any and all costs, liabilities, claims, demands and causes of action including, without limitation, any bodily injury to or death of any person or destruction of or damage to property which CONTRACTOR may suffer, incur, or pay out, to the extent such are caused by the negligence or willful misconduct of COMPANY, its employees or agents or the failure of COMPANY to comply with any laws, regulations or other lawful authority or the failure of COMPANY to comply with its duties or obligations under the Agreement; except to the extent such liabilities, claims, demands and causes of action result from (i) CONTRACTOR'S failure to comply with any laws, regulations or lawful authority; (ii) CONTRACTOR'S failure to comply with its obligations under the Agreement; or (iii) the negligence or willful misconduct of CONTRACTOR, its employees or agents.

3.3 Notwithstanding the foregoing, COMPANY shall indemnify, defend and hold harmless CONTRACTOR, its parent and affiliated companies and their respective directors, officers, employees, agents and subcontractors from and against any and all costs, liabilities, claims,

demands and causes of action for pollution damages; contamination or adverse effects on the environment; destruction of, damage to, or loss of, whether actual or alleged, any property or natural resources, including the cost of assessing the damage; injury to or economic losses resulting from destruction of real or personal property; damages for loss of subsistence use of natural resources; damages equal to the loss of profits or impairment of earning capacity due to the injury, destruction or loss of real property, personal property or natural resources; damages for net costs of providing increased or additional public services; removal costs; and any other costs assessable under the Oil Pollution Act of 1990, the Comprehensive Environmental Response, Compensation and Liability Act or other local, state or Federal law or lawful authority applicable to discharges or releases of oil or hazardous substances which CONTRACTOR, individually or collectively, may suffer, incur, or pay out in connection with, or arising out of, the release of oil or hazardous substances by COMPANY.

THE FOREGOING INDEMNITY SHALL ONLY APPLY TO THOSE CLAIMS, LIABILITIES OR CAUSES OF ACTION ARISING, DURING, OR AS A RESULT OF, EMERGENCY RESPONSE ACTIVITIES. THE INDEMNITY CONTAINED IN THE MASTER SERVICE AGREEMENT SHALL GOVERN THE RIGHTS AND OBLIGATIONS OF THE PARTIES WITH REGARD TO THE TRANSPORTATION OR DISPOSAL OF WASTE MATERIALS BY CONTRACTOR.

4. TERMINATION

4.1 Work Orders issued for performance of services under this Rider may be terminated by either party upon forty-eight (48) hours prior notice to the other party.

Except as specifically amended herein, all other terms and conditions contained in the AGREEMENT shall remain in full force and effect.

IN WITNESS WHEREOF, the parties have caused this RIDER to be executed by their duly authorized representatives as of the day and year first above written.

CLEAN HARBORS ENVIRONMENTAL
SERVICES, INC.

Genesis Energy, L.L.C.,
Genesis Energy, L.P., Genesis Crude Oil,
L.P., and their affiliates and subsidiaries

By: Walter J. Conner

By: [Signature]

Its: Senior Vice President

Its: VP/GM PIPELINES AND TRANSPORTATION

Date: May 31, 2012

Date: 7/11/12



Corporate

131 Kestring Drive
Belle Chasse, LA 70037
Office: (504) 394 6110
Fax: (504) 392 8977

August 10, 2012

Louisiana

221 Clenlenning Road
Houma, LA 70363
Office: (985) 868 0119
Fax: (985) 868 0425

9625 Highway 182
Morgan City LA 70381
Office: (985) 631 9654
Fax: (985) 631 2823

3407 Lark Brooks Road
New Iberia, LA 70560
Office: (337) 364 5373
Fax: (337) 367 9444

5227 N. River Road
Port Allen, LA 70767
Office: (225) 388 9992
Fax: (225) 388 0895

11966 River Road
St. Rose, LA 70087
Office: (504) 712 6947
Fax: (504) 712 6949

42519 Highway 23
Venice, LA 70091
Office: (504) 534 7563
Fax: (504) 534 7566

Texas

2308 W Fairmont Pkwy
La Porte, TX 77571
Office: (281) 470-2016
Fax: (281) 470 2216

8725 Industrial Circle
Port Arthur, TX 77640
Office: (409) 962 7226
Fax: (409) 962 7260

5172 W Loop 281
Longview, TX 75603
Office: (903) 232 7131
Fax: (903) 232 7151

Environmental & Safety Products

1601 4th Street
Harvey, LA 70058
Office: (504) 367 7562
Fax: (504) 367 7567

Genesis Energy, L.L.C
Attn: Bruce McElheny
8550 United Plaza Blvd., Suite 401
Baton Rouge, LA 70809

RE: OPA "90" Compliance 2011 Deployment Letter

Dear Mr. McElheny,

Please allow this letter to serve as documentation to meet the PREP requirements for all your facilities. OMI Environmental Solutions is a U.S. Coast Guard Classified "MM" through "W3" company. OMIES deploys, drills or inspects all of its equipment annually.

DATE	LOCATION	BOATS	BOOM	SKIMMER	PERSONNEL
1/15/2011	Bay St. Elaine (Cocodrie LA)	1	400'	1	9
1/15/2011	Beaumont, TX	5	1100'	2	13
1/20/2011	West Cote Blanche Bay LA	1	600'	0	6
3/19/2011	Morgan City LA	2	700'	2	7
6/8/2011	Breton Sound LA	8	11300	4	30
9/11/2011	Lafitte LA	9	6700	2	33
9/28/2011	Pecan Island LA	1	150'	1	4
9/24/2011	Houston Ship Channel TX	2	2200	0	4
10/20/2011	Plaquemine, LA	1	800'	0	7

All OMIES equipment is properly inspected, maintained, and documented in accordance with our maintenance program. In addition, all our spill response personnel have received the necessary training which includes 29 CFR 1910.120/OSHA HAZWOPER, to safely and effectively respond to an oil spill. A record of this training is on file and available upon request.

In conclusion, OMI Environmental Solutions certifies that our files are current and in compliance with OPA'90 regulations pertaining to Oil Spill Removal Organizations (OSROs)

If you need any further assistance or additional information please feel free to call me at 832-758-1457.

Sincerely,

Rod Dillon

Rod Dillon Compliance Manager

WWW.OMIES.COM 24/7 EMERGENCY RESPONSE 1-800-645-6671

24/7 Oil Spill Response • 24/7 Haz-Mat Response • Industrial Services • Standby Rescue • Waste Management & Disposal
Transportation Services • Safety / Compliance / Training • Environmental & Safety Products

EFFECTIVE DAILY RECOVERY CAPABILITIES

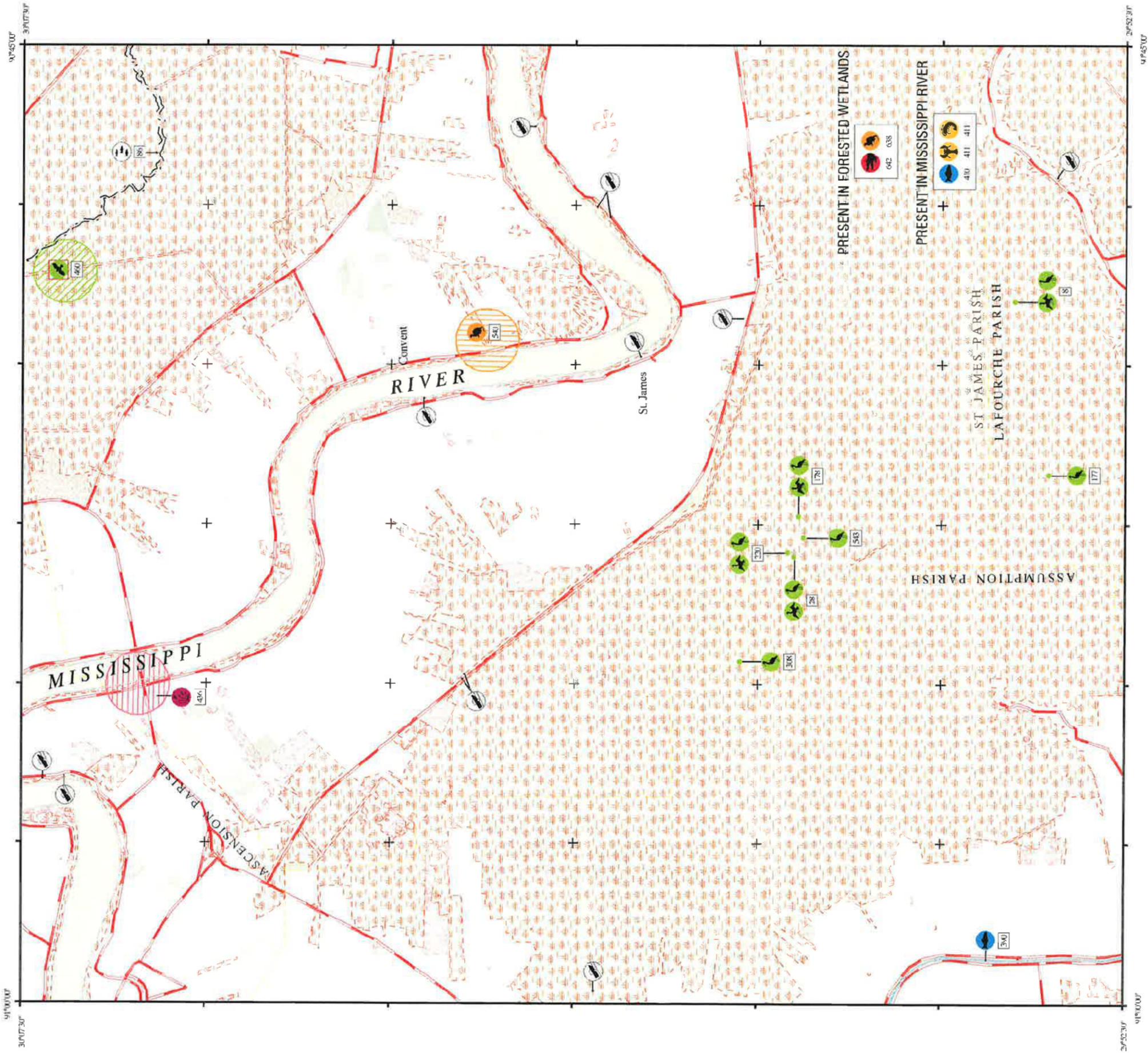
Listed below are the recovery capabilities of all-major skimmers and storage bladders and tanks in the OMI inventory.

• Rope Mop 1-4	1413 BBLS per day	
• Rope Mop 2-4	2208 BBLS per day	
• Rope Mop 2-6	3091 BBLS per day	
• Rope Mop 2-9	4416 BBLS per day	
• Drum Skimmer	3908 BBLS per day	
• Disc Skimmer	114 BBLS per day	
• Marco Harbor 28	1900 BBLS per day	30 BBL Storage
• JBF Skimmer	1600 BBLS per day	20 BBL Storage
• Barge Boat		25 BBL Storage
• Storage Bladders		85 BBL Storage
• Frac-Tank		500 BBL Storage
• Fast Tank		21 BBL Storage
• Vacuum Boat		700 Gal
• Vacuum Truck		70 BBL
• Guzzler		90 BBL

Wier skimmers are considerably less and are only efficient in calm waters and conditions.

ENVIRONMENTAL SENSITIVITY INDEX MAP

PHMSA 000030171



NOTE FOR COASTAL MAPS:
Due to the dynamic nature of the Louisiana coastline, biological resources may represent historical locations that do not correspond with the depicted shoreline.

SHORELINE

- 1988 SHORELINE
- 2001 SHORELINE

SHORELINE HABITATS (ESI) 2001 ESI Shoreline Classification

- 1B EXPOSED, SOLID MAN-MADE STRUCTURES
- 2A EXPOSED WAVECUT PLATFORMS IN CLAY
- 2B EXPOSED SCARPS AND STEEP SLOPES IN CLAY
- 3A FINE- TO MEDIUM-GRAINED SAND BEACHES
- 3B SCARPS AND STEEP SLOPES IN SAND
- 4 COARSE-GRAINED SAND BEACHES
- 5 MIXED SAND AND GRAVEL BEACHES
- 6A GRAVEL BEACHES
- 6B RIPRAP
- 7 EXPOSED TIDAL FLATS
- 8A SHELTERED ROCKY SHORES AND SHELTERED SCARPS IN MUD OR CLAY
- 8B SHELTERED, MAN-MADE STRUCTURES
- 9C SHELTERED RIPRAP
- 9A SHELTERED TIDAL FLATS
- 9B SHELTERED, VEGETATED LOW BANKS
- 10A SALT- AND BRACKISH-WATER MARSHES
- 10B FRESHWATER MARSHES
- 10C FRESHWATER SWAMPS
- 10D SCRUB-SHRUB WETLANDS

COASTAL HABITATS

Based on 1988 Digital Shoreline

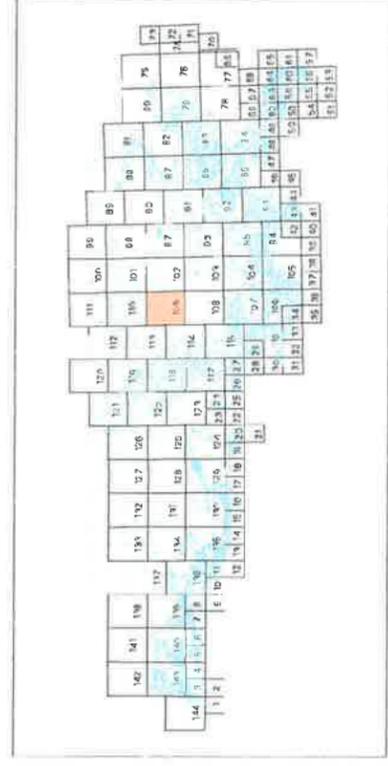
- 10A SALT MARSH
- 10A BRACKISH MARSH
- 10A INTERMEDIATE MARSH
- 10B FRESHWATER MARSH
- 10C FORESTED WETLAND
- 10D SCRUB-SHRUB WETLAND
- SEAGRASS



SCALE 1:100000



Not For Navigation



December 2003
Published at Seattle, Washington
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Response and Restoration
Hazardous Materials Response Division

PONCHATOLA LA-109

Louisiana ESI: ESIMAP 109
BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating	Molting
8	Anhinga			7 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	X		
	Cattle egret			13 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	X		
	Great blue heron			32 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	X		
	Great egret			290 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	X		
	Little blue heron			15 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	X		
	Snowy egret			5 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	X		
	White ibis			14 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	X		
28	Anhinga			3 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	X		
	Cattle egret			68 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	X		
	Great blue heron			60 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	X		
	Great egret			355 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	X		
	Little blue heron			95 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	X		
	Snowy egret			84 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	X		
	Tricolored heron			23 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	X		
	White ibis			40 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	X		
	Yellow-crowned night-heron			9 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	X		
177	Cattle egret			28 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	X		
	Little blue heron			54 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	X		
	Snowy egret			36 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	X		
178	Yellow-crowned night-heron			2 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	X		
	Anhinga			8 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	X		
	Cattle egret			9 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	X		
	Little blue heron			168 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	X		
	Snowy egret			27 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	X		
220	Yellow-crowned night-heron			6 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	X		
	Anhinga			2 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	X		
	Cattle egret			20 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	X		
	Great blue heron			60 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	X		
	Great egret			159 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	X		
308	Cattle egret			40 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	X		
	Little blue heron			105 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	X		
	Snowy egret			85 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	X		
460	Yellow-crowned night-heron			25 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	X		
543	Threatened raptor		T		X	X	X	X	X	X	X	X	X	X	X	X	X		
	Great blue heron			50 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	X		
	Great egret			133 IND (90-99AV)	X	X	X	X	X	X	X	X	X	X	X	X	X		

FISH:

RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
390	Largemouth bass			MED	X	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
410	Alligator gar			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Bantam sunfish			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Bighead carp			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Bigmouth buffalo			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Black buffalo			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Black crappie			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Bluegill			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Bowfin			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Catfish			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Chubsucker			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Common carp			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Freshwater drum			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Gizzard shad			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Grass carp			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Gulf menhaden			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Hybrid sunfish			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Largemouth bass			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Logperch			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Longear sunfish			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Minnows			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Orangespotted sunfish			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Paddlefish			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Redear sunfish			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	River carpsucker			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Shiners			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Shortnose gar			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Shovelnose sturgeon			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Silver carp			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Smallmouth buffalo			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Spotted gar			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Spotted sunfish			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Striped bass			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Striped mullet			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Threadfin shad			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	White bass			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	White crappie			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Yellow bass			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC

HABITAT:

RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D
436	Rare plant				X	X	X	X	X	X	X	X	X	X	X	X

INVERTEBRATE:

RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
411	River shrimp			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	White river crawfish			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC

REPTILE:

RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Hatching
------	---------	---	---	-------	---	---	---	---	---	---	---	---	---	---	---	---	---------	----------

Louisiana ESI: ESIMAP 109 (cont.)

BIOLOGICAL RESOURCES: (cont.)

TERRESTRIAL MAMMAL:

RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D
638	Muskrat			196 TO 53 AC/NEST	X	X	X	X	X	X	X	X	X	X	X	X
	Northern river otter			877 TO 728 AC/NEST	X	X	X	X	X	X	X	X	X	X	X	X
	Nutria			15 TO 3 AC/NEST	X	X	X	X	X	X	X	X	X	X	X	X

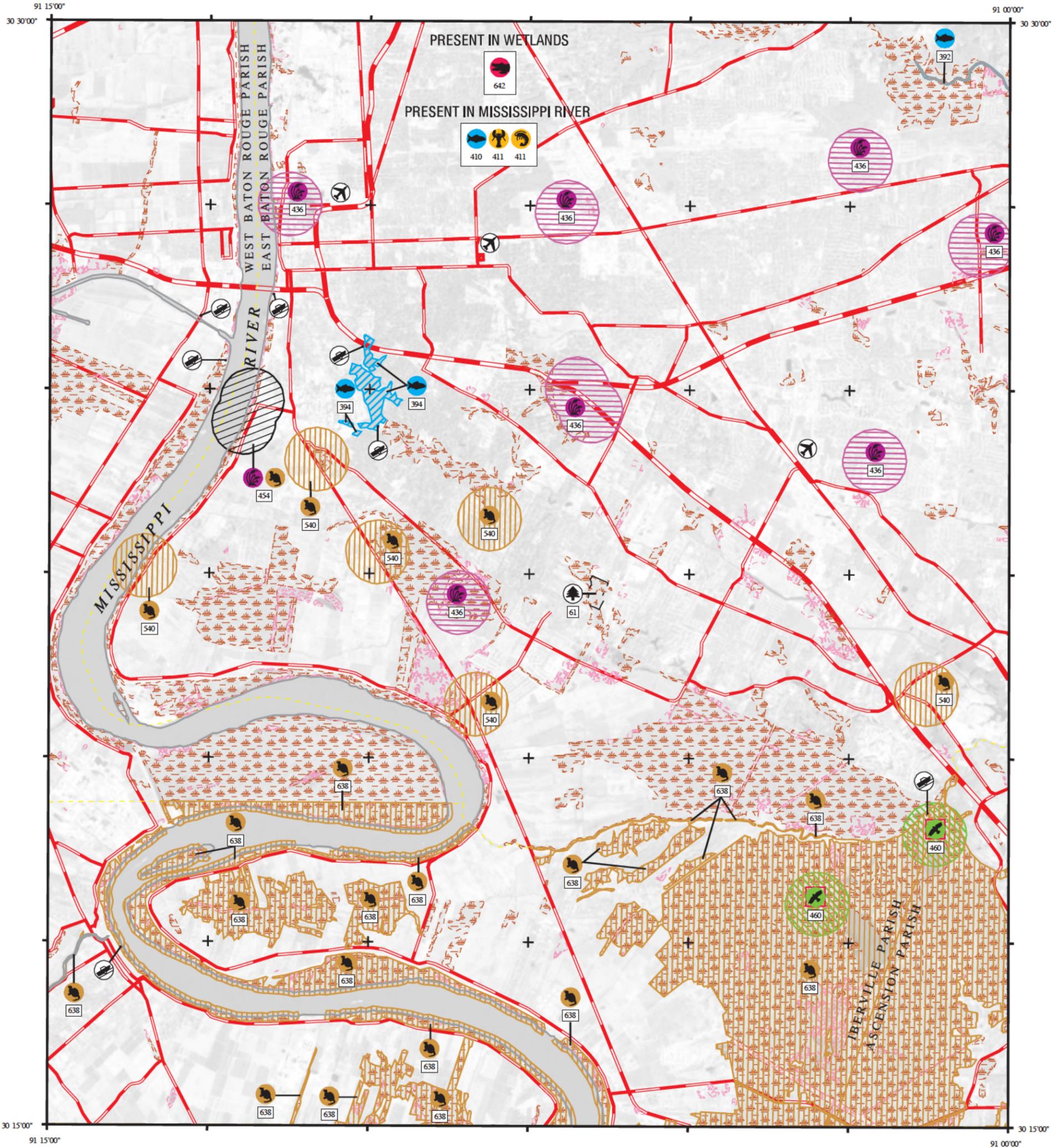
HUMAN USE RESOURCES:

SCENIC RIVER:

HUN#	Name	Owner	Contact	Phone
86	BLIND SCENIC RIVER		PRIVATE	

Biological information shown on the maps represents known concentration areas of occurrences, but does not necessarily represent the full distribution or range of each species. This is particularly important to recognize when considering potential impacts to protected species.

ENVIRONMENTAL SENSITIVITY INDEX MAP



SHORELINE
 1988 SHORELINE
 2001 SHORELINE

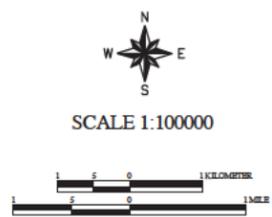
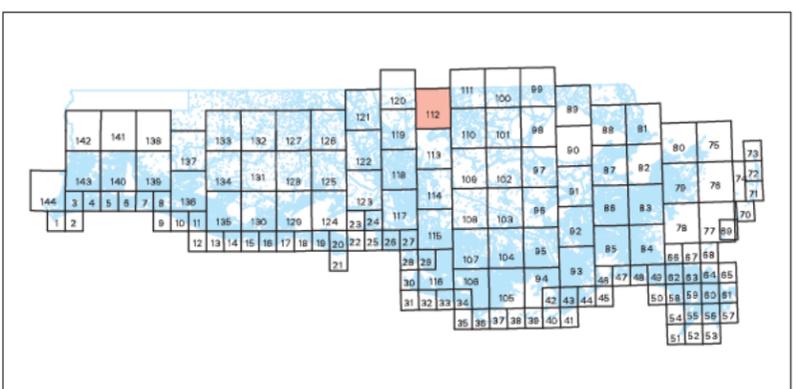
NOTE FOR COASTAL MAPS:
 Due to the dynamic nature of the Louisiana coastline, biological resources may represent historical locations that do not correspond with the depicted shoreline.

**SHORELINE HABITATS (ESI)
 2001 ESI Shoreline Classification**

- 1B EXPOSED, SOLID MAN-MADE STRUCTURES
- 2A EXPOSED WAVE-CUT PLATFORMS IN CLAY
- 2B EXPOSED SCARPS AND STEEP SLOPES IN CLAY
- 3A FINE- TO MEDIUM-GRAINED SAND BEACHES
- 3B SCARPS AND STEEP SLOPES IN SAND
- 4 COARSE-GRAINED SAND BEACHES
- 5 MIXED SAND AND GRAVEL BEACHES
- 6A GRAVEL BEACHES
- 6B RIPRAP
- 7 EXPOSED TIDAL FLATS
- 8A SHELTERED ROCKY SHORES AND SHELTERED SCARPS IN MUD OR CLAY
- 8B SHELTERED, MAN-MADE STRUCTURES
- 8C SHELTERED RIPRAP
- 9A SHELTERED TIDAL FLATS
- 9B SHELTERED, VEGETATED LOW BANKS
- 10A SALT- AND BRACKISH-WATER MARSHES
- 10B FRESHWATER MARSHES
- 10C FRESHWATER SWAMPS
- 10D SCRUB-SHRUB WETLANDS

**COASTAL HABITATS
 Based on 1988 Digital Shoreline**

- 10A SALT MARSH
- 10A BRACKISH MARSH
- 10A INTERMEDIATE MARSH
- 10B FRESHWATER MARSH
- 10C FORESTED WETLAND
- 10D SCRUB-SHRUB WETLAND
- SEAGRASS

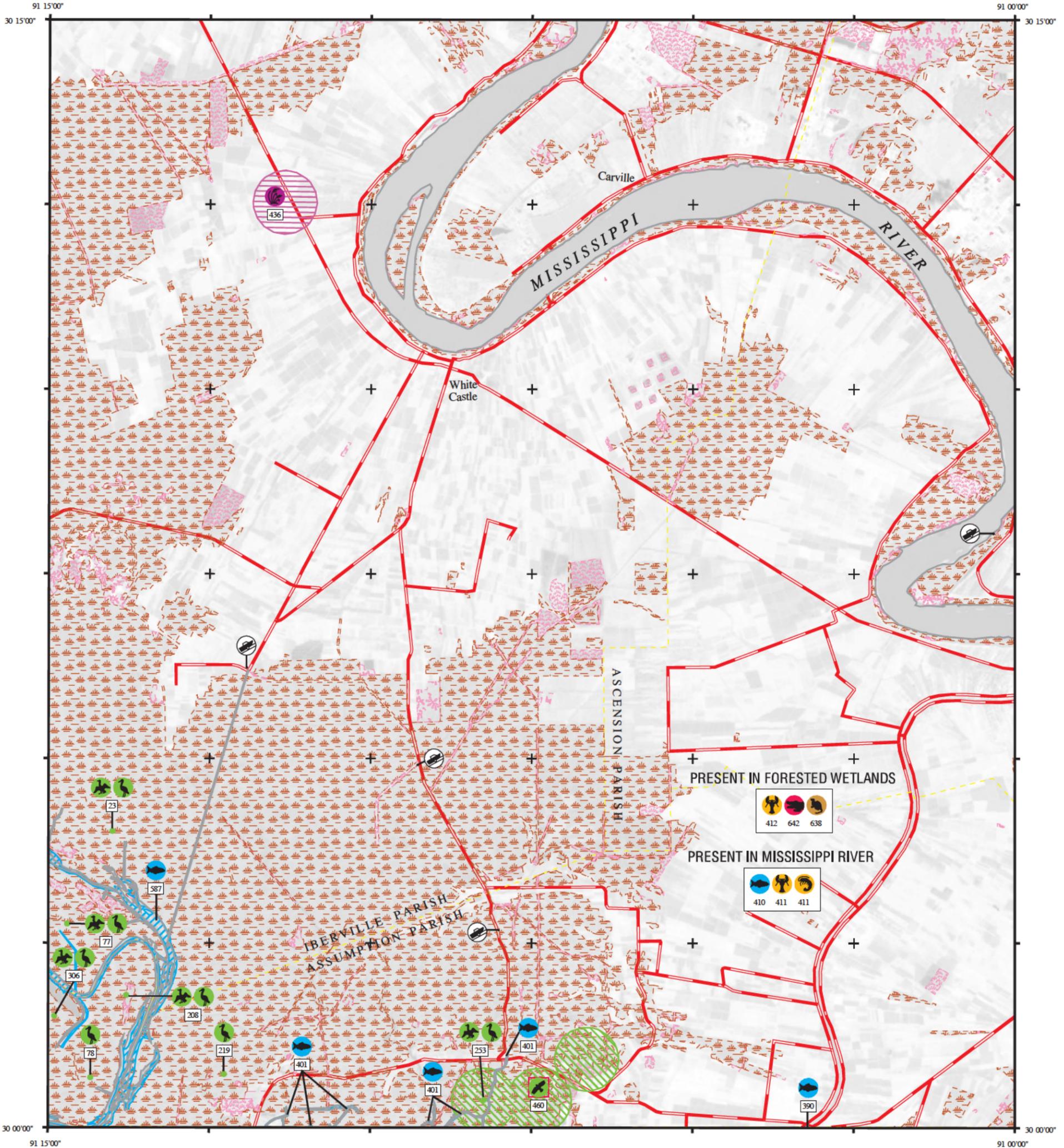


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 National Ocean Service
 Office of Response and Restoration
 Hazardous Materials Response Division

Not For Navigation

BATON ROUGE LA-112

ENVIRONMENTAL SENSITIVITY INDEX MAP



SHORELINE
 1988 SHORELINE
 2001 SHORELINE

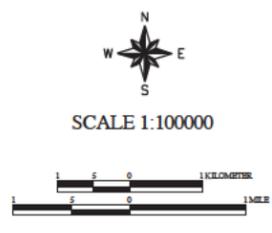
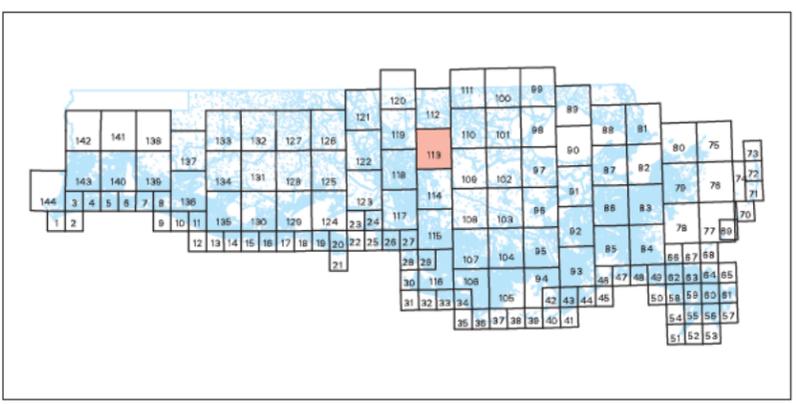
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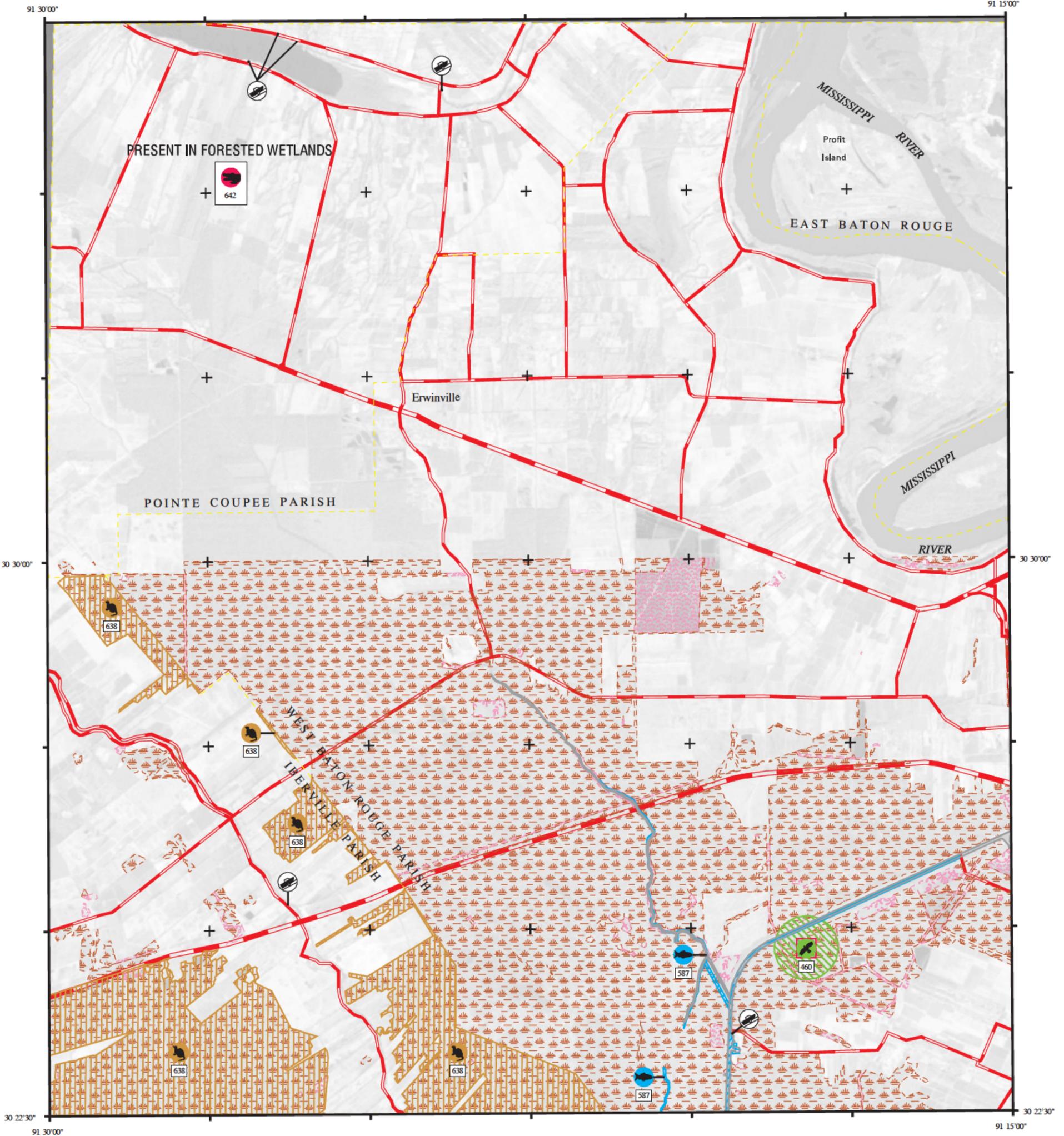


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ENVIRONMENTAL SENSITIVITY INDEX MAP



SHORELINE
 1988 SHORELINE
 2001 SHORELINE

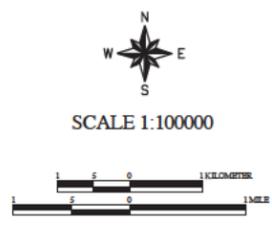
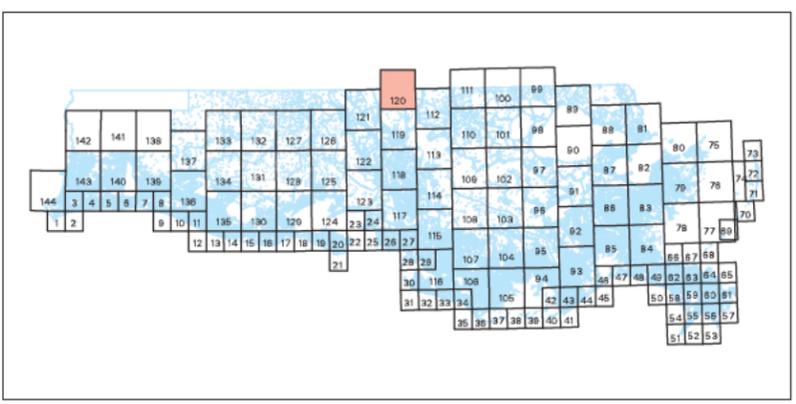
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- SEAGRASS



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BATON ROUGE LA-120

LOUISIANA

SHORELINE HABITATS (ESI) 2001 ESI Shoreline Classification

	1B) EXPOSED, SOLID MAN-MADE STRUCTURES
	2A) EXPOSED WAVE-CUT PLATFORMS IN CLAY
	2B) EXPOSED SCARPS AND STEEP SLOPES IN CLAY
	3A) FINE- TO MEDIUM-GRAINED SAND BEACHES
	3B) SCARPS AND STEEP SLOPES IN SAND
	4) COARSE-GRAINED SAND BEACHES
	5) MIXED SAND AND GRAVEL BEACHES
	6A) GRAVEL BEACHES
	6B) RIPRAP
	7) EXPOSED TIDAL FLATS
	8A) SHELTERED ROCKY SHORES AND SHELTERED SCARPS IN MUD OR CLAY
	8B) SHELTERED MAN-MADE STRUCTURES
	8C) SHELTERED RIPRAP
	9A) SHELTERED TIDAL FLATS
	9B) SHELTERED, VEGETATED LOW BANKS
	10A) SALT- AND BRACKISH-WATER MARSHES
	10B) FRESHWATER MARSHES
	10C) FRESHWATER SWAMPS
	10D) SCRUB-SHRUB WETLANDS

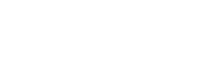
COASTAL HABITATS From 1988 Digital Shoreline

	10A) SALT MARSH
	10A) BRACKISH MARSH
	10A) INTERMEDIATE MARSH
	10B) FRESHWATER MARSH
	10C) FORESTED WETLAND
	10D) SCRUB-SHRUB WETLAND
	SEAGRASS

SENSITIVE BIOLOGICAL RESOURCES

	BIRD		TERRESTRIAL MAMMAL		REPTILE / AMPHIBIAN
	DIVING BIRD		BAT		ALLIGATOR
	GULL / TERN		BEAR		TURTLE
	PASSERINE		SMALL MAMMAL		OTHER REPTILE / AMPHIBIAN
	RAPTOR		INVERTEBRATE		HABITAT
	SHOREBIRD		BIVALVE		PLANT
	WADING BIRD		CEPHALOPOD		SEAGRASS
	WATERFOWL		CRAB		MUTIPLE ELEMENTS
	NESTING SITE		CRAYFISH		THREATENED / ENDANGERED
	FISH		INSECT		RAR NUMBER
	FISH		SHRIMP		

HUMAN-USE FEATURES

	AIRPORT / HELIPORT		SENIC RIVER		PARISH BOUNDARY
	BOAT RAMP		STATE PARK		MANAGEMENT BOUNDARY
	INDIAN RESERVATION		WILDLIFE REFUGE		MAJOR ROAD
	MARINA		HUMAN-USE NUMBER		MINOR ROAD
	NATIONAL PARK / NATURE CONSERVANCY				SHORELINE FROM 2001 PHOTO INTERPRETATION
					SHORELINE FROM 1988 DIGITAL DATA

Guidelines for Interpreting ESI Maps

To help users interpret the ESI maps and tabular data, we offer the following guidelines for use in addition to the map legend:

- **Shoreline Habitats.** The “shoreline,” representing the boundary between land and water, is color-coded with the ESI classification. Most shoreline habitats are shown as a line, with no areal dimension. Where there is more than one shoreline type (e.g., a beach in front of a seawall), the colors for each habitat are shown, with the color for the landward habitat on the land side of the shoreline and the color for the seaward habitat on the water side. In areas where the intertidal zone is wide (e.g., wide tidal flats, wave-cut rocky platforms), the habitat from high to low water is filled with the ESI classification color. When data are available, the entire extent of wetlands are filled with colored patterns. The seaward edge of the wetland is color-coded with the ESI classification; the landward extent of the wetland is indicated by a dashed, colored line.
- **Biological Resources.** The distribution of biological resources is shown using many different conventions. The major convention is an icon associated with a point, line, or polygon that shows the species’ areal distribution. The icon’s reference number corresponds to a data table with details on species and life history. Biological resource data are organized into six major groups, each with a reference color: birds (green), mammals (brown), fish (blue), shellfish (orange), reptiles (red), and rare/endangered plants and special habitats (purple). These colors are used to fill hatched polygons and the icons. Each major group has subgroups with unique icons to visually indicate the type of organism or feature present. The icon or group of icons is usually located inside the polygon it represents; however, sometimes a line is connected between the icon and the polygon or point to make it easier to relate the two. Note that icons are used to indicate the types of resources present, but the actual data are the points and polygons. A red box around an icon indicates the presence of a species on the state or Federal list of threatened or endangered species.

The number listed below each icon refers to the first column of a data table for each map. The data tables, organized by group (birds, fish, etc.), include the following information: species name, status as threatened or endangered on state and Federal lists, concentration (specifically for each point or polygon), presence by month, and special life-history time periods. When a polygon contains multiple groups, the one number under the group of icons is listed under each group heading in the data tables. Where possible, the same number is used on multiple maps. For example, all bald eagle nests with the same seasonality could have the same number throughout the atlas, or the same assemblage of fish would have the same number wherever it occurred.

A data table has a separate listing for every unique combination of species, concentration, seasonality, life-history stage, and source. By looking at the monthly seasonality data in the table for each map, the species present at the time of concern can be easily identified. An ‘X’ or number is placed under each month in which any life stage of the species is present in the area represented by the point or polygon. Numbers are used typically for fish and shellfish where data on relative abundance are available. The final columns in the data tables include the months when reproductive activities occur or early life stages are present. Users should pay close attention to the data tables because they contain much of the information needed to identify the most sensitive resources at different times of the year.

Points, lines, and polygons on a map represent the distribution of the resources. Green points show bird nesting sites, including bald eagle nests and dense colonial nesters (e.g., heron rookeries and seabird nesting colonies). Animals and habitats are also represented as: 1) hatched polygons in the color for the animal group (e.g., green for birds); 2) black hatched polygons which contain multiple groups of resources (birds and fish in the same tidal channels); 3) solid lines (usually used for fish in small streams); or 4) in “common in ...” boxes. When showing the biological resource polygons would make the maps too difficult to read (usually when multiple polygons cover a large area), the polygons are not plotted and the presence of the resource is indicated by placing the icon in a box labeled “common in ...” The box contains an appropriate geographic reference. Different boxes can be used on the same map when, for example: “common in Winyah Bay” or “common in tidal creeks.” The data for these resources are still fully present in the database but are not shown to make the maps more readable.

- **Human-use Resources.** Most of the human-use resources are point features indicated by a black-and-white icon. Managed lands, such as refuges and sanctuaries, have their boundaries shown as a dot-dash line with an icon and name placed inside. Where the feature is a known point location (e.g., a drinking water intake, boat ramp, marina), the exact location is shown as a small black dot and a line is drawn from it to the icon. Activities such as commercial and recreational fishing and areas such as recreational beaches are also indicated by an icon placed in the general area without any lines to points or polygons since the boundaries are not readily defined.

Some features, like historic and archaeological sites, are location-sensitive: the agency managing the resource believes the exact location should not be shown in order to protect the site. In these cases, the icon is placed in the general area of the resource, but the exact location is not shown.



4in line segment

8in line segment

16in line segment

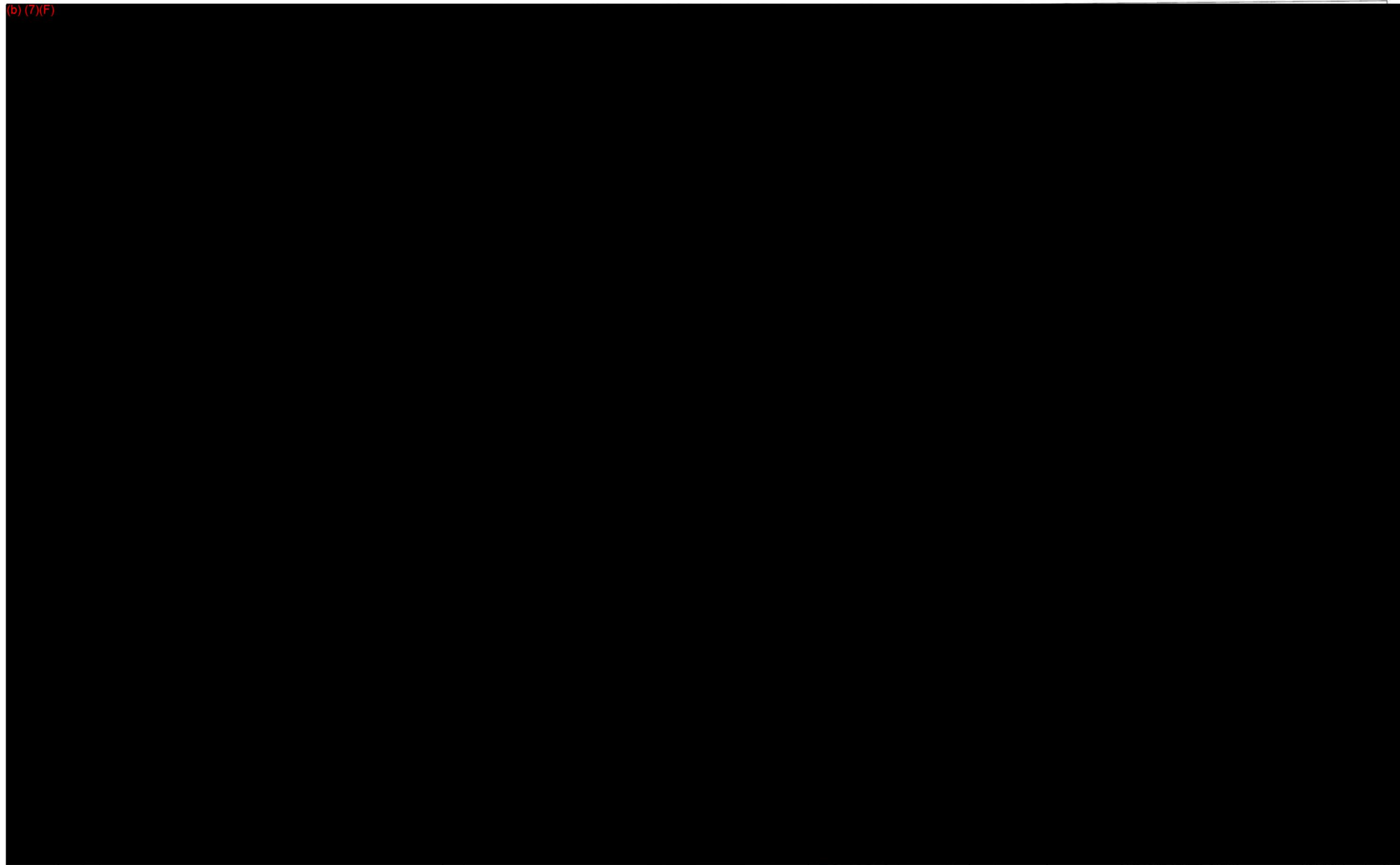
Data SIO, NOAA, U.S. Navy, NGA, GEBCO
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(b) (7)(F)

(b) (7)(F)



FRP Planning Distance Calculation

Segment 1

Oil Transport Over Land - Sheet Flow

Elevation E ₁ (at spill location)	88	ft
Elevation E ₂ (end point)	20	ft
Segment Distance D	3300	ft
Surface Type (select from drop-down)	Short Grass Pasture	

k = 7
s = 0.02061

$V_1 = k * s^{1/2}$

$T_1 = D / V_1$

Velocity V₁ 1. ft / sec = .69 mph

Time T₁ .91 hours

Travel Distance D₁ 0.63 miles

T = Total Response Time Remaining 26.09 hours

$T = 27 - T_1$

Planning Distance Method – Oil Transport Over Land

Oil Transport Over Land

EPA's comments suggest that different roughness coefficients for overland flow should be included. The State of Arizona recommends different sheet flow roughness coefficients in planning for flood damage prevention.³ That guidance document lists roughness coefficient values acceptable for use in sheet flow calculations over a variety of surfaces. The roughness coefficient value accounts for factors such as vegetation, sediment size, blocking of flow, and variations in channel geometry. Option 2 will allow the facility owner or operator to use those roughness coefficient values for different areas to achieve flow velocity distinctions that cannot be obtained with Option 1.

Example

Oil Transport Over Land

It is assumed that the worst case discharge initially moves as sheet flow, but turns into shallow concentrated flow after a very small distance, such that overland transport is represented by shallow concentrated flow on the entire distance D₁. If the flow is unimpeded, then the Chezy-Manning equation can be used to estimate the overland flow velocity (V₁):

$$V_1 = 1.49/n \times r^{2/3} \times s^{1/2}$$

If typical values for the roughness coefficient (*n*) and hydraulic radius (*r*) are used (see Table 4 for various surfaces), then the velocity depends on slope and a factor *k* which depends on the surface type. V₁ is expressed:

$$V_1 = k s^{1/2}$$

The average slope (*s*) can be found by dividing the change in elevation by the distance traveled.

TABLE 4 – Coefficients for Estimating Overland Travel Times

Surface	Roughness Coefficient (n)	Hydraulic Radius (r)	Overland Travel Factor (k)
Paved Surface	0.025	0.20	20.4
Unpaved Compacted Surface	0.050	0.40	16.2
Bare Unpaved Surface (sand or gravel)	0.017	0.04	10.3
Short Grass Pasture	0.025	0.04	7.0
Dense Grass	0.24	0.12	1.5
Natural Rangeland	0.13	0.04	1.3
Bermuda Grass	0.41	0.15	1.0

The time (T₁) that it takes for the oil to travel from the nearest opportunity for discharge to a storm drain or open concrete channel can then be calculated based on the runoff velocity and distance: $T_1 = D_1 / V_1$

Where D₁ is the distance (in feet) between the nearest opportunity for discharge and the storm drain. T₁ is expressed in seconds.

If D₂ = 0, or it is assumed that the additional time required for the oil to travel through the storm drain or channel to navigable water is negligible, then T₁ represents the total time it takes for the discharge to reach navigable water. T₁ must then be subtracted from the response time interval (t) to obtain the time during which oil is transported in moving navigable waters. This new time interval (t - T₁) is used to calculate a new planning distance to determine how far downstream from the outfall the oil will travel before response resources arrive and to determine whether the oil will affect fish and wildlife and sensitive environments or drinking water intakes.

Example of Oil Transport Over Land: The following example provides a sample calculation for the case illustrated in Section 2.6, assuming that the discharge from the facility travels one mile (1 mile) over a short grass pasture surface before reaching a very short storm drain emptying into the Monongahela River, and that the difference in elevation between the facility and the storm drain is 5 feet.

³ Arizona Department of Water Resources. "State Standard for Identification of and Development Within Sheet Flow Areas," SSA-4-95, January 1995.

- 1) The difference and elevation is 5 feet over a distance of 1 mile (5280 feet). The slope s is:
 $s = 5 \text{ ft} / 5280 \text{ ft} = 0.00095$
- 2) The value of k for a short grass pasture is given as 7.0 in Table 4.
- 3) Solve for overland flow velocity: $V_1 = 7.0 \times (0.00095)^{1/2} = 0.22 \text{ ft/sec}$

Thus, the time (T_1) that it takes for the discharge flow to reach moving navigable waters 5,280 feet away (1 mile) is:
 $T_1 = D_1 / V_1 = 24,000 \text{ seconds or about 6.5 hours.}$

Since the resource response time (t) for this river is 27 hours, the oil will be transported on the river for $(t - T_1) = 21.5 \text{ hours}$ before response resources arrive.

Louisiana ESI: ESIMAP 112

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating	Molting
460	Threatened raptor	T	X	X	X	X	X	X	X	X	X	X	X	X	OCT-MAY	-	-

FISH:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
392	Largemouth bass	LOW	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
394	Largemouth bass	HIGH	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
410	Alligator gar	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Bantam sunfish	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Bighead carp	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Bigmouth buffalo	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Black buffalo	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Black crappie	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Bluegill	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Bowfin	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Catfish	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Chubsucker	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Common carp	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Freshwater drum	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Gizzard shad	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Grass carp	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Gulf menhaden	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Hybrid sunfish	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Largemouth bass	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Logperch	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Longear sunfish	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Minnows	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Orangespotted sunfish	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Paddlefish	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Redear sunfish	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	River carpsucker	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Shiners	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Shortnose gar	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Shovelnose sturgeon	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Silver carp	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Smallmouth buffalo	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Spotted gar	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Spotted sunfish	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Striped bass	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Striped mullet	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Threadfin shad	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	White bass	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	White crappie	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Yellow bass	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-

HABITAT:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D
436	Rare plant		X	X	X	X	X	X	X	X	X	X	X	X
454	Rare plant		X	X	X	X	X	X	X	X	X	X	X	X

INVERTEBRATE:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
411	River shrimp	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	White river crawfish	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-

REPTILE:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Hatching	Interesting	Juveniles	Adults
642	American alligator	1000 TO 250 AC/NEST	X	X	X	X	X	X	X	X	X	X	X	X	JUN-AUG	AUG-SEP	-	JAN-DEC	JAN-DEC

TERRESTRIAL MAMMAL:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D
454	Rare small mammal		X	X	X	X	X	X	X	X	X	X	X	X
540	Rare small mammal		X	X	X	X	X	X	X	X	X	X	X	X
638	Common raccoon	25 TO 23 AC/NEST	X	X	X	X	X	X	X	X	X	X	X	X
	Mink	96 TO 56 AC/NEST	X	X	X	X	X	X	X	X	X	X	X	X
	Muskrat	196 TO 53 AC/NEST	X	X	X	X	X	X	X	X	X	X	X	X
	Northern river otter	877 TO 728 AC/NEST	X	X	X	X	X	X	X	X	X	X	X	X
	Nutria	15 TO 3 AC/NEST	X	X	X	X	X	X	X	X	X	X	X	X

HUMAN USE RESOURCES:

NATURE CONSERVANCY:

HUN#	Name	Owner	Contact	Phone
61	BLUEBONNET SWAMP PRESERVE		THE NATURE CONSERVANCY	

Biological information shown on the maps represents known concentration areas or occurrences, but does not necessarily represent the full distribution or range of each species. This is particularly important to recognize when considering potential impacts to protected species.

Louisiana ESI: ESIMAP 113 (cont.)

BIOLOGICAL RESOURCES: (cont.)

FISH:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
410	Shorthead gar	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Shovelnose sturgeon	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Silver carp	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Smallmouth buffalo	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Spotted gar	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Spotted sunfish	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Striped bass	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Striped mullet	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Threadfin shad	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	White bass	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	White crappie	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	Yellow bass	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
587	Bay anchovy	2						2	2	2	2	2	2	2	-	APR-OCT	APR-OCT	-	-
	Gizzard shad	3	3	3	3	3	3	3	3	3	3	3	3	3	MAR-SEP	MAR-SEP	MAR-SEP	JAN-DEC	-
	Gulf menhaden	4	4	4	4	4	4	4	4	4	4	4	4	4	-	-	-	JAN-DEC	-
	Southern flounder	2	2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	JAN-DEC	-
	Striped mullet	3	3	3	3	3	3	3	3	3	3	3	3	3	-	-	-	JAN-DEC	-

HABITAT:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D
436	Rare plant		X	X	X	X	X	X	X	X	X	X	X	X

INVERTEBRATE:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
411	River shrimp	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	White river crawfish	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
412	Red swamp crawfish	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-
	White river crawfish	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	-

REPTILE:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Hatching	Internesting	Juveniles	Adults
642	American alligator	1000 TO 250 AC/NEST	X	X	X	X	X	X	X	X	X	X	X	X	JUN-AUG	AUG-SEP	-	JAN-DEC	JAN-DEC

TERRESTRIAL MAMMAL:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D
638	Common raccoon	25 TO 23 AC/NEST	X	X	X	X	X	X	X	X	X	X	X	X
	Mink	96 TO 56 AC/NEST	X	X	X	X	X	X	X	X	X	X	X	X
	Muskrat	196 TO 53 AC/NEST	X	X	X	X	X	X	X	X	X	X	X	X
	Northern river otter	877 TO 728 AC/NEST	X	X	X	X	X	X	X	X	X	X	X	X
	Nutria	15 TO 3 AC/NEST	X	X	X	X	X	X	X	X	X	X	X	X

Biological information shown on the maps represents known concentration areas or occurrences, but does not necessarily represent the full distribution or range of each species. This is particularly important to recognize when considering potential impacts to protected species.

Louisiana ESI: ESIMAP 120

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating	Molting
460	Threatened raptor	T	X	X	X	X	X	X	X	X	X	X	X	X	OCT-MAY	-	-

FISH:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
587	Bay anchovy	2				2	2	2	2	2	2				-	APR-OCT	APR-OCT	-	-
	Gizzard shad	3	3	3	3	3	3	3	3	3	3	3	3	3	MAR-SEP	MAR-SEP	MAR-SEP	JAN-DEC	-
	Gulf menhaden	4	4	4	4	4	4	4	4	4	4	4	4	4	-	-	-	JAN-DEC	-
	Southern flounder	2	2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	JAN-DEC	-
	Striped mullet	3	3	3	3	3	3	3	3	3	3	3	3	3	-	-	-	JAN-DEC	-

REPTILE:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Hatching	Interesting	Juveniles	Adults
642	American alligator	1000 TO 250 AC/NEST	X	X	X	X	X	X	X	X	X	X	X	X	JUN-AUG	AUG-SEP	-	JAN-DEC	JAN-DEC

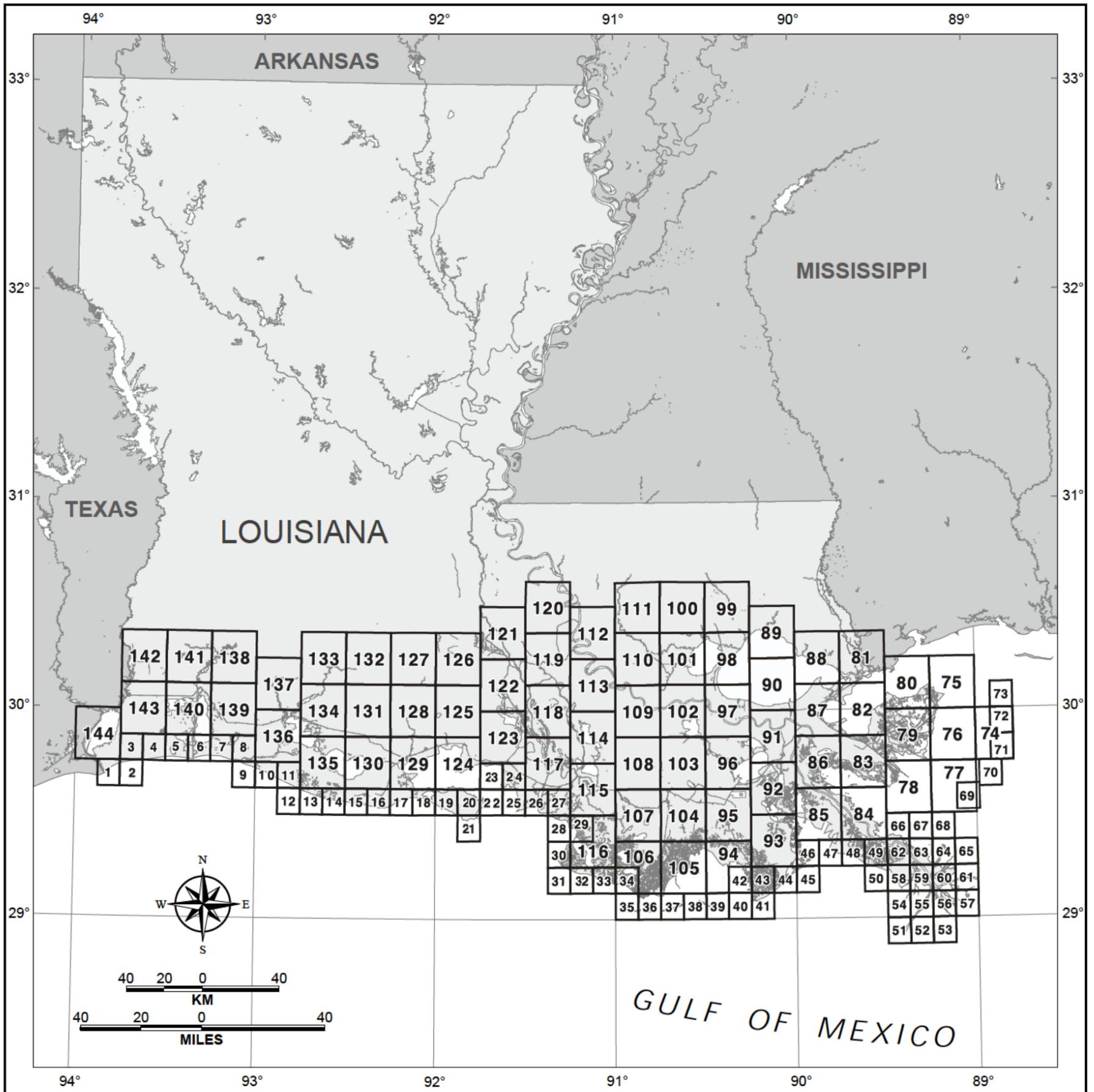
TERRESTRIAL MAMMAL:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D
638	Common raccoon	25 TO 23 AC/NEST	X	X	X	X	X	X	X	X	X	X	X	X
	Mink	96 TO 56 AC/NEST	X	X	X	X	X	X	X	X	X	X	X	X
	Muskrat	196 TO 53 AC/NEST	X	X	X	X	X	X	X	X	X	X	X	X
	Northern river otter	877 TO 728 AC/NEST	X	X	X	X	X	X	X	X	X	X	X	X
	Nutria	15 TO 3 AC/NEST	X	X	X	X	X	X	X	X	X	X	X	X

Biological information shown on the maps represents known concentration areas or occurrences, but does not necessarily represent the full distribution or range of each species. This is particularly important to recognize when considering potential impacts to protected species.

Sensitivity of Coastal Environments and Wildlife to Spilled Oil

LOUISIANA



Supported by:

In Cooperation with:



**National Oceanic and
Atmospheric Administration**

National Ocean Service

Office of Response and Restoration
Hazardous Materials Response Division
Seattle, Washington

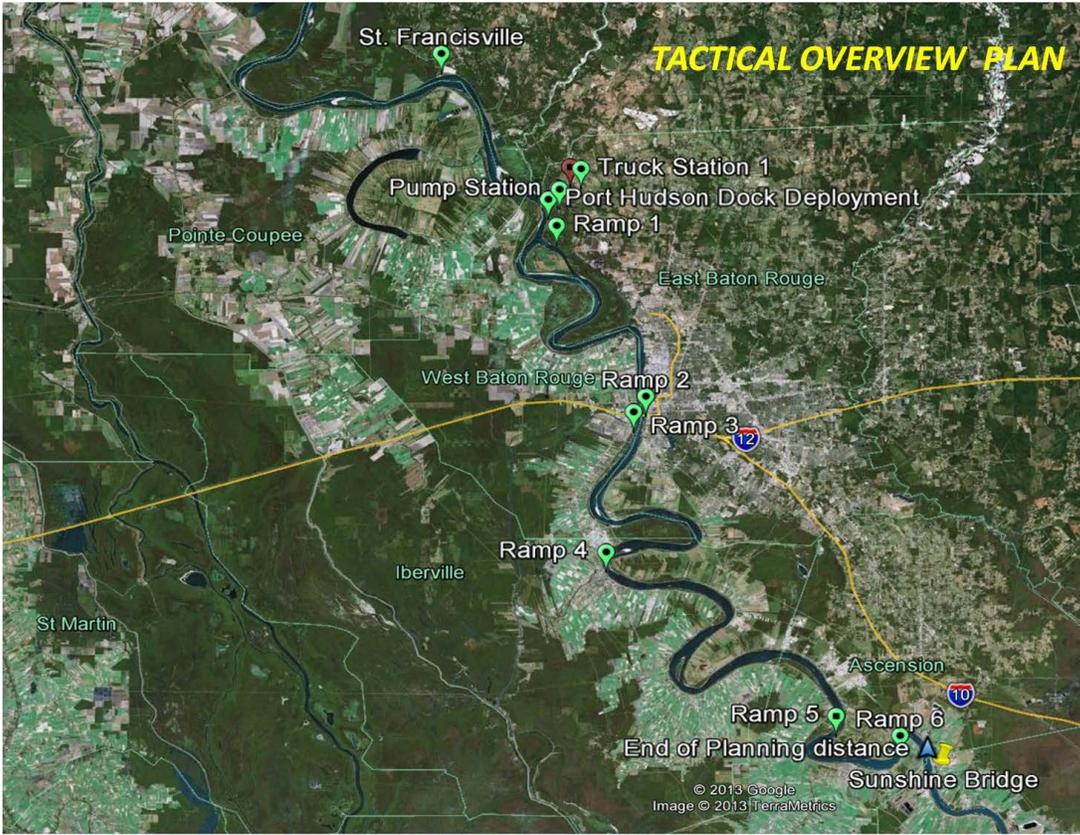
Minerals Management Service (MMS)
New Orleans, Louisiana

U.S. Fish and Wildlife Service (USFWS)
Lafayette, Louisiana

The Louisiana Oil Spill Coordinator's Office (LOSCO)
Baton Rouge, Louisiana

Louisiana Department of Wildlife and Fisheries (LDWF)
Baton Rouge, Louisiana

Louisiana Department of Natural Resources (LDNR)
Baton Rouge, Louisiana



U.S. Department of
Homeland Security

United States
Coast Guard



Commanding Officer
United States Coast Guard
Marine Safety Unit

6041 Crestmount Drive
Baton Rouge, LA 70809
Phone: (225) 298-5400
Fax: (225) 298-5408

16611

APR 04 2012

GENESIS ENERGY, BRWF3
ATTN: CLINT MURRAY
769 PORT HUDSON CEMETARY ROAD
P.O. BOX 1326
ZACHARY, LA 70791

FACILITY SECURITY PLAN AMENDMENT APPROVAL

The amendments to the facility security plan (FSP) for Genesis Energy dated March 01, 2012, are approved. The amendments included changes in section 1, the FSP's introduction and section E, additional information, in accordance with Title 33 Code of Federal Regulations (CFR) 105.410 and 105.415.

This approval will remain valid throughout the term of your Facility Security Plan Approval Letter, unless rescinded in writing by this office. You must review your plans annually and submit any amendments to this office for approval as required by 33 CFR 105.410 and 105.415. Keep a copy of this letter with the security plan and ensure this document is available to Coast Guard personnel upon request.

Failure to comply with the requirements of 33 CFR 105 may result in suspension or revocation of this security plan approval, thereby making the facility ineligible to operate in, on, under, or adjacent to waters subject to the jurisdiction of the U.S. in accordance with Title 46 United States Code §70103(c)(5). Your facility security plan is sensitive security information and must be protected in accordance with 49 CFR 15 and 1520. A copy of your security plan and any amendments must be made available to Coast Guard personnel upon request.

I commend your efforts in reviewing and updating your security plan to reflect your company's operating procedures and organizational structure. Implementation of the strategies and procedures contained in your plan serve to reduce the risk and mitigate the results of an act that threatens the security of personnel, the facility, and the public. Please ensure that all parties with responsibilities under this plan are familiar with the procedures and requirements contained therein. If you have any questions, please contact Lieutenant Victoria Saxon at (225) 298-5400 ext. 241.

Sincerely,

A handwritten signature in blue ink, appearing to read "Q. L. Davis".

Q. L. DAVIS
Lieutenant Commander
U.S. Coast Guard
By Direction

U.S. Department of
Homeland Security

United States
Coast Guard



Commanding Officer
United States Coast Guard
Marine Safety Unit

6041 Crestmount Drive
Baton Rouge, LA 70809
Phone: (225) 298-5400
Fax: (225) 298-5408

16455/BRWF03

OCT 16 2007

Genesis Crude Oil, LP. -- Port Hudson Facility
Attn: Mr. Joey Guidry
17411 Village Green
Houston, TX 77040

SUBJ: FACILITY RESPONSE PLAN APPROVAL LETTER

The facility response plan you submitted to meet the requirements of the Oil Pollution Act of 1990 is approved.

I commend your efforts in developing a response plan that reflects your company's operating procedures and organizational structure. I remind you that your plan is a vital working document and that implementing this plan will help ensure effective oil spill response and mitigation. Please be sure that all parties with responsibilities under the plan are familiar with the plans, procedures, and requirements.

GENESIS CRUDE OIL, LP is prohibited from handling, storing, transporting, transferring, or lightening oil unless it is operating in full compliance with this plan. Compliance includes ensuring that the required resources are available and in place through contract or other approved means and that the exercises required by Title 33, Code of Federal Regulations, Part 154.1055 are being properly conducted. The marine transportation related portion of your facility must have a copy of this plan and we recommend that it be kept alongside the operations manual.

This approval will remain valid until five years from the date of this letter. You must review your plan annually and resubmit the plan to the U.S. Coast Guard for re-approval six months before the end of this approval period, as required by Title 33, Code of Federal Regulations, Part 154.1065. **You are required to keep a copy of this letter with your plan.** If you have any questions, please contact Marine Safety Unit Baton Rouge at (225) 298-5400.

Sincerely,

A handwritten signature in black ink that reads "S. N. Gilreath".

S. N. GILREATH
Commander, U. S. Coast Guard
Commanding Officer
By direction of the Captain of the Port

U.S. Department of
Homeland Security



United States
Coast Guard

Commanding Officer
United States Coast Guard
Marine Safety Unit

6041 Crestmount Dr.
Baton Rouge, LA 70809
Phone: (225) 298-5400
Fax: (225) 298-5408

16611/BRWF3

JUL 27 2007

Genesis Crude Oil, LP. – Port Hudson Facility
Attn: Mr. Joey Guidry
17411 Village Green
Houston, TX 77040

SUBJ: SECURITY PLAN LETTER OF APPROVAL

The facility security plan for Genesis Crude Oil, LP. – Port Hudson Facility, submitted to meet the requirements of Title 33 Code of Federal Regulations (CFR) Part 105, is approved.

Commencing July 28, 2007, Genesis Crude Oil, LP. – Port Hudson Facility must operate in compliance with this approved security plan and any additional requirements contained in 33 CFR Part 105. Your facility is subject to inspections by Coast Guard personnel to verify compliance with your security plan. Failure to comply with the requirements of 33 CFR Part 105, including those as outlined in your facility security plan, may result in suspension or revocation of this security plan approval, thereby making the facility ineligible to operate in, on, under, or adjacent to waters subject to the jurisdiction of the U.S. in accordance with 46 USC 70103(c)(5). **Your facility security plan is sensitive security information and must be protected in accordance with 49 CFR Part 1520.** A copy of your security plan and any amendments must be made available to Coast Guard personnel upon request.

This approval will remain valid until five years from the date of this letter unless rescinded in writing by this office. You must review your plans annually and submit any amendments to this office for re-approval as required by Title 33, CFR 105.410 and 105.415. **Keep the original copy of this letter with the security plan.** Coast Guard personnel will audit your adherence with the requirements of this plan on an annual basis.

I commend your efforts in developing a security plan that reflects your company's operating procedures and organizational structure. Implementation of the strategies and procedures contained in your plan serve to reduce the risk and mitigate the results of an act that threatens the security of personnel, the facility, and the public. Please ensure that all parties with responsibilities under this plan are familiar with the procedures and requirements contained therein. If you have any questions, please contact Marine Safety Unit Baton Rouge at (225) 298-5400.

Sincerely,

S. N. GILREATH

Commander, U.S. Coast Guard

By Direction of the Federal Maritime Security Coordinator

U.S. Department of
Homeland Security

United States
Coast Guard



Commanding Officer
United States Coast Guard
Marine Safety Unit

6041 Crestmount Drive
Baton Rouge, LA 70809
Phone: (225) 298-5400
Fax: (225) 298-5408

16455/BRWF3

Genesis Crude Oil
Attn: Tricia G. Petty
17411 Village Green
Houston, TX 77040

REMOVAL FROM CARETAKER STATUS APPROVAL LETTER

I have received your request, dated May 1, 2008, to be taken out of caretaker status. The required start up inspection conducted by my office on April 3, 2008, verified you are in compliance with the transfer regulations of 33 Code of Federal Regulation (CFR) Part 154 as well as facility security regulations of 33 CFR Part 105. Your request is approved.

I commend your efforts in bringing your facility into full compliance. As a reminder at any time my office may come out to conduct spot check to ensure your facility is operating in compliance with all applicable laws and regulations. Your facility must maintain the Operations Manual, Facility Response Plan and Facility Security Plan in accordance with 33 CFR 105 & 154.

If there are any changes to the marine transportation related portion of your facility you must notify our office immediately. Please refer to you facility identification number BRWF3 in all future correspondence. If you have any questions, please contact MST3 Robert Feus in Facility Compliance Division of Marine Safety Unit Baton Rouge at (225) 298-5400 ext. 227.

Sincerely,

A handwritten signature in black ink, appearing to read "S. N. Gilreath".

S. N. GILREATH
Commander, U. S. Coast Guard
Commanding Officer
By direction of the Captain of the Port