



U.S. Department  
of Transportation

**Pipeline and Hazardous  
Materials Safety Administration**

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

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



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Central Business District

Facility Emergency  
Response Plan

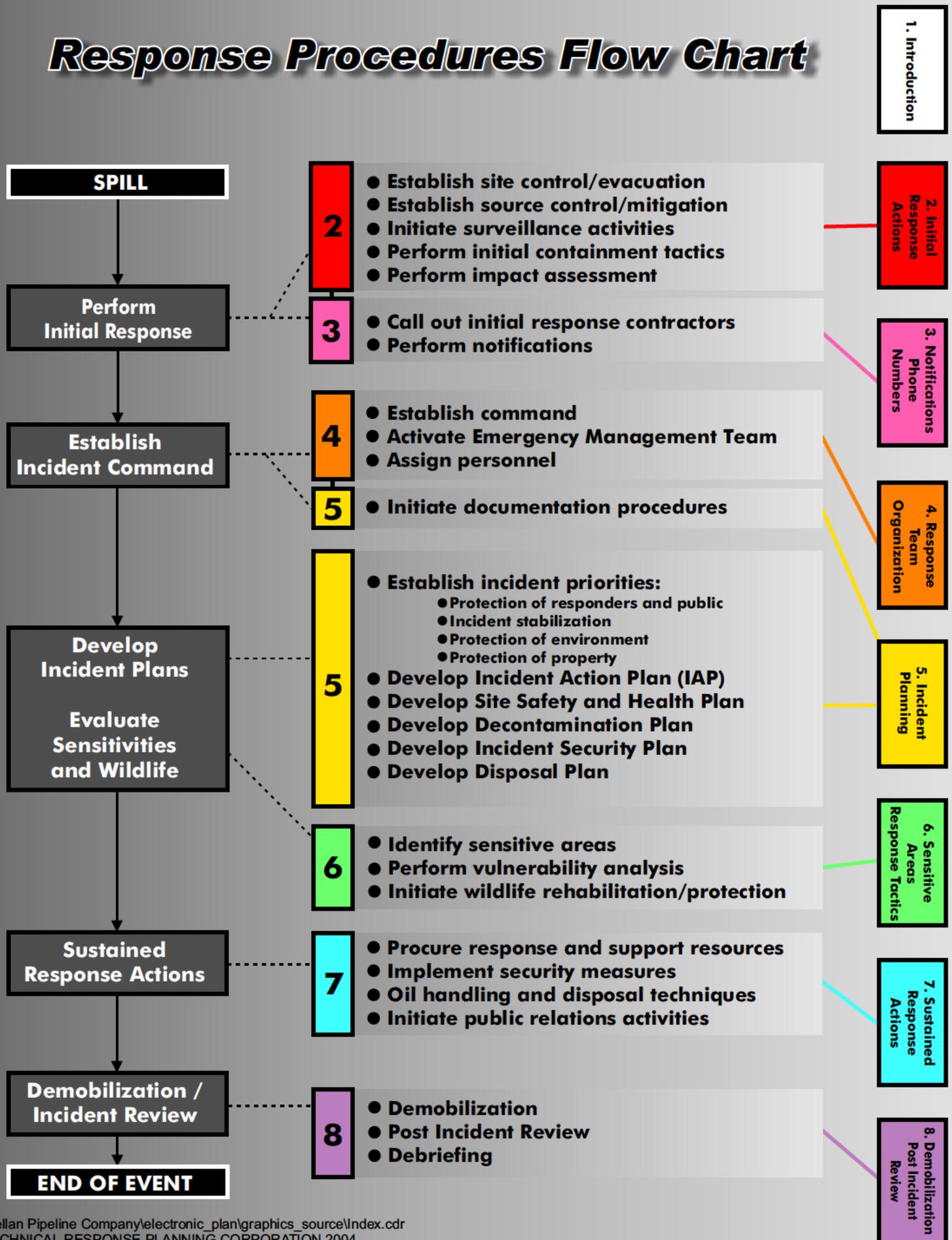
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# Response Procedures Flow Chart



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1/19/2010	Section 2 - Initial Response Actions	
1/19/2010	Section 2 - Initial Response Actions	
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8/22/2013	1 - PHMSA   3 - Notifications / Telephone Numbers   3.1 Emergency Information and Notification Procedures	

	Figure 3.1-4 - Notifications and Telephone Numbers   Company Personnel	
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10/10/2013	1 - PHMSA   1 - Introduction   1.5 Agency Submittal / Approval Letters	
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	External Notifications	
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	Company Personnel	
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12/5/2013	1 - PHMSA   1 - Introduction   Figure 1-2 - Distribution List	
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## SECTION 1

### INTRODUCTION

Last revised: January 2014

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Figure 1-1 - Record of Changes

Figure 1-2 - Distribution List

Figure 1-3 - Central Business District Information Summary

Figure 1-4 - Pipeline System Overview Map

Figure 1-5 - Central Business District Map

1.1 Purpose / Scope of Plan

1.2 Plan Review and Update Procedure

1.3 Certification of Adequate Resources

1.4 Management of Change Request Form

**Figure 1.4-1 - Management of Change Request Form**

1.5 Agency Submittal / Approval Letters

## FIGURE 1-1 - RECORD OF CHANGES

Plan review and modifications will be initiated and coordinated by the District Health, Safety, and Environmental Coordinator. Refer to the Table of Contents for the Record of Changes.

Central Business District

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## FIGURE 1-2 - DISTRIBUTION LIST

PLAN HOLDER	ADDRESS	NUMBER OF PAPER COPIES	NUMBER OF ELECTRONIC COPIES
Technical Response Planning Corporation	1610 Woodstead Court, Suite 355 The Woodlands, TX 77380		
Terry Chance, O&M Team Lead	1611 129th Street Whiting, IN 46394		
Tyrone Mitchell, Regional Operations Manager	4014 Flowers Road Doraville, GA 30360		
Gerry Lauer	8230 Whitcomb Merrillville, IN 46410		
Isabelita Strong, Xylene O&M Team Lead	8230 Whitcomb Merrillville, IN 46410		
BP Pipelines NA Inc	150 W. Warrenville Rd. Naperville, IL 60563		
Katherine Reed, Damage Prevention Team Leader	8230 Whitcomb Merrillville, IN 46410		

Central Business District

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## FIGURE 1-3 - Central Business District INFORMATION SUMMARY

<b>Owner/Operator:</b>	BP Pipelines N.A. 150 W. Warrenville Rd Naperville , IL 60563	
<b>Zone Name:</b>	Central Business District	
<b>Zone Mailing Address:</b>	8230 Whitcomb Street Merrillville, IN 46410	
<b>Zone Telephone/Fax:</b>	Phone: (219) 472-2325 / Fax: (219) 736-3819	
<b>Qualified Individuals:</b>	Tyrone Mitchell Regional Operations Manager, Doraville, GA Primary Qualified Individual (678) 837-3802 (Office) (b) (6) (Home) (b) (6) (Mobile)	4014 Flowers Road Doraville, GA 30360
	Terry Chance O&M Team Lead, Alternate Qualified Individuals Alternate Qualified Individual	1611 129th Street

	(219) 473-9665 (Office) (b) (6) Home (b) (6) (Mobile)	Whiting, IN 46394
	Katherine Reed Damage Prevention Team Leader, Merrillville, IN Alternate Qualified Individual (219) 472-2406 (Office) (b) (6) Home (b) (6) (Mobile)	8230 Whitcomb St. Merrillville, IN 46410
	Isabelita Strong Xylene O&M Team Lead Alternate Qualified Individual (219) 472-2339 (Office) (b) (6) (Mobile)	8230 Whitcomb St. Merrillville, IN 46410

FIGURE 1-3 - Central Business District INFORMATION SUMMARY, CONTINUED

Line Sections/ Products Handled: (Refer to Product Characteristic and Hazards, FIGURE C.6-1)	Section	Product	Diameter
	(b) (3), (b) (7)(F)	Xylene	8"
	(b) (3), (b) (7)(F)	Refined Products	10"
	(b) (3), (b) (7)(F)	Xylene	8"
	(b) (3), (b) (7)(F)	Xylene	8"
	(b) (3), (b) (7)(F)	Xylene	8"
	(b) (3), (b) (7)(F)	Xylene	8"
	(b) (3), (b) (7)(F)	Xylene	8"
	(b) (3), (b) (7)(F)	Xylene	8"
	(b) (3), (b) (7)(F)	Xylene	8"
	(b) (3), (b) (7)(F)	Xylene	8"
	(b) (3), (b) (7)(F)	Refined Products	10", 12"
	(b) (3), (b) (7)(F)	Refined Products	12"
	(b) (3), (b) (7)(F)	Refined Products	8"
	(b) (3), (b) (7)(F)	Refined Products	10", 12", 14"
	(b) (3), (b) (7)(F)	Refined Products	8"
	(b) (3), (b) (7)(F)	NGL	10"

(b) (3), (b) (7)(F)	Butane	6", 8", 12"
	Refined Products	6"
	Purged with Nitrogen	6"
Central Business District		Page 1 - 6

FIGURE 1-3 - Central Business District INFORMATION SUMMARY, CONTINUED

Line Sections/ Products Handled: (Refer to Product Characteristic and Hazards, FIGURE C.6-1)	Section	Product	Diameter
	(b) (3), (b) (7)(F)	Gasoline	12", 20"

Central Business District	Page 1 - 7
---------------------------	------------

FIGURE 1-3 - Central Business District INFORMATION SUMMARY, CONTINUED

<b>PHMSA #:</b>	BPIO
<b>Description of Zone:</b>	The pipeline carries refined oil (including Butane, Diesel Fuel / Distillate, Gasoline, Jet Fuel , Natural Gas Liquids , Xylene) in the areas shown in <b>FIGURE 1-4</b> and <b>FIGURE 1-5</b>
<b>Response Zone Consists of the Following Counties:</b>	Limestone, Morgan(Alabama); Cook, Edgar, Iroquois, Kankakee, Vermilion, Will(Illinois); Boone, Clinton, Elkhart, Gibson, Jasper, La Porte, Lake, Marion, Pike, Porter, St. Joseph, Sullivan, Tippecanoe, Vanderburgh, Vermilion, Vigo, Warrick, White (Indiana); Christian, Daviess, Henderson, McLean, Muhlenberg, Todd (Kentucky); Branch, Calhoun, Cass, Jackson, St. Joseph, Washtenaw, Wayne (Michigan); Dickson, Giles, Hickman, Maury, Montgomery (Tennessee)
<b>Worst Case Discharge:</b>	(b) (7)(F), (b) (3)
<b>Alignment Maps (Piping, Plan Profiles):</b>	Maintained at: Maintained at: Warrenville, IL
<b>Spill Detection and Mitigation Procedures:</b>	Refer to <b>SECTION 2</b> and <b>APPENDIX C</b> .
<b>Statement of Significant and Substantial Harm:</b>	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.
<b>Date Prepared:</b>	8-30-07

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 1-4 - PIPELINE SYSTEM OVERVIEW MAP**

**[Click here to view BPPL System Overview](#)**

## **FIGURE 1-5 - Central Business District MAP**

**[Click here to view Mid-America and Central BD Index Dwg](#)**

### **1.1 PURPOSE / SCOPE OF PLAN**

The purpose of this Spill Response Plan (Plan) is to provide guidelines to quickly, safely, and effectively respond to a spill from the Central Business District. The pipelines within this zone are owned by and operated by BP Pipelines N.A.. This Plan contains prioritized procedures for Facility personnel to mitigate or prevent any discharge resulting from in-facility operations, including hazardous waste. A copy of the "Hazardous Waste Contingency Plan" can be found in the Additional Information Appendix. Also, guidelines for waste management can be found in **SECTION 7.3**.

For more information on this plan, contact your supervisor, Regional Emergency Response and Crisis Management Coordinator.

This Plan is intended to satisfy the requirements of the Oil Pollution Act of 1990 (OPA 90), and certifies [49 CFR 194.107(b)] that it has been prepared in accordance with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) and applicable Area Contingency Plans (ACP), EPA Region IV Regional Contingency Plan and EPA Region V Regional Contingency Plan. Specifically, this Plan is intended to satisfy:

- Pipeline and Hazardous Materials Safety Administration (PHMSA) U.S. Department of Transportation requirements for an OPA 90 Plan (49 CFR 194).
- Pipeline and Hazardous Materials Safety Administration (PHMSA) U.S. Department of Transportation requirements for Transportation of Natural Gas and other Gas By Pipeline (49 CFR 192.615).
- Pipeline and Hazardous Materials Safety Administration (PHMSA) U.S. Department of Transportation requirements for Transportation of Hazardous Liquids By Pipeline (49 CFR 195.402 (e)).
  - This manual addresses the requirement for responding to emergencies. Separate manuals have been prepared to cover normal operations, maintenance activities and abnormal operations.
- Occupational Safety and Health Administration (OSHA) requirements for Emergency Response

Plan (ERP) (29 CFR 1910.120 (1)(2)) and Emergency Action Plan (ERP) (29 CFR 1910.38 (a)(2)).

## 1.2 PLAN REVIEW AND UPDATE PROCEDURE

In accordance with 49 CFR Part 194.121, this Plan will be reviewed annually and modified to address new or different operating conditions or information included in the Plan. Upon review of the response plan for each five-year period, the plan will be submitted to PHMSA prior to 5 years from the last approval date. 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. Examples of changes in operating conditions that would cause a significant change to the Plan include:

<b>CONDITIONS REQUIRING REVISIONS &amp; SUBMISSIONS</b>
Relocation or replacement of the transportation system in a way that substantially effects the information included in the Plan, such as a change to the Worst Case Discharge volume.
A change in the type of oil handled, stored, or transferred that materially alters the required response resources.
A change in key personnel Qualified Individuals (QI).
A change in the name of the Oil Spill Removal Organization (OSRO).
Any other changes that materially affect the implementation of the Plan.
A change in the NCP or ACP that has significant impact on the equipment appropriate for response activities.

All requests for changes must be made through the District Health, Safety, and Environmental Coordinator, DOT Coordinator, and HSSE District Coordinator.

## 1.3 CERTIFICATION OF ADEQUATE RESOURCES

# CERTIFICATION

## Pursuant to the Clean Water Act Section 311(j)(5)(F)

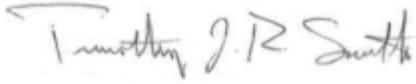
BP Pipelines N.A., Central Business District

The undersigned, the owner or operator of the above referenced pipeline who is authorized to sign this certification on behalf of the Company, hereby certifies that the above referenced pipeline has prepared a response plan which will be implemented in the event of a worst case discharge of oil. I also certify that the Plan is in effect for this pipeline and that Operator personnel are trained in the implementation of this Plan.

I further certify that the availability of private personnel and equipment necessary to respond,

to the maximum extent practicable, to a worst case discharge or a substantial threat of a discharge is ensured by contract or other approved means.

Also, I certify that this Plan meets the applicable requirements of Pipeline and Hazardous Materials Safety Administration (PHMSA), U.S. Department of Transportation (49 CFR 194).



Timothy Smith, JR  
Area Manager  
11/5/2013

Central Business District

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#### 1.4 MANAGEMENT OF CHANGE REQUEST FORM

Central Business District

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FIGURE 1.4-1 - MANAGEMENT OF CHANGE REQUEST FORM

MANAGEMENT OF CHANGE AUTHORIZATION					
<b>Facility / Location:</b>			<b>MOC Number:</b>		
<b>Equip ID / Unit No.:</b>			<b>Line Segment:</b>	From:	To:
<b>Type of Change:</b>	<input type="checkbox"/> Permanent	<input type="checkbox"/> Temporary	<b>Time Period:</b>	From:	To:
<b>Change Requested by (Originator):</b>			<b>Date Initiated:</b>		
<b>Basis / Description of Change:</b>					
<b>MOC Process Leader Assigned:</b>					
<b>MOC Category:</b> (check all that apply)	<input type="checkbox"/> Mechanical MOC	<input type="checkbox"/> Technical MOC	<input type="checkbox"/> Procedural MOC	<input type="checkbox"/> Organizational MOC	
<b>REVIEWERS (by Functional Area)</b>	<b>Person Contacted</b>	<b>OK</b>	<b>Reject Date</b>	<b>Comments</b>	
Engineering / S&II / ROW Health, Safety & Environment / DOT					
Field Operations - CORE					
Operations - Tulsa Control Center					
Maintenance - CORE					
Maintenance - SWAT					
Other (Legal, Management, etc.)					
<b>Pre-Implementation Tasks</b>					<b>Date Completed</b>

CVP / ACP Checklist Completed:	<input type="checkbox"/> Yes	<input type="checkbox"/> N/A	
Hazard Analysis Performed (PHA, HAZOP) & Items Resolved:	<input type="checkbox"/> Yes	<input type="checkbox"/> N/A	
Impact on Public Health & Safety: Hazard Analysis Items Resolved:	<input type="checkbox"/> Yes	<input type="checkbox"/> N/A	
Other: Impact on Public Health & Safety:	<input type="checkbox"/> Yes	<input type="checkbox"/> N/A	
<b>Project Rejected:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, reason:			
<b>Implementation of Change authorized by:</b> (BP Amoco Supervisor)			
Date:			
Post-Implementation Tasks			Date Completed
Operation & Maintenance Procedures Updated:	<input type="checkbox"/> Yes	<input type="checkbox"/> N/A	
Communication to Affected Parties Completed:	<input type="checkbox"/> Yes	<input type="checkbox"/> N/A	
Training Completed and Documented:	<input type="checkbox"/> Yes	<input type="checkbox"/> N/A	
Safety Start-up Review Completed:	<input type="checkbox"/> Yes	<input type="checkbox"/> N/A	
Other:	<input type="checkbox"/> Yes	<input type="checkbox"/> N/A	
Update Drawings / Documentation:		By When:	
Additional Forms or Support Comments:	<input type="checkbox"/> Yes	<input type="checkbox"/> N/A	Number of Forms:
<b>OFFICE of RECORD:</b>			
<b>LOCATION:</b>			

**FIGURE 1.4-1 - MANAGEMENT OF CHANGE REQUEST FORM, CONTINUED**

MANAGEMENT OF CHANGE AUTHORIZATION, CONTINUED
<b>MOC Form Completion Guidelines:</b>
Facility/Location: Identify where the change is to be made (e.g. electrical substation, Manhattan).
MOC Number: Use the MAXIMO Location Code (if applicable) + year + sequential number, or, Site Name + year + sequential number.
Equipment Identifier / Unit No: if applicable.
Line Segment: if applicable. Specify section of line.
Type of Change: Note if the change will be permanent or temporary. If a temporary change, identify the time frame.
Change Requested by: Identify the Originator suggesting the change and the <u>date</u> initiated.
Basis / Description of Change: Describe the proposed change.
MOC Process Leader Assigned: Assigned by Manager / Supervisor once the change is conceptually approved.
MOC Category: Refer to Appendix B for guidance. Check all applicable categories.
Reviewers (by Functional Area): Identify who was contacted regarding the change. Contact/approval can be done by phone, e-mail, memo, meetings, etc. Attach pertinent documentation of reviewer approval to MOC form, if applicable. Other can include contacting the Law Dept., HR, Management, Union, etc.
Pre-Implementation Tasks: To be completed, if applicable, prior to the change.

Project Rejected: If yes, describe the reason.
Implementation Authorized: Signature of Supervisor and dated.
Post-Implementation Tasks: To be completed during and following implementation of the change. MOC Process Leader is responsible to ensure closure of post-implementation tasks.
Office of Record: Keep the MOC form <u>at the Office of Record for the site</u> where the change was implemented including unmanned locations.
Location: City, State.

## 1.5 AGENCY SUBMITTAL / APPROVAL LETTERS

**[Click here to view PHMSA Plan Submittal 11/02/2007](#)**

**[Click here to view PHMSA QI Update Submittal 07/09/2010](#)**

**[Click here to view PHMSA Plan Submittal 08/03/2010](#)**

**[Click here to view PHMSA Plan Questionnaire 08/03/2010](#)**

**[Click here to view PHMSA Review Letter 09/20/2013](#)**

**[Click here to view PHMSA Plan Re-Submittal 01/20/2014](#)**

## SECTION 2

Last revised: January 2010

## INITIAL RESPONSE ACTIONS

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Figure 2-1 - Initial Response Action Guidelines

**2.1 Spill Response****Figure 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 - Oil Spill Surveillance Checklist2.1.3 Spill Volume EstimatingFigure 2.1-4 - Spill Estimation Factors2.1.4 Estimating Spill Trajectories**2.1.5 Initial Containment Actions****2.1.6 Safety Considerations****2.2 Fire / Explosions / Vapor Release****2.2.1 Fire, Explosion, and Vapor Release Response Actions****2.2.2 BLEVE - Boiling Liquid Expanding Vapor Explosion****2.3 Medical Emergency / Personal Injury****2.3.1 Medical Emergency / Personal Injury Checklist****2.4 Natural Disasters / Severe Weather****2.4.1 Earthquake/Tornado Procedure**

## SECTION 2

### INITIAL RESPONSE ACTIONS, CONTINUED

#### **2.4.2 Flooding Procedure**

#### **2.4.3 Hurricane Procedure**

#### **2.5 Security Related Incidents**

##### **2.5.1 Threats to Personnel and Facilities**

##### **2.5.2 Criminal Acts / Workplace Violence**

##### **2.5.3 Sabotage / Bomb Threat / Suspicious Package**

##### **2.5.4 Threat Receipt Precautions**

Figure 2.5-1 - Threat Documentation Report Form

#### **2.6 Evacuation**

##### **2.6.1 Evacuation Checklist**

#### **2.7 Fire Pre Plan**

FIGURE 2-1 - INITIAL RESPONSE ACTION GUIDELINES

RESPONSE ACTION	PERSON TAKING ACTION (INITIALS)	DATE/TIME ACTION TAKEN
<b>First Responder / Tactical Response Team (TRT)</b>		
<p>If in Impacted/source area, leave immediately (life safety first). Activate alarms or otherwise alert asset personnel and workers.</p>		
<p>Pipeline Response in Right of Way (ROW):</p> <p>From safe distance, Identify character, exact source, amount, and extent of the release and other necessary items needed for notifications</p> <p>Control source of Incident, if safe to do so (i.e. trained per USPL HAZWOPER Policy, qualified and properly PPE equipped). Otherwise, leave the area immediately.</p>		
<p>If fixed facility:</p> <p>Evacuate Personnel from facility, if necessary</p> <ul style="list-style-type: none"> <li>• To safe muster point</li> <li>• Conduct personal accountability (Roll call).</li> </ul> <p>Identify and control source of Incident, if safe to do so (i.e. trained per USPL HAZWOPER Policy, qualified and properly PPE equipped). Otherwise, leave the area immediately.</p>		
<p><b>Initiate Notifications IMMEDIATELY or within 15 minutes of discovering a discharge or release.</b></p> <ul style="list-style-type: none"> <li>• Call 911 (fire, Police, EMT)</li> <li>• NRC (if potential water impact) <b>(800-424-8802)</b></li> <li>• OSRO/Response Contractor <ul style="list-style-type: none"> <li>• Better to Over Respond - call all OSROs</li> <li>• Refer to <b>FIGURE 3.1-4</b></li> </ul> </li> <li>• Qualified Individual (Team Lead/Terminal Manager)</li> <li>• BP Notification Center <b>(800-321-8642)</b></li> </ul>		
<p><b>If safe to do so, work with Fire Department/trained responders to:</b></p> <p>Identify hazards:</p> <ul style="list-style-type: none"> <li>• Establish hazard control area, if necessary.*</li> </ul> <p>The area immediately surrounding a spill, leak, or discharge of hazardous material(s) which extends far enough to</p>		

prevent adverse health and safety effects from the release<sup>1</sup>.

Verify evacuation status:

- Verify all Personnel have evacuated from the Hazard Control Area to pre-designated assembly areas.

If necessary, communicate need to potentially evacuate personnel at adjacent properties/locations.

**Note 1:** See USPL Hazardous Waste Operations and Emergency Response (Hazwoper) Policy in DRM. The DOT Emergency Response Guidebook may be used to initially delineate the Hot Zone, or Exclusion Zone. Hot zones cannot be reduced until confirmed by air monitoring.

### FIGURE 2-1 - INITIAL RESPONSE ACTION GUIDELINES, CONTINUED

RESPONSE ACTION	PERSON TAKING ACTION (INITIALS)	DATE/TIME ACTION TAKEN
<b>First Responder / Tactical Response Team (TRT), Continued</b>		
*If safe to do so, shut down potential ignition sources, including motors, electrical pumps, electrical power, boats, vehicles, hot work, etc.		
Xylene Pipeline: N/A, because all stations are unmanned and there are no emergency alarms. CHE Pipelines: N/A, because all stations are unmanned and there are no emergency alarms.		
<b>Incident Commander (Operations Team Leader/Terminal Manager)</b>		
Ensure evacuation accountability (roll call) procedures implemented and confirm all personnel are accounted.		
Ensure notifications have been initiated/complete.		
Activate Tactical Response Team (TRT) and set up response organization ( <b>SECTION 5</b> ICS-201-3).		
Assess the oil spill and/or Incident Potential . Determine if initial source control or containment has been established.		
Assess possible hazards to human health and the environment (including outside the fence line if at a fixed facility).		
Ensure Site Characterization and Monitoring is initiated near release site.		
If necessary: Initiate spill tracking and surveillance operations by activating surveillance aircraft and/or watercraft. Estimate trajectory of spill utilizing information in <b>SECTION 2.1.4</b> . Send photographer/videographer, if		

safe.		
Establish initial Incident Objectives and Priorities.		
Determine location of Incident Command Post (ICP) facilities and support. Assess operational requirements and resource requirements.		
Ensure ICS 201- Initial Incident Briefing Document is complete and distributed to Unified Command, IMT (if activated) and internal stakeholders (Refer to <b>SECTION 5</b> ).		
Ensure compliance with all safety practices and procedures. Ensure initial safety briefings with TRT and field responders is conducted		
If no response is warranted, ensure that appropriate regulatory notifications have been made and no further action is taken.		
<p><b>DOCUMENT the incident</b></p> <ul style="list-style-type: none"> <li>• Ensure all responders capture response actions in personal log (ICS 214/notebook)</li> <li>• Collect all incident documentation and file on-site in training files.</li> </ul>		

## 2.1 SPILL RESPONSE

**FIGURE 2.1-1 - SPILL RESPONSE ACTION CHECKLIST**

SPECIFIC RESPONSE ACTIONS	COMMENT
<b>Line Break or Leak</b>	
Shut down source/pumping equipment.	
Close upstream and downstream valves.	
Utilize Combustible Gas Indicator, O <sub>2</sub> meter, proper colorimetric indicator and other air sampling measurements (as applicable) to assure that areas are safe to enter for continued response operations.	
<p>Mitigate spreading of the product, as the situation demands. Potential containment strategies include:</p> <ul style="list-style-type: none"> <li>• Deployment of boom (Reference ACP for potential strategies)</li> <li>• Diking, trenching, and/or diversion</li> <li>• Spreading sorbent material over the spill</li> <li>• Prevent the spill from entering water to the greatest extent possible</li> </ul>	
Determine the direction and expected duration of spill	

movement. Refer to <b>SECTION 2.1.2.</b>	
Drain the line section, as the situation demands.	
Request local authorities to establish scene security and traffic control in the area, as the situation demands.	
Make all necessary repairs.	
Return the line/rack to service when repairs are complete.	
Clean up spilled product to eliminate any possible environmental problems. Be alert for underground cables.	
If the spill escapes the containment area, review the location of socio-economic and environmentally sensitive areas identified in <b>SECTION 6.</b> Determine which of these may be threatened by the spill and direct the response operation to these locations. Initiate protection and recovery actions.	
Inform local utilities, telephone company, railway, etc., as necessary.	
Complete follow-up and written reporting, as the situation demands.	
<b>Storage Tank Leak</b>	
Shut down all tank product movement operations and isolate the tank.	
Initiate Confined Space Entry procedures, as applicable.	
Insure that the containment area drainage valve(s) is closed.	
If leak is near tank bottom, create and maintain a "water bottom" to suspend the discharge of product.	
Utilize Combustible Gas Indicator, O <sub>2</sub> meter, proper colorimetric indicator and other air sampling measurements (as applicable) to assure that areas are safe to enter for continued response operations.	
Block drainage of spilled material from traveling off-site.	
Stop all traffic in hazardous area (inside and outside of property boundaries), as the situation demands.	

FIGURE 2.1-1 - SPILL RESPONSE ACTION CHECKLIST, CONTINUED

SPECIFIC RESPONSE ACTIONS	COMMENT
<b>Storage Tank Leak, Continued</b>	
Remove product from containment (at a sump or in a low area) with an explosion proof pump, oil skimmer, and/or vacuum truck w/skimmer attachments.	
If applicable, process remaining product through a separator system.	
Determine the direction and expected duration of spill	

movement. Refer to <b>SECTION 2.1.2.</b>	
Request that local authorities establish scene security and traffic control in the area, as necessary.	
Empty tank as soon as possible.	
Make all necessary repairs. Return the line/tank to service when repairs and integrity testing are completed.	
Clean up product spill to eliminate any possible environmental problems. Be alert for underground cables, conduits, etc.	
If necessary, call an approved waste removal company to handle the remaining sludge and residue from the containment area.	
If the spill escapes the containment area, review the location of socioeconomic and environmentally sensitive areas identified in <b>SECTION 6</b> and the ACP. Determine which of these may be threatened by the spill and direct the response to these locations. Initiate protection and recovery actions.	
Inform local operators such as utilities, telephone company, railway, as necessary.	
Complete follow-up and written reporting, as the situation demands.	
<b>Leak or Spill at Truck Rack</b>	
Evacuate personnel from the truck rack area, as the situation demands.	
Shut down all loading operations, pumps motors and loading valves.	
Guard against all sources of ignition.	
Secure the area. Stop all traffic from entering rack or hazardous area.	
If a line leak is involved, close off riser valves and/or tank valves.	
Clean area with sorbent material, flush (with water) all remaining product into a separator system.	
Resume truck loading operations as directed by Terminal Management.	
<b>Truck Leaks/Spills Outside Terminal</b>	
Notify local fire and police departments.	
Assist local responders (police) to secure the area.	

**FIGURE 2.1-1 - SPILL RESPONSE ACTION CHECKLIST, CONTINUED**

SPECIFIC RESPONSE ACTIONS	COMMENT
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<b>Truck Leaks/Spills Outside Terminal, Continued</b>	
<p>Notify Terminal Management of the incident with the following information:</p> <ul style="list-style-type: none"> <li>• Location of spill.</li> <li>• Size of spill.</li> <li>• Product type.</li> <li>• Present situation.</li> <li>• If assistance/equipment is required for cleanup.</li> <li>• If product spills on a highway or other impervious surface, clean area with sorbent materials, vacuum truck, or other cleanup equipment as available or necessary. If product has entered sewer system, advise the local Fire Department.</li> </ul>	
<p>Consider the need to evacuate area residents. Request assistance from local authorities (fire, police departments) as necessary.</p>	
<b>Marine Operation Spills/Leaks</b>	
<p>Shut down all engines/motors.</p>	
<p>Close all line and vessel manifold discharge valves.</p>	
<p>If hose rupture is involved, drain line into vessel, drums, or buckets and blank line to stop spill into water.</p>	
<p>Initiate Confined Space Entry procedures, as applicable.</p>	
<p>Utilize Combustible Gas Indicator, O<sub>2</sub> meter, proper colorimetric indicator and other air sampling measurements (as applicable) to assure that areas are safe to enter for continued response operations.</p>	
<p>If other than hose rupture, determine source of leak and stop discharge.</p>	
<p>Prevent discharge from entering the water if at all possible by:</p> <ul style="list-style-type: none"> <li>• Pumping from sump or deck drainage system into drums, tanks, containment area, or other storage facility.</li> <li>• Directing the flow into a containment or collection area away from the water, if feasible.</li> <li>• Placing containment boom or sorbent material around area (provided that a safe operating environment exists).</li> </ul>	
<p>If product enters the water and a safe operating environment exists, try to contain by:</p> <ul style="list-style-type: none"> <li>• Deploying spill response equipment (facility and/or contract) to prevent/mitigate spill impact (spreading of spill).</li> </ul>	

Attempting to divert/contain the spill:	
<ul style="list-style-type: none"> <li>• In quiet area or low current areas of the water.</li> <li>• Away from strong winds or in areas that could be affected by change in wind direction.</li> <li>• Away from areas of hazard to public, property improvements, marinas, water intakes, or any environmentally sensitive areas.</li> </ul>	
Make all necessary repairs.	
Return the line/vessel to service when repairs are complete.	

### FIGURE 2.1-1 - SPILL RESPONSE ACTION CHECKLIST, CONTINUED

SPECIFIC RESPONSE ACTIONS	COMMENT
<b>Marine Operation Spills/Leaks, Continued</b>	
Clean up spilled product to eliminate any possible environmental problems. Be alert for underground cables, etc.	
If the spill escapes the containment area, review the location of socioeconomic and environmentally sensitive areas identified in <b>SECTION 6</b> and the ACP. Determine which of these may be threatened by the spill and direct the response operation to these locations. Initiate protection and recovery actions.	
Request local authorities (USCG, Port Authority, etc.) to establish traffic control in the area, as the situation demands.	
Inform local operators such as utilities, telephone company, railway, as necessary.	
Complete follow-up and written reporting, as the situation demands.	

#### 2.1.1 Spill Detection and Mitigation Procedures

See **APPENDIX C.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**. Worst case discharge volume calculations and discussion are provided in **APPENDIX C**.

#### FIGURE 2.1-2 - SPILL MITIGATION PROCEDURES

TYPE	MITIGATION PROCEDURE
Failure of Transfer	1. Personnel safety is the first priority. Evacuate nonessential

Equipment	<ol style="list-style-type: none"> <li>1. personnel or personnel at high risk.</li> <li>2. Terminate transfer operations and close all affected valves.</li> <li>3. Drain product into containment areas if possible.</li> <li>4. Eliminate sources of vapor cloud ignition by shutting down all engines and motors.</li> </ol>
Tank/Overfill/Failure	<ol style="list-style-type: none"> <li>1. Personnel safety is the first priority. Evacuate nonessential personnel or personnel at high risk.</li> <li>2. Shut down or divert source of incoming flow to tank.</li> <li>3. Transfer fluid to another tank with adequate storage capacity (if possible).</li> <li>4. Shut down source of vapor cloud ignition by shutting down all engines and motors.</li> <li>5. Ensure that dike discharge valves are closed.</li> <li>6. Monitor diked containment area for leaks and potential capacity limitations.</li> <li>7. Begin transferring spilled product to another tank as soon as possible.</li> </ol>
Piping Rupture/Leak (under pressure or not)	<ol style="list-style-type: none"> <li>1. Personnel safety is the first priority. Evacuate nonessential personnel or personnel at high risk.</li> <li>2. Shut down pumps. Close the closest valves on each side of the rupture.</li> <li>3. Drain the line back into contained areas (if possible). Alert nearby personnel of potential safety hazards.</li> <li>4. Shut down source of vapor cloud ignition by shutting down all engines and motors.</li> <li>5. If piping is leaking and under pressure, then relieve pressure by draining into a containment area or back to a tank (if possible). Then repair line according to established procedures.</li> </ol>
Fire/Explosion	<ol style="list-style-type: none"> <li>1. Personnel safety is the first priority. Evacuate nonessential personnel or personnel at risk of injury.</li> <li>2. Notify local fire and police departments.</li> <li>3. Attempt to extinguish fire if it is in incipient (early) stage.</li> <li>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).</li> <li>5. Eliminate sources of vapor cloud ignition by shutting down all engines and motors.</li> <li>6. Control fire before taking steps to contain spill.</li> </ol>
Manifold Failure	<ol style="list-style-type: none"> <li>1. Personnel safety is the first priority. Evacuate nonessential personnel or personnel at high risk.</li> <li>2. Terminate transfer operations immediately.</li> <li>3. Isolate the damaged area by closing block valves on both sides of the leak/rupture.</li> <li>4. Shut down source of vapor cloud ignition by shutting down all engines and motors.</li> <li>5. Drain fluids back into containment areas (if possible).</li> </ol>

### 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.
- The Company utilizes USCG classified OSROs to address aerial surveillance. Spill surveillance is best accomplished through the use of helicopters or small planes; helicopters are preferred due to their superior visibility and maneuverability.
- Dispatch observers to crossings downstream or down gradient to determine the spill's maximum reach. Surveillance is also required during spill response operations to gauge the effectiveness of response operations; to assist in locating skimmers; and assess the spill's size, movement, and impact.

### Field Surveillance Equipment

- 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.
  - In the event of reduced visibility, such as dense fog or cloud cover, boats may have to be used to patrol the area and document the location and movements of the spill; however, this method may not be safe if the spill involves a highly flammable product.
- If fixed-wing planes are to be used, high-wing types provide better visibility than low-wing types.

### Field Observations

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

### FIGURE 2.1-3 - OIL SPILL SURVEILLANCE CHECKLIST

Record your observations of spilled oil either in a notebook or directly on an area chart. This checklist is an aid for organizing your observations. File used forms copies with the local area office to retain for a minimum of five years. Incident observation form originals **MUST** be maintained with the incident/response files. Retention time will be determined by Incident Legal Officer.

<b>General Information</b>	
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):
Observer's name:	Flight path/trackline:
Observer's affiliation:	Altitude where observation taken:
Location of source (if known):	Areas not observed (i.e. foggy locations, restricted air spaces, shallow water areas):
<b>Oil Observations</b>	
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):	
<b>Considerations</b>	
<ul style="list-style-type: none"> <li>• During surveillance flights, travel beyond known impacted areas to check for additional oil spill sites</li> <li>• Include the name and phone number of the person making the observations</li> <li>• Clearly describe the locations where oil is observed and the areas where no oil has been seen</li> </ul>	
<b>Other Observations</b>	
<b>Response Operations</b>	
Equipment deployment (general locations where equipment is working and whether they are working 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):	

**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):

## 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, and
- 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, and
  - 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	

Barely Visible	0.0000015	0.00004	25 gals/mile <sup>2</sup>	44 liters/km <sup>2</sup>
Silvery	0.000003	0.00008	50 gals/mile <sup>2</sup>	88 liters/km <sup>2</sup>
Slightly colored	0.000006	0.00015	100 gals/mile <sup>2</sup>	179 liters/km <sup>2</sup>
Brightly colored	0.000012	0.0003	200 gals/mile <sup>2</sup>	351 liters/km <sup>2</sup>
Dull	0.00004	0.001	666 gals/mile <sup>2</sup>	1,167 liters/km <sup>2</sup>
Dark	0.00008	0.002	1,332 gals/mile <sup>2</sup>	2,237 liters/km <sup>2</sup>
Thickness of light oils: 0.0010 inches to 0.00010 inches				
Thickness of heavy oils: 0.10 inches to 0.010 inches				

#### 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 such as CAMEO. 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 reduce the surface area and the shoreline to be cleaned;
- Concentrate the oil (when safe to do so), making physical recovery more efficient; and
- Limit the environmental impact to the immediate spill area.

### 2.1.5 Initial Containment Actions, Continued

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 applicable).
- Ensure that the area remains secure to air traffic.

## 2.2 FIRE / EXPLOSION / VAPOR RELEASE

### 2.2.1 Fire, Explosion, and Vapor Release Response Actions

SPECIFIC RESPONSE ACTIONS	COMMENT
<b>FIRE / EXPLOSION</b>	
1. Discontinue all tasks in progress (hot work, truck loading, maintenance, etc.)	
2. Sound local fire alarm, if available.	
3. Attempt to extinguish incipient stage fires, if trained to do so.	
4. Ensure 911 or local ER number was called to activate Fire and EMS support.	
Report the condition to Management and take further defensive actions as instructed.	
5. Report the Situation to QI/Management and ensure other internal/external notifications are in progress, as appropriate.	

6. Evacuate personnel to designated assembly areas and Account for personnel (roll call).  Communicate any missing personnel (with potential last location) to the Fire Department.	
7. Emergency shutdown systems and/or manually (from a safe distance) isolate fuel sources and shut down engines and heaters.	
8. Ensure Asset emergency response plans have been activated. Ie:  Facility Response Plan  Security Plan	
9. Establish a secure perimeter around the area to prevent unauthorized entry per asset security plan ( <b>SECTION 5</b> ).	
10. Liaison with Fire Department to continue tactical measures to contain the fire;	
11. Recognize fire conditions which present BLEVE hazards and protect personnel and the public appropriately. ( <b>SECTION 2.2.3</b> ). Communicate potential bleve hazards to Fire Department.	
12. Contain spilled material and runoff. Dike far ahead of the release, as necessary.	
13. Conduct post-incident activities ( <b>SECTION 8</b> ).	
14. Ensure all incident/response documentation is compiled and filed.	
<b>VAPOR RELEASE</b>	
Report the release to Terminal Manager/Team Lead/QI.	
Sound the facility alarm.	
Do not assume vapors or gases are harmless because of lack of odor - <b>Harmful vapors or gases may be odorless.</b>	

## 2.2.1 Fire, Explosion, and Vapor Release Response Actions, Continued

SPECIFIC RESPONSE ACTIONS	COMMENT
<b>VAPOR RELEASE, CONTINUED</b>	
Evacuate personnel from the immediate area to the designated	

assembly area or to a location upwind of the release.	
Account for personnel using roll call.	
Engage emergency shutdown systems and/or manually isolate release from a safe distance.	
Isolate all sources of potential ignition.	
Establish a secure perimeter around the area to prevent unauthorized entry using Security Plan.	
Complete internal and external notifications, as appropriate.	
Assess the threat to the public and notify public officials as appropriate.	
Liaison with local Emergency Responders (Fire, Police) to evacuate surrounding homes, businesses, etc. Potentially impacted by vapor cloud.	
Conduct post-incident activities ( <b>SECTION 8</b> ).	
Ensure all incident/response documentation is compiled and filed.	

### 2.2.2 BLEVE - Boiling Liquid Expanding Vapor Explosion

BLEVE occurs when:

- Sealed containers of liquefied gases are accidentally exposed and enveloped by fire.
- Vapor is generated and internal pressure rapidly rises.
- The container wall temperature rises in the outage or unfilled area.
- Wall strength deteriorates and the stress applied by the increased pressure exceeds the reduced strength of the wall.
- The container ruptures and super-heated liquid is released, expands and vaporizes in seconds resulting in catastrophic damage from the spread of ignited vapors. The ruptured vessel or tank could propel dangerous shrapnel significant distances. It is important that:
  - Vessels or tanks are kept cool and
  - External fires are extinguished quickly.

#### Fire Fighters should do the following:

- Fight fire from the maximum distance possible, or use unmanned hose holders or monitor nozzles.
- Cool containers by flooding them with large amounts of water until well after the fire is out.
- Do not direct water at the source of leak or at safety devices; icing may occur.
- Leave the area immediately if you hear a rising sound from venting safety devices or see discoloration of the tank.
- For massive fires, use unmanned hose holders or monitor nozzles; if this is impossible, leave the area and let the fire burn.
- Be aware that when a BLEVE occurs, sections of the tank can fly in any direction. Just avoiding the ends of the tank should not be considered a safe operating procedure.

Always consider your own safety and the safety of people in the immediate area first.

## 2.3 MEDICAL EMERGENCY / PERSONAL INJURY

### 2.3.1 Medical Emergency / Personal Injury Checklist

SPECIFIC RESPONSE ACTIONS	COMMENT
<b>General</b>	
<p>Medical emergencies may involve and/or be categorized as follows:</p> <ol style="list-style-type: none"> <li>a. <b>First Aid</b> - One or more patients with minor injuries which can be effectively managed with the application of routine First Aid. This type of injury does not require medical transport to a hospital, but may require follow-up with a Physician.</li> <li>b. <b>Serious</b> - One or more patients with moderate to serious injuries, requiring response by local Emergency Medical Services (EMS) and may include transport to a hospital for advanced care and treatment.</li> <li>c. <b>Life-Threatening</b> - One or more patients with serious or life-threatening injuries, requiring response by local Emergency Medical Services (EMS) and includes transport to a hospital for advanced care and treatment.</li> </ol>	
Assess the scene.	
Summon local Emergency Medical Services (EMS) to the scene; provide information on the nature of injuries and number of injured persons ( <b>SECTION 3</b> ).	
If trained, provide First Aid/CPR as necessary, until EMS arrives at the scene; injured personnel should not be moved unless the situation is life threatening.	
Assist with Medical Evacuation (via air or ground transport) as recommended by EMS personnel.	
Establish a secure perimeter around the area to prevent unauthorized entry. Initiate the Site Security Plan, as necessary ( <b>SECTION 5</b> ).	
Notify Team Leader/Terminal Manager and make appropriate notifications to local emergency agencies if necessary. Make other internal management contacts as appropriate ( <b>SECTION 3</b> ).	
<p>In case of a fatality:</p> <ul style="list-style-type: none"> <li>• Do not move the victim.</li> <li>• Do not release name of victim(s).</li> <li>• Contact local law enforcement.</li> <li>• Contact local medical authority.</li> <li>• Preserve the accident site.</li> <li>• Restrict all communications concerning the incident (do not release names of victims unless authorized).</li> </ul>	

Conduct post-incident activities ( <b>SECTION 8</b> ).	
Ensure all incident/response documentation is compiled and filed.	

## 2.4 NATURAL DISASTER / SEVERE WEATHER

### 2.4.1 Earthquake/Tornado Procedure

SPECIFIC RESPONSE ACTIONS	COMMENT
1. Activate the emergency alarm, if available.	
2. Evacuate personnel from the immediate area to a safe assembly area. Determine safe location based on impact to facility.	
3. Account for personnel using roll call.	
4. Evaluate the extent of the emergency.	
5. If time permits, engage emergency shutdown systems and/or manually isolate processes and equipment.	
6. Notify the Team Leader/Terminal Manager and make other internal notifications, as appropriate. ( <b>SECTION 3</b> )	
7. Conduct an inspection for residual safety hazards, such as: <ul style="list-style-type: none"> <li>• Process safety/integrity;</li> <li>• Structural damage;</li> <li>• Downed power lines; and</li> <li>• Leaking natural gas, water, and sewer lines.</li> </ul>	
8. Arrange for necessary repairs.	
9. Conduct post-incident activities. ( <b>SECTION 8</b> )	
10. Ensure all incident/response documentation is compiled and filed.	

### 2.4.2 Flooding Procedure

SPECIFIC RESPONSE ACTIONS	COMMENT
1. Account for personnel.	
2. Notify Manager and make other internal notifications, as	

appropriate. ( <b>SECTION 3</b> )	
3. Evaluate the extent of the emergency.	
4. Prepare an evacuation plan based upon flood crest and weather forecast.	
5. Maintain tank levels as appropriate (consider filling tanks that might float with water).	
6. Secure all loose items in the area that could do harm to other equipment (pipe, tools).	
7. Engage emergency shutdown systems and/or manually isolate processes and equipment, if necessary.	
8. Evacuate personnel, as necessary. Conduct Accountability via roll call.	
9. Conduct an inspection for residual safety hazards, such as: <ul style="list-style-type: none"> <li>• Structural damage;</li> <li>• Downed power lines;</li> <li>• Leaking natural gas, water and sewer lines;</li> <li>• Poisonous snakes and other wildlife sheltering in structures, vehicles, and furniture; and</li> <li>• Avoid direct contact with flood water, mud, and animal carcasses.</li> </ul>	
10. Arrange for necessary repairs.	
11. Conduct post-incident activities. ( <b>SECTION 8</b> )	
12. Ensure all incident/response documentation is compiled and filed.	

## 2.4.3 Hurricane Procedure

SPECIFIC RESPONSE ACTIONS	COMMENT
<b>Prior to Hurricane Season</b>	
1. Conduct hurricane awareness training, which includes evacuation routes and asset hurricane procedures.	
2. Coordinate activities with local and state agencies involved in hurricane preparation (Emergency Access Cards, etc.).	

3. Communicate recommended Community Evacuation routes.	
4. Determine disposition of Company vehicles during evacuation.	
5. Each location should maintain current photographs of facilities.	
<b>June 1st to November of Hurricane Season</b>	
1. Verify the availability of and procure emergency supplies, as necessary: <ul style="list-style-type: none"> <li>• Portable radios</li> <li>• Plywood, lumber, plastic sheeting, or covering</li> <li>• Drinking water</li> <li>• First Aid Kits</li> <li>• Flashlight and batteries</li> <li>• Tools</li> <li>• Emergency non-perishable food item</li> </ul>	
2. Ensure emergency generators and portable equipment is in good working order and sufficient fuel is available.	
<b>Hurricane entering Gulf of Mexico or Approaching East Coast</b>	
1. Implement hurricane procedures.	
2. Identify employees who may volunteer to implement hurricane procedures.	
<b>72 hours prior to hurricane's eye reaching landfall</b>	
1. Cancel all training and meetings requiring travel to affected areas.	
2. Designate location for temporary Communication Center.	
3. Verify contractor contacts and availability.	
4. All employees shall provide to their supervisor an evacuation location and contact number.	
5. Each location shall identify a radio frequency which broadcasts emergency weather information.	
6. Report facility status to Corporate Management.	

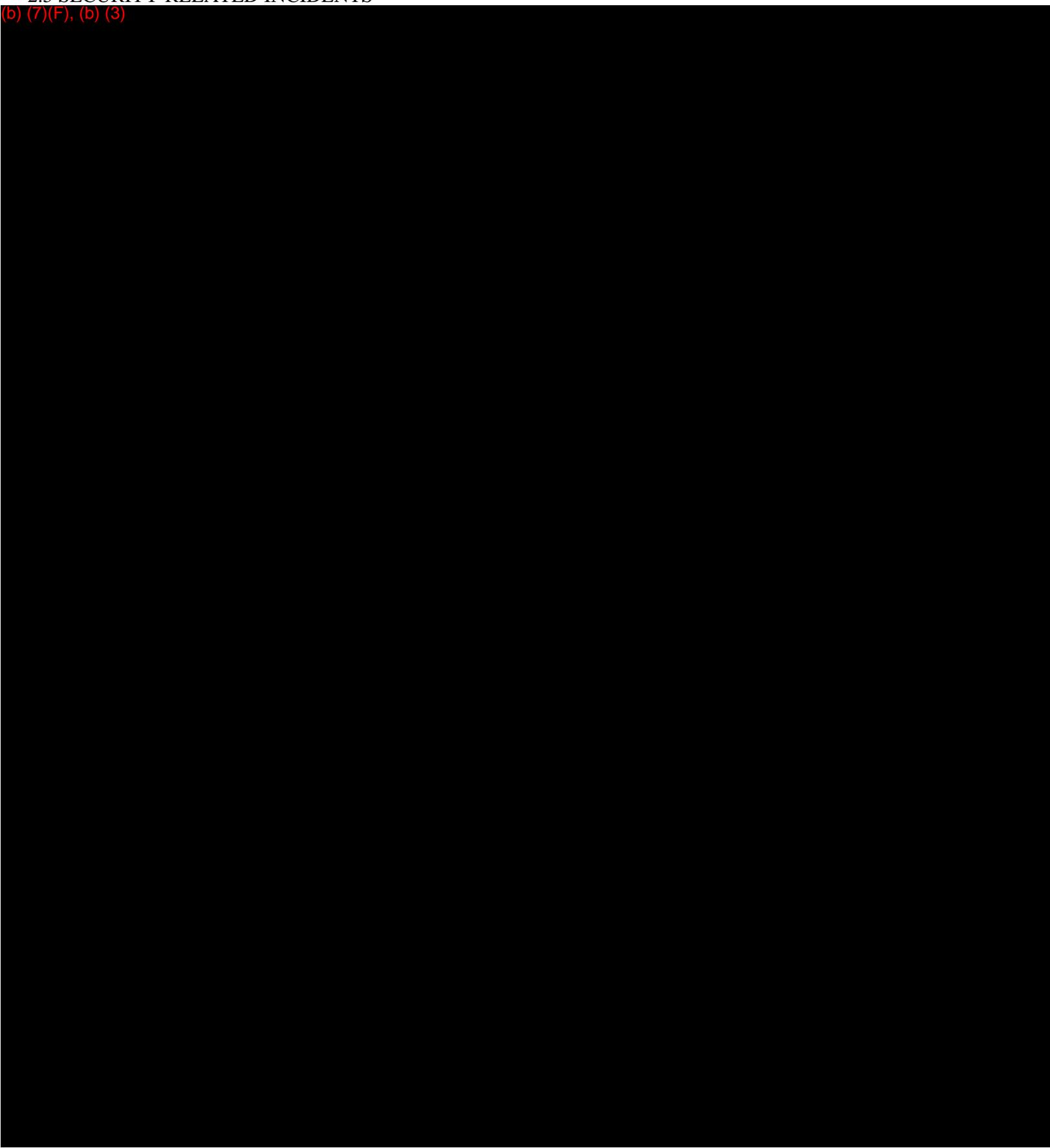
### 2.4.3 Hurricane Procedure, Continued

SPECIFIC RESPONSE ACTIONS	COMMENT
<b>48 hours prior to hurricane's eye reaching landfall</b>	
1. Implement flex-shift to allow employees to secure personal property.	
2. Ensure all storage tanks are stabilized.	
3. Ensure all below ground sumps have been pumped dry.	
4. Secure all critical documents including electronic data.	
5. Elevate electrical equipment, sensitive office equipment and documents in the event of high water.	
6. Report facility status to Corporate Management.	
<b>36 hours prior to hurricane's eye reaching landfall</b>	
1. Communicate with suppliers and affected customers.	
2. Report facility status to Corporate Management.	
<b>24 hours prior to hurricane's eye reaching landfall</b>	
1. Begin shutdown operations.	
2. Release non-essential personnel.	
3. Report facility status to Corporate Management.	
<b>12 hours prior to hurricane's eye reaching landfall</b>	
1. Man Communications Center continuously.	
2. Report facility status to Corporate Management.	
<b>Post Storm Recovery Procedure</b>	
1. Initiate facility damage assessment.	
2. Report facility status to Corporate Management.	
<p>3. Once access has been granted, the following processes should be surveyed for operational reliability prior to startup:</p> <ul style="list-style-type: none"> <li>• Electrical panels and motors,</li> <li>• Instrument air system,</li> <li>• Emergency Shutdown System,</li> <li>• Tank and Vessel foundation and support (possible)</li> </ul>	

- washouts), and
- Check for dangerous wildlife and reptiles.

## 2.5 SECURITY RELATED INCIDENTS

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













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

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

## SECTION 3

Last revised: December 2013

**NOTIFICATIONS / TELEPHONE NUMBERS**

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3.1 Emergency Information and Notification ProceduresFigure 3.1-1 Emergency Notification Flow ChartFigure 3.1-2 - Initial Incident Report FormFigure 3.1-3 - DOT / PHMSA Accident Report FormFigure 3.1-4 - Notifications and Telephone Numbers

### 3.1 EMERGENCY INFORMATION AND NOTIFICATION PROCEDURES

Semi-annually, call agencies and oil spill response contractors (OSROs) listed in External Notifications and Telephone Numbers of Facility Response Plan, to verify phone numbers are current.

The notification sequence for a spill is as follows:

- Pipeline personnel will identify and control the source of a spill, if safe to do so, then will notify Pipeline Control who will contact the Qualified Individual.
- Once the Qualified Individual arrives on scene they may assume the role as Incident Commander. The Incident Commander will conduct notifications as illustrated in the Notification Flowchart **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 a Preliminary Incident 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** is the required DOT/PHMSA Accident Report Form to be submitted to the agency within 30 days.
- **FIGURE 3.1-4** provides a notification summary and documentation form to assist in documenting notifications.

FIGURE 3.1-1 - EMERGENCY NOTIFICATION FLOW CHART

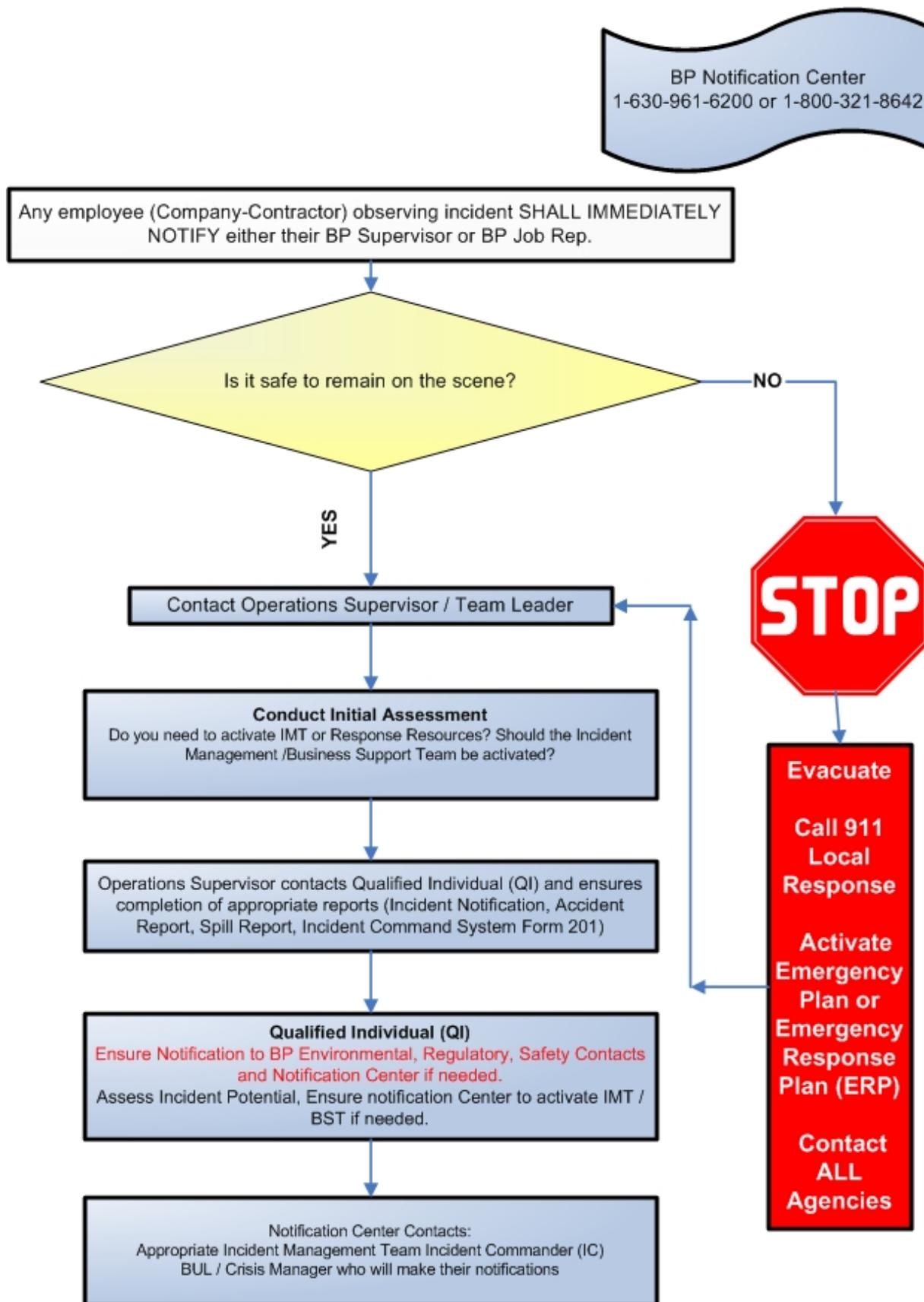


FIGURE 3.1-2 - INITIAL INCIDENT REPORT FORM

Name of pipeline:

Time of discharge:

Location of discharge:

Name of oil involved:

Reason for discharge (e.g., material failure, excavation damage, corrosion):

Estimated volume of oil discharged:

Weather conditions on scene; and:

Actions taken or planned by persons on scene:

NOTICE: This report is required by 49 CFR Part 195. Failure to report can result in a civil penalty not to exceed \$25,000 for each violation for each day that such violation persists except that the maximum civil penalty shall not exceed \$500,000 as provided in 49 USC 60122

Form Approved  
OMB No. 2137-0047



U.S. Department of Transportation  
Research and Special Programs  
Administration

FIGURE 3.1-3 - ACCIDENT REPORT -  
HAZARDOUS LIQUID PIPELINE SYSTEMS

Report Date

No. \_\_\_\_\_  
(DOT Use Only)

**INSTRUCTIONS**

**Important:** Please read the separate instructions for completing this form before you begin. They clarify the information requested and provide specific examples. If you do



ambient conditions			
<input type="radio"/> Crude oil			
<b>CAUSES FOR SMALL SPILLS ONLY (5 gallons to under 5 barrels) :</b>		<i>(For large spills [5 barrels or greater] see Part H)</i>	
<input type="radio"/> Corrosion	<input type="radio"/> Natural Forces	<input type="radio"/> Excavation Damage	<input type="radio"/> Other Outside Force Damage
<input type="radio"/> Material and/or Weld Failures	<input type="radio"/> Equipment	<input type="radio"/> Incorrect Operation	<input type="radio"/> Other
<b>PART B - PREPARER AND AUTHORIZED SIGNATURE</b>			
_____ (type or print) Preparer's Name and Title		_____ Area Code and Telephone Number	
_____ Preparer's E-mail Address		_____ Area Code and Facsimile Number	
_____ Authorized Signature	_____ (type or print) Name and Title	_____ Date	_____ Area Code and Telephone Number
<b>PART C - ORIGIN OF THE ACCIDENT (Check all that apply)</b>			
1. Additional location information			
a. <u>Line segment name</u> or ID	c. Is pipeline interstate? <input checked="" type="radio"/> Yes <input type="radio"/> No		
Accident on Federal land other than	Offshore: <input type="radio"/> Yes <input type="radio"/> No <i>(complete d if offshore)</i>		
b. Outer Continental Shelf	d. Area _____ Block # _____		
<input type="radio"/> Yes <input type="radio"/> No	State <u>///</u> or Outer Continental Shelf <input type="checkbox"/>		

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2. Location of system involved (check all that apply)		a. Type of leak or rupture	
<input type="checkbox"/> Operator's Property	<input type="checkbox"/> Pipeline Right of Way	<input type="radio"/> Leak: <input type="radio"/> Pinhole <input type="radio"/> Connection Failure	<i>(complete sec. H5)</i> <input type="radio"/> Puncture, diameter (inches) _____
<input type="checkbox"/> High Consequence Area (HCA)?		<input type="radio"/> Rupture: <input type="radio"/> Circumferential - Separation	
Describe HCA _____		<input type="radio"/> Longitudinal - Tear/Crack, length (inches) _____	Propagation Length, total, both sides (feet) _____
3. Part of system involved in accident		<input type="radio"/> N/A <input type="radio"/> Other _____	
<input type="radio"/> Above Ground Storage Tank	<input type="radio"/> Pump/meter station; terminal/tank farm piping and equipment, including sumps	b. Type of block valve used for isolation of immediate section:	
<input type="radio"/> Cavern or other below ground storage facility		Upstream: <input type="checkbox"/> Manual <input type="checkbox"/> Automatic <input type="checkbox"/> Remote Control	<input type="checkbox"/> Check Valve
<input type="radio"/> Other Specify: _____	<input type="radio"/> Onshore pipeline, including valve sites	Downstream: <input type="checkbox"/> Manual <input type="checkbox"/> Automatic <input type="checkbox"/> Remote Control	<input type="checkbox"/> Check Valve
<input type="radio"/> Offshore pipeline including platforms			

If failure occurred on **Pipeline**,  
complete items a - g:

4. Failure occurred on

- Body of Pipe  
 Pipe Seam  
 Scraper Trap  
 Pump  
 Sump  
 Joint  
 Valve  
 Metering Facility  
 Repair Sleeve  
 Welded Fitting  
 Bolted Fitting  
 Girth Weld

Other (specify) \_\_\_\_\_

Year the component that failed was installed:        /        /        /       

5. Maximum operating pressure (MOP)

a. Estimated pressure at point and time of accident:

\_\_\_\_\_ PSIG

b. MOP at time of accident:

\_\_\_\_\_ PSIG

c. Did an overpressurization occur relating to the accident?

Yes  No

c. Length of segment isolated \_\_\_\_\_ ft

d. Distance between valves \_\_\_\_\_ ft

e. Is segment configured for internal inspection tools?  Yes  No

f. Had there been an in-line inspection device run at the point of failure?

Yes  No  Don't Know

Not Possible due to physical constraints in the system

g. If Yes, type of device run (check all that apply)

High Resolution Magnetic Flux tool        Year run:

Low Resolution Magnetic Flux tool        Year run:

UT tool        Year run:

Geometry tool        Year run:

Caliper tool        Year run:

Crack tool        Year run:

Hard Spot tool        Year run:

Other tool        Year run:

#### PART D - MATERIAL SPECIFICATION

1. Nominal pipe size (NPS)        in.

2. Wall thickness        in.

3. Specification SMYS        /        /        /        /        /       

4. Seam type \_\_\_\_\_

5. Valve type \_\_\_\_\_

6. Manufactured by \_\_\_\_\_ in year        /        /        /        /       

#### PART E - ENVIRONMENT

1. Area of accident  In open ditch

Under pavement  Above ground

Underground  Under water

Inside/under building  Other \_\_\_\_\_

2. Depth of cover: \_\_\_\_\_ inches

#### PART F - CONSEQUENCES

1. Consequences (check and complete all that apply)

a. **Fatalities**        **Injuries**       

Number of operator employees:

\_\_\_\_\_

Contractor employees working for operator:

\_\_\_\_\_

General public:

\_\_\_\_\_

**Totals:**

\_\_\_\_\_

b. Was pipeline/segment shutdown due to leak?  Yes  No

If Yes, how long? \_\_\_\_\_ days \_\_\_\_\_ hours \_\_\_\_\_ minutes

c. Product ignited  Yes  No

d. Explosion  Yes  No

e.  Evacuation (general public only)        /        /        /        /        people

Reason for Evacuation:

Precautionary by company

Evacuation required or initiated by public official

f. Elapsed time until area was made safe:

       hr.        min.

**2. Environmental Impact**

a. Wildlife Impact: Fish/aquatic  Yes  No      Water Contamination:  Yes  No (If Yes, provide the following)

Birds  Yes  No      Amount in water \_\_\_\_\_ barrels

Terrestrial  Yes  No      Ocean/Seawater  No  Yes

b. Soil Contamination  Yes  No      Surface  No  Yes

If Yes, estimated number of cubic yards: \_\_\_\_\_      Groundwater  No  Yes

c. Long term impact assessment performed:  Yes  No      Drinking Water  No  Yes (If Yes, check below)

d. Anticipated remediation  Yes  No       Private well  Public water intake

If Yes, check all that apply:  Surface water  Groundwater  Soil  Vegetation  Wildlife

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**PART G - LEAK DETECTION INFORMATION**

1. Computer based leak detection capability in place?  Yes  No

2. Was the release initially detected by? (check one):

CPM/SCADA-based system with leak detection       Remote operating personnel, including controllers

Static shut-in test or other pressure or leak test       Air patrol or ground surveillance

Local operating personnel, procedures or equipment       A third party       Other (specify) \_\_\_\_\_

3. Estimated leak duration: days \_\_\_\_ hours \_\_\_\_

**PART H - APPARENT CAUSE**

**Important:** There are 25 numbered causes in this Part H. Check the box corresponding to the primary cause of the accident. Check one circle in each of the supplemental categories corresponding to the cause you indicate. See the instructions for guidance.

**H1 - CORROSION**

1. <input type="checkbox"/> External Corrosion	a. Pipe Coating	b. Visual Examination	c. Cause of Corrosion
2. <input type="checkbox"/> Internal Corrosion	<input type="radio"/> Bare	<input type="radio"/> Localized Pitting	<input type="radio"/> Selective Seam Corrosion
	<input type="radio"/> Coated	<input type="radio"/> General Corrosion	<input type="radio"/> Galvanic
		<input type="radio"/> Other _____	<input type="radio"/> Atmospheric
			<input type="radio"/> Stray Current
			<input type="radio"/> Cathodic Protection
			<input type="radio"/> Disrupted
			<input type="radio"/> Stress Corrosion Cracking
			<input type="radio"/> Microbiological
			<input type="radio"/> Other _____

- (Complete items a - e where applicable.)
- d. Was corroded part of pipeline considered to be under cathodic protection prior to discovering accident?  
 No  Yes, Year Protection Started: /////
- e. Was pipe previously damaged in the area of corrosion?  
 No  Yes ⇒ Estimated time prior to accident: /// years /// months Unknown

**H2 - NATURAL FORCES**

3.  Earth Movement ⇒  Earthquake  Subsidence  Landslide  Other \_\_\_\_\_
4.  Lightning
5.  Heavy Rains/Floods ⇒  Washouts  Flotation  Mudslide  Scouring  Other \_\_\_\_\_  
 ⇒  Thermal  Frost
6.  Temperature Stress  Heave  Frozen Components  Other \_\_\_\_\_
7.  High Winds

**H3 - EXCAVATION DAMAGE**

8.  Operator Excavation Damage (including their contractors/Not Third Party)
9.  Third Party (complete a - f)
- a. Excavator group:  General Public  Government  Excavator other than Operator/subcontractor
- b. Type:  Road Work  Pipeline  Water  Electric  Sewer  Phone/Cable  
 Landowner-not farming related  Farming  Railroad  
 Other liquid or gas transmission pipeline operator or their contractor  
 Nautical Operations  Other \_\_\_\_\_
- c. Excavation was:  Open Trench  Sub-strata (boring, directional drilling, etc?)
- d. Excavation was an ongoing activity (Month or longer)  Yes  No If Yes, Date of last contact \_\_\_/\_\_\_/\_\_\_
- e. Did operator get prior notification of excavation activity?  
 Yes; Date received: /// mo. /// day ///// yr.  No  
 Notification received from:  One Call System  Excavator  Contractor  Landowner
- f. Was pipeline marked as result of location request for excavation?  No  Yes (If Yes, check applicable items i - iv)
- i. Temporary markings:  Flags  Stakes  Paint
- ii. Permanent markings:
- iii. Marks were (check one):  Accurate  Not Accurate
- iv. Were marks made within required time?  Yes  No

**H4 - OTHER OUTSIDE FORCE DAMAGE**

10.  Fire/Explosion as primary cause of failure ⇒ Fire/Explosion cause:  Man made  Natural
11.  Car, truck or other vehicle not relating to excavation activity damaging pipe

12.  Rupture of Previously Damaged Pipe13.  Vandalism

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**H5 - MATERIAL AND/OR WELD FAILURES****Material**14.  Body of Pipe ⇒  Dent  Gouge  Bend  Arc Burn  Other15.  Component ⇒  Valve  Fitting  Vessel  Extruded Outlet  Other16.  Joint ⇒  Gasket  O-Ring  Threads  Other**Weld**17.  Butt ⇒  Pipe Fabrication  Other18.  Fillet ⇒  Branch  Hot Tap  Fitting  Repair Sleeve  Other19.  Pipe Seam ⇒  LF ERW  DSAW  Seamless  Flash Weld  HF ERW  SAW  Spiral  OtherComplete a-g if you indicate **any** cause in part H5.

a. Type of failure:

 Construction Defect ⇒  Poor Workmanship  Procedure not followed  Poor Construction Procedures Material Defectb. Was failure due to pipe damage sustained in transportation to the construction or fabrication site?  Yes  Noc. Was part which leaked pressure tested before accident occurred?  Yes, complete d - g  Nod. Date of test:        yr.        mo.        daye. Test medium:  Water  Inert Gas  Other \_\_\_\_\_f. Time held at test pressure:        hr.

g. Estimated test pressure at point of accident: \_\_\_\_\_ PSIG

**H6 - EQUIPMENT**20.  Malfunction of Control/Relief Equipment ⇒  Control valve  Instrumentation  SCADA  Communications  Block valve  Relief valve  Power failure  Other \_\_\_\_\_21.  Broken Pipe Coupling ⇒  Threads Stripped, Nipples  Valve Threads  Dresser Couplings  Other \_\_\_\_\_

22.  Seal Failure ⇒  Gasket  O-ring  Seal/Pump Packing  Other \_\_\_\_\_

**H7 - INCORRECT OPERATION**

23.  Incorrect Operation

a. Type:  Inadequate Procedures  Inadequate Safety Practices  Failure to Follow Procedures  
 Other \_\_\_\_\_

b. Number of employees involved who failed a post-accident test: drug test: \_\_\_\_/\_\_\_\_/\_\_\_\_/\_\_\_\_ alcohol test: \_\_\_\_/\_\_\_\_/\_\_\_\_/\_\_\_\_

**H8 - OTHER**

24.  Miscellaneous, describe: \_\_\_\_\_

25.  Unknown

Investigation Complete  Still Under Investigation (*submit a supplemental report when investigation is complete*)

**PART I - NARRATIVE DESCRIPTION OF FACTORS CONTRIBUTING TO THE EVENT**

(Attach additional sheets as necessary)

FIGURE 3.1-4 - NOTIFICATIONS AND TELEPHONE NUMBERS

\*24 Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
<b>COMPANY PERSONNEL</b>		
Tyrone Mitchell Regional Operations Manager, Doraville, GA <b>Primary Qualified Individual</b> Liaison Officer	(678) 837-3802 (Office) (b) (6) (Home) (b) (6) *(Mobile)	
Thomas Antenucci Area Manager Ohio South District Incident Commander	(513) 482-3215 (Office) (b) (6)	

	(Home) (b) (6) *(Mobile)	
BP Notification Center (BPNC)	(800) 321-8642* (Office), (630) 961-6200 (Office), (630) 961-6965 (Fax) (Office)	
BP Pipeline - Emergency Only	(800) 548-6482 (Office)	
Terry Chance O&M Team Lead, Alternate Qualified Individuals <b>Alternate Qualified Individual</b> Field Incident Commander	(219) 473-9665 (Office) (b) (6) (Home) *(Mobile) Sat Phone 321-205-1672 (Pager)	
Katherine Reed Damage Prevention Team Leader, Merrillville, IN <b>Alternate Qualified Individual</b>	(219) 472-2406 (Office) (b) (6) (Home) (b) (6) *(Mobile) Sat Phone 321-205-1942 (Pager)	
Isabelita Strong Xylene O&M Team Lead <b>Alternate Qualified Individual</b>	(219) 472-2339 (Office) (b) (6) *(Mobile)	
Terry Zimmerman O&M Heavy Maintenance Team Leader, Manhattan, IL	(815) 478-6110 (Office) (b) (6) (Home) (b) (6) *(Mobile)	
Scott Fitzgerald DOT Compliance Advisor	n/a (Home) (b) (6) *(Mobile)	
Mark Buteau Compliance Coordinator Planning Section Chief	(337) 735-5303 (Office) (b) (6) (Home) (b) (6) *(Mobile)	

Jennifer Brennan Environmental Coord., Manhattan, IL	(815) 478-6122 (Office) (b) (6) (Home) (b) (6) *(Mobile) Sat Phone 321-205-1617 (Pager)	
Gerry Lauer Safety Coordinator, Merrillville, IN Site Safety	(219) 472-2337 (Office) (b) (6) (Home) (b) (6) *(Mobile) Sat Phone 321-205-1916 (Pager)	
Darren Doyle EoR Safety Coordinator, Freeman MO Site Safety Officer	(816) 899-5620 (Office) (b) (6) (Home) (b) (6) *(Mobile) (321) 205-1686 Sat Phone (Pager)	

FIGURE 3.1-4 - NOTIFICATIONS AND TELEPHONE NUMBERS

\*24 Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
COMPANY PERSONNEL , CONTINUED		
Ronald Rybarczyk Government & Public Affairs Director (GPA) Public Information Officer / Liaison Officer	(419) 698-6376 (Office) (b) (6) (Home) (b) (6) *(Mobile)	
Paula Skryja Emergency Response/Crisis Management Coordinator Crisis Management Advisor	(708) 390-5521 (Office) (b) (6) *(Mobile)	
Tulsa Pipeline Control Center Resources	(918) 660-4453, -4456 (Office)	
Frank G. Nitsch Supervisor, HSE	(630) 836-3489 (Office)	

HSE Director, Alternate	(b) (6) (Home) (b) (6) *(Mobile) (877) 408-2778 (Pager)	
Brian Stone Corrosion Specialist	(563) 556-2561 (Office) (b) (6) *(Mobile)	
Central District Satellite Phones	Tim Smith Sat Phone 321-205-1955 (Office) Terry Chance Sat Phone (b) (6) (Home) Kathy Reed Sat Phone (b) (6) *(Mobile) Gerry Lauer Sat Phone 321-205-1916 (Pager)	
Michael Baum O&M D - Dearborn First Responder	(734) 699-5514 (Office) (b) (6) (Home) (b) (6) *(Mobile)	
Daniel Beall E&M EL 1 - Whiting First Responder	(219) 473-9641 (Office) (b) (6) (Home) (b) (6) *(Mobile)	
Darren Carnes O&MD - South Bend First Responder	574-272-0267 (Office) (b) (6) (Home) *(Mobile)	
Greg Chevalier O&M EL 1 First Responder	734-699-5514 (Office) (b) (6) (Home) *(Mobile)	
David Depa E&M EL 1 First Responder	(219) 659-8575 (Office) (b) (6) (Home) (b) (6)	

	*(Mobile)	
Bradley Eaton E&M 2 - Dearborn First Responder	(734) 699-5514 (Office) (b) (6) (Home) (b) (6) *(Mobile)	
Phil Fuller O&M D - Jackson First Responder	(517) 536-8659 (Office) (b) (6) (Home) (b) (6) *(Mobile)	

FIGURE 3.1-4 - NOTIFICATIONS AND TELEPHONE NUMBERS

\*24 Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
COMPANY PERSONNEL , CONTINUED		
Kyron Fikes Field Specialist First Responder	219-384-7662 (Office) (b) (6) *(Mobile)	
Todd McKee E&M EL 2 - Indianapolis First Responder	(317) 920-9311 (Office) (b) (6) (Home) (b) (6) *(Mobile)	
Dan Love E&M 1 First Responder	219-987-5907 (Office) (b) (6) (Home) *(Mobile)	
William Schaffer E&M 1 - Jackson First Responder	(517) 536-8659 (Office) (b) (6) (Home) (b) (6) *(Mobile)	
Glenn Weiss	(574) 272-0267	

E&M 2 -South Bend First Responder	(Office) (b) (6) (Home) (b) (6) *(Mobile)	
Ben Taylor Field Specialist First Responder	219-473-9665 (Office) (b) (6) (Home) *(Mobile)	
Pete Dalessandro E&M 2 - Cal A First Responder	(219) 931-2345 (Office) (b) (6) (Home) (b) (6) *(Mobile)	
Ryan Creekmore Field Specialist First Responder	812-202-1398 (Office) (b) (6) (Home) *(Mobile)	
Tony Hardiman E&M 2 - Decatur First Responder	(256) 350-1910 (Office) (b) (6) (Home) (b) (6) *(Mobile) Satellite Phone 011+8816+3161+0339 (Pager)	
Rick Saulsbury E&M 2 - Southside First Responder	(931) 387-2547 (Office) (b) (6) (Home) (b) (6) *(Mobile) Satellite Phone 011+8816+3166+7267 (Pager)	
Kyle Rudibaugh Field Specialist First Responder	812-477-2142 (Office) (b) (6) (Home) *(Mobile)	
Dan Wyatt E&M EL - Humrick First Responder	(217) 247-2878 (Office) (b) (6) (Home) (b) (6)	

	*(Mobile)	
Arthur Green O&M D, Merrillville, IN 1st Responder	(219) 472-2368 (Office) (b) (6) (Home) (b) (6) *(Mobile)	

FIGURE 3.1-4 - NOTIFICATIONS AND TELEPHONE NUMBERS

\*24 Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
COMPANY PERSONNEL , CONTINUED		
Jeffrey Payne Damage Prevention Specialist 1st Responder	(219) 472-2367 (Office) (b) (6) (Home) (b) (6) *(Mobile)	
Whiting Refinery Emergency Center	219-473-5536 (Office)	
Whiting Refinery Fire/EMS	219-473-1212 (Office)	
Whiting Refinery Cube Coordinator	(219) 473-3777 (Office)	
Whiting Refinery Control Room - J&L Console	219-473-3000, -3330 (Office)	
Whiting Refinery Security Dispatch	(219) 473-3500 (Office)	

FIGURE 3.1-4 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED

\*24 Hour Number

	PHONE	

AFFILIATION	NUMBER	TIME CONTACTED
<b>Initial</b>		
National Response Center (NRC) - NRC will contact the USCG and EPA completing the Federal notifications.	(800) 424-8802* (202) 267-2675* (202) 267-1322 Fax	
U.S. Environmental Protection Agency, Region IV (AL, FL, GA, KY, MS, NC, SC, TN) Sam Nunn Atlanta Federal Center 61 Forsyth Street, SW, Atlanta, GA 30303-8960	(404) 562-9900 (Main Number) (404) 562-8700* (Spill Reporting) (800) 241-1754 (Main Number) (404) 562-8174 (Fax)	
U.S. Environmental Protection Agency, Region V (IL, IN, MI, MN, OH, WI) 77 W. Jackson Blvd, Chicago, IL, 60604	(312) 353-2318* Emergency Response	
<b>Recommended</b>		
<b>Federal Agencies</b>		
"USFWS - Midwest Region (Regional Office)	(612) 713-5360 main number (612) 713-5178 - Ecological Office Office Hours: 8:00am - 4:30pm CST	
Army Corp of Engineers Washington, DC, Office of Homeland Security, Director of Emergency Operations	(202) 761-1001*	
Army Corps of Engineers Great Lakes & Ohio River Division (IL, IN, KY, MI, TN) Cincinnati, Ohio	Readiness & Contingency Operations: (513) 684-3085 Emergency Response Mission: (513) 684-3089	
Army Corps of Engineers Mississippi Valley Division (MN) Vicksburg, MS	Readiness & Contingency Operations (601) 634-7308 Emergency Response Mission (601) 634-5026	
Army Corps of Engineers South Atlantic Division Headquarters (AL) Atlanta, GA	Readiness & Contingency Operations (404) 909-2076 Joel Hendrix Emergency Response Mission (404) 562-5150	
Army Corps of Engineers-Chicago	(312) 846-5530 main	

District	number (312) 846-5330 general information	
Environmental Protection Agency, Region IV (AL, FL, GA, KY, MS, NC, SC, TN) Sam Nunn Atlanta Federal Center 61 Forsyth Street, SW, Atlanta, GA 30303-8960	(404) 562-9900 (Main Number) (404) 562-8700* (Spill Reporting) (800) 241-1754 (Main Number) (404) 562-8174 (Fax)	
Occupational Safety and Health Administration (OSHA) - Washington, D.C.	(800) 321-6742*	
Occupational Safety And Health Administration (OSHA) Region 4 - Region Office (AL, FL, GA, KY, MS, NC, SC, TN) 61 Forsyth Street, SW Room 6T50, Atlanta, Georgia 30303	(678) 237-0400 Atlanta main number (678) 237-0447 FAX	
OSHA, Region 5 (IL, IN, MI, MN, OH, WI) 230 South Dearborn Street, Room 3244, Chicago, Illinois 60604	(312) 353-2220 (312) 353-7774 Fax	
U.S. Army Corps of Engineers - Ohio River Division	(513) 684-3010 (Ohio River Division) (502) 315-6100 (Louisville District)	

FIGURE 3.1-4 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED

\*24 Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
<b>Recommended, Continued</b>		
U.S. Army Corps of Engineers Detroit, MI	(313) 226-6413 main number (888) 694-8313 main number (313) 554-8524 Emergency Response Mission	
U.S. Army Corps of Engineers Louisville District	(502) 315-6100 main number (502) 315-6100 Emergency Response Mission	
U.S. Coast Guard - Ninth District Sector Detroit	(313) 568-9560* Search and Rescue (313) 568-9525 main	

	number	
U.S. Coast Guard - Ninth District Sector Lake Michigan	(414) 747-7161 (414) 747-7100 main number	
U.S. Coast Guard Eighth District Sector Ohio Valley (TN, AL)	(502) 779-5400*	
U.S. Coast Guard Marine Safety Detachment Nashville, TN	(615) 736-5421 main number	
U.S. Coast Guard Marine Safety Unit - Cleveland	(216) 937-0111 main number	
U.S. Coast Guard Ninth District Command Center	(800) 321-4400* Search and Rescue (216) 902-6063 Response Division	
U.S. Dept. of Transportation (DOT) Office of Pipeline Safety (Notified via NRC)	(202) 366-4000 main number (202) 366-4433 admin (202) 366-4595 emergency Office of Pipeline Safety	
U.S. DOT Hazardous Materials (Notified via NRC)	(202) 366-4000 main number (202)-366-0656 HAZMAT	
U.S. Environmental Protection Agency, Region V (IL, IN, MI, MN, OH, WI) 77 W. Jackson Blvd, Chicago, IL, 60604	(312) 353-2318*? Emergency Response (312) 353-2000 Main Number (800) 621-8431 Environmental Hotline 8:30 am - 4:30 pm	
U.S. Fish and Wildlife Service Southeast Region Office Atlanta, GA	(404) 679-4000 main number (404) 679-7127 Bill Starkle (404) 895-7093* (spill cell phone)	
US DOT-Federal Highways Administration	202-366-4000 main number	
US Fish & Wildlife Service	(251) 441-5181 Alabama Ecological Services Field Office	
USFWS - Midwest Region Chicago Ecological Services Office Barrington, IL	(612) 713-5104 - Annette Trowbridge - Ecological Services (847) 381-2253 main number (Chicago) Office Hours: 8:00am- 4:30pm	

State Agencies - Alabama		
Alabama Department of Conservation and Natural Resources	(334) 242-3486	
Alabama Department of Environmental Management (ADEM) - Mobile, AL	(251) 450-3400 (Mobile Branch) (334) 242-4378 (Montgomery State Troopers) (334) 271-7700 (334) 271-7861 (Air Division)	
Alabama Department of Environmental Management (ADEM) - Mobile, AL	(251) 660-2300 (Alabama State Police Highway Patrol Post)	

FIGURE 3.1-4 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED

\*24 Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
<b>Recommended, Continued</b>		
<b>State Agencies - Alabama</b>		
Alabama Dept. of Public Safety Information Line	(334) 242-4371 (334) 242-4393 (Division Chief)?	
Alabama Division of Wildlife and Freshwater Fisheries	(334) 242-3465	
Alabama Emergency Management Agency (SERC)	(205) 280-2200	
Alabama Law Enforcement Agency	(334) 353-3050	
Alabama State Fire Marshal's Office	(334) 241-4166 main number	
<b>County Agencies - Alabama</b>		
Limestone County		
Limestone Co. Emergency Management Agency	(256) 232-2631	
Limestone Co. Sheriff Department	(256) 232-0111	
Morgan County		
Decatur Ambulance	(256) 350-4613 (Dispatch) 911 Dispatch for all of Morgan Co	
Decatur Fire Department	(256) 341-4862	

Decatur General	(256) 341-2000	
Decatur Hospital	256-350-2211	
Decatur Police	256-353-2515	
Morgan Co. Sheriff Department	(256) 351-4800 (256) 301-1174 (Dispatch)	
Morgan County Emergency Management Agency	(256) 351-4620 (256)-351-4625	
<b>State Agencies - Illinois</b>		
Illinois Department of Natural Resources Headquarters, Springfield IL	(217) 785-0075 (Director's Office) (217) 782-6431 Office of Law Enforcement Duty Office Hours: 8:30am - 5:00pm (Rafael Guterrez) 888-236-7529 (After hours)	
Illinois Environmental Protection Agency	(217) 782-3637 (217) 782-7860*? when calling from outside state (217) 782-3397 (headquarters); (217) 782-2700 main number central office for IEMA (800) 782-7860* when calling within state	
Illinois State Fire Marshall	(217) 785-0969 main number (217) 557-3131 or (217) 785-7808 Division of Petroleum and Chemical Safety	
Illinois State Fire Marshall	(312) 814-2693 (8am-5pm) Office of Fire Prevention	

FIGURE 3.1-4 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED

\*24 Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
<b>Recommended, Continued</b>		
<b>State Agencies - Illinois</b>		

Illinois State Police Command Center District Springfield, IL	(800) 782-7860* (In-state) (217) 786-6677 (statewide emergencies)	
<b>County Agencies - Illinois</b>		
Cook County		
Burham Police Department	(708) 891-2122	
Chicago Fire Dept.	(312) 745-3705 (City of Chicago 311 information) (312) 746-9500 (911 main fire alarm dispatch office)	
Chicago Police - Office of the Superintendent	(312) 745-6100	
Cook Co. Emergency Management Agency of Homeland Security	(815) 955-9827 (312) 603-8180?	
Cook County Sheriff Police Headquarters / Cook County Sheriff?Police	(708) 865-4700 (312) 603-4521 Admin (312) 603-6444	
Lansing Police Department	(708) 895-7150	
Lynwood Police Department	(708) 758-4744	
Sauk Village Police Department	(708) 758-1331	
Steger Police Department	(708) 754-8121	
Edgar County		
Edgar Co. Sheriff Department	(217) 465-4166	
Iroquois County		
Beaverville Ambulance	815-432-4918	
Beaverville Fire	(815) 435-2211 (815) 432-4918* (Dispatch)	
Iroquois Ambulance	815-432-4918	
Iroquois Co. Police	(815) 432-4918* (Dispatch)	
Iroquois Co. Sheriff Department	911 (815) 432-6992	
Iroquois Fire?/ Concord Fire Protection District	(815) 429-3541	
Iroquois LEPC / Iroquois Emergency Services & Disaster Agency	(815) 432-4918 (815) 432-6997 Office Hours: 8:30am - 12:30pm M-F	

FIGURE 3.1-4 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED

\*24 Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
<b>Recommended, Continued</b>		
<b>County Agencies - Illinois</b>		
Iroquois County		
Sheldon Ambulance	815-432-4918	
Sheldon Fire	(815) 432-2431* (Dispatch)	
Sheldon Police	(815) 432-2431* (Dispatch)	
Stockland Ambulance	815-432-4918	
Stockland Fire Dispatch Center / Stockland Fire Station	(815) 432-4918 (815) 682-4498	
Watseka Ambulance	815-432-4918	
Watseka Co. Police	(815) 432-2433	
Watseka Fire Dispatch Center	(815) 432-2421	
Watseka Hospital	815-432-7762 (ER)	
Watseka Police (Dispatch Center)	815-432-2431* (Dispatch)	
Kankakee County		
Kankakee Co. Hospital	815-933-1671	
Kankakee Co. LEPC	(815) 802-7172	
Kankakee Co. Sheriff Department Dispatch Center	(815) 933-3324	
Kankakee Dispatch (Ambulance)	815-933-3324	
Kankakee Fire	(815) 933-0450 (815) 933-3311*	
Kankakee Fire Dispatch	(815) 933-3324	
Kankakee Police	(815) 933-0420 (815) 933-3321 (non- emergency)	
Momence Ambulance	815-472-2111	

FIGURE 3.1-4 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED

## \*24 Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
<b>Recommended, Continued</b>		
<b>County Agencies - Illinois</b>		
Kankakee County		
Momence Fire	(815) 472-4525	
Momence Police	(815) 472-2021	
Vermillion County		
Danville Ambulance	217-443-3911	
Danville Fire Dept. Administrative	(217) 431-2350	
Danville Fire Dispatch	(217) 442-0155	
Danville Hospital	217-443-5000 217-442-0153 (non-emergency) 217-442-0348 (emergency)	
Danville Police	217-431-2250	
Georgetown Ambulance	217-662-2701	
Georgetown Fire	217-662-2670	
Georgetown Police	217-662-2131	
Hoopestown Ambulance	217-283-5196	
Hoopestown Fire Dispatch	(217) 283-5196	
Hoopestown Hospital	217-283-5531	
Hoopestown Police	217-283-5196	
Vermillion Co. Sheriff Department	(217) 442-4080	
Will County		
Beecher Ambulance	708-946-6585	
Beecher Fire	708-946-6585	
Beecher Police	708-946-2341	

FIGURE 3.1-4 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED

## \*24 Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
<b>Recommended, Continued</b>		
<b>County Agencies - Illinois</b>		

Will County		
Crete Ambulance, Fire Dept., & Police	(708) 672-1564 (Dispatch) (708) 672-0911	
Crete Fire Depart., Police & Ambulance	708-672-0911	
Crete Police Dispatch Center, Ambulance, & Fire Dept.	(708) 672-1564 (708) 672-0911	
Will Co. Sheriff	815-727-8895 (non emerg) 815-727-8575 (emerg Dispatch)	
State Agencies - Indiana		
Indiana Department Environmental Management (IDEM)	(888) 233-7745* (317) 233-7745* Spill Reporting	
Indiana Department of Homeland Security / Indiana Emergency Operating Center	(800) 669-7362	
Indiana Emergency Management Agency, EMS?/ Indiana Emergency Response Commission	(317) 232-3986 (317) 234-6796	
Indiana State Police	(317) 232-8248* (Administrative)	
County Agencies - Indiana		
Boone County		
Boone Co. LEPC	765-482-1412 - office	
Boone Co. Sheriff Department	911 765-482-1412	
Lebanon Ambulance	765-485-8270	
Lebanon Fire Department	765-482-8831	
Lebanon Police	(765) 482-8836	
Whitestown Fire Department	317-769-3300	
Withham Memorial Hospital (Lebanon Hospital)	(765) 485-8000	
Zionsville Ambulance	317-873-5358	
Zionsville Fire Department	317-873-5358	
Zionsville Police	(317) 873-5967 (Administrative)	

FIGURE 3.1-4 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED

\*24 Hour Number

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AFFILIATION	PHONE NUMBER	TIME CONTACTED
<b>Recommended, Continued</b>		
<b>County Agencies - Indiana</b>		
Clinton County		
Clinton Co. LEPC / Clinton Co. Fire Department	(765) 654-7212* (765) 654-4329 - office	
Clinton Co. Police Department (Dispatch)	(765) 654-5563	
Franciscan St. Elizabeth East	(765) 502-4000	
Frankfort Ambulance	765-654-7212	
Frankfort Fire Department	765-654-7212	
Frankfort Police	765-654-4431	
Mulberry Ambulance / Frankfort Ambulance / Frankfort Fire Dept.	(765) 654-7212 (765) 659-4601 Business Hours: M-F 8:00am - 4:00pm, Closed 12:00pm - 1:00pm	
Mulberry Fire Department / Frankfort Fire	(765) 654-7212 (765) 296-2466	
Witham Memorial Hospital	(765) 485-8000	
Elkhart County		
Elkhart City Fire Department	(574) 293-8931	
Elkhart Co. Sheriff's Department	(574) 891-2100	
Elkhart General (Elkhart Co. Hospital)	(574) 294-2621	
Elkhart Police Department	(574) 295-7070	
Gibson County		
Gibson Co. Health Department / Gibson Co. LEPC	(812) 385-3831 (812) 664-1281	
Gibson Co. Sheriff Department	(812) 385-3496*	
Princeton Fire	812-385-4672	
Jasper County		
Demotte Ambulance / Keener Township Ambulance	(219) 987-2021 (Administrative)	
Demotte Fire Department Keener Township	(219) 987-2121	

FIGURE 3.1-4 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED

\*24 Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
<b>Recommended, Continued</b>		
<b>County Agencies - Indiana</b>		
Jasper County		
Demotte Police	219-987-3344	
Jasper Co. Hospital	(219) 866-5141	
Jasper Co. Sheriff Department	(219) 866-7344	
Jasper County Emergency Management	(219) 866-1352	
Rensselaer Fire and/or Ambulance	219-866-5221	
Rensselaer Police	219-866-7602	
Knox County		
Knox Co. Sheriff Department	(812) 882-7660	
Knox County Emergency Mgmt / Knox Co. LEPC	(812) 882-1502 (812) 882-4261*	
Vincennes Fire Department	(812) 882-2600	
La Porte County		
Indiana University La Porte Hospital	(219) 872-3331	
La Porte Co. Sheriffs Office / La Porte Co. LEPC	219-326-7700 219-362-7210 (219) 326-6808 x 2265 (219)-575-0003* (HAZMAT)	
Laporte City Police Department	(219) 362-9446	
LaPorte County Clerks Office	(219) 326-6808	
Michigan City Fire	219-873-1440	
Michigan City Hospital - Franciscan St. Anthony	219-879-8511	
Michigan City Police	(219) 874-3221 (non-emergency)	
Lake County		
Crown Point Fire	219-662-3248	
Crown Point Hospital	219-663-8120	

FIGURE 3.1-4 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED

\*24 Hour Number

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AFFILIATION	PHONE NUMBER	TIME CONTACTED
<b>Recommended, Continued</b>		
<b>County Agencies - Indiana</b>		
Lake County		
Crown Point Police	219-663-2131	
East Chicago Ambulance (Prompt)	219-838-4444	
East Chicago Fire Depart.	219-391-8472	
East Chicago Hospital (St. Catherine's)	219-392-1700	
East Chicago Police	(219) 391-8400* (Dispatch)	
Gary Ambulance	(219) 881-5285 (219) 881-1260 (Dispatch)	
Gary Fire	219-881-5252	
Gary Hospital (Methodist)	219-866-4545	
Gary Police	(219) 881-1260 (Dispatch) (219) 881-1214	
Hammond Fire Department	(219) 853-6416	
Hammond Police	(219) 853-6490	
Highland Fire Department	(219) 923-9876	
Highland Police Department	(219) 838-3184	
Lake Co. Dept. of Homeland Security / Lake Co. LEPC / Lake Co. Sheriff Department	(219) 755-3549 (219) 755-3512 (Hazardous Chemical Spills) (219) 755-3333* (Police Dept.); (219) 755-3400 (Switchboard)	
Lake Co. Sheriff Department	(219) 755-3512 (219) 755-3400 (219) 755-3333*	
Lake Dalecarlia Fire	219-696-8876	
Munster Fire Department	(219) 836-6960 (Administrative) (219) 836-6600 * (Dispatch)	
Munster Police Department	(219) 836-6600	

FIGURE 3.1-4 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED

\*24 Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
<b>Recommended, Continued</b>		
<b>County Agencies - Indiana</b>		
Lake County		
Schereville Police Department	(219) 322-5000 (non-emergency)	
Whiting Fire Dept. & Ambulance	219-659-1069	
Whiting Hospital (Franciscan St. Margaret Health)	(219) 932-2300	
Whiting Police Department	(219) 659-2131	
Whiting Refinery Ambulance Service	219-473-1212	
Whiting Refinery Fire Dept	(219) 473-1212	
Marion County		
Indianapolis Fire Department	317-327-6041	
Indianapolis Ambulance	317-955-3500 (Rural Metro Ambulance)	
Indianapolis Hospital	317-865-5000	
Indianapolis Police Department	(317) 327-3811 (Non-Emergency) (317) 327-3282 (Chief's Office)	
Marion Co. LEPC - Div Homeland Security & Emergency Management / Marion Co. LEPC	(317) 327-3900 (317) 327-7503 (317) 221-2266 (Marion Co Health Dept)	
Marion Co. Sheriff Department	911 317-327-1700	
New Augusta Ambulance / City of Indianapolis Police Non-Emergency	(317) 327-3811 (Non-Emergency)	
Pike County		
Pike Co. Emergency Management / Pike Co. LEPC	(812) 354-6776 (Dispatch) (812) 354-6937	
Pike Co. Sheriff Department	(812) 354-6024 (Dispatch)	
Porter County		
Chesterton Ambulance	219-926-8366	
Chesterton Fire	219-926-7162	
Chesterton Medical Campus	(219) 926-7755	

FIGURE 3.1-4 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED

\*24 Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
<b>Recommended, Continued</b>		
<b>County Agencies - Indiana</b>		
Porter County		
Chesterton Police	219-926-1136	
Portage Ambulance	(219) 763-2455	
Portage Fire Department	(219) 762-7404	
Portage Hospital Campus	(219) 364-3000	
Portage Police Department	(219) 477-3122 (Sheriff's Dept.) Dispatch for all Porter Co. (219) 762-3122	
Porter Ambulance / Porter Co. Central Dispatch	(219) 926-8366 (219) 477-3170*	
Porter Co. Emergency Management / Porter Co. LEPC / Porter Co. Central Dispatch	(219) 465-3490 (219) 465-3593 (219) 477-3170*	
Porter Co. Sheriff Department	(219) 477-3000	
Porter Fire Department	(219) 926-1226	
Porter Police Department	(219) 926-7611	
St. Joseph County		
New Carlisle Police	574-654-3544	
South Bend Ambulance	(574) 272-9768 (574) 235-8393 (574) 258-1678	
South Bend Fire	574-235-9255	
South Bend Hospital (Memorial)	(574) 234-9041 574-647-1000	
South Bend Police	574-235-9201	
St. Joseph Co. LEPC / St Joseph Co. South Bend Department Police Dispatch	(574) 245-6711 or (574) 235-9361 (24 hrs) - LEPC (574) 235-9201	
St. Joseph Co. Police	574-235-9611	
Sullivan County		

Sullivan Co. Sheriff	812-268-4308	
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FIGURE 3.1-4 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED

\*24 Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
<b>Recommended, Continued</b>		
<b>County Agencies - Indiana</b>		
Sullivan County		
Sullivan Co. Sheriff / Sullivan Co. LEPC	(812) 268-4308 - sheriff (812) 696-5076; ext 23 (24 hrs) - LEPC	
Sullivan Fire	812-268-5837	
Sullivan Police	812-268-4353	
Tippecanoe County		
Battle Ground Ambulance - Americare	765-449-7100	
Buck Creek / Tippecanoe Ambulance Service	765-423-6235	
Buck Creek Volunteer Fire Dept.	(765) 589-8446	
Tippecanoe Co. LEPC / EMA	(765) 742-1334*	
Tippecanoe Co. Police Department	911 765-423-9321	
Vanderburgh County		
Evansville Fire	812-435-6235	
Vanderburgh LEPC / Vanderburgh Co. Central Dispatch	(812) 435-5620 or (812) 426-7331 (24 hr) - LEPC (b) (6) (cell- Vanderburgh Co Health Dept) (812) 426-7325 - central dispatch	
Vanderburgh Sheriff	(812) 421-6200	
Vermillion County		
St. Bernice Fire	765-832-6926	
Vermillion Co. Emergency Management Committee / Vermillion Co. LEPC	(765) 832-5500 (765) 245-4352 (765) 505-1704	
Vermillion Co. Sheriff	911* (765) 492-3838*	

Vigo County		
Terre Haute Fire	812-234-8683	
Terre Haute Police	812-238-1661	
Vigo Co. LEPC	(812) 232-5411 or (812) 232-8730 (24 hr)	
Vigo Co. Sheriff	911 812-462-3226	

FIGURE 3.1-4 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED

\*24 Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
<b>Recommended, Continued</b>		
<b>County Agencies - Indiana</b>		
Warrick County		
Deaconess Gateway Hospital	(812) 842-2000	
Warrick Co. Emergency Management / Warrick Co. Dispatch	(812) 897-6178 (812) 897-1200*	
Warrick Co. Sheriff Department	(812) 897-6180	
White County		
Brookston Ambulance/Fire	765-563-6300	
White Co. Emergency Management Agency / White Co. Dispatch	(574) 583-4692 (574) 583-7103*	
White Co. Sheriff Department	911 574-583-2251	
White County / Brookston Police Dept.	(765) 563-3313	
Wolcott Ambulance / White Co. Dispatch	(574) 583-7103*	
Wolcott Fire / White Co. Dispatch	(574) 583-7103*	
Wolcott Police	219-279-2505	
<b>State Agencies - Kentucky</b>		
Kentucky Department of Military Affairs - Office of Disaster and Emergency Services	(888) 522-7228* (502) 607-1638 800-255-2587	
Kentucky Department of Natural Resources - Environmental Response Team	(800) 928-2380* (502) 564-2380	
Kentucky Dept. for Environmental Protection (KDEP)	(502) 564-2380	

Kentucky Division of Emergency Management?(SERC)	(800) 255-2587* (502) 607-1638 (Duty Officer)	
Kentucky Division of Water Quality	(800) 928-2380	
Kentucky Emergency Operations	(502) 564-2380	
Kentucky Spill Reporting Hotline	(800) 928-2380	
Kentucky State Police Headquarters	(502) 695-6300 (800) 222-5555 Emergency Hotline	

FIGURE 3.1-4 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED

\*24 Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
<b>Recommended, Continued</b>		
<b>State Agencies - Kentucky</b>		
Kentucky Underground Protection, Inc. / Kentucky811?	(800) 752-6007 811 (nation wide)	
<b>County Agencies - Kentucky</b>		
Christian County		
Christian Co. LEPC	270-890-1400	
Christian Co. Sheriff Department	270-887-4143	
Daviess County		
Daviess Co. Sheriff Department	270-685-8444	
Southern States River Terminal Co / Daviess Co. Emergency Management	(270) 683-0146 (270) 685-8448	
Henderson County		
Henderson Co. LEPC	270-826-6558 270-831-1235	
Henderson Co. Sheriff	270-826-2713	
McLean County		
McLean Co. LEPC	(270) 273-3551 (309) 888-5020	
McLean Co. Sheriff Department	270-273-3276	
Muhlenberg County		
Muhlenberg Co. LEPC	(270) 338-3902	
Muhlenberg Co. Sheriff Department	(270) 338-3345	
Todd County		
Todd Co. LEPC / Dispatch	(270) 265-2501	

Todd Co. Sheriff Department	(270) 265-9966 x 2	
<b>State Agencies - Michigan</b>		
Michigan Department of Environmental Quality Pollution & Emergency Alert System	(800) 292-4706 (In-State) (517) 373-7660 (Outside State)	
Michigan State Police	911 517-332-2521	
State of Michigan Bureau of Fire Services	(517) 241-8847	
<b>County Agencies - Michigan</b>		
Branch County		
Branch Co. LEPC / Branch Co. Emergency Management	(517) 279-2352 office (517) 278-3091 dispatch	
Branch Co. Sheriff Department	(517) 278-2325 x 1	

FIGURE 3.1-4 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED

\*24 Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
<b>Recommended, Continued</b>		
<b>County Agencies - Michigan</b>		
Branch County		
Cold Water Ambulance	(517) 278-3091 (Dispatch)	
Cold Water Hospital (Community Health Center of Branch Co.)?	(517) 279-5400	
Cold Water Police	(517) 278-4525 (517) 278-3091 (911 Center)	
Calhoun County		
Calhoun Co. LEPC	269-969-6430	
Calhoun Co. Sheriff Department	(269) 969-6450 (269) 966-3663 (non-emergency)	
Calhoun County Dispatch	(269) 781-0911	
Homer Fire	517-568-4328	
Homer Police	517-568-4312	
Cass County		
Cass Co. LEPC	911	

	269-445-1460	
Cass Co. Sheriff Department	269-445-8644	
<b>Jackson County</b>		
Allegiance Health Hospital (Jackson Hospital)	(517) 788-4800	
Allegiance Health Hospital (Jackson Hospital) Express Care Clinic	(517) 788-6760	
Jackson Ambulance	(517) 787-5700* (Dispatch)	
Jackson Co. Sheriff / Jackson Co. LEPC	(517) 768-7948 (517) 768-7946	
Jackson County Sheriff	517-768-7900	
Jackson Police	517-788-4127	
<b>St. Joseph County</b>		
Colon Community Fire Department	(269) 432-3211	
Colon Police Department	(269) 432-3182	

FIGURE 3.1-4 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED

\*24 Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
<b>Recommended, Continued</b>		
<b>County Agencies - Michigan</b>		
<b>St. Joseph County</b>		
Constantine Police	269-435-4355	
St. Joseph Co. LEPC	(269) 467-5613 911 (269) 467-4638	
St. Joseph Co. Sheriff Department	269-467-9045	
Three Rivers Hospital (Three Rivers Health)	(269) 278-1145	
Three Rivers Police	(269) 467-4195 (Dispatch) (269) 278-1235	
<b>Washtenaw County</b>		
Ann Arbor Ambulance	734-973-4767 Also Call (734) 971-4420 (Huron Valley Ambulance)	
Ann Arbor Fire	734-994-4958	

Ann Arbor Hospital (St. Joseph Mercy Hospital)	(734) 712-3456	
City of Ann Arbor Safety & Services Area	(734) 794-6900	
Saline Ambulance	734-973-4767	
Saline Hospital (St. Joseph Mercy Hospital)	(734) 712-3456	
Saline Police	734-429-7911	
Washtenaw Co. LEPC / Emergency Management	(734) 973-4900 (734) 222-3848	
Washtenaw Co. Sheriff Department	734-971-8400	
Wayne County		
Allen Park Hospital (Homecare)	(800) 757-7711 Also Call (313) 383-3333 (Park Urgent Care)	
Allen Park Police Department	(313) 386-7800	
City of Melvindale Police Department	(313) 429-1070	
Detroit Fire	313-596-2900	

FIGURE 3.1-4 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED

\*24 Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
<b>Recommended, Continued</b>		
<b>County Agencies - Michigan</b>		
Wayne County		
Detroit Police	313-596-1800	
Henry-Ford Wyandott Hospital	(734) 246-6000	
Oakwood Hospital & Medical Center	(313) 593-7000	
Oakwood Annapolis Hospital	(734) 467-4000	
Oakwood Heritage Hospital	(313) 295-5000	
Oakwood SouthShore & Medical Center	(734) 671-3800	
River Rouge Fire Department	(313) 842-1718	
River Rouge Police Department	(313) 842-8700	
Romulus Police Department	734-941-8400	
Taylor Ambulance	(734) 946-0405	
Taylor Fire Department	911	

	(734) 374-1355	
Taylor Police Department	734-287-6611	
Wayne Co. Airport & Police Dispatch	(734) 942-5212	
Wayne Co. Ambulance - Rapid Response	(313) 817-6000	
Wayne Co. LEPC / Emergency Management of Homeland Security	(734) 942-5289	
Wayne Co. Sheriff Department	(313) 224-2222	
<b>State Agencies - Tennessee</b>		
Tennessee Department of Environment and Conservation	(615) 532-0109 (888) 891-8332? (Knoxville Office)	
Tennessee Department of Safety & Homeland Security	(615) 251-5166	

FIGURE 3.1-4 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED

\*24 Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
<b>Recommended, Continued</b>		
<b>State Agencies - Tennessee</b>		
Tennessee Emergency Management Agency?(SERC)	(800) 262-3300* (In-State) (615) 741-0001* (Outside State)	
Tennessee Highway Patrol	(615) 251-5175 (Colonel Trott's Office - Administrative)	
Tennessee Office of Homeland Security	(615) 532-7825	
Tennessee State Fire Marshal's Office	(615) 741-2981	
Tennessee Wildlife Resource Agency	(615) 781-6500 Office Hours: 8:00am - 4:00pm	
<b>County Agencies - Tennessee</b>		
Dickson County		
City Dickson Fire / Dickson Fire Squad Rescue	(615) 446-6331 (615) 446-9278	
Dickson Ambulance	615-446-3701	
Dickson Co. Ambulance	615-446-3701	
Dickson Co. LEPC	(615) 441-5010 Also Call 615-446-	

	3701	
Dickson Co. Sheriff Department	(615) 789-4140 (906) 774-6262	
Dickson Hospital (Horizon Medical Center)	(615) 446-0446	
Dickson Police / City of Dickson Police Dept. / Dickson Central Communications	(615) 446-5403 (615) 446-8041	
White Bluff Ambulance	615-446-3701	
White Bluff Police Administrative	(615) 797-3131 (615) 789-4139 (Dispatch)	
Giles County		
Campbellsville Ambulance	(931) 363-0911	
Giles Co. 911 Dispatch / Giles Co. LEPC	(931) 363-0911 (931) 363-1342	
Giles Co. Sheriff Department	931-363-3505	
Hillside Hospital	(931) 363-7531	

FIGURE 3.1-4 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED

\*24 Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
<b>Recommended, Continued</b>		
<b>County Agencies - Tennessee</b>		
Giles County		
Oak Grove Ambulance	(931) 363-8505 Office Hours: 8:00am - 4:30pm M-F	
Oak Grove Hospital	931-363-7531	
Pulaski Ambulance	931-363-8505 Office Hours: 8:00am - 4:30pm M-F	
Pulaski Fire Department	931-424-4407	
Pulaski Hospital	931-363-7531	
Pulaski Police	931-424-4404	
Hickman County		
Hickman Co. LEPC	(931) 729-6132	
Hickman Co. Sheriff	931-729-6143	
Maury County		

Columbia Ambulance (Maury Regional Ambulance Service)	931-388-1433	
Columbia Fire Department	931-380-2728	
Columbia Hospital (Maury Region Medical Center)	(931) 381-1111	
Columbia Police / Maury Co. Dispatch	(931) 380-2720 (931) 388-2727 (option 1)	
Maury Co. Ambulance	(931) 388-1434* (Dispatch)	
Maury Co. Fire Department / Maury Co. 911	(931) 381-3366 (931) 381-3501	
Maury Co. Hospital (Maury Region Medical Center)	(931) 381-1111	
Maury Co. Sheriff Department	931-388-5151	
Mt. Pleasant Ambulance	931-388-1433	
Mt. Pleasant Hospital (Maury Region Medical Center)	(931) 381-1111	

FIGURE 3.1-4 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED

\*24 Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
<b>Recommended, Continued</b>		
<b>County Agencies - Tennessee</b>		
Maury County		
Mt. Pleasant Police & Fire	(931) 379-3201	
Saw Dust Ambulance (Maury Regional Ambulance Service)	931-388-1434	
Saw Dust Hospital (Maury Region Medical Center)	(931) 381-1111	
Water Valley Ambulance (Maury Regional Ambulance Service)	931-388-1434	
Water Valley Hospital (Maury Region Medical Center)	(931) 381-1111	
Montgomery County		
City Clarksville Fire	(931) 645-7456	
Clarksville Ambulance	931-648-5737	
Clarksville Hospital (Gateway Medical Center)	(931) 502-1000	
Clarksville Police Department	(931) 648-0656	

Montgomery Co. Emergency Management	(931) 648-5702	
Montgomery Co. Sheriff Department	(931) 648-0611	
<b>USCG Classified OSRO's</b>		
Heritage Environmental Services, LLC Indianapolis, IN	(800) 487-7455*	
Marine Spill Response Corporation (MSRC) Chattanooga, TN	(800) 645-7745*	
National Response Corporation (NRC) Bayou Labatre, AL	(800) 899-4672*	
Veolia Environmental Services Germantown, WI	(800) 688-4005* (National Response #)	
Veolia Environmental Services Special Services, Inc. Schererville, IN	(800) 688-4005*	
Veolia Environmental Services East Chicago, IN	(800) 688-4005* (National Response #)	
Veolia Environmental Services New Lenox (South of Chicago), IL	(800) 688-4005* (National Response #)	

FIGURE 3.1-4 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED

\*24 Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
<b>Recommended, Continued</b>		
<b>USCG Classified OSRO's</b>		
Heritage Environmental Services, LLC Toledo, OH	(800) 487-7455*	
Marine Pollution Control Corp Detroit, MI	(800) 521-8232*	
Oil Mop Belle Chasse, LA	(800) 645-6671 (504) 394-6110	
Clean Harbors Environmental Services Monee, IL	(800) 645-8265*	
Heritage Environmental Services, Inc. Lemont, IL	(800) 487-7455*	
Clean Harbors Environmental Services, Inc. Sterling Heights, MI	(800) 645-8265*	

<b>Non-Classified OSRO's</b>		
EQ Indianapolis, IN	(800) 839-3975*	
Inland Industrial Services, LLC	(800) 992-9118*	
Conestoga Rovers & Associates	(866) 812-9565* (National Response #)	
Antea Group (formerly Delta Environmental Services)	651-639-9449 (866) 812-9565* (National Response #)	
Minnesota Limited Inc.	(763) 262-7000	
Midwestern Contractors	(630) 668-3420	
Pipelilnk Maintenance	765-342-7444	
INSERV Environmental Services	(574) 968-0372 (877) 917-3239* (National Response #)	
<b>Neighboring Facilities</b>		
Buckeye (Conoco Phillips) - East Chicago, IN	219-397-6666 918-661-8757	
Buckeye Pipeline - East Chicago, IN	219-397-2234	
Buckeye:Ecorse Terminal Operations	734-777-9007	
Detroit Metro Airport Operations Desk	734-942-5304	

FIGURE 3.1-4 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED

\*24 Hour Number

AFFILIATION	PHONE NUMBER	TIME CONTACTED
<b>Recommended, Continued</b>		
<b>Neighboring Facilities</b>		
Explorer Hammond Station Control Room Op. Tech	219-989-8251	
Explorer Tulsa Control Center	918-493-5100	
OneOK	713-369-9301	
RailRoads - NW Indiana Conrail (800) 272-0911 EJ&E 219-883-4300 x5242 CSX 1-800-232-0144 IHB 219-844-4803 Mobile Jct.800-537-6644		
Service Air (Shell) Tank Farm at Detroit Metro Airport	734-941-5510	

West Shore Pipeline Co.	(888) 625-7310 Emergency (847) 439-0270 (630) 257-3742	
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## SECTION 4

Last revised: July 2008

**RESPONSE TEAM ORGANIZATION**

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4.1 Description4.1.1 Facility Response Team4.1.2 Incident Management Team (IMT) / BP Americas  
Response Team (BART)4.1.3 Business Support Team (BST)4.2 Activation Procedures4.3 Team Member Response Times4.4 Incident Command System / Unified Command4.5 Qualified Individual (QI)Figure 4.5-1 - Incident Management Team Activation  
ProcedureFigure 4.5-2 - Incident Management Team Organization4.6 Incident Management Team (IMT) Job Description Checklists

## 4.1 DESCRIPTION

The Company's Incident Response Organization consists of the following teams:

- Facility Response Team (Local Response Team)
- Incident Management Team (IMT)
- BP Americas Response Team (BART)
- Business Support Team (BST)

The teams are organized and act in a manner consistent with the Incident Command System (ICS). These teams are comprised of personnel at Houston, Chicago, and local facilities. These teams will work in cooperation to:

- Manage the incident,
- Develop strategies and priorities for a response,
- Supervise contractors,
- Handle safety and security matters, and
- Provide logistical support for contractor personnel

### 4.1.1 Facility Response Team

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

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

The Facility Response Team/Incident Management Team organization is shown in **FIGURE 4.5-2**. Telephone reference is provided in **FIGURE 3.1-4**. Detailed job descriptions of the primary response team positions are provided in **SECTION 4.6**.

### 4.1.2 Incident Management Team (IMT) / BP Americas Response Team (BART)

The regional Incident Management Team (IMT) and the national BP Americas Response Team (BART), once fully staffed, are designed to cover all aspects of a comprehensive and prolonged incident response. During a prolonged response, additional personnel may be cascaded in, and more than one level within the Team may be involved to sustain 24-hour operations.

Both teams (IMT and BART) are organized according to Incident Command System principles. Led by an Incident Commander, the team is composed of the following principal components:

- Command
- Planning
- Finance

- Operations
- Logistics

### **Incident Management Team (IMT)**

A regional response team of approximately 30 US Pipelines & Logistics, Air BP, Retail, RM and Lubes (Castrol) personnel located in a particular geographic area. (There are five of these teams organized across the country.) All or part of an IMT can be deployed to the field location to provide manpower and expertise, to help respond to an incident, and manage it. These teams function by using the Incident Command System.

### **BP Americas Response Team (BART)**

The national response team made up of approximately 250 employees from all of the BUs within North America. All or any part of the BART can be deployed to the field location to provide manpower and expertise, to help respond to an incident, and manage it. This team also functions using the Incident Command System.

The primary roles of the IMT / BART are to:

- Provide strategic direction to emergency response operations.
- Support tactical responders.
- Address tactical and/or crisis issues and concerns best handled at the IMT / BART level.
- Interface with and provide information to external parties.

The functions carried out by an IMT or the BART include:

- Sizing up the incident and the nature and status of tactical response operations.
- Developing strategic objectives and response priorities.
- Gathering information on the nature and location of tactical response operations and the resources being used to carry out the operations.
- Securing the resources necessary to support tactical response operations.
- Working with the Facility Response Team to develop Incident Action Plans describing field assignments for the next operational period.
- Securing the resources necessary to implement Incident Action Plans.
- Preparing a General Plan that scopes emergency response operations from initial notification to the completion of demobilization operations.
- Securing the resources necessary to implement the General Plan.
- Instituting and enforcing appropriate financial controls.
- Continuously assessing incident potential to determine an incident's capacity to grow into a crisis situation.

### **BP Americas Response Team (BART), continued**

**FIGURE 4.5-2** provides an organizational chart for the IMT. **FIGURE 3.1-4** presents a roster of all involved personnel with job titles. Job descriptions for each team member are included in **SECTION 4.6**.

#### **4.1.3 Business Support Team BST**

A small team made up primarily of US Pipelines & Logistics (USPL) personnel located in the Naperville Office that provides business support to the field location during an incident. This

team does not manage the field response but it ensures that the field location has the resources and support it needs to successfully deal with the incident. The BST also addresses business related issues that grow out of the incident that could adversely impact USPL or the Company. Facilitation of communication/information sharing is another responsibility of the BST.

When activated, the BST determines what, if anything, must be done to support Facility Response Team / IMT response efforts; and it works to identify, evaluate and proactively address the implications of the incident and response operations on the Company. The mission of the BST is to avoid crisis, whenever possible, and to mitigate crisis situations that cannot be avoided, to the maximum extent possible.

### **Notification of BST Emergency Manager (EM)**

All incidents that involve injuries, fatalities or the implementation of tactical response equipment should be reported to the BST Emergency Manager (EM), as soon as possible. This can be accomplished through the process outlined in **SECTION 4.2** below. The Terminal Manager / Incident Commander (TM / IC) should provide a brief account of the incident facts, initial response efforts, agency and media involvement and Facility Response Team / IMT / BART support needs. A more detailed briefing can be provided to the BST later

### **Activation of BST**

The BST Emergency Manager (EM) will assess the situation, and decide on the most appropriate course of action. If the incident is minor, requires no assistance from the BST and poses little threat to escalate to a crisis, the EM can elect to simply monitor the situation.

Whenever the EM determines that a potential or actual crisis exists, the BST Aide de Camp will be instructed to activate the full or partial BST.

## **4.2 ACTIVATION PROCEDURES**

Activation of appropriate Company response teams may be accomplished in stages. If an incident has been discovered and it is determined by the Terminal Manager / Incident Commander (TM / IC) that a response is warranted, team activation proceeds as follows (see **FIGURE 3.1-1**):

- The Terminal Manager (TM / IC) is notified.
- TM / IC notifies the Area Manager (AM) or District Operations Manager (DOM) and the BP Notification Center (BPNC).
- The AM or DOM continues the upward notification process (through appropriate levels of US Pipelines & Logistics management).
- The BPNC contacts the Emergency Preparedness / Crisis Management (EP/CM) Advisor.
- The EP/CM Advisor notifies the BST Emergency Manager (EM) and they assess the need to activate / convene the BST and activate / deploy the IMT and/or BART.
- If activation of any of these teams is necessary, the EP/CM Advisor (who is also the BST Aide de Camp) accomplishes this through the BPNC, via the BP Communicator System (autodialer).
- If activated, the BST convenes in the Naperville 1 office building.
- If activated, all or any part of the IMT and/or BART may be deployed to the Incident

Command Post (ICP).

- TM / IC briefs all IMT / BART members, upon arrival at ICP.
- IC and Section Chiefs continually assess staffing needs.
- IC requests additional IMT / BART personnel, if needed, through the BST. (BST Aide de Camp handles activation.)
- IC de-activates IMT / BART personnel that are not needed.

#### **4.3 TEAM MEMBER RESPONSE TIMES**

The Incident Commander and IMT will likely mobilize to the Naperville or Houston Crisis Center (HCC) initially. The IMT's maximum expected arrival time during off hours is 1-2 hours. The ICP may be relocated closer to the spill location within the first 24 to 48 hours of the response.

#### **4.4 INCIDENT COMMAND SYSTEM / UNIFIED COMMAND**

The Incident Command System (ICS) will be used as a method of integrating federal, state and local agencies into the IMT. The purpose of this system is to organize diverse responding agencies into one unified team.

The ICS includes a Unified Command Structure consisting of three key On-Scene Coordinators: Federal On-Scene Coordinator (FOSC), State On-Scene Coordinator (SOSC) and the Responsible Party Incident Commander (RP). These three entities will share decision-making authority as Incident Commanders and will consult with each other regarding spill response management issues.

The FOSC will coordinate all federal agencies involved in the response. The SOSC will coordinate all state and local agencies involved in the response activities. The Responsible Party Incident Commander will coordinate all company activities.

Depending upon the size and complexity of the incident, additional federal and state agency personnel may integrate into the other functions of the IMT.

#### **4.5 QUALIFIED INDIVIDUAL (QI)**

The Qualified Individual (QI) is an English-speaking representative of the Company, located in the United States, available on a 24-hour basis, with full authority to obligate funds, implement response actions and immediately notify the appropriate Federal officials and response organizations. The designated Company QIs are listed in **FIGURE 3.1-4**. A description of QI training is provided in **APPENDIX A**. A copy of the "Appointment and Authorization of Qualified Individuals" letter can be found in the Additional Information appendix.

#### **4.5 QUALIFIED INDIVIDUAL (QI), CONTINUED**

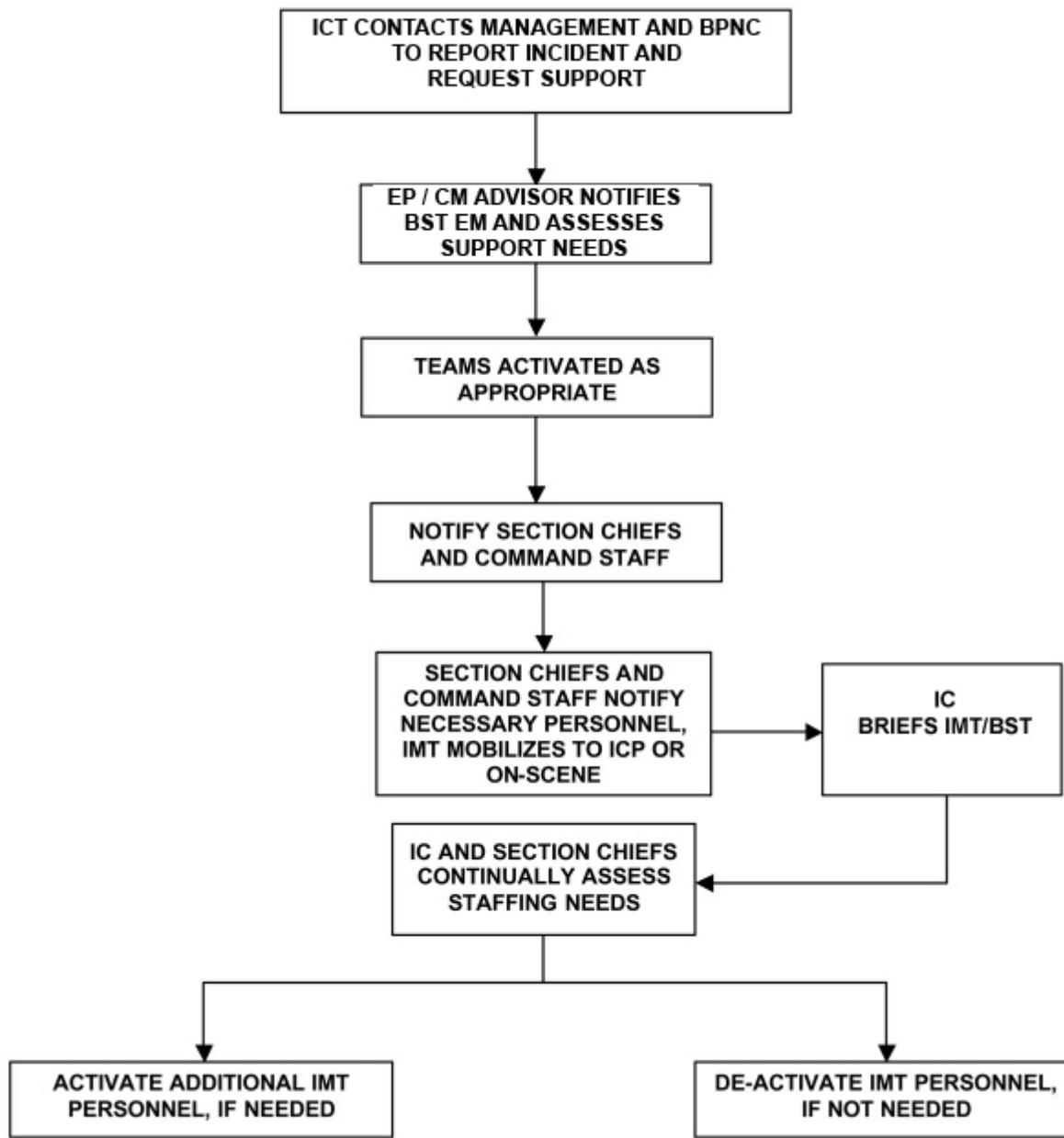
The QI has the following responsibilities and authorities as required by the Oil Pollution Act of 1990 (40 CFR Parts 9 and 112):

- Activate internal alarms and hazard communication systems to notify all appropriate personnel.
- Notify all response personnel as needed.
- Identify 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 (including outside the fenceline).
- Coordinate rescue and response actions.
- Must be familiar with the planning distance and equipment deployment locations.
- Assess and implement prompt removal actions.
- Access Company funds to initiate cleanup activities.
- Direct cleanup activities until properly relieved of responsibility or incident is terminated.

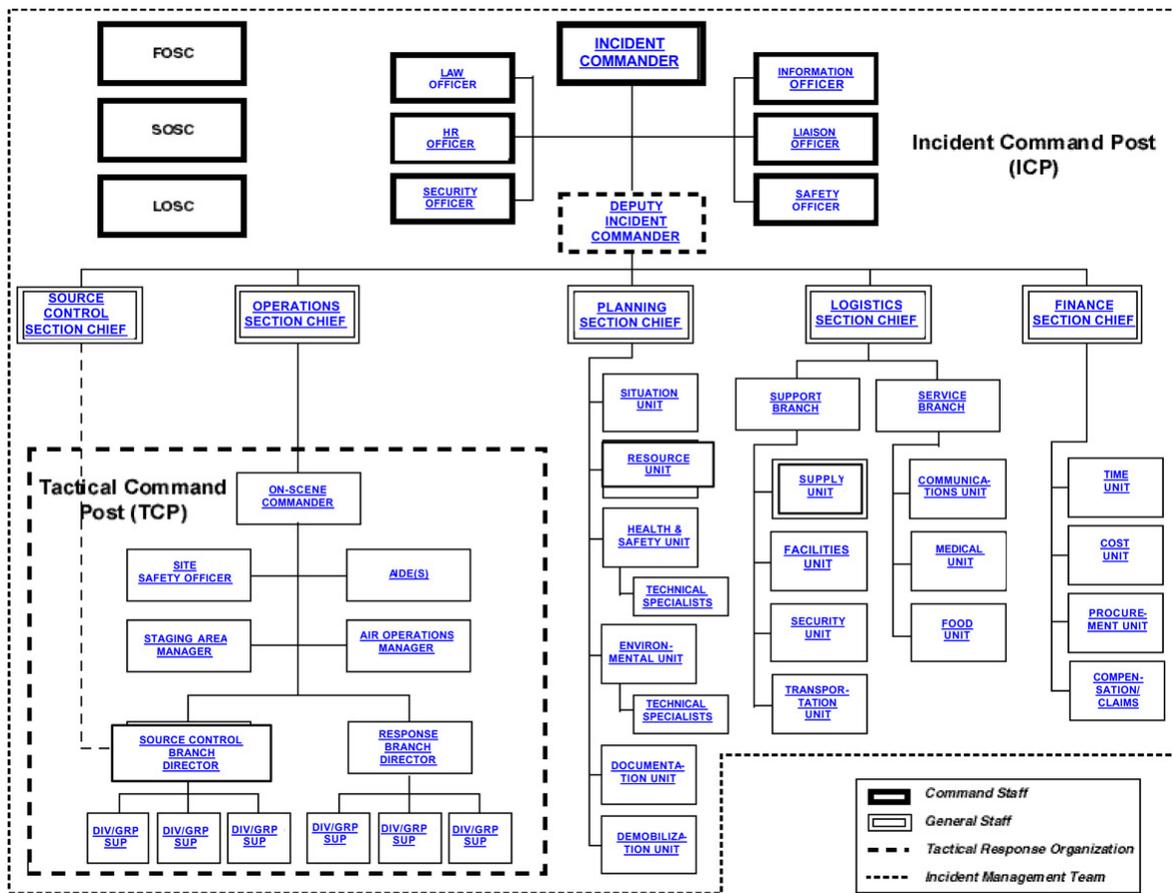
#### **FIGURE 4.5-1 - INCIDENT MANAGEMENT TEAM ACTIVATION PROCEDURE**



\*BP Corp., 2000

**FIGURE 4.5-2 - INCIDENT MANAGEMENT TEAM ORGANIZATION**

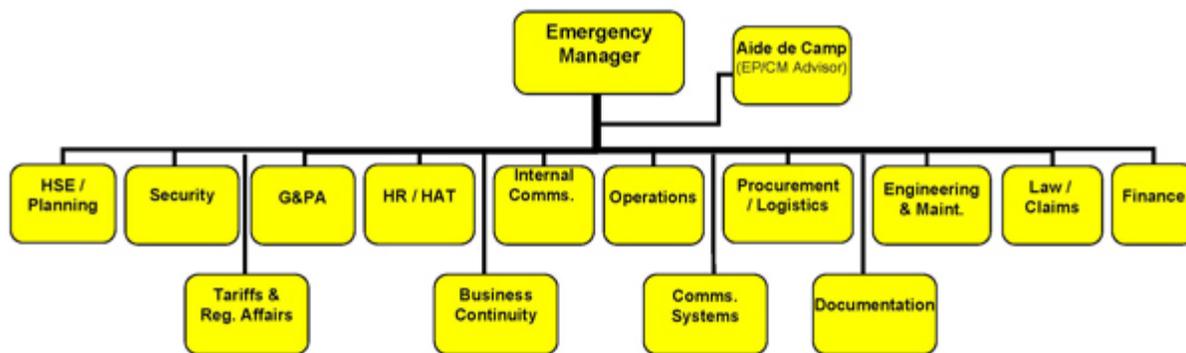
**TYPICAL IMT ORGANIZATION**



Note: Refer to **FIGURE 3.1-4** for IMT Members.

FIGURE 4.5-2 - INCIDENT MANAGEMENT TEAM ORGANIZATION, CONTINUED

**USPL BUSINESS SUPPORT TEAM**



Core Team

#### 4.6 INCIDENT MANAGEMENT TEAM (IMT) JOB DESCRIPTION CHECKLISTS

The following job description checklists are intended to be used as a tool to assist IMT members in their particular positions within the Incident Command System (ICS). The position descriptions and checklists were derived from the Field Operations Guide (FOG).

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

Incident Commanders for oil discharges will be organized within the Unified Command structure which includes, but is not limited to:

- The predesignated Federal On Scene Coordinator (FOSC) acting under the authority of the National Contingency Plan (NCP).
- The predesignated State On Scene Coordinator (SOSC) representing state and local response agencies.
- The representation of the Responsible Party (RP).

The Unified Command is responsible for the overall management of the incident. The Unified Command directs incident activities including the development and implementation of strategic decisions and approves the ordering and releasing of resources. The Unified Command may activate Deputy Incident Commanders to assist in carrying out Incident Command responsibilities.

INCIDENT COMMANDER	INITIALS	DATE & TIME
Review Common Responsibilities.		
Assess the situation and/or obtain incident briefing from prior Incident Commander.		
Determine Incident Objectives and Strategies in accordance with Area Contingency Plan(s) (ACP).		
Establish the immediate priorities.		
Establish an Incident Command Post.		
Establish an appropriate organization.		
Brief Command Staff and Section Chiefs.		

Ensure Planning Meetings are scheduled as required.		
Approve and authorize the implementation of an Incident Action Plan.		
Determine information needs and advise Command and General Staff.		
Coordinate activity for all Command and General Staff.		
Manage incident operations.		
Approve requests for additional resources and requests for release of resources.		
Approve the use of trainees, volunteers and auxiliary personnel.		
Authorize release of information to news media.		
Ensure incident funding is available.		
Notify Natural Resource Damage Assessment (NRDA) and coordinate NRDA Team.		
Coordinate incident investigation responsibilities.		
Seek appropriate legal counsel.		
Order demobilization of the incident when appropriate.		
Complete Final Spill Cleanup Report.		

The Information Officer, a member of the Command Staff, is responsible for developing and releasing information about the incident to the news media, to incident personnel and to other appropriate agencies and organizations.

Only one Information Officer will be assigned for each incident, including incidents operating within Unified Command or multi-jurisdictional incidents. The Information Officer may have assistants as necessary and the assistants may also represent assisting agencies or jurisdictions if warranted.

<b>INFORMATION OFFICER</b>	<b>INITIALS</b>	<b>DATE &amp; TIME</b>
Review Common Responsibilities.		
Determine from the Incident Commander if there are any limits on information release.		
Develop material for use in media briefings.		
Obtain Incident Commander approval for media releases.		
Inform media and conduct media briefings.		
Arrange for tours and other interviews or briefings that may be required.		
Obtain media information that may be useful to incident planning.		
Maintain current information summaries and/or displays of the incident and provide information on the status of the incident to incident personnel.		

The Safety Officer, a member of the Command Staff, is responsible for monitoring and assessing hazardous and unsafe situations and developing measures for assuring personnel safety. The Safety Officer will correct unsafe acts or conditions through the regular line of authority, although the Officer may exercise emergency authority to stop or prevent unsafe acts when immediate actions is required. The Safety Officer maintains awareness of active and developing situations, ensures the preparation and implementation of the Site Safety Plan and includes safety messages in each Incident Action Plan.

SAFETY OFFICER	INITIALS	DATE & TIME
Review Common Responsibilities.		
Identify hazardous or unsafe situations associated with the incident by ensuring the performance of preliminary and continuous site characterization and analysis which shall include the identification of all actual or potential physical, biological and chemical hazards known or expected to be present on site.		
Participate in Planning Meetings to identify any health and safety concerns inherent in the operations daily workplan.		
Review the Incident Action Plan for safety implications.		
Exercise emergency authority to stop and prevent unsafe acts.		
Investigate accidents that have occurred within the incident areas.		
<p>Ensure the preparation and implementation of the Site Specific Health and Safety Plan (HASP) in accordance with the Area Contingency Plan (ACP) and State and Federal OSHA regulations. The HASP shall at minimum address, include, or contain the following elements:</p> <ul style="list-style-type: none"> <li>• Health and Safety hazard analysis for each site task or operation,</li> <li>• Comprehensive operations work plan,</li> <li>• Personnel training requirements,</li> <li>• PPE selection criteria,</li> <li>• Site specific occupational medical monitoring requirements,</li> <li>• Air monitoring plan: area/personal,</li> <li>• Site control measures,</li> <li>• Confined space entry procedures "only if needed",</li> <li>• Pre-entry briefings (tailgate meetings) initial and as needed,</li> <li>• Pre-operations health and safety conference for all incident participants, and</li> <li>• Quality assurance of HASP effectiveness.</li> </ul>		
Assign assistants and manage the incident safety organization.		
Review and approve the Medical Plan.		

Incidents that are multi-jurisdiction, or have several agencies involved, may require the establishment of the Liaison Officer position on the Command Staff.

<b>LIAISON OFFICER</b>	<b>INITIALS</b>	<b>DATE &amp; TIME</b>
Review Common Responsibilities.		
Provide a point of contact for assisting and cooperating Agency Representatives.		
Identify Agency Representatives from each agency including communications link and location.		
Maintain a list of assisting and coordinating interagency contacts.		
Assist in establishing and coordinating interagency contacts.		
Keep agencies supporting incident aware of incident status.		
Monitor incident operations to identify current or potential inter-organizational issues and advise Incident Commander as appropriate.		
Participate in Planning Meetings, provide current resource status information, including limitations and capabilities of assisting agency resources.		

The **Technical Specialists** are advisors with special skills needed to support the incident. Technical Specialists may be assigned anywhere in the ICS Organization. If necessary, Technical Specialists may be formed into a separate Unit. The Planning Section will maintain a list of available Specialists and will assign them where needed. The following are example positions for Technical Specialists that might be utilized during an oil spill response:

- Legal Specialists
- Scientific Support Coordinator Specialists
- Sampling Specialist
- Disposal (Waste Management) Specialists
- Alternative Response Technologies (ART) Specialist

The Legal Specialists will act in an advisory capacity during an oil spill response.

<b>LEGAL OFFICER</b>	<b>INITIALS</b>	<b>DATE &amp; TIME</b>
Review Common Responsibilities.		
Participate in Planning Meetings if requested.		
Advise Unified Command on legal issues relating to in-situ burning, use of dispersants and other alternative response technology.		
Advise Unified Command on legal issues relating to Natural Resource Damage Assessment (NRDA).		
Advise Unified Command on legal issues relating to investigation.		
Advise Unified Command on legal issues relating to finance and claims.		

Advise Unified Command on response related issues.		
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<b>Central Business District</b>
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The Operations Section Chief, a member of the General Staff, is responsible for the management of all operations directly applicable to the primary mission. The Operations Section Chief activates and supervises elements in accordance with the Incident Action Plan and directs its execution; activates and executes the Site Safety Plan; directs the preparation of Unit operational plans, requests or releases resources, makes expedient changes to the Incident Action Plan as necessary and reports such to the Incident Commander.

<b>OPERATIONS SECTION CHIEF</b>	<b>INITIALS</b>	<b>DATE &amp; TIME</b>
Review Common Responsibilities.		
Develop operations portion of Incident Action Plan.		
Brief and assign operations personnel in accordance with Incident Action Plan.		
Supervise the execution of the Incident Action Plan for Operations.		
Request resources needed to implement the Operations tactics as part of the Incident Action Plan development (ICS 215).		
Ensure safe tactical operations.		
Make or approve expedient changes to the Incident Action Plan during operational period as necessary.		
Approve suggested list of resources to be released from assigned status (not released from the incident).		
Assemble and disassemble Strike Teams/Task Forces assigned to Operations Section.		
Report information about changes in the implementation of the IAP, special activities, events and occurrences to Incident Commander as well as to Planning Section Chief and Information Officer.		

<b>Central Business District</b>
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The Planning Section Chief, a member of the General Staff, is responsible for the collection, evaluation, dissemination, and use of information about the development of the incident and status of resources. Information is needed to:

- Understand the current situation.
- Predict probable course of incident events.
- Prepare alternative strategies for the incident.

<b>PLANNING SECTION CHIEF</b>	<b>INITIALS</b>	<b>DATE &amp; TIME</b>
Review Common Responsibilities.		
Activate Planning Section Units.		
Assign available personnel already on site to ICS organizational positions		

as appropriate.		
Collect and process situation information about the incident.		
Supervise preparation of the Incident Action Plan.		
Provide input to the Incident Command and Operations Sections Chief in preparing the Incident Action Plan.		
Participate in planning and other meetings as required.		
Establish information requirements and reporting schedules for all ICS organizational elements for use in preparing the Incident Action Plan.		
Determine need for any specialized resources in support of the incident.		
Provide Resources Unit with the Planning Section's organizational structure including names and locations of assigned personnel.		
Assign Technical Specialists where needed.		
Assemble information on alternative strategies.		
Assemble and disassemble Strike Teams and Task Forces as necessary.		
Provide periodic predictions on incident potential.		
Compile and display Incident Status Summary information.		
Provide status reports to appropriate requesters.		
Advise General Staff of any significant changes in incident status.		
Incorporate the incident Traffic Plan (from Ground Support Unit), Vessel Routing Plan (from Vessel Support Unit) and other supporting plans into the Incident Action Plan.		
Instruct Planning Section Units in distribution and routing of incident information.		
Prepare recommendations for release of resources for submission to members of Incident Command.		
Maintain Section record.		

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

<b>LOGISTICS SECTION CHIEF</b>	<b>INITIALS</b>	<b>DATE &amp; TIME</b>
Review Common Responsibilities.		
Plan organization of Logistics Section.		
Assign work locations and preliminary work tasks to Section personnel.		
Notify Resources Unit of Logistics Section Units activated including names and locations of assigned personnel.		
Assemble and brief Branch Directors and Unit Leaders.		

Participate in preparation of Incident Action Plan.		
Identify service and support requirements for planned and expected operations.		
Provide input to and review Communications Plan, Medical Plan, Traffic Plan, and Vessel Routing Plan.		
Coordinate and process requests for additional resources.		
Review Incident Action Plan and estimate Section needs for next operational period.		
Advise on current service and support elements of the Incident Action Plan.		
Prepare service and support elements of the Incident Action Plan.		
Estimate future service and support requirements.		
Receive Demobilization Plan from Planning Section.		
Recommend release of Unit resources in conformance with Demobilization Plan.		
Ensure general welfare and safety of Logistics Section personnel.		

The Finance Section Chief, a member of the General Staff, is responsible for all financial and cost analysis aspects of the incident and for supervising members of the Finance Section.

<b>FINANCE SECTION CHIEF</b>	<b>INITIALS</b>	<b>DATE &amp; TIME</b>
Review Common Responsibilities.		
Attend briefing with responsible agency to gather information.		
Attend Planning Meeting to gather information on overall strategy.		
Determine resource needs.		
Develop an operating plan for Finance function on incident.		
Prepare work objectives for subordinates, brief staff, making assignments, and evaluate performance.		
Inform members of the Unified Command and General Staff when Section is fully operational.		
Meet with assisting and cooperating Agency Representatives as required.		
Provide input in all planning sessions on financial and cost analysis matters.		
Maintain daily contact with agency(s) administrative headquarters on finance matters.		
Ensure that all personnel time records transmitted to home agencies according to policy.		
Participate in all demobilizing planning.		

Ensure that all obligation documents initiated at the incident are properly prepared and completed.		
Brief agency administration personnel on all incident related business management issues needing attention and follow-up to leaving incident.		

SECTION 5  
**INCIDENT PLANNING**

Last revised: July 2008

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5.1 Documentation Procedures

5.2 ICS Forms

5.2.1 Incident Briefing Form - ICS 201 (Initial Report Only)

5.2.2 BP Initial Plan of Action (IPA)

5.2.3 Incident Action Plan (IAP) Table of Contents

5.2.4 Incident Action Plan (IAP) Cover Sheet

5.2.5 Incident Action Plan (IAP) Executive Summary

5.2.6 Objectives For General Plan

5.2.7 Objectives - ICS 202

5.2.8 Organization Assignment List - ICS 203

5.2.9 Field Assignment Change Sheet - ICS 204

5.2.10 Field Assignment - ICS 204a

5.2.11 Communications Plan - ICS 205

5.2.12 Medical Plan - ICS 206

5.2.13 Check-In List (Equipment / Personnel) - ICS 211

5.3 Site Safety and Health Plan

5.4 Decontamination Plan

5.5 Disposal Plan

5.6 Incident Security Plan

5.7 Demobilization Plan

5.8 Incident Potential Worksheet

## 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 clean-up 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 ICS FORMS

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

For use by the Command Staff to gather information on the Spill Management Team's efforts to implement applicable response plans. Prepared by the initial Incident Commander (IC) for providing documentation of the initial response.

- **BP INITIAL PLAN OF ACTION (IPA)**

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, FOSC, and SOSC.

The IPA consists of the following ICS forms:

- **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 ACTION PLAN (IAP) EXECUTIVE SUMMARY**

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

- **OBJECTIVES FOR GENERAL PLAN**

Displays the progress and planned start and end dates for various incident response

activities.

- **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.

- **FIELD ASSIGNMENT CHANGE SHEET - ICS 204**

Submits assignments at the level of Division and Groups.

- **FIELD ASSIGNMENT - ICS 204a**

This form is an optional attachment, which can be used in conjunction with the Assignment List, ICS form 204-OS. The ICS 204-OS is used to give assignments to Divisions and Groups; the ICS form 204-a-OS provides more specific assignment information, when needed.

## 5.2 ICS FORMS, CONTINUED

- **COMMUNICATIONS PLAN - ICS 205**

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

- **MEDICAL PLAN - ICS 206**

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

- **CHECK-IN LIST (EQUIPMENT / PERSONNEL) - ICS 211**

This form is used for equipment and personnel check in only. Equipment arriving at the incident can be checked in at various incident locations. Personnel arriving at the incident can check in at various incident locations.

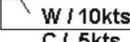
In addition, these Incident Command System (ICS) forms may be found on the U.S. Coast Guard web page: [http://www.uscg.mil/ccs/cit/cim/forms1/form\\_ics.html](http://www.uscg.mil/ccs/cit/cim/forms1/form_ics.html).

### 5.2.1 Incident Briefing Form - ICS 201 (Initial Report Only)

**1. Incident  
Name:** \_\_\_\_\_

**2. Date / Time Prepared / Updated:** \_\_\_\_\_

**3. ? Map Sketch**

- |  |   |   |
|--|---|---|
|  Source                |  Boundary of Isolation Perimeter |  First Aid Station   |
|  Tactical Command Post |  Boundary of Hot Zone            |  Task  |
|  Staging Area(s)       |  Location of Warm Zone           |  W / 10kts<br>C / .5kts Wind and Current Speed and Direction |

Staging Area(s)	Tasks	Weather
S1 _____	T1 _____	Wind direction/Speed _____
S2 _____	T2 _____	Temp _____
S3 _____	T3 _____	Precipitation _____
S4 _____	T4 _____	Tides _____
S5 _____	T5 _____	Sunrise/Set _____

<b>Prepared by:</b> _____	<b>Contact</b>
	<b>Phone</b> _____
	<b>Radio</b> _____

**SUMMARY OF INCIDENT AND CURRENT ACTIONS**

INCIDENT BRIEFING ICS 201-2 (pg 2 of 6)

**Incident Name:** \_\_\_\_\_ **Date Prepared:** \_\_\_\_\_**Incident Location:** \_\_\_\_\_ **Time Prepared:** \_\_\_\_\_**DESCRIPTION OF INCIDENT:**

Date/Time: \_\_\_\_\_

What Happened:  Fire  Gas Leak  Explosion  Spill  Medical   
HAZMAT  Other

Extent of \_\_\_\_\_

Impact: \_\_\_\_\_

Source: \_\_\_\_\_ Name/Type: \_\_\_\_\_

**DESCRIPTION OF SPILLED/ EMITTED MATERIAL:****Type:** \_\_\_\_\_ **Quantity:** \_\_\_\_\_**INCIDENT POTENTIAL:**

- Incident Under Control.
- Incident currently not under control, but can be handled with available resources.
- Incident not under control and will require additional resources (e.g., contractors, mutual aid).
- Incident will likely generate significant public affairs/community relations issues.

**SAFETY CONSIDERATIONS:**

Injuries: \_\_\_\_\_ Fatalities: \_\_\_\_\_ Missing: \_\_\_\_\_

Chemical

Hazards: \_\_\_\_\_

Physical

Hazards: \_\_\_\_\_

Required PPE

Level: \_\_\_\_\_

**RESPONSE: GENERAL**

PROBLEMS	SOLUTIONS

**IMPACTS:**  Land  People  Property  Environment   
Water  Community**RESPONSE OBJECTIVES (MARK APPLICABLE):**

- Ensure Safety of all responders and the Community from Incident Hazards
- Gain and maintain control over incident source (spill, fire, etc.)
- Minimize spread of spill or emitted materials
- Clean up impacted areas in an environmentally sound fashion (Spill, storm debris, etc.)
- Keep Internal and external stakeholders informed (Public, Leadership, agencies, etc.)

<input type="checkbox"/> Other		
<b>Prepared By:</b>	<b>ICS Position:</b>	<b>Phone:</b>

**5.2.1 Incident Briefing Form - ICS 201 (Initial Report Only), Continued**

<b>1. Incident Name</b>	<b>2. Prepared by (name)</b> Date: _____ Time: _____	<b>INCIDENT BRIEFING</b>
-------------------------	---	--------------------------

**3. Current Organization**

```

graph TD
    UC[Unified Command] --- SO[Safety Officer]
    UC --- LO[Liaison Officer]
    UC --- IO[Information Officer GPA]
    UC --- OS[Operations Section]
    UC --- PS[Planning Section]
    UC --- LS[Logistics Section]
    UC --- FS[Finance Section]
    OS --- DG1[Div./Group]
    OS --- DG2[Div./Group]
    OS --- DG3[Div./Group]
    PS --- SUL[Situation Unit Lead]
    PS --- DUL[Documentation UL]
    PS --- EUL[Environmental UL]
    
```

FOSC \_\_\_\_\_

SOSC \_\_\_\_\_

BPIC \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Safety Officer \_\_\_\_\_

Liaison Officer \_\_\_\_\_

Information Officer (GPA) \_\_\_\_\_

file:///wdc-netapp01/...e Plans 2011/Incoming/All Plans/154101 - BP Central Business District/Plan/1\_dot\_template/sec5 htm?MAIN\_ID=82[12/8/2014 3:43:15 PM]



<b>SITE SAFETY AND CONTROLS</b>	<b>INCIDENT BRIEFING ICS 201-5 (pg 5 of 6)</b>
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	<b>Date Prepared:</b>
<b>Incident Location:</b>	<b>Time Prepared:</b>

**Site Control**

Has an on-scene Safety Officer been designated?  Yes  No

Has an Incident Command Post been established?  Yes  No

Have all personnel been accounted for? Injuries: \_\_ Fatalities: \_\_  
Unaccounted: \_\_  Yes  No

Are people injured or trapped? (Attach Company Injury/Incident Report, as appropriate)  Yes  No

Are untrained/unorganized people on-scene or involved in rescue operations?  Yes  No

Has an Isolation Perimeter been established?  Yes  No

Has a Staging Area been established?  Yes  No

Has Site Access Control been established?  Yes  No

**Hazards**

*Have you determined the need for:*

Air monitoring  Yes  No

Onsite characterization  Yes  No

Offsite characterization  Yes  No

*Are there immediate signs of potential hazards:*

Markings, colors, placards, or labels indicating hazards?  Yes  No

Unidentified liquid or solid products visible?  Yes  No

Vapors visible? Color: \_\_\_\_\_  Yes  No

Odors or smells?  Yes  No

Spill area conditions:  Dry  Wet  Icy

Electrical lines down?  Yes  No

Ignition sources nearby (sparks, flames, vehicles)?  Yes  No

Physical hazards (holes, caverns, deep ditches, fast-moving water) nearby?  Yes  No

Is local traffic a potential problem?  Yes  No

As you approach the scene from the upwind side, are there changes in status of any of the above?  Yes  No





<b>Status of Source:</b>				
<b>Status of Source Control Operations (including relief well planning, material procurement, and rig availability):</b>				
<b>Spilled/Emitted Material (what, how much, location, predicted landfall - where, when):</b>				
<b>On-scene Atmospheric and Oceanic Conditions:</b>				
Wind Speed:	Wind Direction from:	Air temp:	Visibility:	Precipitation:
Sea Height:	Current Speed:	Current Direction:	Water Temp.:	Other:
<b>Status of People (deaths, injuries, missing, evacuated, etc.):</b>				
<b>Safety Considerations:</b>				
<b>Locations of IMT EOC, TRT ICP, etc.:</b>				
<b>Status of Unified Command (including integration of other responding organizations into IMT):</b>				

### 5.2.2 BP Initial Plan of Action (IPA), Continued

<b>Status of Notifications</b>			
<b>Agency</b>	<b>Contacted by</b>	<b>Time</b>	<b>Name of agency contact person</b>
<b>National Response Center</b>			
<b>EPA</b>			









<b>1. Incident Name:</b>	
<b>2. Operational Period:</b>	
<b>Start Time/Date:</b>	<b>End Time/Date:</b>
<b>3. Objectives</b>	
No.	Objectives
<b>4. Approved by:</b>	

**5.2.8 Organization Assignment List - ICS 203**

<b>1. Incident Name:</b>
--------------------------

**2.? Operational Period Covered by Plan:**

<b>???? Start Time/Date:</b>		<b>End Time/Date:</b>	
<b>3.???? Command Section:</b>		<b>4.??? Operations Section:</b>	
Incident Commander	Chief		
Unified Commanders	On-scene Commander		
Deputy	Site Safety Officer		
Safety Officer	Staging Area Manager		
Information Officer	Air Operations Manager		
Liaison Officer	Aide		
Law Officer	<b>a.??? Branch I:</b>		
Human Resources Officer	Director		
Security Officer	Division/Group		
<b>5.???? Planning Section:</b>	Division/Group		
Chief	Division/Group		
Resource Unit	Division/Group		
Situation Unit	<b>b.??? Branch II:</b>		
Documentation Unit	Director		
Demobilization Unit	Division/Group		
Health & Safety Unit	Division/Group		
Environmental Unit	Division/Group		
Technical Specialists	Division/Group		
<b>6.???? Logistics Section:</b>	<b>c.?? Branch III:</b>		
Chief	Director		
Service Branch	Division/Group		
Communications Unit	Division/Group		
Medical Unit	Division/Group		
Food Unit	Division/Group		
Support Branch	<b>d.??? Branch IV:</b>		
Supply Unit	Division/Group		
Facilities Unit	Division/Group		
Security Unit	Division/Group		
Transportation Unit	Division/Group		
<b>7.???? Finance Section:</b>	Division/Group		
Chief	<b>e.??? Branch V:</b>		
Time Unit	Director		
Procurement Unit	Division/Group		
Compensation/Claims Unit	Division/Group		

Cost Unit	Division/Group		
	Division/Group		

## 5.2.9 Field Assignment Change Sheet - ICS 204

<b>1.?? Incident Name:</b>		<b>2.?? Field Assignment No.</b>	
<b>3.?? Change Number:</b>		<b>Change Date:</b>	<b>Change Time:</b>
<b>4.?? Status of Change:</b>	<b>Draft</b>	<b>Final</b>	
<b>5.?? Contact Person:</b>		<b>Position:</b>	
<b>6.?? Portion(s) of Assignment Changed</b>			
? <input type="checkbox"/> Operational Period		? <input type="checkbox"/> Team Leader	
? <input type="checkbox"/> Task		? <input type="checkbox"/> Number of Personnel	
? <input type="checkbox"/> Division or Group Designation		? <input type="checkbox"/> Schedule	
? <input type="checkbox"/> Objective		? <input type="checkbox"/> Safety Message	
? <input type="checkbox"/> Description of Work		? <input type="checkbox"/> Environmental Message	
? <input type="checkbox"/> Management		? <input type="checkbox"/> Diagram or Map	
? <input type="checkbox"/> Equipment			
Description of Change(s)			
<b>7.?? Approved by:</b>		<b>Time/Date:</b>	

## 5.2.10 Field Assignment - ICS 204a

<b>1.? Incident Name:</b>		<b>2.? Field Assignment No.:</b>	
<b>3.? Status of Assignment:</b>	Draft	Final	
<b>4.? Operational Period:</b>	Current	Next	
<b>???? Start Time/Date</b>		<b>End Time/Date</b>	
<b>5.? Task:</b>		<b>6.? Division/Group:</b>	
<b>7.? Objective:</b>			
<b>8.? Description of Work:</b>			
		<b>9.? Diagram:?</b> <input type="checkbox"/> Yes ? <input type="checkbox"/> No	
<b>10.? Management</b>			
<b>Position</b>	<b>Person</b>	<b>Communications</b>	
Section Chief			
Branch Director			
Division/Group Supervisor			
Task Leader			
<b>11.? Resources</b>			
<b>Qty.</b>	<b>Single Resource/Strike Team/Task Force</b>	<b>Leader</b>	<b>No. of Personnel</b>
<b>12.? Schedule:</b>	<b>Start Time:</b>	<b>Finish Time:</b>	
<b>13.? Attachments:</b>	<input type="checkbox"/> Change Sheet	<input type="checkbox"/> Environmental Message	
	<input type="checkbox"/> Safety Message	<input type="checkbox"/> Other (Specify)	
<b>14.? Approved by:</b>		<b>Time/Date:</b>	

## 5.2.11 Communications Plan - ICS 205

<b>1.?? Incident Name:</b>				
<b>2.?? Operational Period Covered by Plan:</b>				
<b>Start Time/Date:</b>			<b>End Time/Date:</b>	
<b>3.?? Command Network</b>				
Source	Frequency	Channel	Phone/Fax No.	Assignment
<b>4.?? Tactical Network</b>				
Source	Frequency	Channel	Phone/Fax No.	Assignment
<b>5.?? Supply Network</b>				
Source	Frequency	Channel	Phone/Fax No.	Assignment
<b>6.?? Other Networks (e.g., Source Control, Crisis, etc.)</b>				
Source	Frequency	Channel	Phone/Fax No.	Assignment
<b>7.?? Approved by:??</b>			<b>Time/Date:</b>	
???				





### 1. PROJECT OBJECTIVE

Prepared by:		Date:	
Overall Objective of Project:			

### 2. SITE DESCRIPTION

Date:		Sector:	
Business Unit:			
Name of Facility:			
Location (Road, City):			
Potential Hazards (Y / N):			
		Excavations, Trenches, and/or Confined Spaces	
		Hazardous Vapors and Gases	
		Direct Exposure to Hazardous Material	
		Dust and Particulates	
		Environmental Hazards (Rain, Snow, Cold, Heat)	
		Equipment Hazards	
		Other:	
		Other:	
		Other:	

Area Affected: (Describe the area including approximate dimensions.? Attach Site Map)

--

Surrounding Population (Y/N):		
		Urban
		Suburban
		Rural
		Industrial

Distance to Nearest Population:	
---------------------------------	--

## 5.3 SITE SAFETY AND HEALTH PLAN, CONTINUED

Topography: (Describe terrain)					
sandy beach	rocky	cliffs	marshes	docks	other (explain)
Climate/Weather Conditions:					
	Present	Anticipated			
Winds					
Temp ?F					
Humidity					
% Rain					
Seas					
Comments					
<b>3. BACKGROUND INFORMATION</b>					
Background information: (Include date, range of site use, source of contamination, estimated extent of contamination, known and suspected contaminants, etc.)					
<b>4. ENTRY OBJECTIVES</b>					
Entry Objectives: (Fully describe the purpose of site visit(s). If multiple visits, indicate the objectives of each entry. The number and types of samples should be included if sampling is to be performed). All work shall be conducted in accordance with procedures established during pre-entry briefings and attached work plans. A work plan is attached as Item 10.					

**5.3 SITE SAFETY AND HEALTH PLAN, CONTINUED**

<b>5. PERSONNEL ROLES</b>		
BP Pipelines, N.A. Personnel:		
Key Personnel	Title / Responsibilities	
	<i>On-Scene Commander (OSC)</i>	
	<i>Site Safety &amp; Health Plan Officer (SSO)</i>	
	<i>Contractor Supervisor (CS)</i>	
	<i>GPA</i>	
Federal Agency Representatives:		
Name	Agency	Phone
State Agency Representatives:		
Name	Agency	Phone
Local Agency Representatives:		
Name	Agency	Phone

**5.3 SITE SAFETY AND HEALTH PLAN, CONTINUED**



### 7. HAZARD EVALUATION

The following substance(s) are known to be on-site. The primary hazards of each are identified.

Product	Physical State <sup>1</sup>	Waste Characteristics <sub>2</sub>	Primary Hazard <sup>3</sup>

1. Liquid, solid, sludge, gas/vapor, other.

2. Corrosive, flammable, toxic, volatile, reactive, radioactive, carcinogen, other.

3. Toxic on inhalation or ingestion absorbed through skin, irritant to eyes, irritant to respiratory tract, irritant to skin, other.

Anticipated concentration and allowable exposure limits

Product	Anticipated Concentration	Full-Shift Exposure Limit	Short-Term Exposure Limit

NOTE: Include institution that establishes limit (e.g., OSHA, ACGIH, etc.).

Other Site Hazards (Y / N):

<input type="checkbox"/>	Heat	
<input type="checkbox"/>	Cold	
<input type="checkbox"/>	Confined Spaces	
<input type="checkbox"/>	Heavy Equipment	
<input type="checkbox"/>	Overhead / Underground Utilities	
<input type="checkbox"/>	Bloodborne Pathogens	
<input type="checkbox"/>	Poison Ivy	
<input type="checkbox"/>	Insects:	
<input type="checkbox"/>	Rodents:	
<input type="checkbox"/>	Snakes:	
<input type="checkbox"/>	Lighting:	
<input type="checkbox"/>	Work Near Water:	
<input type="checkbox"/>	Electrical Hazards:	
<input type="checkbox"/>	Helicopters:	
<input type="checkbox"/>	ATV's:	
<input type="checkbox"/>	Others:	
<input type="checkbox"/>	Others:	



**NOTE:** No changes to the specified levels of protection shall be made without the approval of the Clean-Up Leader and Site Safety Officer.

### 5.3 SITE SAFETY AND HEALTH PLAN, CONTINUED

#### 9.2 ENVIRONMENTAL MONITORING

A direct reading instrument will be used to monitor organic vapor concentration. The instrument will be on while the workers approach the work area and readings will be taken during the following conditions:

- Possibility of IDLH or flammable atmosphere has developed.
- Indication that exposures may have risen over limits since prior monitoring.
- Work begins on different portion of site.
- Contaminants other than those previously identified are being handled.
- Different type of operation is initiated.
- Employees are handling leaking drums or containers.
- Employees are working in areas with obvious liquid contamination.

If at any time a measurement of \_\_\_ ppm or more above concentration is observed, the workers will retreat to a safe area and upgrade the level of protection to level \_\_\_\_\_. Monitoring will be continuous during times of respirator usage.? If at any time the concentration approaches \_\_\_ ppm greater than background, the work area will be evacuated immediately.

Combustible Gas Monitoring will be conducted by:	
Instrument(s) used will be:	
Calibration Frequency:	
Frequency of Monitoring:	
Location of Monitoring:	
Benzene/Xylene/Toluene monitoring will be conducted by:	
Instrument(s) used will be:	
Calibration Frequency:	
Frequency of Monitoring:	
Location of Monitoring:	

Other monitoring will be conducted by:	
Instrument(s) used will be:	
Calibration Frequency:	
Frequency of Monitoring:	
Location of Monitoring:	
<b>NOTE:</b> Monitoring results are attached to this report.	

### 5.3 SITE SAFETY AND HEALTH PLAN, CONTINUED

#### 10.? ON-SITE WORK PLANS

The field team will perform the following tasks:

Team Member	Function

#### 11.? SPECIAL INSTRUCTIONS

#### 12.? COMMUNICATION PROCEDURES

The following emergency signal indicates that there is an emergency situation:

	Horn blasts	
	Siren	
	Alarm	
	Whistle	
	Other:	

In addition, the following standard hand signals will be used in case of failure of audible communications:

- Hand gripping throat????????? P Out of air, can't breathe
- Grip partner's wrist or both?? P Leave area immediately hands around waist
- Hands on top of head????????? ?P Need assistance



2. The hazards have been reassessed.
3. The Site Safety Plan has been reviewed.
4. Site personnel have been briefed on any change in the Site Safety Plan.

An exit route will be used in an emergency restricting the use of the main entrance.? Location of the Emergency Exit Route (See Site Map):

In the event of an accidental release, fire or explosion or the sounding of the emergency signal, workers will evacuate the work area and assemble in the designated location.

Location of Designated Assembly Area (See Site Map):

### 5.3 SITE SAFETY AND HEALTH PLAN, CONTINUED

#### 15.? SITE SAFETY PLAN

Site Safety Officer(s):

The Site Safety Officer is directly responsible for safety recommendations on site.? He/She will maintain daily site logs documenting all notable events and/or conditions of health and safety concerns.

Emergency Medical Care:

Qualified Medical personnel are located on site (Y/N):

If there are qualified Medical personnel located on-site, then identify location (See Site Map):

Phone Number:

Radio Frequency:

Medical Surveillance:

In accordance with 29 CFR 1910.120 (f), the employees/contractors involved in this project have been examined by a physician trained in occupational medicine, for the purpose of determining fitness with respect to handling hazardous materials and wearing personal protective equipment.? The results of the examination indicate that these employees/contractors are physically capable and qualified to work under conditions described in this plan, without risk to personal health and safety.

Emergency Resources:

Command Post:

????????????????Phone Number:

Safety Officer:?????????????



Other:		
Emergency Medical Information For Substances Present:		
Substance	Exposure Symptoms	First-Aid
<b>16.? TRAINING CERTIFICATION</b>		
The Site Safety Officer will ensure that all employees have the appropriate training/certification as per 29 CFR 1910.120 (8) (e).		

#### 5.4 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.

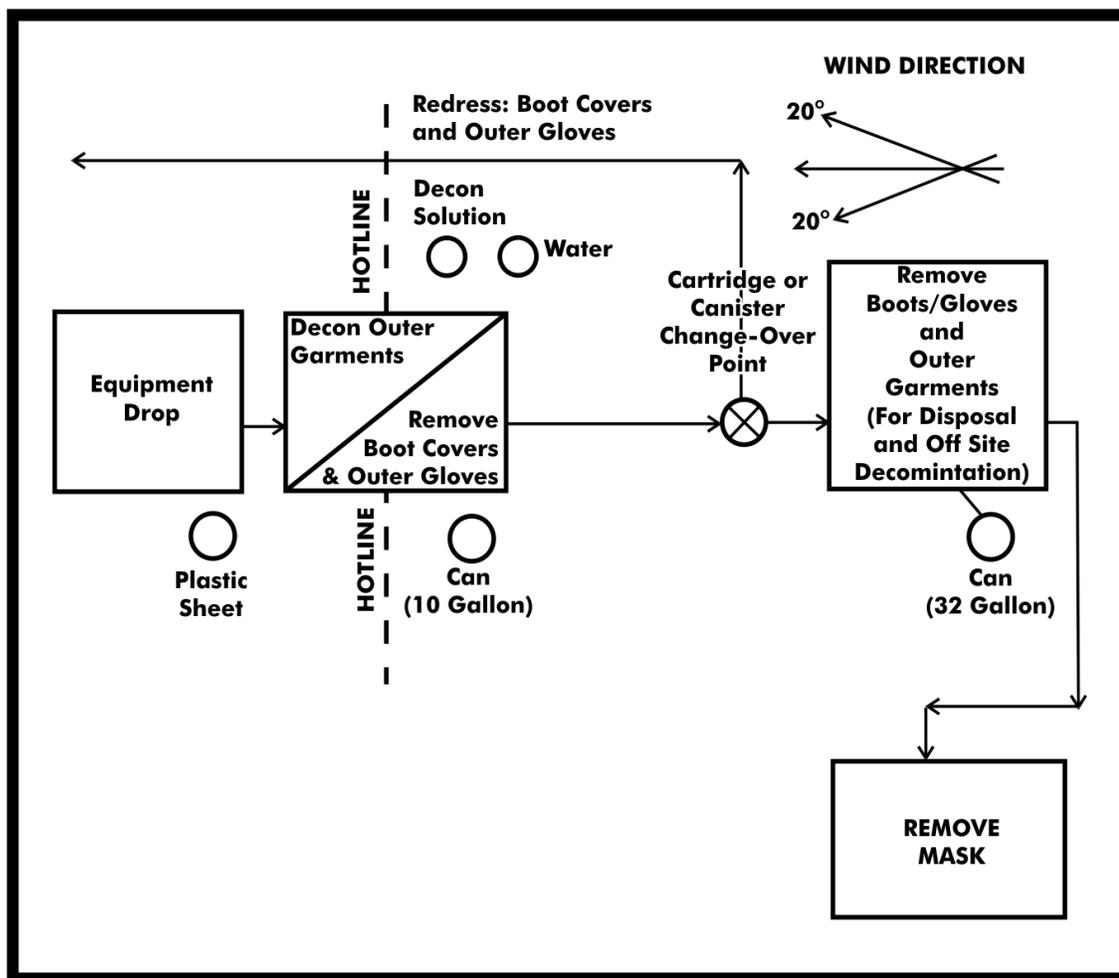
#### 5.4 DECONTAMINATION PLAN, CONTINUED

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 change	If worker leaves exclusion zone to 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.

## 5.4 DECONTAMINATION PLAN, CONTINUED

### DECONTAMINATION PROCEDURES, MINIMUM DECONTAMINATION LAYOUT



## 5.4 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 and 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.

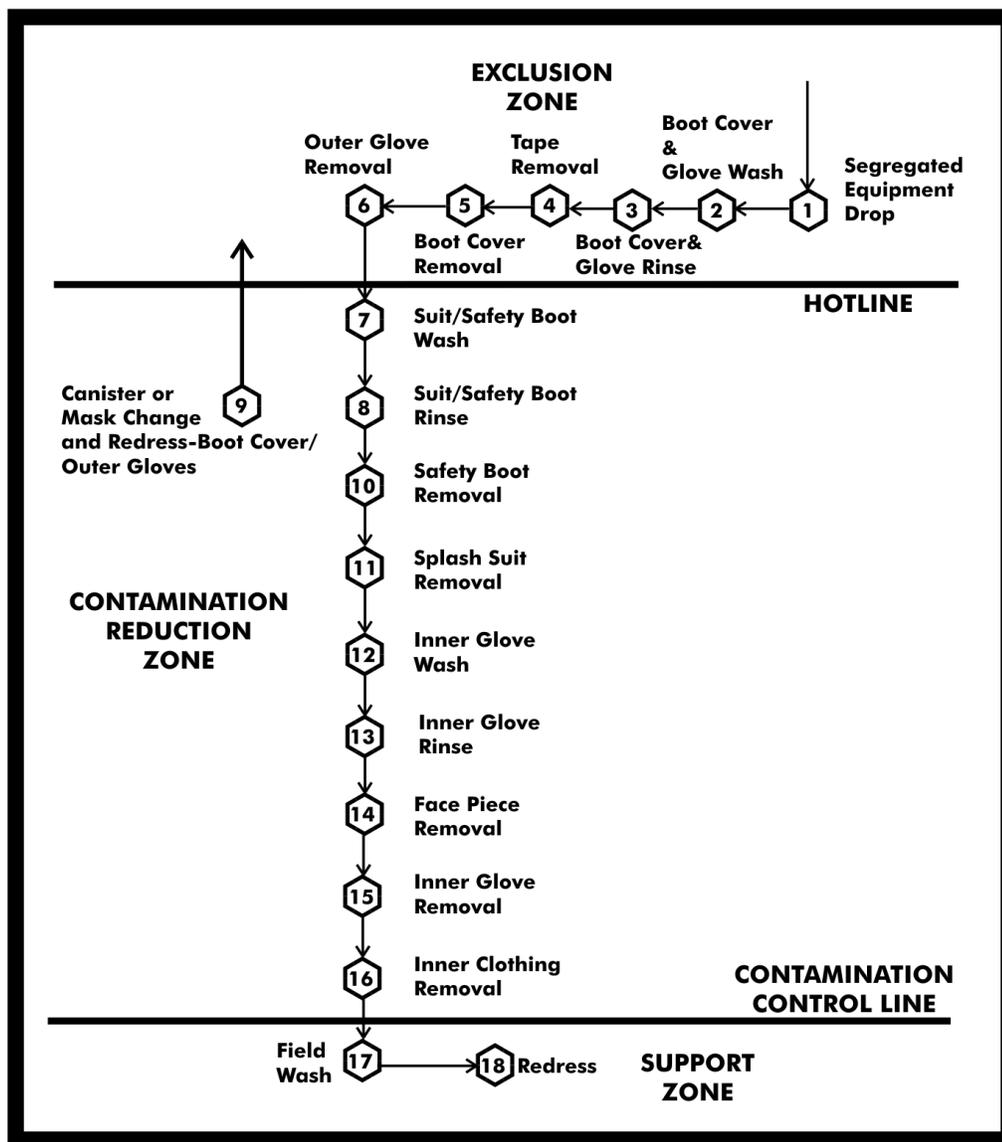
## 5.4 DECONTAMINATION PLAN, CONTINUED

Procedures for these stations are as follows:

MAXIMUM MEASURES FOR DECONTAMINATION		
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.

## 5.4 DECONTAMINATION PLAN, CONTINUED

DECONTAMINATION PROCEDURES, MAXIMUM DECONTAMINATION LAYOUT



5.5 DISPOSAL PLAN

Incident Name:	Incident Location:
Status As Of:	
Waste Name:	
Weather Conditions:	
State Agency:	
Agency Representative responsible for waste management/disposal:	
Phone:	
Injury made to obtain variance on:	
Individual contacted:	
<b>Disposal Priorities</b>	
<b>Step One - Sample</b>	

Oil Sample was extracted/sent for analysis on:		
Lab Name:		
Chain of Custody:	Relinquished By:	Received By:
<b>Step Two - Option</b>	Available	Most Likely
Natural Degradation or Dispersion		
Pit Burial		
Landfill		
Land Farms		
In-Situ Burning		
Open Pit Burning		
Portable Incineration		
Air Curtain Incineration		
Process Incineration		
Reprocessing		
Reclaiming		
Recycling		
Well Injection		
Locate Resources for Disposal:		
Percent Oil:		
Percent Solids:		
Percent Debris:		
Disposal Plan Page 1	1999-2000 dbSoft, Inc.	Printed by:

### 5.5 DISPOSAL PLAN, CONTINUED

<b>Step Three - Information</b>
Generator Name:
Generator USEPA ID:
Generator Address:
Technical Contact:
Properties and composition:
Process generating waste:
Waste Name:
Is USEPA Hazardous Waste:





### 5.7 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 Division 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.

## 5.8 INCIDENT POTENTIAL WORKSHEET

**Incident / Exercise**

**Name:** \_\_\_\_\_

**Date / Time:** \_\_\_\_\_

**Completed By:** \_\_\_\_\_

~ (Check marks or answers in ***BOLD ITALIC*** areas should trigger a crisis potential review by the BST) ~

Please define the potential geographic area subject to potential impacts:

\_\_\_\_\_  
\_\_\_\_\_

<b>MAGNITUDE AND DURATION OF INCIDENT RESPONSE OPERATIONS</b>	
Can the incident be managed solely by local personnel resources?	<input type="checkbox"/> Yes <input type="checkbox"/> <i>No</i>
Will emergency response operations continue around the clock?	<input type="checkbox"/> <i>Yes</i> <input type="checkbox"/> No
Will emergency response operations go on for an extended period of time?	<input type="checkbox"/> <i>Yes</i> <input type="checkbox"/> No <i>How Long?</i> _____
<b>SOURCE</b>	
Source?	<input type="checkbox"/> Known <input type="checkbox"/> <i>Unknown</i>
Source control status?	<input type="checkbox"/> Controlled <input type="checkbox"/> <i>Uncontrolled</i>
If the source is controlled, what is the potential for loss of	<input type="checkbox"/> Low <input type="checkbox"/> <i>Medium</i> <input type="checkbox"/>

control?	<b>High</b>
Nature of uncontrolled source?	<input type="checkbox"/> Stabilized <input type="checkbox"/> <b>Growing</b>
Is special expertise needed to bring the source under control?	<input type="checkbox"/> <b>Yes</b> <input type="checkbox"/> No
<b>MATERIAL SPILLED / EMITTED</b>	
Nature/hazards of material known?	Nature known: <input type="checkbox"/> Yes <input type="checkbox"/> <b>No</b> Hazards known: <input type="checkbox"/> Yes <input type="checkbox"/> <b>No</b>
Nature of release?	<input type="checkbox"/> Batch <input type="checkbox"/> <b>Continuous</b>
Material contained or uncontained?	<input type="checkbox"/> Contained <input type="checkbox"/> <b>Uncontained</b>
If the material is contained, what is the potential for loss of containment?	<input type="checkbox"/> None <input type="checkbox"/> Low <input type="checkbox"/> <b>Medium</b> <input type="checkbox"/> <b>High</b>
Material in a moving waterway?	<input type="checkbox"/> <b>Yes</b> <input type="checkbox"/> No
Material within or under ice?	<input type="checkbox"/> <b>Yes</b> <input type="checkbox"/> No
Is special expertise needed to contain and recover the material?	<input type="checkbox"/> <b>Yes</b> <input type="checkbox"/> No

## 5.8 INCIDENT POTENTIAL WORKSHEET, CONTINUED

<b>HEALTH AND SAFETY</b>	
Does the release area appear to pose an immediate danger to the life or health of any person or the environment?	<input type="checkbox"/> <b>Yes</b> <input type="checkbox"/> No
Are there significant, ongoing short term or long term threats to personnel or public safety?	Personnel <input type="checkbox"/> <b>Yes</b> <input type="checkbox"/> No <i>If yes,</i> <input type="checkbox"/> <b>Short</b> <input type="checkbox"/> <i>term:</i> <b>Long</b> Public <input type="checkbox"/> <b>Yes</b> <input type="checkbox"/> No <i>If yes,</i> <input type="checkbox"/> <b>Short</b> <input type="checkbox"/> <i>term:</i> <b>Long</b>
Are there people missing? How many? Affiliation?  Likelihood of rescue/survival?	<input type="checkbox"/> <b>Yes</b> <input type="checkbox"/> No  <input type="checkbox"/> <b>Employee</b> <input type="checkbox"/> <b>Contractor</b> <input type="checkbox"/> <b>Other</b> _____ <input type="checkbox"/> <b>High</b> <input type="checkbox"/> <b>Low</b> <input type="checkbox"/> <b>Unkown</b>
Are any people injured? How many? Have the victims been identified? Affiliation?  Nature and severity of injuries?	<input type="checkbox"/> <b>Yes</b> <input type="checkbox"/> No  <input type="checkbox"/> <b>Yes</b> <input type="checkbox"/> <b>No</b> <input type="checkbox"/> <b>Employee</b> <input type="checkbox"/> <b>Contractor</b> <input type="checkbox"/> <b>Other</b> _____ <input type="checkbox"/> <b>Not Life Threatening</b>

Have next-of-kin notifications been made?	<input type="checkbox"/> <i>Life Threatening</i> <input type="checkbox"/> <i>Yes</i> <input type="checkbox"/> <i>No</i>
Are there any fatalities? How many? Have the victims been identified? Affiliation?	<input type="checkbox"/> <i>Yes</i> <input type="checkbox"/> <i>No</i> <hr/> <input type="checkbox"/> <i>Yes</i> <input type="checkbox"/> <i>No</i> <input type="checkbox"/> <i>Employee</i> <input type="checkbox"/> <i>Contractor</i> <input type="checkbox"/> <i>Other</i>
Have the bodies been removed from incident scene? Have next-of-kin been notified?	<input type="checkbox"/> <i>Yes</i> <input type="checkbox"/> <i>No</i> <input type="checkbox"/> <i>Yes</i> <input type="checkbox"/> <i>No</i>
Has any governmental authority declared the scene of the incident to be a crime scene?	<input type="checkbox"/> <i>Yes</i> <input type="checkbox"/> <i>No</i>
<b>HUMAN RESOURCES CONCERNS</b>	
Do the responders need psychological support?	<input type="checkbox"/> <i>Yes</i> <input type="checkbox"/> <i>No</i>
Do employees need psychological support?	<input type="checkbox"/> <i>Yes</i> <input type="checkbox"/> <i>No</i>
Are there issues relating to compensation with response personnel?	<input type="checkbox"/> <i>Yes</i> <input type="checkbox"/> <i>No</i>
Is there a need for family assistance for response personnel?	<input type="checkbox"/> <i>Yes</i> <input type="checkbox"/> <i>No</i>

## 5.8 INCIDENT POTENTIAL WORKSHEET, CONTINUED

<b>COMMUNITY IMPACTS</b>	
Are communities impacted or threatened?	<input type="checkbox"/> <i>Yes</i> <input type="checkbox"/> <i>No</i>
What is the nature / severity of the impact: Health and safety? Social? Cultural? Economic? Environmental?	<input type="checkbox"/> <i>Yes</i> <input type="checkbox"/> <i>No</i> <input type="checkbox"/> <i>Yes</i> <input type="checkbox"/> <i>No</i>
What is the potential exposure to third party claims?	<input type="checkbox"/> <i>None</i> <input type="checkbox"/> <i>Minor (localized)</i> <input type="checkbox"/> <i>Major (regional or beyond)</i>
What is the tenor of contacts with / from impacted / threatened communities?	<input type="checkbox"/> <i>Cooperative</i> <input type="checkbox"/> <i>Strained</i> <input type="checkbox"/> <i>Antagonistic</i>
<b>IMPACT ON NORMAL OPERATIONS</b>	
Has the incident caused a shutdown or curtailment of normal operations?	<input type="checkbox"/> <i>Yes</i> <input type="checkbox"/> <i>No; If yes:</i> <input type="checkbox"/> <i>Shutdown</i> <input type="checkbox"/> <i>Curtailment</i>
How long are the shutdown / curtailment likely to last?	_____
What is the estimate of lost production / throughput to pipeline?	_____ <i>bbls/day</i>
What impact will the shutdown / curtailment have on other	<input type="checkbox"/> <i>None</i> <input type="checkbox"/> <i>Minor (a few</i>

operations?	days) <input type="checkbox"/> <i>Moderate (approx. a week)</i> <input type="checkbox"/> <i>Severe</i>
<b>ENVIRONMENTAL IMPACTS</b>	
What is the potential magnitude of environmental impacts?	<input type="checkbox"/> Localized <input type="checkbox"/> <i>Widespread</i>
Are weather conditions likely to limit the ability to respond? <b>Please explain (research forecast):</b>	<input type="checkbox"/> <i>Yes</i> <input type="checkbox"/> No
<hr/> <hr/> <hr/>	
Is the incident likely to impact wildlife?	<input type="checkbox"/> <i>Yes</i> <input type="checkbox"/> No <i>If yes:</i> <input type="checkbox"/> Minor <input type="checkbox"/> <i>Major</i>
Are listed species / pre-identified sensitive areas impacted / threatened by the incident?	<input type="checkbox"/> <i>Yes</i> <input type="checkbox"/> No
Are specialized resources needed to provide assistance in any of the following areas:	
Land access?	<input type="checkbox"/> <i>Yes</i> <input type="checkbox"/> No
Use of alternative technologies?	<input type="checkbox"/> <i>Yes</i> <input type="checkbox"/> No
Wildlife capture / rehabilitation?	<input type="checkbox"/> <i>Yes</i> <input type="checkbox"/> No
Waste management?	<input type="checkbox"/> <i>Yes</i> <input type="checkbox"/> No
Cleanup assessment?	<input type="checkbox"/> <i>Yes</i> <input type="checkbox"/> No
Natural resource damage assessment?	<input type="checkbox"/> <i>Yes</i> <input type="checkbox"/> No
Air quality monitoring?	<input type="checkbox"/> <i>Yes</i> <input type="checkbox"/> No
Water quality monitoring?	<input type="checkbox"/> <i>Yes</i> <input type="checkbox"/> No

## 5.8 INCIDENT POTENTIAL WORKSHEET, CONTINUED

<b>EXTERNAL AFFAIRS</b>	
Are there any required notifications yet to be made?	<input type="checkbox"/> <i>Yes</i> <input type="checkbox"/> <i>No</i>
Are government agencies willing to participate in Unified Command?	<input type="checkbox"/> <i>Yes</i> <input type="checkbox"/> <i>No</i>
Are government agencies willing, as appropriate, to integrate with BP&apos;s IMT?	<input type="checkbox"/> <i>Yes</i> <input type="checkbox"/> <i>No</i>
What is the tenor of interactions with / from government agencies?	<input type="checkbox"/> Cooperative <input type="checkbox"/> <i>Strained</i> <input type="checkbox"/> <i>Antagonistic</i>
What level of media interest is the incident likely to generate?	<input type="checkbox"/> Low <input type="checkbox"/> <i>High</i>
Are representatives of the media present?	<input type="checkbox"/> <i>Yes</i> <input type="checkbox"/> No
What is the volume of media inquiries?	<input type="checkbox"/> Low <input type="checkbox"/> <i>High</i>

What is the tenor of media inquiries?	<input type="checkbox"/> Cooperative <input type="checkbox"/> <i>Strained</i> <input type="checkbox"/> <i>Antagonistic</i>
Can media inquiries be handled with local resources?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Will a local Joint Information Center (JIC) have to be established?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>LEGAL CONCERNS</b>	
Has an IMT Law Officer arrived at the Incident Command Post?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Is legal assistance needed in any of the following areas: Accident investigation? Documentation? Contracts? Claims? Natural Resource Damage Assessment?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
<b>FINANCIAL CONCERNS</b>	
Is financial assistance needed in any of the following areas: Accounting? Cost tracking? Contracts? Audit? Claims? Insurance?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
Will there be a need to maintain cash accounts to support emergency response operations?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are spending authorities adequate?	<input type="checkbox"/> Yes <input type="checkbox"/> No

## 5.8 INCIDENT POTENTIAL WORKSHEET, CONTINUED

**Summary of Current Findings**

Magnitude and Duration of Incident Response Operations: \_\_\_\_\_

Source: \_\_\_\_\_

Material Spilled/Emitted: \_\_\_\_\_

Health and Safety: \_\_\_\_\_

Human Resources  
Concerns:

---

Community  
Impacts:

---

Impact on Normal  
Operations:

---

Environmental  
Impacts:

---

External  
Affairs:

---

Legal  
Concerns:

---

Financial  
Concerns:

---

---

SECTION 6  
SENSITIVE AREAS / RESPONSE TACTICS

Last revised: October 2009

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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 Alternative Response Strategies

6.4.1 Dispersants

6.4.2 Bioremediation

6.4.3 In-Situ Burn

Figure 6.4-1 - Alternate Strategies Checklist

Figure 6.4-2 - Decision Guide for the Federal Bioremediation Approval Process

6.5 Wildlife Protection and Rehabilitation

6.6 Endangered and Threatened Species By State

6.7 Sensitivity Maps

6.8 Waterway / HCA Overview and Tactical Sites

## 6.1 AREA DESCRIPTION

Description of shoreline types and specific shoreline protection and clean-up 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.

Sensitivity maps are provided in **SECTION 6.7**.

## 6.2 SPILL CONTAINMENT / RECOVERY

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

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

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

For terrestrial spills, trenches 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. Given below is a summary of booming techniques.

## 6.2 SPILL CONTAINMENT / RECOVERY, CONTINUED

- |  |   |
|--|---|
| <b>Containment/Diversion<br/>Berming</b> | <ul style="list-style-type: none"> <li>• Berms are constructed ahead of advancing surface spills to contain spill or divert spill to a containment area.</li> <li>• My cause disturbance of soils and some increased soil penetration.</li> </ul> |
|--|---|

**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.

**6.2 SPILL CONTAINMENT / RECOVERY, CONTINUED**

### 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://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"> <li>• This class includes towns, cities, farms, pastures, fields, reclaimed wetlands, and other altered areas</li> <li>• Organisms and algae may be common in riprap structures and on pilings</li> </ul>	<ul style="list-style-type: none"> <li>• Oil would percolate easily between the gravel and boulders of riprap structures</li> <li>• Oil would coat the intertidal areas of solid structures</li> <li>• Biota would be damaged or killed under heavy accumulations</li> </ul>	<ul style="list-style-type: none"> <li>• May require high pressure spraying: <ul style="list-style-type: none"> <li>• To remove oil</li> <li>• To prepare substrate for recolonization of barnacle and oyster communities</li> </ul> </li> <li>• For aesthetic reasons</li> </ul>
Freshwater Flat	<ul style="list-style-type: none"> <li>• Mud or organic deposits located along the shore or in shallow portions of nontidal freshwater lakes and ponds</li> <li>• They are exposed to low wave and current energy</li> <li>• They are often areas of heavy bird use</li> </ul>	<ul style="list-style-type: none"> <li>• Oil is expected to be deposited along the shoreline</li> <li>• Penetration of spilled oil into the water-saturated sediments of the flat will not occur</li> <li>• When sediments are contaminated, oil may persist for years</li> </ul>	<ul style="list-style-type: none"> <li>• These areas require high priority for protection against oil contamination</li> <li>• Cleanup of freshwater flats is nearly impossible because of soft substrate</li> <li>• Cleanup is usually not even considered because of the likelihood of mixing oil deeper into the sediments during the cleanup effort</li> <li>• Passive efforts, such as sorbent boom can be used to retain oil</li> </ul>

			as it is naturally removed
Fresh Marsh	<ul style="list-style-type: none"> <li>• Found along freshwater ponds and lakes</li> <li>• 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</li> <li>• Birds and mammals extensively use fresh marshes for feeding and breeding purposes</li> </ul>	<ul style="list-style-type: none"> <li>• Small amounts of oil will contaminate the outer marsh fringe only; natural removal by wave action can occur within months</li> <li>• Large spills will cover more area and may persist for decades</li> <li>• Oil, particularly the heavy fuel oils, tends to adhere readily to marsh grasses</li> </ul>	<ul style="list-style-type: none"> <li>• Marshes require the highest priority for shoreline protection</li> <li>• Natural recovery is recommended when: <ul style="list-style-type: none"> <li>• A small extent of marsh is affected</li> <li>• A small amount of oil impacts the marsh fringe</li> </ul> </li> <li>• The preferred cleanup method is a combination of low-pressure flushing, sorption, and vacuum pumping performed from boats</li> <li>• Any cleanup activities should be supervised closely to avoid excessive disturbances of the marsh surface or roots</li> <li>• Oil wrack and other debris may be removed by hand</li> </ul>
Swamp	<ul style="list-style-type: none"> <li>• 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</li> <li>• Birds and mammals use swamps during feeding and breeding activities</li> </ul>	<ul style="list-style-type: none"> <li>• Even small amounts of spilled oil can spread through the swamp</li> <li>• Large spills will cover more area and may persist for decades since water-flushing rates are low</li> <li>• Oil, particularly the heavy fuel oils, will adhere to swamp vegetation</li> <li>• Unlike mangroves, the roots of swamp forest trees are not exposed; thus, little damage to trees is expected. Any underbrush</li> </ul>	<ul style="list-style-type: none"> <li>• No cleanup recommended under light conditions</li> <li>• 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</li> <li>• Proper strategic boom placement may be highly effective in trapping large quantities of oil, thus reducing oil impact to</li> </ul>

		vegetation, however, would be severely impacted	interior swamp forests <ul style="list-style-type: none"> <li>Oil trapped by boom can be reclaimed through the use of skimmers and vacuums</li> </ul>
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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"> <li>Have ocean-like waves and currents</li> <li>Weather changes effect on-water conditions</li> <li>River mouths present problems</li> <li>Thermal stratification occurs</li> </ul>	<ul style="list-style-type: none"> <li>Most organisms are mobile enough to move out of the spill area</li> <li>Aquatic birds are vulnerable to oiling</li> <li>Human usage (such as transportation, water intakes, and recreational activities) may be restricted</li> </ul>	<ul style="list-style-type: none"> <li>Booming, skimming, vacuuming, and natural recovery are the preferred cleanup methods</li> <li>Should not use sorbents, containment booming, skimming, and vacuuming on gasoline spills</li> <li>Cleanup options include physical herding, sorbents, and debris/vegetation removal</li> </ul>
Large Rivers	<ul style="list-style-type: none"> <li>May have varying salinities, meandering channels, and high flow rates</li> <li>May include manmade structures (such as dams and locks)</li> <li>Water levels vary seasonally</li> <li>Floods generate high suspended sediment and debris loads</li> </ul>	<ul style="list-style-type: none"> <li>Fish and migratory birds are of great concern</li> <li>Under flood conditions, may impact highly sensitive areas in floodplains</li> <li>Human usage may be high</li> <li>When sediments are contaminated, oil may persist for years</li> </ul>	<ul style="list-style-type: none"> <li>Booming, skimming, and vacuuming are the preferred cleanup methods</li> <li>Should not use sorbents, containment booming, skimming, and vacuuming on gasoline spills</li> <li>Cleanup options include natural recovery, physical herding, sorbents, and debris/vegetation removal</li> </ul>
Small Lakes and Ponds	<ul style="list-style-type: none"> <li>Water surface can be choppy</li> <li>Water levels can fluctuate widely</li> <li>May completely freeze in winter</li> </ul>	<ul style="list-style-type: none"> <li>Wildlife and socioeconomic areas likely to be impacted</li> <li>Wind will control the oil's distribution</li> </ul>	<ul style="list-style-type: none"> <li>Booming, skimming, vacuuming, and sorbents are the preferred cleanup methods</li> <li>Should not use</li> </ul>

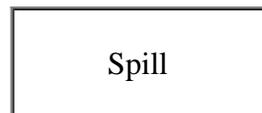
	<p>Bottom sediments near the shore can be soft and muddy</p> <ul style="list-style-type: none"> <li>Surrounding area may include wet meadows and marshes</li> </ul>		<p>containment booming, vacuuming, sorbents, and skimming on gasoline spills</p> <ul style="list-style-type: none"> <li>Cleanup options include physical herding, sorbents, and debris/vegetation removal</li> </ul>
Small Rivers and Streams	<ul style="list-style-type: none"> <li>Wide range of water bodies - fast flowing streams to slow moving bayous with low muddy banks and fringed with vegetation</li> <li>May include waterfalls, rapids, log jams, mid-channel bars, and islands</li> <li>Weathering rates may be slower because spreading and evaporation are restricted</li> </ul>	<ul style="list-style-type: none"> <li>Usually contaminate both banks and the water column, exposing a large number of biota to being oiled</li> <li>Water intakes for drinking water, irrigation, and industrial use likely to be impacted</li> </ul>	<ul style="list-style-type: none"> <li>Booming, skimming, vacuuming, sorbents, barriers, and berms are the preferred cleanup methods</li> <li>Should not use containment booming, sorbents, vacuuming, and skimming on gasoline spills</li> <li>Cleanup options include physical herding, natural recovery, debris removal, vegetation removal, and in-situ burn</li> </ul>

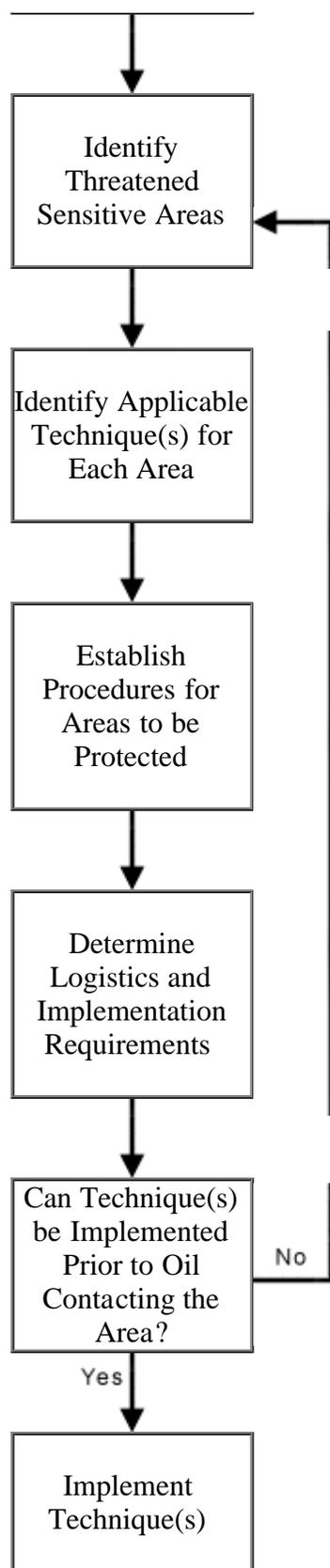
### 6.3 SENSITIVE AREA PROTECTION

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 pipeline are provided in [SECTION 6.7](#).

#### FIGURE 6.3-1 - SENSITIVE AREA PROTECTION IMPLEMENTATION SEQUENCE





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

				<b>POTENTIAL</b>
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TECHNIQUE	DESCRIPTION	RECOMMENDED EQUIPMENT	APPLICABILITY	ENVIRONMENTAL EFFECTS
<b>Removal</b>				
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"> <li>• Can be used on all habitat types</li> <li>• Light to moderate oiling conditions for stranded oil or heavy oils that have formed semi-solid to solid masses</li> <li>• In areas where roosting or birthing animals cannot or should not be disturbed</li> </ul>	<ul style="list-style-type: none"> <li>• Sediment disturbance and erosion potential</li> </ul>
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"> <li>• On land, wherever surface sediments are accessible to heavy equipment</li> <li>• Large amounts of oiled materials</li> </ul>	<ul style="list-style-type: none"> <li>• Removes upper 2 to 12 inches of sediments</li> </ul>
3. Sorbent Use	Sorbents are applied manually to oil accumulations, coatings, sheens, etc., to remove and recover the oil.	<u>Equipment</u> misc. hand tools misc. sorbents <u>Personnel</u> 2-10 workers	<ul style="list-style-type: none"> <li>• Can be used on all habitat types</li> <li>• Free-floating oil close to shore or stranded on shore, secondary treatment method after gross oil removal</li> <li>• Sensitive areas where</li> </ul>	<ul style="list-style-type: none"> <li>• Sediment disturbance and erosion potential</li> <li>• Trampling of vegetation and organisms</li> <li>• Foot traffic can work oil deeper into soft sediments</li> </ul>

			access is restricted	
4. Vacuum/Pumps/Skimmers	Pumps, vacuum trucks, skimmers are used to remove oil accumulations from land or relatively thick floating layers from the water.	<u>Equipment</u> 1-2 50- to 100-bbl vacuum trucks w/hoses 1-2 nozzle screens or skimmer heads <u>Personnel</u> 2-6 workers plus truck operators	<ul style="list-style-type: none"> <li>• Can be used on all habitat types</li> <li>• Stranded oil on the substrate</li> <li>• Shoreline access points</li> </ul>	<ul style="list-style-type: none"> <li>• Typically does not remove all oil</li> <li>• Can remove some surface organisms, sediments, and vegetation</li> </ul>
<b>Washing</b>				
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.	<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 <u>Personnel</u> 6-8 workers per system	<ul style="list-style-type: none"> <li>• All shoreline types except steep intertidal areas</li> <li>• Heavily oiled areas where the oil is still fluid and adheres loosely to the substrate</li> <li>• Where oil has penetrated into gravel sediments</li> <li>• Used with other washing techniques</li> </ul>	<ul style="list-style-type: none"> <li>• Can impact clean downgradient areas</li> <li>• Can displace some surface organisms if present</li> <li>• Sediments transported into water can affect water quality</li> </ul>

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

TECHNIQUE	DESCRIPTION	RECOMMENDED EQUIPMENT	APPLICABILITY	POTENTIAL ENVIRONMENTAL EFFECTS
<b>Washing, Continued</b>				
6. Flushing	Water streams at low to moderate pressure, and possibly elevated temperatures, are used to remove	<u>Equipment</u> 1-5 50- to 100-gpm/100-psi pumping systems with manifold 1-4 100-ft hoses	<ul style="list-style-type: none"> <li>• Substrates, riprap, and solid man-made structures</li> <li>• Oil stranded</li> </ul>	<ul style="list-style-type: none"> <li>• Can impact clean downgradient areas</li> <li>• Will displace many surface</li> </ul>

	oil from surface or near-surface sediments through agitation and direct contact. Oil is flushed back into the water or a collection point for subsequent recovery. May also be used to flush out oil trapped by shoreline or aquatic vegetation.	and nozzles per system 1-2 200-ft containment booms per system 1 oil recovery device per system <u>Personnel</u> 8-10 workers per system	onshore <ul style="list-style-type: none"> <li>Floating oil on shallow intertidal areas</li> </ul>	organisms if present <ul style="list-style-type: none"> <li>Sediments transported into water can affect water quality</li> <li>Hot water can be lethal to many organisms</li> <li>Can increase oil penetration depth</li> </ul>
7. Spot (High Pressure Washing)	High pressure water streams are used to remove oil coatings from hard surfaces in small areas where flushing is ineffective. Oil is directed back into water or collection point for subsequent recovery.	<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 1 oil recovery device per unit <u>Personnel</u> 2-4 workers per unit	<ul style="list-style-type: none"> <li>Bedrock, man-made structures, and gravel substrates</li> <li>When low-pressure flushing is not effective</li> <li>Directed water jet can remove oil from hard to reach sites</li> </ul>	<ul style="list-style-type: none"> <li>Will remove most organisms if present</li> <li>Can damage surface being cleaned</li> <li>Can affect clean downgradient or nearby areas</li> </ul>
<b>In Situ</b>				
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- to 2,000-ft sorbent/snare boom 200-400 stakes or anchor systems <u>Personnel</u> 4-10 workers	<ul style="list-style-type: none"> <li>All shoreline types</li> <li>Calm wave action</li> <li>Slow removal process</li> </ul>	<ul style="list-style-type: none"> <li>Significant amounts of oil can remain on the shoreline for extended periods of time</li> </ul>
9. Sediment Tilling	Mechanical equipment or hand tools are used to till lightly to moderately oiled surface	<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>	<ul style="list-style-type: none"> <li>Any sedimentary substrate that can support heavy equipment</li> <li>Sand and</li> </ul>	<ul style="list-style-type: none"> <li>Significant amounts of oil can remain on the shoreline for extended periods of time</li> <li>Disturbs surface</li> </ul>

	sediments to maximize natural degradation processes.	2-10 workers	gravel beaches with subsurface oil <ul style="list-style-type: none"> <li>• Where sediment is stained or lightly oiled</li> <li>• Where oil is stranded above normal high waterline</li> </ul>	sediments and organisms
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**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"> <li>• Any shoreline habitat type where nutrients are deficient</li> <li>• Moderate to heavily oiled substrates</li> <li>• After other techniques have been used to remove free product on lightly oiled shorelines</li> <li>• Where other techniques are destructive or ineffective</li> </ul>	<ul style="list-style-type: none"> <li>• Significant amounts of oil can remain on the shoreline for extended periods of time</li> <li>• Can disturb surface sediments and organisms</li> </ul>
11. Log/Debris Burning	Oiled logs, driftwood, vegetation, and debris are burned to	<u>Equipment</u> 1 set of fire control equipment 2-4 fans 1 supply of	<ul style="list-style-type: none"> <li>• On most habitats except dry muddy substrates</li> </ul>	<ul style="list-style-type: none"> <li>• Heat may impact local near-surface organisms</li> <li>• Substantial</li> </ul>

	minimize material handling and disposal requirements. Material should be stacked in tall piles and fans used to ensure a hot, clean burn.	combustion promoter <u>Personnel</u> 2-4 workers	where heat may impact the biological productivity of the habitat <ul style="list-style-type: none"> <li>• Where heavily oiled items are difficult or impossible to move</li> <li>• Many potential applications on ice</li> </ul>	smoke may be generated <ul style="list-style-type: none"> <li>• Heat may impact adjacent vegetation</li> </ul>
12. Natural Recovery	No action is taken and oil is allowed to degrade naturally.	None required	<ul style="list-style-type: none"> <li>• All habitat types</li> <li>• When natural removal rates are fast</li> <li>• Degree of oiling is light</li> <li>• Access is severely restricted or dangerous to cleanup crews</li> <li>• When cleanup actions will do more harm than natural removal</li> </ul>	<ul style="list-style-type: none"> <li>• Oil may persist for significant periods of time</li> <li>• Remobilized oil or sheens may impact other areas</li> <li>• Higher probability of impacting wildlife</li> </ul>

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

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

	<p>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.</p>		<p>volume for mixing and dilution</p> <ul style="list-style-type: none"> <li>• When the impact of the floating oil has been determined to be greater than the impact of dispersed oil on the water-column community</li> </ul>	<ul style="list-style-type: none"> <li>• May adversely impact organisms in the upper 30 feet of the water column</li> <li>• Some water-surface and shoreline impacts could occur</li> </ul>
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 ALTERNATIVE RESPONSE STRATEGIES

Non-mechanical methods for cleanup operations could involve the use of chemical cleaning products or appropriate bioremediation products. A checklist for evaluating different alternate strategies is present in **FIGURE 6.4-1**.

### 6.4.1 Dispersants

While physical removal is the most common method for eliminating spilled oil from the environment, mechanical removal may be limited by equipment capability, weather, sea conditions, and spill magnitude. An alternative strategy for reducing impacts from oil spills is to disperse the oil into the water by breaking it into small droplets and suspending them in the water. This process occurs naturally very slowly but can be accelerated by the application of a dispersant.

A dispersant is an agent (surfactant) which reduces the surface tension of the oil and water and allows them to mix more readily. In the presence of sufficient mixing energy supplied by waves, wind, or man-made turbulence, the oil can remain suspended in the water column resisting resurfacing and re-coalescing. Dispersants may be effective in areas where environmental or logistical considerations do not allow the deployment of cleanup equipment and personnel, and may reduce the overall level of effort and manpower requirement and personnel necessary for responding to major spills.

The Company will not use dispersants without the concurrence of the FOSC. Dispersants will not be used without concurrence of the EPA and the state with jurisdiction over the affected waters. Refer to the NCP for dispersant use policies and procedures.

### 6.4.2 Bioremediation

Bioremediation is the process of stimulating the growth and activity of microorganisms such as bacteria and fungi that naturally feed on hydrocarbons. It is conducted as a means of accelerating the natural biodegradation rates of stranded or floating oil. Biodegradation is a natural process by which the above microorganism, in the presence of nutrients and oxygen, chemically breakdown hydrocarbons and other substances and produce by-products including carbon dioxide, water, biomass, and partially oxidized products.

Biodegradation, together with physical processes such as evaporation and dispersion, are the primary natural mechanisms for the removal of hydrocarbons (oil spills) from the environment. This process generally occurs at a very low rate but can often be enhanced by the application of nutrients such as nitrogen, phosphorus, potassium, and others.

There are, however, instances on open seas or shorelines where standard recovery or cleanup techniques are not practical or will result in significant environmental or physical impacts. In these cases, bioremediation may be a viable response option and should be considered for use.

**FIGURE 6.4-2** provides a federal decision guide for bioremediation consideration.

### 6.4.3 In-Situ Burn

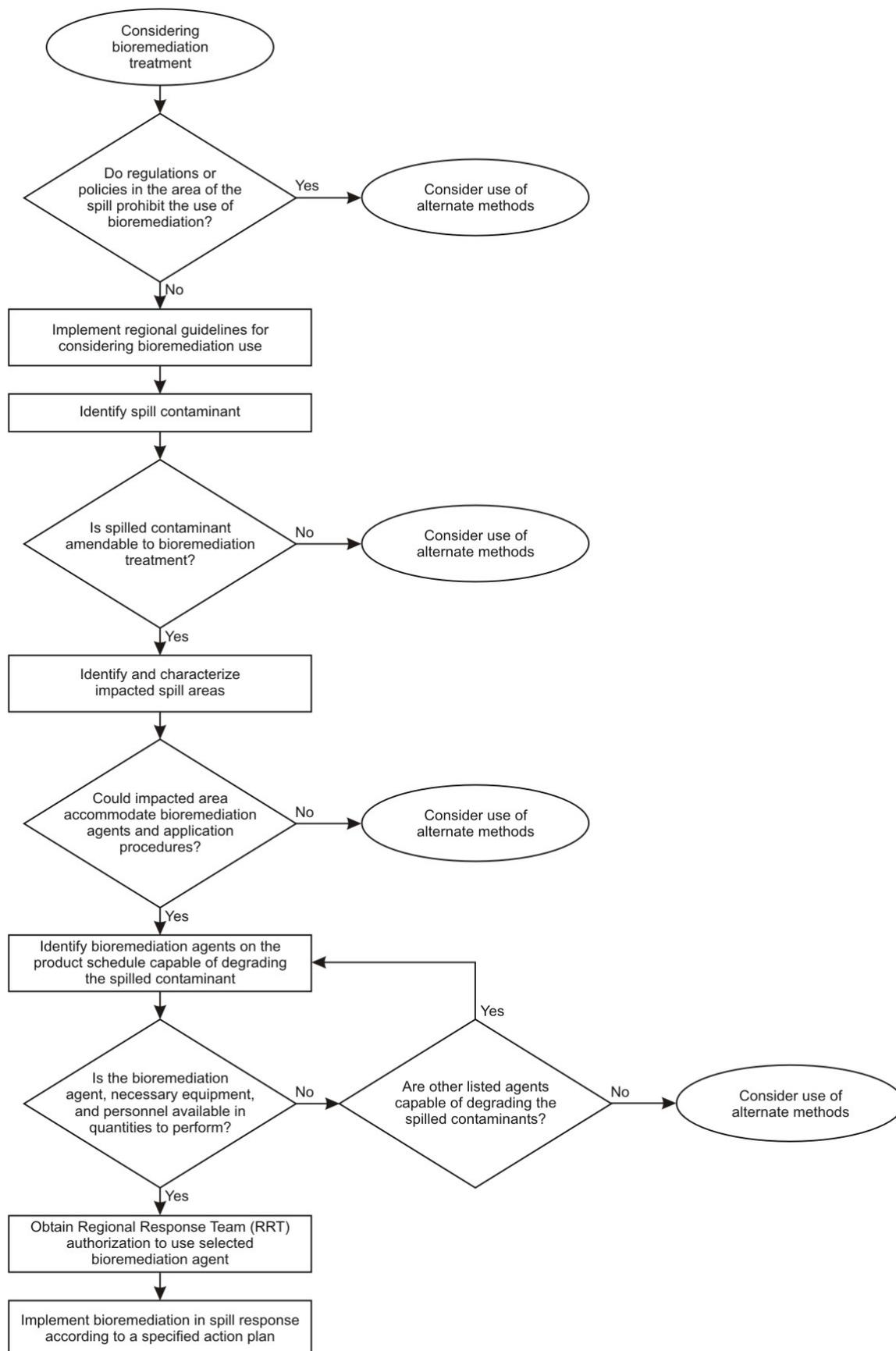
In-Situ burning has been successfully used as a viable technique for mitigating oil spills off shore and in a marsh type environment. This is especially true of areas that have mostly grassy vegetation with little or no woody vegetation. In a grassy marshland environment, an In-Situ burn may produce less long-term damage to the environment than traditional mechanical cleanup methods.

The Company will not use In-Situ Burn without the concurrence of the FOOSC and the Regional Response Team (RRT).

FIGURE 6.4-1 - ALTERNATE STRATEGIES CHECKLIST

Evaluate Alternate Strategies (oil spills only)	Initials	Date & Time Started	Date & Time Completed
No response			
In-situ burning			
Flood and flush			
Bioremediation/nutrient application			
Dispersants/surfactants			
Gelling/solidifying agents			
Sorbents			
Mechanical recovery			

FIGURE 6.4-2 - DECISION GUIDE FOR THE FEDERAL BIOREMEDIATION APPROVAL PROCESS



## 6.5 WILDLIFE PROTECTION AND REHABILITATION

- The Company will support wildlife protection and rehabilitation efforts during the response, but will not typically directly manage these efforts.
- Company personnel will not attempt to rescue or clean affected wildlife, because such actions may cause harm to the individuals or may place the animals at further risk.
- Federal and state agencies responsible for wildlife capture and rehabilitation will typically coordinate capturing and rehabilitating oiled wildlife; a list of these agencies are included in **FIGURE 3.1-4**.
- 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.

## 6.6 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE
Acornshell, southern	<i>Epioblasma othcaloogensis</i>	Freshwater with strong currents and coarse particle substrates	E	Alabama
Ring pink (mussel)	<i>Obovaria retusa</i>	Large rivers, gravel and sand bars	E	Alabama
Bat, gray	<i>Myotis grisescens</i>	Caves and mines; rivers adjacent to forests	E	Alabama
Blossom, turgid (pearlymussel) Entire Range	<i>Epioblasma turgidula</i>	Sand and gravel substrates of shallow, fast-flowing streams	E	Alabama
Blossom, yellow (pearlymussel) Entire Range	<i>Epioblasma florentina florentina</i>	Riffle and shoal areas of small to medium-sized streams	E	Alabama
Campeloma, slender	<i>Campeloma decampi</i>	Piney and Limestone creeks	E	Alabama
Catspaw (=purple cat's paw pearlymussel) Entire Range	<i>Epioblasma obliquata obliquata</i>	Medium to large rivers in gravel riffles	E	Alabama
Cavefish, Alabama	<i>Speoplatyrhinus poulsoni</i>	Clear lentic subterranean waters, in Warsaw limestone formation	E	Alabama
Chaffseed, American	<i>Schwalbea americana</i>	Acidic, sandy or peaty soils in open	E	Alabama

		pine flatwoods		
Clubshell, ovate	<i>Pleurobema perovatum</i>	Sandy or gravel bottoms of rivers with moderate currents	E	Alabama
Clubshell, southern	<i>Pleurobema decisum</i>	Sand and gravel in the center of the stream or in sand along the margins of the stream	E	Alabama
Combshell, Cumberlandian Entire Range	<i>Epioblasma brevidens</i>	Large creeks to large rivers	E	Alabama

T - Threatened

E - Endangered

## 6.6 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE
Combshell, southern	<i>Epioblasma penita</i>	Riffles or shoals with sandy gravel to gravel-cobble substrates	E	Alabama
Combshell, upland	<i>Epioblasma metastriata</i>	Shoals in rivers and large streams	E	Alabama
Darter, boulder	<i>Etheostoma wapiti</i>	Fast rocky riffles of small to medium rivers	E	Alabama
Darter, vermilion	<i>Etheostoma chermocki</i>	Small to medium-sized gravel-bottomed streams with pools of moderate current	E	Alabama
Darter, watercress	<i>Etheostoma nuchale</i>	Springs and small streams immediately below them	E	Alabama
Fanshell	<i>Cyprogenia stegaria</i>	Medium to large streams	E	Alabama
Grass, Tennessee yellow-eyed	<i>Xyris tennesseensis</i>	Moist to wet seepage slopes, springy meadows, and banks of small streams	E	Alabama
Harperella	<i>Ptilimnium nodosum</i>	Rocky or gravelly shoals of clear, swift-	E	Alabama

		flowing streams		
Kidneyshell, triangular	<i>Ptychobranchnus greenii</i>	Freshwater, moderate gradient, pool, riffle	E	Alabama
Lampmussel, Alabama Entire Range	<i>Lampsilis virescens</i>	Sand and gravel substrates in shoal areas	E	Alabama
Leather flower, Alabama	<i>Clematis socialis</i>	Silt and clay of alluvial, grass-sedge openings along a highway right-of-way	E	Alabama
Leather flower, Morefield's	<i>Clematis morefieldii</i>	Limestone bluffs within open Juniper-hardwood forests	E	Alabama

T - Threatened

E - Endangered

## 6.6 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE
Lilliput, pale (pearlymussel)	<i>Toxolasma cylindrellus</i>	Firm rubble, gravel, and sand substrates in shallow riffles and shoals	E	Alabama
Lioplax, cylindrical (snail)	<i>Lioplax cyclostomaformis</i>	Under tabular boulders and slabs in moderate to fast current	E	Alabama
Manatee, West Indian	<i>Trichechus manatus</i>	Shallow coastal waters, estuaries, bays, rivers, and lakes	E	Alabama
Moccasinshell, Gulf	<i>Medionidus penicillatus</i>	Streams and rivers where there is a moderate current and sand and gravel substrates	E	Alabama
Monkeyface, Cumberland (pearlymussel) Entire Range	<i>Quadrula intermedia</i>	Shallow riffle and shoal areas of headwater streams and bigger rivers	E	Alabama
Mouse, Alabama beach	<i>Peromyscus polionotus ammobates</i>	Beach dunes and in pine areas adjacent to the dune	E	Alabama

Mouse, Perdido Key beach	<i>Peromyscus polionotus trissyllepsis</i>	Pockets of low density in mixed pine-hardwood forests	E	Alabama
Mucket, pink (pearlymussel)	<i>Lampsilis abrupta</i>	Sand and gravel substrates	E	Alabama
Mussel, oyster Entire Range	<i>Epioblasma capsaeformis</i>	Large creeks and rivers	E	Alabama
Pearlymussel, cracking Entire Range	<i>Hemistena lata</i>	Sand, gravel, and cobble substrates in swift currents or mud	E	Alabama
Pebblesnail, flat	<i>Lepyrium showalteri</i>	Rivers on smooth stones in rapid currents	E	Alabama
Pigtoe, dark	<i>Pleurobema furvum</i>	Highly oxygenated, clear streams with moderate flow	E	Alabama

T - Threatened

E - Endangered

## 6.6 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE
Pigtoe, finerayed Entire Range	<i>Fusconaia cuneolus</i>	Clear, high gradient streams in firm cobble and gravel substrates	E	Alabama
Pigtoe, flat	<i>Pleurobema marshalli</i>	Riffles and shoals on sandy gravel to gravel-cobble substrates	E	Alabama
Pigtoe, heavy	<i>Pleurobema taitianum</i>	Riffles and shoals on sandy gravel to gravel-cobble substrates	E	Alabama
Pigtoe, oval	<i>Pleurobema pyriforme</i>	Medium-sized creeks to small rivers with silty sand to sand and gravel substrates	E	Alabama
Pigtoe, rough	<i>Pleurobema plenum</i>	Medium to large rivers in sand, gravel, and cobble substrates in shoals	E	Alabama

Pigtoe, shiny Entire Range	<i>Fusconaia cor</i>	Shoals and riffles in clear streams	E	Alabama
Pigtoe, southern	<i>Pleurobema georgianum</i>	High quality rivers with stable gravel and sandy-gravel substrates	E	Alabama
Pimpleback, orangefoot (pearlymussel)	<i>Plethobasus cooperianus</i>	Large rivers in sand, gravel, and cobble substrates	E	Alabama
Pinkroot, gentian	<i>Spigelia gentianoides</i>	Sandy or dry-mesic pine-oak woods	E	Alabama
Pitcher-plant, Alabama canebrake	<i>Sarracenia rubra alabamensis</i>	Sandy and gravelly bogs; in damp, peaty soil around springheads or seeps; and in swamps	E	Alabama
Pitcher-plant, green	<i>Sarracenia oreophila</i>	Wet areas, bogs swamps and moist woods and sandy floodplains	E	Alabama
Pocketbook, shinyrayed	<i>Lampsilis subangulata</i>	Muddy sand and sand in slight to moderate current	E	Alabama

T - Threatened

E - Endangered

## 6.6 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE
Pondberry	<i>Lindera melissifolia</i>	Floodplain hardwood forests and forested swales	E	Alabama
Prairie-clover, leafy	<i>Dalea foliosa</i>	Thin-soiled limestone glades and limestone barrens	E	Alabama
Quillwort, Louisiana	<i>Isoetes louisianensis</i>	Shallow blackwater streams in riparian woodland	E	Alabama
Riversnail, Anthony's Entire Range	<i>Athearnia anthonyi</i>	Freshwater, larger rivers, but lower stretches of larger creeks	E	Alabama
Rocksail, plicate	<i>Leptoxis plicata</i>	Flowing water over gravel, cobble, or	E	Alabama

		bedrock		
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	Alabama
Sea turtle, hawksbill	<i>Eretmochelys imbricata</i>	Clear offshore waters off the mainland and on island shelves	E	Alabama
Sea turtle, Kemp's ridley	<i>Lepidochelys kempii</i>	Shallow areas with sandy and muddy bottoms	E	Alabama
Sea turtle, leatherback	<i>Dermochelys coriacea</i>	Warm sands of tropical beaches	E	Alabama
Shiner, Cahaba	<i>Notropis cahabae</i>	Slow-moderate current over sand substrate in main river channel	E	Alabama
Shiner, palezone	<i>Notropis albizonatus</i>	Upland large creeks and small rivers, clean substrates of bedrock, cobble, and gravel	E	Alabama
Shrimp, Alabama cave	<i>Palaemonias alabamae</i>	Subterranean aquatic pools with fine silt bottoms	E	Alabama

T - Threatened

E - Endangered

## 6.6 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE
Snail, armored	<i>Pyrgulopsis (=Marstonia) pachyta</i>	Shallow, still water along the edge of pools on tree roots and detritus	E	Alabama
Snail, tulotoma	<i>Tulotoma magnifica</i>	Riffles and shoals on the undersides of large rocks	E	Alabama
Stirrupshell	<i>Quadrula stapes</i>	Riffles and shoals on sandy gravel to gravel-cobble substrates	E	Alabama

Stork, wood AL, FL, GA, SC	<i>Mycteria americana</i>	Marshes, swamps, lagoons, ponds, flooded fields; also occurs in brackish wetlands	E	Alabama
Sturgeon, Alabama	<i>Scaphirhynchus suttkusi</i>	Main channels of major rivers in areas below the Fall Line	E	Alabama
Trillium, relict	<i>Trillium reliquum</i>	Mesic hardwood forests	E	Alabama
Turtle, Alabama red-belly	<i>Pseudemys alabamensis</i>	Backwaters of upper Mobile Bay in areas with dense submerged vegetation	E	Alabama
Wartyback, white (pearlymussel)	<i>Plethobasus cicatricosus</i>	Shoals and riffles in large rivers like the Tennessee	E	Alabama
Whale, finback	<i>Balaenoptera physalus</i>	Offshore ocean waters	E	Alabama
Whale, humpback	<i>Megaptera novaeangliae</i>	Surface of the ocean	E	Alabama
Woodpecker, red-cockaded	<i>Picoides borealis</i>	Open pine forests with large, widely-spaced older trees	E	Alabama
Amphianthus, little	<i>Amphianthus pusillus</i>	Vernal pools on granite outcrops of the southeastern Piedmont	T	Alabama

T - Threatened

E - Endangered

## 6.6 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE
Bladderpod, lyrate	<i>Lesquerella lyrata</i>	Red soils, limestone outcroppings, disturbed cedar glades and glade-like areas	T	Alabama
Button, Mohr's Barbara	<i>Marshallia mohrii</i>	Seasonally wet glades or openings in woods with exposed rock and sandy clay soil	T	Alabama

Chub, spotfin Entire	<i>Erimonax monacha</i>	Cool and warm, typically clear, large creeks or medium-sized rivers	T	Alabama
Darter, goldline	<i>Percina aurolineata</i>	Small to medium rivers in areas of white-water rapids and substrates of bedrock, boulders, rubble and gravel	T	Alabama
Darter, slackwater	<i>Etheostoma boschungii</i>	Gravel-bottomed pools in sluggish areas of creeks and small rivers	T	Alabama
Darter, snail	<i>Percina tanasi</i>	Sand and gravel shoals of moderately flowing, vegetated, large creeks	T	Alabama
Elimia, lacy (snail)	<i>Elimia crenatella</i>	Small headwater streams, which consists of sand, gravel, cobble and rock slabs	T	Alabama
Fern, Alabama streak-sorus	<i>Thelypteris pilosa</i> var. <i>alabamensis</i>	Sandstone overhangs and cliff faces, often in coves	T	Alabama
Fern, American hart's-tongue	<i>Asplenium scolopendrium</i> var. <i>americanum</i>	High humidity, deeply shaded conditions near limestone sinks and caves	T	Alabama
Heelsplitter, Alabama (=inflated)	<i>Potamilus inflatus</i>	Sand, mud, silt, and sandy-gravel substrates	T	Alabama
Moccasinshell, Alabama	<i>Medionidus acutissimus</i>	Margins of streams with a typical sand and gravel substrate in clear water of moderate flow	T	Alabama
Mucket, orangenacre	<i>Lampsilis perovalis</i>	Gravel-cobble substrates and possibly coarse sand	T	Alabama

T - Threatened

E - Endangered

## 6.6 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	Alabama
Pocketbook, finelined	<i>Lampsilis altilis</i>	Creek, high gradient, low gradient, medium river, moderate gradient, riffle	T	Alabama
Potato-bean, Price's	<i>Apios priceana</i>	Open, rocky, wooded slopes and floodplain edges	T	Alabama
Rocksnaill, painted	<i>Leptoxis taeniata</i>	Shoals and riffles of rivers on substrates of gravel and cobble	T	Alabama
Rocksnaill, round	<i>Leptoxis ampla</i>	Riffles and shoals over gravel, cobble, or other rocky substrates	T	Alabama
Salamander, Red Hills	<i>Phaeognathus hubrichti</i>	Slopes of mesic, shaded ravines dominated by hardwood trees	T	Alabama
Sculpin, pygmy	<i>Cottus paulus</i> (=pygmaeus)	Impounded spring pool and spring run	T	Alabama
Sea turtle, green (except where endangered)	<i>Chelonia mydas</i>	Coasts, open sea	T	Alabama
Sea turtle, loggerhead	<i>Caretta caretta</i>	Estuaries, coastal streams and salt marshes	T	Alabama
Shiner, blue	<i>Cyprinella caerulea</i>	Sand and gravel substrate among cobble in cool, clear water	T	Alabama
Slabshell, Chipola	<i>Elliptio chipolaensis</i>	Muddy sand in moderate current	T	Alabama
Sturgeon, gulf	<i>Acipenser oxyrinchus desotoi</i>	Free-flowing riverine	T	Alabama

T - Threatened

E - Endangered

## 6.6 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC	HABITAT	STATUS	STATE
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	NAME			
Tortoise, gopher W of of Mobile/Tombigbee Rs.	<i>Gopherus polyphemus</i>	Grassland/herbaceous	T	Alabama
Turtle, flattened musk species range clarified	<i>Sternotherus depressus</i>	Free-flowing creek or small river with pools about 1 m deep or more	T	Alabama
Water-plantain, Kral's	<i>Sagittaria secundifolia</i>	Undammed riverine reaches or among loose boulders in sands, gravels, and silts in pools	T	Alabama
Milkweed, Mead's	<i>Asclepias meadii</i>	Dry or mesic prairies and igneous glades with rocky outcrops	T	Illinois
Amphipod, Illinois cave	<i>Gammarus acherondytes</i>	Riffle areas of cave streams that have a gravel substrate	E	Illinois
Bat, gray	<i>Myotis grisescens</i>	Caves and mines; rivers adjacent to forests	E	Illinois
Bat, Indiana	<i>Myotis sodalis</i>	Caves, mines, upland forests	E	Illinois
Butterfly, Karner blue	<i>Lycaeides melissa samuelis</i>	Pine barrens and oak savannas on sandy soils	E	Illinois
Clubshell Entire Range; Except where listed as Experimental Populations	<i>Pleurobema clava</i>	Medium to large rivers in gravel or mixed gravel and sand	E	Illinois
Dragonfly, Hine's emerald	<i>Somatochlora hineana</i>	Calcareous spring-fed marshes and sedge meadows overlaying dolomite bedrock	E	Illinois
Fanshell	<i>Cyprogenia stegaria</i>	Medium to large streams	E	Illinois
Higgins eye (pearlymussel)	<i>Lampsilis higginsii</i>	Substrates of mud with a mixture of gravel and stones	E	Illinois

T - Threatened

E - Endangered

## 6.6 ENDANGERED AND THREATENED SPECIES BY STATE

SCIENTIFIC			
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COMMON NAME	NAME	HABITAT	STATUS	STATE
Mucket, pink (pearlymussel)	<i>Lampsilis abrupta</i>	Sand and gravel substrates	E	Illinois
Pimpleback, orangefoot (pearlymussel)	<i>Plethobasus cooperianus</i>	Large rivers in sand, gravel, and cobble substrates	E	Illinois
Plover, piping Great Lakes watershed	<i>Charadrius melodus</i>	Sandy beaches, islands	E	Illinois
Pocketbook, fat	<i>Potamilus capax</i>	Sand, mud, and fine gravel substrates	E	Illinois
Prairie-clover, leafy	<i>Dalea foliosa</i>	Thin-soiled limestone glades and limestone barrens	E	Illinois
Snail, Iowa Pleistocene	<i>Discus macclintocki</i>	Aquatic environment	E	Illinois
Sturgeon, pallid	<i>Scaphirhynchus albus</i>	Free-flowing riverine	E	Illinois
Tern, least interior pop.	<i>Sterna antillarum</i>	Open sandy or gravelly beach, dredge spoil and other open shoreline areas	E	Illinois
Aster, decurrent false	<i>Boltonia decurrens</i>	Moist, sandy soil and regular disturbance	T	Illinois
Bush-clover, prairie	<i>Lespedeza leptostachya</i>	Gravelly soil in dry to mesic praries	T	Illinois
Daisy, lakeside	<i>Hymenoxys herbacea</i>	Full sun in dry calcareous sites	T	Illinois
Orchid, eastern prairie fringed	<i>Platanthera leucophaea</i>	Mesic to wet praries	T	Illinois

T - Threatened

E - Endangered

## 6.6 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE
Pogonia, small whorled	<i>Isotria medeoloides</i>	Acidic soils, in dry to mesic second-growth	T	Illinois
Potato-bean, Price's	<i>Apios priceana</i>	Open, rocky, wooded slopes and floodplain edges	T	Illinois
Thistle, Pitcher's	<i>Cirsium pitcheri</i>	Shorelines of Lakes Michigan, Huron and Superior	T	Illinois

Bat, gray	<i>Myotis grisescens</i>	Caves and mines; rivers adjacent to forests	E	Indiana
Bat, Indiana	<i>Myotis sodalis</i>	Caves, mines, upland forests	E	Indiana
Butterfly, Karner blue	<i>Lycaeides melissa samuelis</i>	Pine barrens and oak savannas on sandy soils	E	Indiana
Butterfly, Mitchell's satyr	<i>Neonympha mitchellii mitchellii</i>	Sedge swamps, marshes	E	Indiana
Catspaw, white (pearlymussel)	<i>Epioblasma obliquata perobliqua</i>	Found in riffles or runs of high gradient streams	E	Indiana
Clover, running buffalo	<i>Trifolium stoloniferum</i>	Open woodlands, savannas, grasslands, stream-banks, floodplains, and shoals	E	Indiana
Clubshell Entire Range; Except where listed as Experimental Populations	<i>Pleurobema clava</i>	Medium to large rivers in gravel or mixed gravel and sand	E	Indiana
Fanshell	<i>Cyprogenia stegaria</i>	Medium to large streams	E	Indiana
Goldenrod, Short's	<i>Solidago shortii</i>		E	Indiana

T - Threatened

E - Endangered

## 6.6 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE
Mucket, pink (pearlymussel)	<i>Lampsilis abrupta</i>	Sand and gravel substrates	E	Indiana
Pigtoe, rough	<i>Pleurobema plenum</i>	Medium to large rivers in sand, gravel, and cobble substrates in shoals	E	Indiana
Pimpleback, orangefoot (pearlymussel)	<i>Plethobasus cooperianus</i>	Large rivers in sand, gravel, and cobble substrates	E	Indiana
Plover, piping Great Lakes watershed	<i>Charadrius melodus</i>	Sandy beaches, islands	E	Indiana
Pocketbook, fat	<i>Potamilus capax</i>	Sand, mud, and fine	E	Indiana

		gravel substrates		
Riffleshell, northern	<i>Epioblasma torulosa rangiana</i>	Swiftly flowing, well-oxygenated water, coarse gravel runs	E	Indiana
Tern, least interior pop.	<i>Sterna antillarum</i>	Open sandy or gravelly beach, dredge spoil and other open shoreline areas	E	Indiana
Wartyback, white (pearlymussel)	<i>Plethobasus cicatricosus</i>	Shoals and riffles in large rivers like the Tennessee	E	Indiana
Milkweed, Mead's	<i>Asclepias meadii</i>	Dry or mesic prairies and igneous glades with rocky outcrops	T	Indiana
Orchid, eastern prairie fringed	<i>Platanthera leucophaea</i>	Mesic to wet praries	T	Indiana
Plover, piping except Great Lakes watershed	<i>Charadrius melodus</i>	Sandy beaches, islands	T	Indiana
Snake, copperbelly water MI, OH, IN N of 400 N. Lat.	<i>Nerodia erythrogaster neglecta</i>	Wooded floodplains, shrub wetlands	T	Indiana

T - Threatened

E - Endangered

## 6.6 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE
Thistle, Pitcher's	<i>Cirsium pitcheri</i>	Shorelines of Lakes Michigan, Huron and Superior	T	Indiana
Bat, gray	<i>Myotis grisescens</i>	Caves and mines; rivers adjacent to forests	E	Kentucky
Bat, Indiana	<i>Myotis sodalis</i>	Caves, mines, upland forests	E	Kentucky
Bat, Virginia big-eared	<i>Corynorhinus (=Plecotus) townsendii virginianus</i>	Caves dominated by oak-hickory or beech-maple-hemlock forest	E	Kentucky
Bean, Cumberland (pearlymussel) Entire Range; Except where listed as Experimental	<i>Villosa trabalis</i>	Sand, gravel, and cobble substrates	E	Kentucky

Populations				
Blossom, tubercled (pearlymussel) Entire Range; Except where listed as Experimental Populations	<i>Epioblasma torulosa torulosa</i>	Medium to large rivers in gravel riffles	E	Kentucky
Catspaw (=purple cat's paw pearlymussel) Entire Range; Except where listed as Experimental Populations	<i>Epioblasma obliquata obliquata</i>	Medium to large rivers in gravel riffles	E	Kentucky
Clover, running buffalo	<i>Trifolium stoloniferum</i>	Open woodlands, savannas, grasslands, stream-banks, floodplains, and shoals	E	Kentucky
Clubshell Entire Range; Except where listed as Experimental Populations	<i>Pleurobema clava</i>	Medium to large rivers in gravel or mixed gravel and sand	E	Kentucky
Combshell, Cumberlandian Entire Range; Except where listed as Experimental Populations	<i>Epioblasma brevidens</i>	Large creeks to large rivers	E	Kentucky
Darter, duskytail Entire	<i>Etheostoma percnurum</i>	Gravel and rubble pools and riffles of large creeks and small to medium rivers	E	Kentucky
Darter, relict	<i>Etheostoma chienense</i>	Sandy Coastal Plain stream system	E	Kentucky

T - Threatened

E - Endangered

## 6.6 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE
Elktoe, Cumberland	<i>Alasmidonta atropurpurea</i>	Shallow flats or pools, sand substrate with cobble/boulder material	E	Kentucky
Fanshell	<i>Cyprogenia stegaria</i>	Medium to large streams	E	Kentucky
		Cedar glades and		

Goldenrod, Short's	<i>Solidago shortii</i>	glade-like habitats; right-of-ways, roadside ledges, and meadows/pastures	E	Kentucky
Mucket, pink (pearlymussel)	<i>Lampsilis abrupta</i>	Sand and gravel substrates	E	Kentucky
Mussel, oyster Entire Range; Except where listed as Experimental Populations	<i>Epioblasma capsaeformis</i>	Large creeks and rivers; coarse sand and gravel	E	Kentucky
Pearlymussel, cracking Entire Range; Except where listed as Experimental Populations	<i>Hemistena lata</i>	Sand, gravel, and cobble substrates in swift currents or mud	E	Kentucky
Pearlymussel, dromedary Entire Range; Except where listed as Experimental Populations	<i>Dromus dromas</i>	Riffle, at shoals with sand and gravel and moderate current velocities	E	Kentucky
Pearlymussel, littlewing	<i>Pegias fabula</i>	Riffle, in and below on sand and gravel	E	Kentucky
Pigtoe, rough	<i>Pleurobema plenum</i>	Medium to large rivers in sand, gravel, and cobble substrates in shoals	E	Kentucky
Pimpleback, orangefoot (pearlymussel)	<i>Plethobasus cooperianus</i>	Large rivers in sand, gravel, and cobble substrates	E	Kentucky
Pocketbook, fat	<i>Potamilus capax</i>	Sand, mud, and fine gravel substrates	E	Kentucky
Riffleshell, northern	<i>Epioblasma torulosa rangiana</i>	Swiftly flowing, well-oxygenated water, coarse gravel runs	E	Kentucky

T - Threatened

E - Endangered

## 6.6 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE
Riffleshell, tan	<i>Epioblasma florentina walkeri</i> (= <i>E. walkeri</i> )	Sand and gravel substrates, headwaters, riffles and shoals	E	Kentucky
Ring pink (mussel)	<i>Obovaria retusa</i>	Large rivers, gravel and sand bars	E	Kentucky

Rock-cress, Braun's	<i>Arabis perstellata</i>	Wooded steep slopes with limestone outcrops	E	Kentucky
Sandwort, Cumberland	<i>Arenaria cumberlandensis</i>	Sandstone ledges	E	Kentucky
Shiner, palezone	<i>Notropis albizonatus</i>	Upland large creeks and small rivers, clean substrates of bedrock, cobble, and gravel	E	Kentucky
Shrimp, Kentucky cave	<i>Palaemonias ganteri</i>	Pools with silty bottoms	E	Kentucky
Sturgeon, pallid	<i>Scaphirhynchus albus</i>	Free-flowing riverine	E	Kentucky
Tern, least interior pop.	<i>Sterna antillarum</i>	Open sandy or gravelly beach, dredge spoil and other open shoreline areas	E	Kentucky
Wartyback, white (pearlymussel)	<i>Plethobasus cicatricosus</i>	Shoals and riffles in large rivers like the Tennessee	E	Kentucky
Dace, blackside	<i>Phoxinus cumberlandensis</i>	Small upland streams with moderate flows	T	Kentucky
Goldenrod, white-haired	<i>Solidago albopilosa</i>	Shallow, sandstone cave-like structures; sandstone ledges	T	Kentucky
Plover, piping except Great Lakes watershed	<i>Charadrius melodus</i>	Sandy beaches, islands	T	Kentucky

T - Threatened

E - Endangered

## 6.6 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE
Potato-bean, Price's	<i>Apios priceana</i>	Open, rocky, wooded slopes and floodplain edges	T	Kentucky
Rosemary, Cumberland	<i>Conradina verticillata</i>	Gravel bars in the floodplain of major rivers and streams	T	Kentucky
Spiraea, Virginia	<i>Spiraea virginiana</i>	Flood-scoured banks of high-gradient mountain streams,	T	Kentucky

		point bars, and natural levees		
				Kentucky
Bat, Indiana	<i>Myotis sodalis</i>	Caves, mines, upland forests	E	Michigan
Beetle, American burying	<i>Nicrophorus americanus</i>	Cropland/hedgerow	E	Michigan
Beetle, Hungerford's crawling water	<i>Brychius hungerfordi</i>	Warm, shallow, gravel bottom outflow streams	E	Michigan
Butterfly, Karner blue	<i>Lycaeides melissa samuelis</i>	Pine barrens and oak savannas on sandy soils	E	Michigan
Butterfly, Mitchell's satyr	<i>Neonympha mitchellii mitchellii</i>	Sedge swamps, marshes	E	Michigan
Clubshell Entire Range; Except where listed as Experimental Populations	<i>Pleurobema clava</i>	Medium to large rivers in gravel or mixed gravel and sand	E	Michigan
Dragonfly, Hine's emerald	<i>Somatochlora hineana</i>	Calcareous spring-fed marshes and sedge meadows overlaying dolomite bedrock	E	Michigan
Monkey-flower, Michigan	<i>Mimulus glabratus var. michiganensis</i>	Sunny areas, rooted in silty, sandy, alkaline mud, and streams of cool running water	E	Michigan

T - Threatened

E - Endangered

## 6.6 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE
Plover, piping Great Lakes watershed	<i>Charadrius melodus</i>	Sandy beaches, islands	E	Michigan
Riffleshell, northern	<i>Epioblasma torulosa rangiana</i>	Swiftly flowing, well-oxygenated water, coarse gravel runs	E	Michigan
Warbler (=wood), Kirtland's	<i>Dendroica kirtlandii</i>	Shrubland/chaparral, woodland - conifer	E	Michigan
Wolf, gray Lower 48 States, except where delisted and where	<i>Canis lupus</i>	Mixed, grassland/herbaceous	E	Michigan

EXPN. Mexico				
Daisy, lakeside	<i>Hymenoxys herbacea</i>	Full sun in dry calcareous sites	T	Michigan
Fern, American hart's-tongue	<i>Asplenium scolopendrium var. americanum</i>	High humidity, deeply shaded conditions near limestone sinks and caves	T	Michigan
Goldenrod, Houghton's	<i>Solidago houghtonii</i>	Sparsely vegetated, moist, sandy, interdunal depressions, beach flats and beach sands	T	Michigan
Iris, dwarf lake	<i>Iris lacustris</i>	Sands to gravels, to sandy clay loam and organic-enriched sands	T	Michigan
Orchid, eastern prairie fringed	<i>Platanthera leucophaea</i>	Mesic to wet praries	T	Michigan
Pogonia, small whorled	<i>Isotria medeoloides</i>	Cidic soils, in dry to mesic second-growth	T	Michigan
Snake, copperbelly water MI, OH, IN N of 400 N. Lat	<i>Nerodia erythrogaster neglecta</i>	Wooded floodplains, shrub wetlands, and adjacent to slow moving rivers	T	Michigan
Thistle, Pitcher's	<i>Cirsium pitcheri</i>	Shorelines of Lakes Michigan, Huron and Superior	T	Michigan

T - Threatened

E - Endangered

## 6.6 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE
Lynx, Canada (Contiguous U.S. DPS)	<i>Lynx canadensis</i>	Mature forests with dense undergrowth	T	Michigan
Acornshell, southern	<i>Epioblasma othcaloogensis</i>	Freshwater with strong currents and coarse particle substrates	E	Tennessee
Aster, Ruth's golden	<i>Pityopsis ruthii</i>	Soil-filled cracks in phyllite boulders along river banks and in rivers	E	Tennessee
		High-elevation cliffs,		

Avens, spreading	<i>Geum radiatum</i>	outcrops, and steep slopes exposed to full sun	E	Tennessee
Bat, gray	<i>Myotis grisescens</i>	Caves and mines; rivers adjacent to forests	E	Tennessee
Bat, Indiana	<i>Myotis sodalis</i>	Caves, mines, upland forests	E	Tennessee
Bean, Cumberland (pearlymussel) Entire Range; Except where listed as Experimental Populations	<i>Villosa trabilis</i>	Sand, gravel, and cobble substrates in waters with moderate to swift currents	E	Tennessee
Bean, purple	<i>Villosa perpurpurea</i>	Creeks to medium-sized rivers and occasionally headwaters	E	Tennessee
Bladderpod, Spring Creek	<i>Lesquerella perforata</i>	Soil disturbed by flooding or by cultivation, and in areas of full sun	E	Tennessee
Blossom, green (pearlymussel)	<i>Epioblasma torulosa gubernaculum</i>	Sand and gravel substrates with moderate to fast current	E	Tennessee
Blossom, tubercled (pearlymussel) Entire Range; Except where listed as Experimental Populations	<i>Epioblasma torulosa torulosa</i>	Medium to large rivers in gravel riffles	E	Tennessee
Blossom, turgid (pearlymussel) Entire Range; Except where listed as Experimental Populations	<i>Epioblasma turgidula</i>	Sand and gravel substrates of shallow, fast-flowing streams	E	Tennessee

T - Threatened

E - Endangered

## 6.6 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE
Blossom, yellow (pearlymussel) Entire Range; Except where listed as Experimental	<i>Epioblasma florentina florentina</i>	Riffle and shoal areas of small to medium-sized streams	E	Tennessee

Populations				
Bluet, Roan Mountain	<i>Hedyotis purpurea</i> <i>var. montana</i>	Crevices of rock outcrops at the summits of high elevation	E	Tennessee
Catspaw (=purple cat's paw pearlymussel) Entire Range; Except where listed as Experimental Populations	<i>Epioblasma obliquata obliquata</i>	Medium to large rivers in gravel riffles	E	Tennessee
Clubshell Entire Range; Except where listed as Experimental Populations	<i>Pleurobema clava</i>	Medium to large rivers in gravel or mixed gravel and sand	E	Tennessee
Clubshell, ovate	<i>Pleurobema perovatum</i>	Sandy or gravel bottoms of rivers with moderate currents	E	Tennessee
Combshell, Cumberlandian Entire Range; Except where listed as Experimental Populations	<i>Epioblasma brevidens</i>	Large creeks to large rivers	E	Tennessee
Combshell, upland	<i>Epioblasma metastriata</i>	Shoals in rivers and large streams	E	Tennessee
Coneflower, Tennessee purple	<i>Echinacea tennesseensis</i>	Open limestone cedar glades	E	Tennessee
Crayfish, Nashville	<i>Orconectes shoupi</i>	Moderately flowing streams with firm, usually rocky bottoms	E	Tennessee
Darter, amber	<i>Percina antesella</i>	Flowing pools and deeper runs with clean substrates of sand and fine gravel with boulders	E	Tennessee
Darter, bluemask (=jewel)	<i>Etheostoma sp.</i>	Downstream of riffles, in runs, and along pool margins with slow to moderate currents	E	Tennessee
Darter, boulder	<i>Etheostoma wapiti</i>	Fast rocky riffles of small to medium rivers	E	Tennessee

T - Threatened

E - Endangered

## 6.6 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE
Darter, duskytail Entire	<i>Etheostoma percnurum</i>	Gravel and rubble pools and riffles of large creeks and small to medium rivers	E	Tennessee
Elktoe, Appalachian	<i>Alasmidonta raveneliana</i>	Gravelly substrate, mixed with cobble and boulder, and cracks in bedrock	E	Tennessee
Elktoe, Cumberland	<i>Alasmidonta atropurpurea</i>	Shallow flats or pools, sand substrate with cobble/boulder material	E	Tennessee
Fanshell	<i>Cyprogenia stegaria</i>	Medium to large streams	E	Tennessee
Grass, Tennessee yellow-eyed	<i>Xyris tennesseensis</i>	Moist to wet seepage slopes, springy meadows, and banks of small streams	E	Tennessee
Ground-plum, Guthrie's (=Pyne's)	<i>Astragalus bibullatus</i>	Limestone cedar glades	E	Tennessee
Kidneyshell, triangular	<i>Ptychobranhus greeni</i>	Freshwater, moderate gradient, pool, riffle	E	Tennessee
Lampmussel, Alabama Entire Range; Except where listed as Experimental Populations	<i>Lampsilis virescens</i>	Sand and gravel substrates in shoal areas	E	Tennessee
Leather flower, Morefield's	<i>Clematis morefieldii</i>	Limestone bluffs within open Juniper-hardwood forests	E	Tennessee
Lichen, rock gnome	<i>Gymnoderma lineare</i>	Shady rock or shady moss-covered rock	E	Tennessee
Lilliput, pale (pearlymussel)	<i>Toxolasma cylindrellus</i>	Firm rubble, gravel, and sand substrates in shallow riffles and shoals	E	Tennessee
Logperch, Conasauga	<i>Percina jenkinsi</i>	Deep, fast-flowing chutes and pools	E	Tennessee

T - Threatened

E - Endangered

## 6.6 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE
Madtom, pygmy	<i>Noturus stanauli</i>	Moderate to swift gravel runs of clear medium-sized rivers	E	Tennessee
Madtom, smoky Entire	<i>Noturus baileyi</i>	Clear, cool, rocky riffles, runs, and flowing pools of creeks	E	Tennessee
Marstonia, royal (snail)	<i>Pyrgulopsis ogorhaphe</i>	Spring runs flowing out of caves	E	Tennessee
Moccasinshell, Coosa	<i>Medionidus parvulus</i>	Sand and gravel in highly oxygenated, clear streams with moderate flow	E	Tennessee
Monkeyface, Appalachian (pearlymussel)	<i>Quadrula sparsa</i>	Fast-flowing, headwaters sections of rivers in shallow riffles and runs	E	Tennessee
Monkeyface, Cumberland (pearlymussel) Entire Range; Except where listed as Experimental Populations	<i>Quadrula intermedia</i>	Shallow riffle and shoal areas of headwater streams and bigger rivers	E	Tennessee
Mucket, pink (pearlymussel)	<i>Lampsilis abrupta</i>	Sand and gravel substrates	E	Tennessee
Mussel, oyster Entire Range; Except where listed as Experimental Populations	<i>Epioblasma capsaeformis</i>	Large creeks and rivers	E	Tennessee
Pearlymussel, birdwing Entire Range; Except where listed as Experimental Populations	<i>Conradilla caelata</i>	Riffle areas with sand and gravel substrates in moderate to fast currents	E	Tennessee
Pearlymussel, cracking Entire Range; Except where listed as Experimental Populations	<i>Hemistena lata</i>	Sand, gravel, and cobble substrates in swift currents or mud	E	Tennessee
Pearlymussel, dromedary Entire Range; Except where listed as Experimental Populations	<i>Dromus dromas</i>	Riffle, at shoals with sand and gravel and moderate current velocities	E	Tennessee
Pearlymussel, littlewing	<i>Pegias fabula</i>	Riffle, in and below on sand and gravel	E	Tennessee

T - Threatened  
E - Endangered

## 6.6 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE
Pigtoe, Cumberland	<i>Pleurobema gibberum</i>	Small to medium rivers in riffle areas with sand and gravel substrates	E	Tennessee
Pigtoe, finereyed Entire Range; Except where listed as Experimental Populations	<i>Fusconaia cuneolus</i>	Clear, high gradient streams in firm cobble and gravel substrates	E	Tennessee
Pigtoe, rough	<i>Pleurobema plenum</i>	Medium to large rivers in sand, gravel, and cobble substrates in shoals	E	Tennessee
Pigtoe, shiny Entire Range; Except where listed as Experimental Populations	<i>Fusconaia cor</i>	Shoals and riffles in clear streams	E	Tennessee
Pigtoe, southern	<i>Pleurobema georgianum</i>	High quality rivers with stable gravel and sandy-gravel substrates	E	Tennessee
Pimpleback, orangefoot (pearlymussel)	<i>Plethobasus cooperianus</i>	Large rivers in sand, gravel, and cobble substrates	E	Tennessee
Pitcher-plant, green	<i>Sarracenia oreophila</i>	Wet areas, bogs swamps and moist woods and sandy floodplains	E	Tennessee
Prairie-clover, leafy	<i>Dalea foliosa</i>	Thin-soiled limestone glades and limestone barrens	E	Tennessee
Rabbitsfoot, rough	<i>Quadrula cylindrica strigillata</i>	Medium sized to large rivers in moderate to swift current	E	Tennessee
Riffleshell, tan	<i>Epioblasma florentina walkeri</i> (=E. walkeri)	Sand and gravel substrates usually found in headwaters, riffles and shoals	E	Tennessee
		Large rivers, gravel		

Ring pink (mussel)	<i>Obovaria retusa</i>	and sand bars	E	Tennessee
Riversnail, Anthony's Entire Range; Except where listed as Experimental Populations	<i>Athearnia anthonyi</i>	Freshwater, larger rivers, but lower stretches of larger creeks	E	Tennessee

T - Threatened

E - Endangered

Central Business District

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## 6.6 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE
Rock-cress, Braun's	<i>Arabis perstellata</i>	Wooded steep slopes with limestone outcrops	E	Tennessee
Sandwort, Cumberland	<i>Arenaria cumberlandensis</i>	Cool, humid, cave- like rock houses	E	Tennessee
Spider, spruce-fir moss	<i>Microhexura montivaga</i>	Forest - conifer	E	Tennessee
Squirrel, Carolina northern flying	<i>Glaucmys sabrinus coloratus</i>	Coniferous and mixed forests; hardwoods	E	Tennessee
Sturgeon, pallid	<i>Scaphirhynchus albus</i>	Free-flowing riverine	E	Tennessee
Tern, least interior pop.	<i>Sterna antillarum</i>	Open sandy or gravelly beach, dredge spoil and other open shoreline areas	E	Tennessee
Wartyback, white (pearlymussel)	<i>Plethobasus cicatricosus</i>	Shoals and riffles in large rivers like the Tennessee	E	Tennessee
Chub, slender	<i>Erimystax cahni</i>	Medium to fairly large, usually clear, warm rivers of moderate gradient	T	Tennessee
Chub, spotfin Entire	<i>Erimonax monacha</i>	Cool and warm, typically clear, large creeks or medium- sized rivers	T	Tennessee
Dace, blackside	<i>Phoxinus cumberlandensis</i>	Small upland streams with moderate flows	T	Tennessee
		Small to medium rivers in areas of		

Darter, goldline	<i>Percina aurolineata</i>	white-water rapids and substrates of bedrock, boulders, rubble and gravel	T	Tennessee
Darter, slackwater	<i>Etheostoma boschungii</i>	Gravel-bottomed pools in sluggish areas of creeks and small rivers	T	Tennessee

T - Threatened

E - Endangered

## 6.6 ENDANGERED AND THREATENED SPECIES BY STATE

COMMON NAME	SCIENTIFIC NAME	HABITAT	STATUS	STATE
Darter, snail	<i>Percina tanasi</i>	Sand and gravel shoals of moderately flowing, vegetated, large creeks	T	Tennessee
Fern, American hart's-tongue	<i>Asplenium scolopendrium</i> var. <i>americanum</i>	High humidity, deeply shaded conditions near limestone sinks and caves	T	Tennessee
Goldenrod, Blue Ridge	<i>Solidago spithamea</i>	Rocky places such as outcrops, ledges, cliffs, and balds	T	Tennessee
Madtom, yellowfin except where EXPN	<i>Noturus flavipinnis</i>	Medium-sized and large creeks and small rivers that are unpolluted, warm or warm to cool	T	Tennessee
Pocketbook, finelined	<i>Lampsilis altilis</i>	Creek, high gradient, low gradient, medium river, moderate gradient, riffle	T	Tennessee
Pogonia, small whorled	<i>Isotria medeoloides</i>	cidic soils, in dry to mesic second-growth	T	Tennessee
Potato-bean, Price's	<i>Apios priceana</i>	Open, rocky, wooded slopes and floodplain edges	T	Tennessee
Rosemary, Cumberland	<i>Conradina verticillata</i>	Sunlit gravel bars in the floodplain of major rivers and	T	Tennessee

		streams		
Shiner, blue	<i>Cyprinella caerulea</i>	Sand and gravel substrate among cobble in cool, clear water	T	Tennessee
Skullcap, large-flowered	<i>Scutellaria montana</i>	Rocky, well-drained, slightly acidic slope, ravine, and stream bottom forests	T	Tennessee
Snail, painted snake coiled forest	<i>Anguispira picta</i>	Crevices or under ledges of limestone	T	Tennessee
Spiraea, Virginia	<i>Spiraea virginiana</i>	Flood-scoured banks of high-gradient mountain streams, point bars, and natural levees	T	Tennessee

T - Threatened

E - Endangered

## 6.7 SENSITIVITY MAPS

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### **Colon Jct-River Rouge 10"**

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## 6.7 SENSITIVITY MAPS

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SECTION 7  
SUSTAINED RESPONSE ACTIONS

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7.1 Response Resources

7.1.1 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 Site Security Measures

Figure 7.2-1 - Site Security Checklist

7.3 Waste Management

Figure 7.3-1 - Waste Management Flow Chart

Figure 7.3-2 - General Waste Containment and Disposal  
Checklist

7.3.1 Storage

Figure 7.3-3 - Temporary Storage Methods

7.4 Public Affairs

Figure 7.4-1 - Media Incident Fact Sheet

## 7.1 RESPONSE RESOURCES

## 7.1.1 Response Equipment

CATEGORY	TYPE/MODEL	QUANTITY	SIZE	YEAR PURCHASED	OPERATIONAL STATUS	LOCATION AT FACILITY

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

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

\* USCG Classified OSRO

COMPANY/CONTRACTOR	EQUIPMENT	RESPONSE TIME
* Heritage Environmental Services, LLC Indianapolis, IN	Full Response Capabilities per U.S. Coast Guard Classification	hours
EQ Indianapolis, IN Indianapolis, IN	Full Response Capabilities (24-hour Spill Response, Level A, B, C Protection, Waste Transportation & Treatment, etc.)	0 hours
* Marine Spill Response Corporation (MSRC) Chattanooga, TN	Full Response Capabilities per U.S. Coast Guard Classification, including aerial tracking and dispersants	hours
Inland Industrial Services, LLC Detroit, MI	Full Response Capabilities (i.e., tankers, tractors, vacuum trucks, water blasters, etc.)	4 hours
* National Response Corporation (NRC) Bayou Labatre, AL	Full Response Capability per U.S. Coast Guard Classification	0 hours
Conestoga Rovers & Associates Niagara Falls, NY		4 hours
* Veolia Environmental Services Germantown, WI	Full Response Capabilities per U.S. Coast Guard Classification	2 hours
Antea Group (formerly Delta Environmental Services) Redmond, WA		4 hours
* Veolia Environmental Services Special Services, Inc. Schererville, IN	Full Response Capabilities per U.S. Coast Guard Classification	2 hours
Minnesota Limited Inc.		4 hours

Rogers, MN		
* Veolia Environmental Services East Chicago, IN	Full Response Capability per U.S. Coast Guard Classification	2 hours
Midwestern Contractors West Chicago, IL		4 hours
* Veolia Environmental Services New Lenox (South of Chicago), IL	Full Response Capability per U.S. Coast Guard Classification	2 hours
Pipelink Maintenance Brooklyn, IN		4 hours
* Heritage Environmental Services, LLC Toledo, OH	Full Response Capabilities per U.S. Coast Guard Classification	3 hours
INSERV Environmental Services South Bend, IN	Full Response Capabilities (i.e., vac tankers, trucks, tractor, sorbents, ppe, etc.)	4 hours
* Marine Pollution Control Corp Detroit, MI	Full Response Capabilities per U.S. Coast Guard Classification	4 hours
* Oil Mop Belle Chasse, LA	Full Response Capabilities per U.S. Coast Guard Classification	4 hours
* Clean Harbors Environmental Services Monee, IL	Full Response Capabilities per U.S. Coast Guard Classification	4 hours
* Heritage Environmental Services, Inc. Lemont, IL	Full Response Capabilities per U.S. Coast Guard Classification	4 hours

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

\* USCG Classified OSRO

COMPANY/CONTRACTOR	EQUIPMENT	RESPONSE TIME
* Clean Harbors Environmental Services, Inc. Sterling Heights, MI	Full Response Capabilities per U.S. Coast Guard Classification	4 hours

### 7.1.2 Response Equipment Inspection and Maintenance

Company response resources consist of strategically located response trailers containing primarily safety and emergency response equipment.

In general, one or more trailers can be mobilized to any location along the pipeline within six to 12 hours to meet the federal Tier 1 response planning requirements. Vacuum truck

contractors can also respond to most locations along the pipeline system within six hours and regional response contractors can respond to any location within 30 to 36 hours to meet the Tier 2 and Tier 3 response requirements.

Company response equipment is tested and inspected as noted below. The Manager of Operations is responsible for ensuring that the following response equipment and testing procedures are implemented. These consist of:

**Containment boom** During semiannual boom deployment exercises, boom will be inspected for signs of structural deficiencies. If tears in fabric or rotting is observed, boom will be repaired or replaced. In addition, end connectors will be inspected for evidence of corrosion. If severe corrosion is detected, equipment will be repaired or replaced.

**Miscellaneous equipment** Other response equipment identified in this Plan will be inventoried and tested on a semiannual basis to ensure that the stated quantities are in inventory and in proper working order. The equipment inspection and deployment exercises are recorded and maintained at the facility and retained for a period of five years. Exercise requirements are listed in **APPENDIX A**. An Emergency Response or Drill 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 **SECTION 3**.
- 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.
- **APPENDIX B** contains evidence of contracts for the Company's primary response contractors.

### 7.1.4 Command Post

In the event of a major spill, both an off-site Emergency Operations Center (EOC) and a Unified Command Post would be established. For a minor spill, only a Command Post would 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.			

### 7.1.5 Staging Area

In a major spill response, numerous staging areas may be required to support containment and clean-up operations.

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, and
- Have moorage available for vessels to aid the loading/offloading of personnel.

### 7.1.6 Communications Plan

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

- Telephones - Land: 70
- Telephones - Mobile: 60
- Telephones - Satellite: 3
- Fax Machines: 25

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

Additional communications equipment (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 set up communications.

It is the responsibility of the Qualified Individual to provide an adequate communications system.

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**

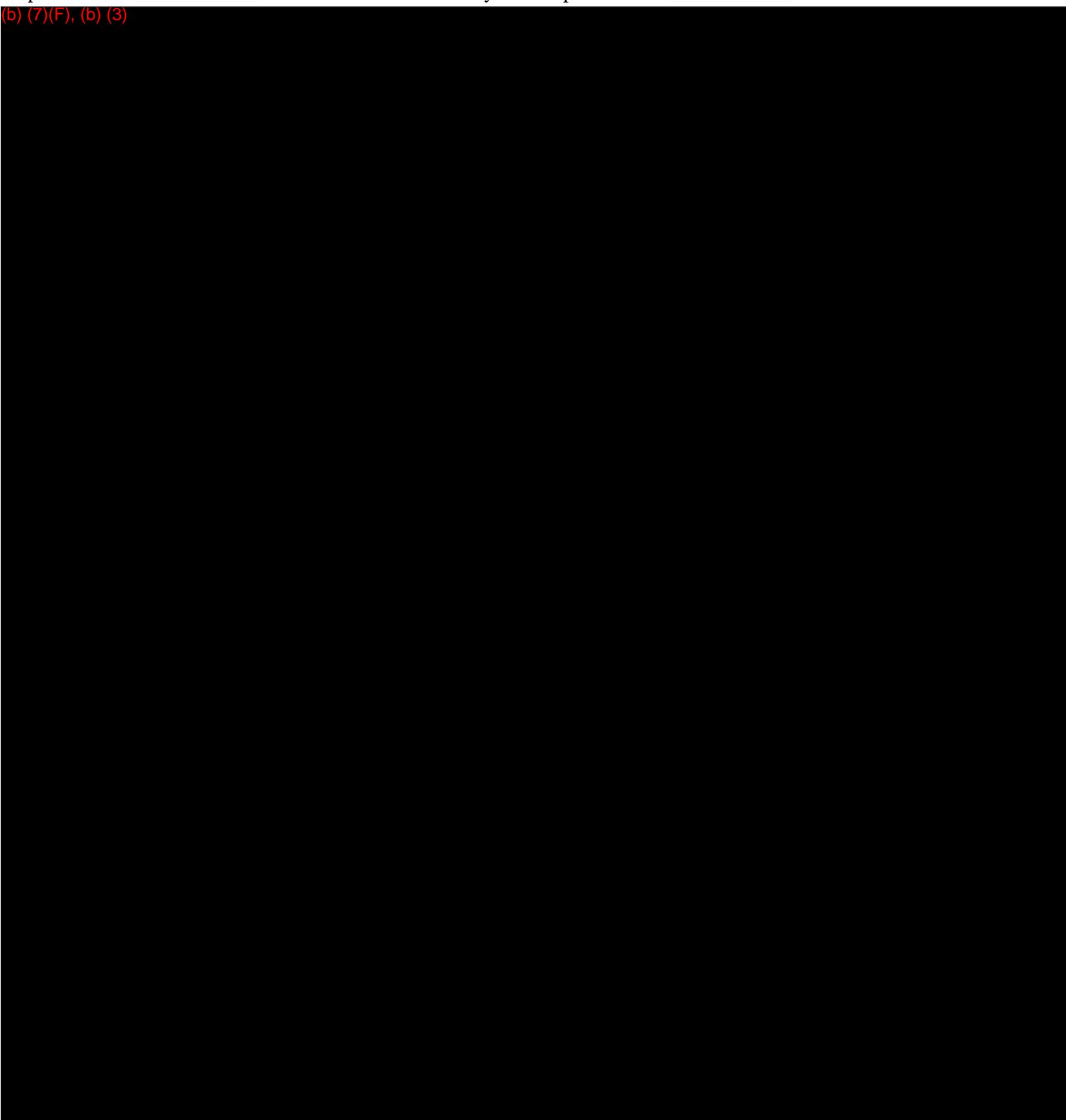
COMMUNICATIONS CHECKLIST	INITIALS	DATE/TIME STARTED	DATE/TIME COMPLETED
Develop a Communications Plan.			
Ensure adequate phone lines per staff element - contact local provider.			
Ensure adequate fax lines - contact local provider.			
Internet access necessary?			
Ensure recharging stations for cellular phones.			
VHF radio communications: <ul style="list-style-type: none"> <li>• Establish frequencies</li> <li>• Assign call signs</li> <li>• Distribute radios</li> <li>• Establish communications schedule</li> </ul>			
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 SITE SECURITY MEASURES

Due to the large amount of public attention created at an oil spill site, additional security measures are required. Several measures should be planned in advance to prepare security personnel for possible events that may occur at the spill site. A checklist for site security is provided in **FIGURE 7.2-1**. A model Incident Security Plan is provided in **SECTION 5.6**.

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



### 7.3 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 5.3**) addressing the proper PPE and waste handling procedures.
- Development of a Disposal Plan (**SECTION 5.5**) in accordance with any federal, state, and/or local regulations.
- 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, and
- Treating waste to reduce hazards or reducing amount of waste generated.

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,
- Minimization of environmental impacts,

### 7.3 WASTE MANAGEMENT, CONTINUED

- Proper disposal, and
- Minimization of present and future environmental liability.

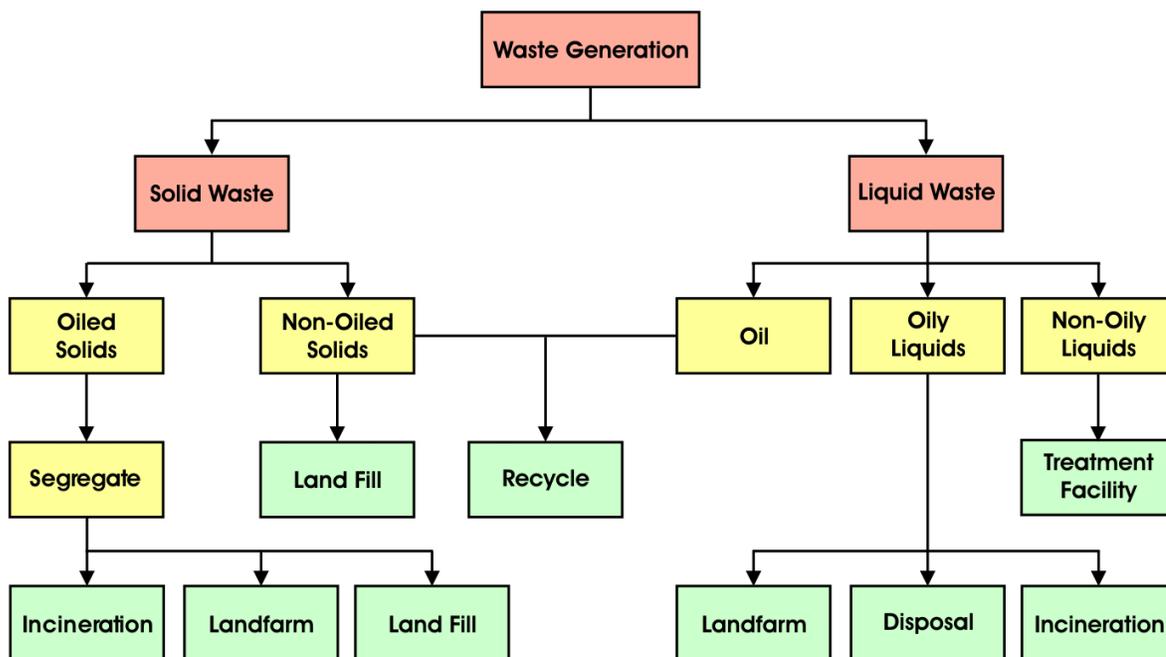
Solid wastes, such as sorbents, PPE, debris, and equipment, will typically be transported from the collection site to a designated facility for:

- Storage,
- Waste segregation,
- Packaging, and
- 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 7.3-1**. An overall checklist for containment and disposal is provided in **FIGURE 7.3-2**.

**FIGURE 7.3-1 - WASTE MANAGEMENT FLOW CHART**



**FIGURE 7.3-2 - 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?	

### 7.3.1 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 7.3-3**. 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.

**FIGURE 7.3-3 - 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 <sup>3</sup>
Bags		X	X	X			1.0-2.0 yd <sup>3</sup>
Boxes		X	X	X			1-5 yd <sup>3</sup>
Open top rolloff	X	X	X	X	X	X	8-40 yd <sup>3</sup>

Roll top rolloff	X	X	X	X	X	X	15-25 yd <sup>3</sup>
Vacuum box	X	X					15-25 yd <sup>3</sup>
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 <sup>3</sup>
Bladders	X	X					25-1,500 gal

## 7.4 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
- Media Incident Fact Sheet (**FIGURE 7.4-1**)

## 7.4 PUBLIC AFFAIRS, CONTINUED

### GUIDELINES FOR DEALING WITH THE MEDIA

- You as a Company Manager are the most logical person for reporters to 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.

#### Provide

- A brief, general description of what happened and
- 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,
- Number of injured or killed, if known, or
- 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.
- 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.
- 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 for him - then do it.
- Don't be defensive.

## **7.4 PUBLIC AFFAIRS, CONTINUED**

### **Other considerations, continued:**

- 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 7.4-1 - MEDIA INCIDENT FACT SHEET

What occurred:
When (time):
Where (location):
What are hazards:
How is the situation being handled:
What agencies have been notified: <b>All necessary agencies have been notified.</b>
Has outside help been requested: <b>All necessary assistance has been requested.</b>
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: <b>All appropriate actions to protect the environment are being taken.</b>
Is there a need for evacuation:

SECTION 8  
DEMOBILIZATION / POST-INCIDENT REVIEW

Last revised: July 2008

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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 - Emergency Response or Drill 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 5.7**). 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.				
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### 8.3 POST-INCIDENT REVIEW

All facility personnel involved in the incident shall be debriefed (by the Company) within 24 hours after termination of operations. 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 also should 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. An Emergency Response or Drill Form is provided in **FIGURE 8.3-1**. Results of the review are forwarded to the Company within 90 days following completion of response and cleanup procedures.

#### FIGURE 8.3-1 - EMERGENCY RESPONSE OR DRILL FORM

EXERCISE?????????  ACTUAL EVENT

Date & Time Convened:

1. Operations Director reviews facts of incident.

(Type, Group Security (Terrorist Act?), Safety, Surroundings, Commodity, Volume Spilled (if spill), Weather)

Obtain topographical map of area from engineering.

Actions Taken:

Level:???????? ???? 1????? 2????? 3

2. Is there anything that must be done prior to adjournment?

3. Who is on the scene?? (Company reps, others, i.e., fire, police, ambulance)

Who is the incident commander?

Phone Numbers:

Where is the command post?

Phone Numbers:

Who is BST Liaison with Incident Command?

Phone Numbers:

Request BST be included by speakerphone during EOC Unified Command meetings

Central Business District

Page 8 - 6

#### FIGURE 8.3-1 - EMERGENCY RESPONSE OR DRILL FORM, CONTINUED

4. Is there a need to contact the Incident Management Teams?

Contact:      a.? IMT?????? \_\_\_\_\_  
                  b.? BART?? \_\_\_\_\_

5. Who (if anyone) has already been dispatched to the scene from Lisle/Chicago?

6. Who else should go to the scene ASAP?

7. Does an all-BP number need to be set up for notification purposes?

8. Next meeting at?

Central Business District

Page 8 - 7

#### 8.3.1 Final Spill Cleanup Report

A final, comprehensive report shall be prepared by the Incident Commander or his designee 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):

- 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;
- Description of damage to the environment;
- Steps taken to clean up the spilled oil along with dates and times steps were taken;
- The equipment used to remove the spilled oil, dates, and number of hours equipment was used;
- The number of persons employed in the removal of oil from each location, including their identity, employer, and the number of hours worked at that location;
- Actions by the Company or contractors to mitigate damage to the environment;
- Measures taken by the Company or contractors to prevent future spills;
- The federal and state agencies to which the Company or contractors reported the discharge; show the agency, its location, the date and time of notification, and the official contacted;
- Description of the effectiveness of equipment and cleanup techniques and recommendations for improvement;
- The names, addresses, and titles of people who played a 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; and
- All other relative information.

# APPENDICES

## A. TRAINING / EXERCISES

## B. CONTRACTOR RESPONSE EQUIPMENT

## C. HAZARD EVALUATION AND RISK ANALYSIS

## D. CROSS-REFERENCES

## E. ACRONYMS AND DEFINITIONS

## F. ADDITIONAL INFORMATION



**APPENDIX A**  
**TRAINING / EXERCISES**

Last revised: July 2008

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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 - Emergency Response or Drill Form

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 local Manager/Team Leader is responsible for the following aspects:
  - Adherence to BU's training/exercise program,
  - Scheduling,
  - Assignment of ICS (Incident Command System) roles,
  - Post-drill evaluation/debrief/improvements, and
  - Maintenance of records (documentation).
- **FIGURE A.1-2** provides descriptions of exercise requirements, **FIGURE A.1-3** provides an Emergency Response or Drill Form.

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"> <li>• Unified Command</li> <li>• Response management system</li> </ul>	<p>Demonstrate the ability of the spill response organization to work within a unified command.</p> <p>Demonstrate the ability of the response organization to operate within the framework of the response management system identified in their respective plans.</p>
4. Discharge control	Demonstrate the ability of the spill response organization to control and stop the discharge at the source.
5. Assessment	Demonstrate the ability of the spill response organization to provide initial assessment of the discharge and provide continuing assessments of the effectiveness of the tactical operations.
6. Containment	Demonstrate the ability of the spill response organization to contain the discharge at the source or in various locations for recovery operations.
7. Recovery	Demonstrate the ability of the spill response organization to recover the discharged product.

8. Protection	Demonstrate the ability of the spill response organization to protect the environmentally and economically sensitive areas identified in the ACP and the respective industry response plan.
9. Disposal	Demonstrate the ability of the spill response organization to dispose of the recovered material and contaminated debris.
10. Communications	Demonstrate the ability to establish an effective communications system for the spill response organization.
11. Transportation	Demonstrate the ability to establish multi-mode transportation both for execution of the discharge and support functions.
12. Personnel support	Demonstrate the ability to provide the necessary support of all personnel associated with response.
13. Equipment maintenance and support	Demonstrate the ability to maintain and support all equipment associated with the response.
14. Procurement	Demonstrate the ability to establish and effective procurement system.
15. Documentation	Demonstrate the ability of the spill response organization to document all operational and support aspects of the response and provide detailed records of decisions and actions taken.

FIGURE A.1-2 - EXERCISE REQUIREMENTS

EXERCISE TYPE	EXERCISE CHARACTERISTICS
Facility/QI notification	<ul style="list-style-type: none"> <li>• Conducted quarterly.</li> <li>• Facility or District initiates mock spill notification to QI.</li> <li>• Facility or District documents time/date of notification, name, and phone number of individual contacted.</li> <li>• Use PREP Exercise Documentation Form in Forms section.</li> </ul>
Equipment deployment	<ul style="list-style-type: none"> <li>• Conducted semiannually if Company owns equipment. (e.g. boat, boom, skimmer, <u>not</u> absorbents)</li> <li>• Response contractors listed in the plan must participate in annual deployment exercise.</li> <li>• Use PREP Exercise Documentation Form in Forms section</li> </ul>
Facility Response Team tabletop	<ul style="list-style-type: none"> <li>• Conducted annually.</li> <li>• Tests team's response activities/responsibilities.</li> <li>• Notify the appropriate agencies.</li> <li>• Documents Plan's effectiveness.</li> <li>• Must exercise worst case discharge scenario once every three years.</li> </ul>

	<p>Must test all Plan components at least once every three years.</p> <ul style="list-style-type: none"> <li>• Use PREP Exercise Documentation Form in Forms section.</li> </ul>
Unannounced	<ul style="list-style-type: none"> <li>• Company will either participate in unannounced tabletop exercise or equipment deployment exercise on an annual basis, if selected.</li> <li>• Company may take credit for participation in government initiated unannounced drill in lieu of drill required by PREP guidelines.</li> <li>• 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 if the Company passes the exercise.</li> </ul>
Area	<ul style="list-style-type: none"> <li>• 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 if the Company passes the exercise.</li> </ul>
<b>OTHER EXERCISE CONSIDERATIONS</b>	
Drill program evaluation procedures	<ul style="list-style-type: none"> <li>• Company conducts post-exercise meetings to discuss positive items, areas for improvement, and to develop action item checklist to be implemented later.</li> </ul>
Records of drills	<ul style="list-style-type: none"> <li>• Company will maintain exercise records for five years following completion of each exercise.</li> <li>• Records will be made available to applicable agencies upon request.</li> <li>• 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.).</li> </ul>

**FIGURE A.1-3 - EMERGENCY RESPONSE OR DRILL FORM**

**Three Year Oil Pollution Act of 1990 Drill Log**

**Facility Name:** \_\_\_\_\_

**Location:** \_\_\_\_\_

	<b>Document Completed Drills with Drill Date and</b>
--	--

Drill Type	Initials		
	Year _____	Year _____	Year _____
<b>QI Notification Drill</b>			
1st Qtr			
2nd Qtr			
3rd Qtr			
4th Qtr			
<b>Annual PREP Tabletop Exercise (indicate scenario type: Small, Medium or Worst Case)</b>			
<b>Agency/OSRO Telephone Notification Drill</b>			
1st Half of Year			
2nd Half of Year			
<b>Facility Owned Equipment Deployment</b>			
1st Half of Year			
2nd Half of Year			
<b>Unannounced Drill</b>			
<b>Contractor Owned Equipment Deployment (obtain documentation annually)</b>			
<b>Agency Unannounced Drill (As requested)</b>			
<b>Area Exercise (As requested)</b>			

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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 a 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"> <li>All field personnel will be trained to properly report/monitor spills.</li> <li>Plan will be reviewed annually with all employees and contract personnel.</li> <li>The Personnel Response Training Log is located in <b>FIGURE A.2-3</b>.</li> </ul>
OSHA training requirements	<ul style="list-style-type: none"> <li>All Company responders designated in Plan must have 24 hours of initial spill response training.</li> <li>Laborers having potential for minimal exposure must have 24 hours of initial oil spill response instruction and eight hours of actual field experience.</li> <li>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.</li> <li>On-site management/supervisors required to receive same training as equipment operators/general laborers plus eight hours of specialized hazardous waste management training.</li> <li>Managers/employees require eight hours of annual refresher training.</li> </ul>
Incident Management Team personnel training	<ul style="list-style-type: none"> <li>See recommended PREP Training Program Matrix (<b>FIGURE A.2-2</b>).</li> </ul>
Training for casual laborers or volunteers	<ul style="list-style-type: none"> <li>Company will not use casual laborers/volunteers for operations requiring HAZWOPER training.</li> </ul>
Wildlife	<ul style="list-style-type: none"> <li>Only trained personnel approved by USFWS and appropriate state agency will be used to treat oiled wildlife.</li> </ul>
Training documentation and record maintenance	<ul style="list-style-type: none"> <li>Training activity records will be retained five years for all personnel following completion of training.</li> <li>Company will retain training records indefinitely for individuals assigned specific duties in the Plan.</li> <li>Training records will be retained at each facility or pipeline office; Supervisor/Area Manager will document all applicable training.</li> </ul>

FIGURE A.2-2 - PREP TRAINING PROGRAM MATRIX

TRAINING ELEMENT	QUALIFIED INDIVIDUAL (QI)	INCIDENT MANAGEMENT TEAM (IMT)	PIPELINE 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 OSRO's to respond small, medium, and large discharges	X	X	X
Responsibilities and authority of the Qualified Individual (QI) as described in the Spill Response Plan and Company response organization	X	X	X
The organization structure that will be used to manage the response actions including: <ul style="list-style-type: none"> <li>• Command and control</li> <li>• Public information</li> <li>• Safety</li> <li>• Liaison with government agencies</li> <li>• Spill response operations</li> <li>• Planning</li> <li>• Logistics support</li> <li>• Finance</li> </ul>	X	X	X

The responsibilities and duties of each Incident Management Team (IMT) within the organization structure	X	X	
The drill and exercise program to meet federal and state regulations as required under Oil Pollution Act of 1990 (OPA 90)	X	X	X
The role of the QI in the post discharge review of the Plan to evaluate and validate its effectiveness	X		

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

TRAINING ELEMENT	QUALIFIED INDIVIDUAL (QI)	INCIDENT MANAGEMENT TEAM (IMT)	PIPELINE PERSONNEL
The Area Contingency Plan (ACP) for the area in which the facility is located	X	X	X
The National Contingency Plan (NCP)	X	X	X
Roles and responsibilities of federal and state agencies in pollution response	X	X	X
Available response resources identified in the Plan	X	X	
Contracting and ordering procedures to acquire OSRO resources identified in the Plan	X	X	
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 IMT		X	
Procedures for the post discharge review of the plan to evaluate and validate its effectiveness		X	
Basic information on spill operations and oil spill clean-up technology including: <ul style="list-style-type: none"> <li>Oil containment</li> <li>Oil recovery methods and devices</li> <li>Equipment limitations and uses</li> <li>Shoreline cleanup and protection</li> </ul>		X	

<ul style="list-style-type: none"> <li>• Spill trajectory analysis</li> <li>• Use of dispersants, in-situ burning, bioremediation</li> <li>• Waste storage and disposal considerations</li> </ul>			
Hazard recognition and evaluation		X	
Site safety and security procedures		X	
Personnel management, as applicable to designated job responsibilities		X	

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

TRAINING ELEMENT	QUALIFIED INDIVIDUAL (QI)	INCIDENT MANAGEMENT TEAM (IMT)	PIPELINE PERSONNEL
Procedures for directing the deployment and use of spill response equipment, as applicable to designated job responsibilities		X	X
Specific procedures to shut down effected operations			X
Procedures to follow in the event of discharge, potential discharge, or emergency involving the following equipment or scenarios: <ul style="list-style-type: none"> <li>• Tank overfill</li> <li>• Tank rupture</li> <li>• Piping or pipeline rupture</li> <li>• Piping or pipeline leak, both under pressure or not under pressure, if applicable</li> <li>• Explosion or fire</li> <li>• Equipment failure</li> <li>• Failure of secondary containment system</li> </ul>			X
QI's name and how to contact him or her			X

**FIGURE A.2-3 - PERSONNEL RESPONSE TRAINING LOG**

NAME	RESPONSE TRAINING/DATE AND NUMBER OF HOURS	PREVENTION TRAINING/DATE AND NUMBER OF HOURS
Thomas Antenucci	24 hr training	

Note: Records are maintained on-site. See VTA, for training history. Refer to **APPENDIX F** for additional information.

**APPENDIX B**  
**CONTRACTOR RESPONSE EQUIPMENT**

Last revised: March 2012

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B.1 Cooperatives and Contractors

B.1.1 OSRO Classification

Figure B.1-1 - Evidence of Contracts

**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. Evidence of contracts and equipment lists are included in **FIGURE B.1-1**.

**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 within this Zone that may respond to incidents at this Facility in this Plan. For a detailed listing of USCG classified OSROs and other contractors, refer to **FIGURE 3.1-4** and **FIGURE 7.1-1**.

COMPANY / CONTRACTOR	APPLICABLE COPT ZONE (S)	USCG CLASSIFICATIONS								RESPONSE TIME		
			Facilities				Vessels					
			MM	W1	W2	W3	MM	W1	W2	W3		
Heritage Environmental Services, LLC 7901 W. Morris St. Indianapolis IN 46231	Chicago	River/Canal	✓	✓	✓	✓	✓	✓	✓	✓	hours	
		Inland	✓				✓					
		Open Ocean										
		Offshore										
		Nearshore										
		Great Lakes						✓				
Marine Spill Response Corporation (MSRC)  Chattanooga TN	Paducah	River/Canal	✓	✓	✓	✓	✓	✓	✓	✓	hours	
		Inland	✓	✓	✓	✓	✓	✓	✓	✓		
		Open Ocean			✓	✓	✓	✓	✓	✓		
		Offshore			✓	✓	✓	✓	✓	✓		
		Nearshore			✓	✓	✓	✓	✓	✓		
		Great Lakes										
National Response Corporation (NRC)  Bayou Labatre AL	Lower Mississippi	River/Canal	✓	✓	✓	✓	✓	✓	✓	✓	0 hours	
		Inland	✓	✓	✓	✓	✓	✓	✓	✓		
		Open Ocean	✓		✓	✓	✓	✓	✓	✓		
		Offshore	✓		✓	✓	✓	✓	✓	✓		
		Nearshore	✓		✓	✓	✓	✓	✓	✓		
		Great Lakes										

		Great Lakes									
Veolia Environmental Services N104 W1325 Donges Bay Road Germantown WI 53022	Chicago		Facilities				Vessels				2 hours
			MM	W1	W2	W3	MM	W1	W2	W3	
		River/Canal	✓	✓	✓	✓	✓	✓	✓	✓	
		Inland	✓		✓	✓	✓		✓	✓	
		Open Ocean									
		Offshore									
		Nearshore									
		Great Lakes	✓	✓	✓	✓	✓	✓	✓	✓	

**Central Business District** **Page B - 3**

COMPANY / CONTRACTOR	APPLICABLE COPT ZONE (S)	USCG CLASSIFICATIONS								RESPONSE TIME	
Veolia Environmental Services Special Services, Inc. P.O. Box 729, 500 Kennedy Ave. Scherverville IN 49375	Chicago		Facilities				Vessels				2 hours
			MM	W1	W2	W3	MM	W1	W2	W3	
		River/Canal	✓	✓	✓	✓	✓	✓	✓	✓	
		Inland	✓		✓	✓	✓		✓	✓	
		Open Ocean									
		Offshore									
		Nearshore									
		Great Lakes	✓	✓	✓	✓	✓	✓	✓	✓	
Veolia Environmental Services 5137 Indianapolis Blvd. East Chicago IN 46312	Chicago		Facilities				Vessels				2 hours
			MM	W1	W2	W3	MM	W1	W2	W3	
		River/Canal	✓	✓	✓	✓	✓	✓	✓	✓	
		Inland	✓		✓	✓	✓		✓	✓	
		Open Ocean									
		Offshore									
		Nearshore									
		Great Lakes	✓	✓	✓	✓	✓	✓	✓	✓	
Veolia Environmental Services 106 Ford Drive New Lenox (South of Chicago) IL 60451	Chicago		Facilities				Vessels				2 hours
			MM	W1	W2	W3	MM	W1	W2	W3	
		River/Canal	✓	✓	✓	✓	✓	✓	✓	✓	
		Inland	✓		✓	✓	✓		✓	✓	
		Open Ocean									
		Offshore									
		Nearshore									
		Great	✓	✓	✓	✓	✓	✓	✓	✓	

		Lakes									
Heritage Environmental Services, LLC 5451 Enterprise Blvd. Toledo OH 43612	Toledo		Facilities				Vessels				3 hours
			MM	W1	W2	W3	MM	W1	W2	W3	
		River/Canal	✓	✓	✓	✓	✓	✓	✓	✓	
		Inland					✓				
		Open Ocean									
		Offshore									
		Nearshore									
		Great Lakes									

**Central Business District** **Page B - 4**

COMPANY / CONTRACTOR	APPLICABLE COPT ZONE (S)	USCG CLASSIFICATIONS								RESPONSE TIME	
Marine Pollution Control Corp 8631 W. Jefferson Detroit MI 48209	Chicago		Facilities				Vessels				4 hours
			MM	W1	W2	W3	MM	W1	W2	W3	
		River/Canal	✓	✓	✓	✓	✓	✓	✓	✓	
		Inland	✓	✓	✓	✓	✓	✓	✓	✓	
		Open Ocean									
		Offshore									
		Nearshore									
		Great Lakes		✓	✓	✓	✓	✓	✓	✓	
Oil Mop 131 Keating Dr Belle Chasse LA 70037	Chicago		Facilities				Vessels				4 hours
			MM	W1	W2	W3	MM	W1	W2	W3	
		River/Canal	✓	✓	✓	✓	✓	✓	✓	✓	
		Inland	✓		✓	✓	✓		✓	✓	
		Open Ocean									
		Offshore									
		Nearshore									
		Great Lakes			✓	✓	✓		✓	✓	
Clean Harbors Environmental Services 11800 South Stony Island Avenue Monee IL 60617	Chicago		Facilities				Vessels				4 hours
			MM	W1	W2	W3	MM	W1	W2	W3	
		River/Canal	✓	✓	✓	✓	✓	✓	✓	✓	
		Inland	✓		✓	✓	✓	✓	✓	✓	
		Open Ocean									
		Offshore									
		Nearshore									
		Great Lakes			✓	✓	✓		✓	✓	

Heritage Environmental Services, Inc. 15330 Canal Bank Rd Lemont IL 60439	Ohio Valley		Facilities				Vessels				4 hours
			MM	W1	W2	W3	MM	W1	W2	W3	
		River/Canal	✓	✓	✓	✓	✓	✓	✓	✓	
		Inland	✓				✓				
		Open Ocean									
		Offshore									
		Nearshore									
		Great Lakes									

COMPANY / CONTRACTOR	APPLICABLE COPT ZONE (S)	USCG CLASSIFICATIONS								RESPONSE TIME	
Clean Harbors Environmental Services, Inc. 6414 Product Drive Sterling Heights MI 48312	Detroit		Facilities				Vessels				4 hours
			MM	W1	W2	W3	MM	W1	W2	W3	
		River/Canal	✓	✓	✓	✓	✓	✓	✓	✓	
		Inland	✓		✓	✓	✓	✓	✓	✓	
		Open Ocean									
		Offshore									
		Nearshore									
		Great Lakes			✓	✓	✓	✓	✓	✓	

B.1.1 OSRO Classification, Continued

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

- o EQ Indianapolis, IN  
2650 N. Shadeland  
Indianapolis, IN  
46219  
Response Time: 0
- o Inland Industrial Services, LLC  
2021 S. Schaefer Hwy  
Detroit, MI  
48217  
Response Time: 4
- o Conestoga Rovers & Associates  
2055 Niagara Falls Blvd, Ste 3  
Niagara Falls, NY  
14304

Response Time: 4

- o Antea Group (formerly Delta Environmental Services)  
4006 148th Ave NE  
Redmond,WA  
98052  
Response Time: 4
- o Minnesota Limited Inc.  
14485 Northdale Blvd  
Rogers,MN  
55374  
Response Time: 4
- o Midwestern Contractors  
245 W. Roosevelt Rd, Bldg 15, Ste 115  
West Chicago,IL  
60185  
Response Time: 4
- o PipeliInk Maintenance  
PO Box 99  
Brooklyn,IN  
46111  
Response Time: 4

Equipment lists and evidence of contract for all of the above contractors are maintained at the Houston, TX office and are available upon request. **FIGURE 7.1-1** provides local response contractor's equipment lists and response times.

#### B.1.1 OSRO Classification, Continued

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

- o INSERV Environmental Services  
P.O. Box 1822  
South Bend,IN  
46634  
Response Time: 4

Equipment lists and evidence of contract for all of the above contractors are maintained at the Houston, TX office and are available upon request. **FIGURE 7.1-1** provides local response contractor's equipment lists and response times.

#### FIGURE B.1-1 - EVIDENCE OF CONTRACTS

(All contracts are evergreen and therefore do not expire.)

- Antea Group (formerly Delta Environmental Services), Redmond,

WA

- Clean Harbors Environmental Services, Monee, IL
- Clean Harbors Environmental Services, Inc., Sterling Heights, MI
- Conestoga Rovers & Associates, Niagara Falls, NY
- EQ Indianapolis, IN, Indianapolis, IN
- Heritage Environmental Services, Inc., Lemont, IL
- Heritage Environmental Services, LLC, Indianapolis, IN
- Heritage Environmental Services, LLC, Toledo, OH
- Inland Industrial Services, LLC, Detroit, MI
- INSERV Environmental Services, South Bend, IN
- Marine Pollution Control Corp, Detroit, MI
- Marine Spill Response Corporation (MSRC) , Chattanooga, TN
- Midwestern Contractors, West Chicago, IL
- Minnesota Limited Inc., Rogers, MN
- National Response Corporation (NRC), Bayou Labatre, AL
- Oil Mop, Belle Chasse, LA
- Pipelilnk Maintenance, Brooklyn, IN
- Veolia Environmental Services, East Chicago, IN
- Veolia Environmental Services, New Lenox (South of Chicago), IL
- Veolia Environmental Services, Germantown, WI
- Veolia Environmental Services Special Services, Inc., Schererville, IN

**APPENDIX C**

Last revised: October 2013

**HAZARD EVALUATION AND RISK ANALYSIS**

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**C.1 Spill Detection/Prevention****C.1.1 Spill Detection****C.1.2 Spill Prevention****C.1.3 Public Awareness Program****C.2 Worst Case Discharge Scenario****C.3 Planning Volume Calculations****C.4 Spill Volume Calculations****C.5 Pipeline - Abnormal Conditions****C.6 Product Characteristics and Hazards****Figure C.6-1- Summary of Commodity Characteristics**

## C.1 SPILL DETECTION/PREVENTION

### C.1.1 Spill Detection

#### Detection

Detection of a discharge from the Company system may occur in a number of ways including:

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

#### **AVAILABILITY - ALL TANKS**

#### **Automated detection**

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



### **C.1.1 Spill Detection, Continued**

#### **Visual detection by Company personnel**

Aerial patrol flights will be made 26 times a year not to exceed 21 days apart. If unable to fly area personnel will walk or drive the right-of-way. 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 also is monitored.

Discharges to the land or surface waters also may be detected by Company personnel during regular operations and inspections. Should a leak be 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** provides a checklist for initial response actions.

### **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. 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 Pipeline Control and region/designated office.
- Dispatch Company field personnel to the site to confirm discharge and conduct preliminary assessment.
- Notify their immediate supervisor and provide assessment results.

### **Pipeline shutdown**

If any of these situations are outside the expected values, abnormal conditions are considered to exist. If abnormal conditions exist, Pipeline Control will take the appropriate actions to ensure that a release does not occur. In either case, appropriate actions taken by Company personnel could include, but are not limited to:

- Shut down effected line segment if there is an indication of a leak
- Isolate line segment
- Depressurize line
- Start internal and external notifications
- Mobilize additional personnel as required

### **C.1.2 Spill Prevention**

Programs designed to prevent emergencies include:

- Corrosion control programs
- Preventative maintenance programs
- Controller training programs

- Operator training programs
- 24 hour emergency telephone numbers
- Supervisory control and data acquisition (SCADA) systems
- Pipeline inspection programs
- Emergency response drills
- Maintaining containment systems around tankage
- Membership in one-call organizations
- Public awareness programs
- Pipeline markers

The purpose of these programs is to prevent or mitigate a potential release and subsequent emergency response.

### **C.1.3 Public Awareness Program**

It is BP Pipelines (North America), Inc.'s policy to maintain an active role in helping to prevent emergencies and consequently lessen the resulting damage. The following programs are in place to help reduce the possibility of an emergency involving a third party, which is in most cases the public. The responsibility for implementing these programs belongs to both the local operations and Maintenance Team Leaders and the Tulsa,OK support group.

**One-Call Systems** - BP Pipelines (North America), Inc. participates in all applicable one call systems. A one call system is established, usually on a state wide basis, to prevent excavation damage (and subsequent releases) to underground facilities. An excavator, prior to digging, informs the one call operator of the location of the excavation and the one call system, in turn, notifies the owners and operators of underground facilities located within the area of the excavations. The underground facilities are then field located and staked to prevent excavation damage.

**Signs** - BP Pipelines (North America), Inc. maintains pipeline markers along the route of the pipeline, at pump stations, terminals, pipeline junctions, river crossings and road crossings. The pipeline markers are visible to the public and contain information about the type of pipeline, operator and emergency phone numbers.

**Maps** - Pipeline maps are forwarded to developers, local governmental agencies and other interested parties upon request.

**Right-Of-Way Clearing** - BP Pipelines (North America), Inc. has a policy of continuously identifying and clearing the right-of-way (ROW) of the pipeline. This not only helps maintain the pipeline but improves the public's awareness and helps locate the pipelines in emergency situations.

**Public Meetings** - BP Pipelines (North America), Inc. is a member of the Pipeliner's

Association and periodically meets with local fire, police, and emergency response groups to inform them about the pipelines and the products shipped.

Air Patrol - The pipeline systems are inspected by aerial patrol at least 26 times each year at intervals that do not exceed three (3) weeks. These aerial patrols are performed for the purposes of locating construction over or near the pipeline, locating encroachments, and identifying areas where a spill or release may have occurred.

## C.2 WORST CASE DISCHARGE SCENARIO

The equipment and personnel to respond to a spill are available from several sources and are provided with the equipment and contractors in **SECTION 7** and **APPENDIX B**. The following sections are discussions of these scenarios.

**APPENDIX C.4** provides worst case discharge calculations. Discussion of this scenario is as follows:

Upon discovery of a spill, the following procedures would be followed:

1. The First Responder would notify the Pipeline Control and notifications would be initiated in accordance with **FIGURE 2-1**. Pipeline Control will contact the Qualified Individual.
2. The Qualified Individual 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** and evacuate personnel as needed in accordance with **SECTION 2**
  - Direct pipeline responders to shut down ignition sources
  - Direct pipeline personnel to position resources in accordance with **SECTION 2.1**
  - Complete Preliminary Incident Report Form in accordance with **SECTION 3**
  - Ensure regulatory agencies are notified
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** as a reminder of issues to address. The primary focus would be to establish incident priorities and objectives and to brief staff accordingly.

6. The Incident Management Team would develop the following plans, as appropriate (some of these plans may not be required during a small or medium spill):

- Site Safety and Health
- Incident Action
- Disposal
- Site Security

## C.2 WORST CASE DISCHARGE SCENARIO, CONTINUED

- Decontamination
- Demobilization

Plan templates are included in **SECTION 5**.

The response would continue until an appropriate level of cleanup is obtained.

## C.3 PLANNING VOLUME CALCULATIONS

Once the worst case discharge volume has been calculated, response resources must be identified to meet the requirements of 49 CFR 194.105(b). Calculations to determine sufficient amount of response equipment necessary to respond to a worst case discharge is described below. A demonstration of the planning volume calculations is provided below.

## C.4 SPILL VOLUME CALCULATIONS

DOT/PHMSA portion of pipeline/facilities

The worst case discharge (WCD) for the DOT portion of the pipeline and facilities, 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.**

**C.4 SPILL VOLUME CALCULATIONS, 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.

If applicable, 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 50% per the company guidelines.

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.

LOCATION	VOLUME (BBLS)

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

Central Business District

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#### C.4 SPILL VOLUME CALCULATIONS, CONTINUED

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

Central Business District

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#### C.5 PIPELINE - ABNORMAL CONDITIONS

Because PHMSA considers the "substantial threat" term in 49 CFR Part 194.115(a) equivalent to the "abnormal conditions" term under 49 CFR Part 195.402(d), procedures to identify events and conditions that can pose a threat of worst case discharge, and actions to take for preventing and mitigating such events and conditions are described in the System Integrity Plan.

#### C.6 PRODUCT CHARACTERISTICS AND HAZARDS

Pipeline systems described in this plan may transport various types of commodities, including, but not limited to:

- Gasoline
- Natural Gas Liquids
- Diesel Fuel / Distillate
- Butane

- Jet Fuel
- Xylene

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 obtained by the facility via fax from the MSDS Hotline (**FIGURE 3.1-4**). Telephone information concerning the potential hazards can also be obtained from the hotline.

**FIGURE C.6-1** describes primary oils handled.

**FIGURE C.6-1 - SUMMARY OF COMMODITY CHARACTERISTICS**

COMMON NAME	MSDS NAME	HEALTH HAZARD	FLASH POINT	SPECIAL HAZARD	REACTIVITY	HEALTH HAZARD WARNING STATEMENT
Gasoline	RFG Unleaded Gasoline	1	3	C	0	Contains benzene, a chemical known to cause cancer in humans. Repeated and prolonged overexposure to benzene vapors may cause leukemia, aplastic anemia, or other blood disorders, immunotoxicity, reproductive harm, or fetal toxicity.
Natural Gas Liquids	Appropriate product name	1	3	C	0	Long term, repeated exposure may cause cancer, blood, kidney and nervous system damage, and contains benzene.
Diesel Fuel / Distillate	Ultra Low Sulfur Diesel	1	2	0	0	Prolonged/repeated skin exposure, inhalation or ingestion of this material above the recommended limits may result in adverse dermal or systemic effects.
Butane	Butane	0	3	A	0	This product is highly flammable; UN1011

Jet Fuel	Appropriate Product Name	1	2	C,COR,H2S	0	Long term, repeated exposure may cause cancer. May damage the blood, kidneys, liver, gastrointestinal tract, respiratory tract, skin, central nervous system, eye, lens or cornea.
Xylene	Appropriate Product Name	2	3	A, C	0	Flammable liquid and vapor. Aspiration hazard. Skin irritant. Long term exposure may cause cancer.
<b>Health Hazard</b> 4 = Extremely Hazardous 3 = Hazardous 2 = Warning 1 = Slightly Hazardous 0 = No Unusual Hazard				<b>Fire Hazard (Flash Point)</b> 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		
<b>Special Hazard</b> A = Asphyxiant C = Contains Carcinogen W = Reacts with Water Y = Radiation Hazard COR = Corrosive OX = Oxidizer H <sub>2</sub> S = Hydrogen Sulfide P = Contents under Pressure T = Hot Material				<b>Reactivity Hazard</b> 4 = May Detonate at Room Temperature 3 = May Detonate with Heat or Shock 2 = Violent Chemical Change with High Temperature and Pressure 1 = Not Stable if Heated 0 = Stable		

**APPENDIX D**  
**CROSS-REFERENCE**

Last revised: July 2008

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Figure D-1 - DOT / PHMSA Response Plans for Onshore Oil Pipelines Cross-Reference

Figure D-2 - DOT Emergency Plans for Transportation of Natural and other Gas by Pipeline Cross-Reference

Figure D-3 - DOT Emergency Procedure Manual for Transportation Hazardous Liquids by Pipeline

Figure D-4 - OSHA Cross-Reference

**FIGURE D-1 - DOT / PHMSA RESPONSE PLANS FOR ONSHORE OIL PIPELINES  
CROSS-REFERENCE**

OPA 90 REQUIREMENTS (49 CFR 194)	LOCATION*
<b>Information Summary</b>	
<ul style="list-style-type: none"> <li>For the core plan:</li> </ul>	
<ul style="list-style-type: none"> <li>Name and address of operator</li> </ul>	<u>Figure 1-3</u>
<ul style="list-style-type: none"> <li>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)</li> </ul>	<u>Figure 1-3</u>
<ul style="list-style-type: none"> <li>For each Response Zone appendix:</li> </ul>	
<ul style="list-style-type: none"> <li>Information summary for core plan</li> </ul>	<u>Section 1</u>
<ul style="list-style-type: none"> <li>QI names and telephone numbers, available on 24-hr basis</li> </ul>	<u>Figure 1-3</u>
<ul style="list-style-type: none"> <li>Description of Response Zone, including county(s) and state(s) in which a worst case discharge could cause substantial harm to the environment</li> </ul>	<u>Figure 1-3</u>
<ul style="list-style-type: none"> <li>List of line sections contained in Response Zone, identified by milepost or survey station or other operator designation</li> </ul>	<u>Figure 1-3</u>
<ul style="list-style-type: none"> <li>Basis for operator?s determination of significant and substantial harm</li> </ul>	<u>Figure 1-3</u>
<ul style="list-style-type: none"> <li>The type of oil and volume of the worst case discharge</li> </ul>	<u>Figure 1-3, Appendix C</u>
<ul style="list-style-type: none"> <li>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</li> </ul>	<u>Appendix B</u>
<b>Notification Procedures</b>	
<ul style="list-style-type: none"> <li>Notification requirements that apply in each area of operation of pipelines covered by the plan, including applicable state or local requirements</li> </ul>	<u>Section 3</u>
<ul style="list-style-type: none"> <li>Checklist of notifications the operator or Qualified Individual is required to make under the response plan, listed in the order of priority</li> </ul>	<u>Figure 3.1-1</u>

<ul style="list-style-type: none"> <li>Name of persons (individuals or organizations) to be notified of discharge, indicating whether notification is to be performed by operating personnel or other personnel</li> </ul>	<a href="#">Figure 3.1-1</a> , <a href="#">Figure 3.1-4</a>
<ul style="list-style-type: none"> <li>Procedures for notifying Qualified Individuals</li> </ul>	<a href="#">Figure 3.1-1</a> , <a href="#">Section 4.5</a> , <a href="#">Figure 4.5-1</a>
<ul style="list-style-type: none"> <li>Primary and secondary communication methods by which notifications can be made</li> </ul>	<a href="#">Section 7.1.6</a>

FIGURE D-1 - DOT / PHMSA RESPONSE PLANS FOR ONSHORE OIL PIPELINES  
CROSS-REFERENCE, CONTINUED

OPA 90 REQUIREMENTS (49 CFR 194)	LOCATION
<ul style="list-style-type: none"> <li>Information to be provided in the initial and each follow-up notification, including the following: <ul style="list-style-type: none"> <li>Name of pipeline</li> <li>Time of discharge</li> <li>Location of discharge</li> <li>Name of oil recovered</li> <li>Reason for discharge (e.g. material failure, excavation damage, corrosion)</li> <li>Estimated volume of oil discharged</li> <li>Weather conditions on scene</li> <li>Actions taken or planned by persons on scene</li> </ul> </li> </ul>	<a href="#">Figure 3.1-2</a>
<b>Spill Detection and On-Scene Spill Mitigation Procedures</b>	
<ul style="list-style-type: none"> <li>Methods of initial discharge detection</li> </ul>	<a href="#">Appendix C.1</a>
<ul style="list-style-type: none"> <li>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</li> </ul>	<a href="#">Section 2</a>
<ul style="list-style-type: none"> <li>List of equipment that may be needed in response activities based on land and navigable waters including: <ul style="list-style-type: none"> <li>Transfer hoses and pumps</li> <li>Portable pumps and ancillary equipment</li> <li>Facilities available to transport and receive oil from a leaking pipeline</li> </ul> </li> </ul>	<a href="#">Section 7.1.1</a> , <a href="#">Appendix B</a>
<ul style="list-style-type: none"> <li>Identification of the availability, location, and contact phone numbers to obtain equipment for response activities on a 24-hour basis</li> </ul>	<a href="#">Figure 3.1-4</a> , <a href="#">Appendix B</a>
<ul style="list-style-type: none"> <li>Identification of personnel and their location, telephone numbers, and responsibilities for use of equipment in response activities on a 24-hour basis</li> </ul>	<a href="#">Figure 3.1-4</a> , <a href="#">Appendix B</a>

Response Activities	
<ul style="list-style-type: none"> <li>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</li> </ul>	<u>Section 2, Section 4.6, Appendix B</u>
<ul style="list-style-type: none"> <li>Qualified Individual's responsibilities and authority, including notification of the response resources identified in the response plan</li> </ul>	<u>Section 4.5</u>
<ul style="list-style-type: none"> <li>Procedures for coordinating the actions of the operator or Qualified Individual with the action of the OSC responsible for monitoring or directing those actions</li> </ul>	<u>Section 4.4, Section 4.5</u>
<ul style="list-style-type: none"> <li>Oil Spill Removal Organizations (OSRO) available through contract or other approved means, to respond to a worst case discharge to the maximum extent practicable</li> </ul>	<u>Appendix B</u>
<ul style="list-style-type: none"> <li>For each organization identified under paragraph (d), a listing of: <ul style="list-style-type: none"> <li>Equipment and supplies available</li> <li>Trained personnel necessary to continue operation of the equipment and staff the oil spill removal organization for the first seven days of the response</li> </ul> </li> </ul>	<u>Appendix B</u>

FIGURE D-1 - DOT / PHMSA RESPONSE PLANS FOR ONSHORE OIL PIPELINES  
CROSS-REFERENCE, CONTINUED

OPA 90 REQUIREMENTS (49 CFR 194)	LOCATION
List of Contacts	
<ul style="list-style-type: none"> <li>List of persons the Plan requires the operator to contact</li> </ul>	<u>Figure 3.1-1, Figure 3.1-4</u>
<ul style="list-style-type: none"> <li>Qualified individuals for the operator's areas of operation</li> </ul>	<u>Figure 1-3</u>
<ul style="list-style-type: none"> <li>Applicable insurance representatives or surveyors for the operator's areas of operation</li> </ul>	<u>Figure 4.5-2</u>
<ul style="list-style-type: none"> <li>Persons or organizations to notify for activation of response resources</li> </ul>	<u>Figure 3.1-1, Figure 3.1-4</u>
Training Procedures	
<ul style="list-style-type: none"> <li>Description of training procedures and programs of the operations</li> </ul>	<u>Appendix A.2</u>
Drill Procedures	

• Announced and unannounced drills	<a href="#">Appendix A.1</a>
<ul style="list-style-type: none"> <li>Types of drills and their frequencies; for example: <ul style="list-style-type: none"> <li>Manned pipeline emergency procedures and qualified individual notification drills conducted quarterly</li> <li>Drills involving emergency actions by assigned operating or maintenance personnel and notification of qualified individual on pipeline facilities which are normally unmanned, conducted quarterly</li> <li>Shore-based Incident Management Team (IMT) tabletop drills conducted yearly</li> <li>Oil spill removal organization field equipment deployment drills conducted yearly</li> <li>A drill that exercises entire response plan for each Response Zone, would be conducted at least once every three years</li> </ul> </li> </ul>	<a href="#">Appendix A.1</a>
<b>Response Plan review and update procedures</b>	
• Procedures to meet ?194.121	<a href="#">Section 1.2</a>
• Procedures to review plan after a worst case discharge and to evaluate and record the plan?s effectiveness	<a href="#">Section 1.2,</a> <a href="#">Appendix C</a>
<b>Response zone appendices</b>	
Each response zone appendix would provide the following information:	
• Name and telephone number of the qualified individual	<a href="#">Figure 1-3</a>
• Notification procedures	<a href="#">Section 3</a>
• Spill detection and mitigation procedures	<a href="#">Section 2.1.1,</a> <a href="#">Appendix C</a>
• Name, address, and telephone number of oil spill response organization	<a href="#">Figure 3.1-4,</a> <a href="#">Appendix B</a>
<ul style="list-style-type: none"> <li>Response activities and response resources including: <ul style="list-style-type: none"> <li>Equipment and supplies necessary to meet ?194.115</li> <li>Trained personnel necessary to sustain operation of the equipment and to staff the oil spill response organization and spill management team for the first seven days of the response</li> </ul> </li> </ul>	<a href="#">Appendix A,</a> <a href="#">Appendix B</a>

FIGURE D-1 - DOT / PHMSA RESPONSE PLANS FOR ONSHORE OIL PIPELINES  
CROSS-REFERENCE, CONTINUED

OPA 90 REQUIREMENTS (49 CFR 194)	LOCATION
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<ul style="list-style-type: none"> <li>Names and telephone numbers of federal, state, and local agencies which the operator expects to assume pollution response responsibilities</li> </ul>	<u>Figure 3.1-4</u>
<ul style="list-style-type: none"> <li>Worst case discharge volume</li> </ul>	<u>Appendix C</u>
<ul style="list-style-type: none"> <li>Method used to determine the worst case discharge volume, with calculations</li> </ul>	<u>Appendix C</u>
<ul style="list-style-type: none"> <li>A map that clearly shows: <ul style="list-style-type: none"> <li>Location of worst case discharge</li> <li>Distance between each line section in the Response Zone: <ul style="list-style-type: none"> <li>Each potentially affected public drinking water intake, lake, river, and stream within a radius of five miles of the line section</li> <li>Each potentially affected environmentally sensitive area within a radius of one mile of the line section</li> </ul> </li> </ul> </li> </ul>	<u>Section 6</u>
<ul style="list-style-type: none"> <li>Piping diagram and plan-profile drawing of each line section; may be kept separate from the response plan if the location is identified</li> </ul>	<u>Figure 1-3</u>
<ul style="list-style-type: none"> <li>For every oil transported by each pipeline in the response zone, emergency response data that: <ul style="list-style-type: none"> <li>Include name, description, physical and chemical characteristics, health and safety hazards, and initial spill-handling and firefighting methods</li> <li>Meet 29 CFR 1910.1200 or 49 CFR 172.602</li> </ul> </li> </ul>	<u>Appendix C</u>

**FIGURE D-2 - DOT EMERGENCY PLANS FOR TRANSPORTATION OF NATURAL AND OTHER GAS BY PIPELINE CROSS-REFERENCE**

<b>EMERGENCY PLAN REQUIREMENTS (49 CFR 192.615)</b>	<b>LOCATION</b>
a. Written procedures to minimize hazards	
1. Receiving, identifying, and classifying notices of events which require immediate response by the operator	<u>Section 2</u>
2. Establishing and maintaining adequate means of communication with appropriate fire, police, and other public officials	<u>Section 3, Section 4.4</u>
3. Prompt and effective response to a notice of each type of emergency, including the following:	

i. Gas detect inside or near a building	<u>Section 2</u>
ii. Fire located near or directly involving a pipeline facility	<u>Section 2</u>
iii. Explosion occurring near or directly involving a pipeline facility	<u>Section 2</u>
iv. Natural disaster	<u>Section 2</u>
4. The availability of personnel, equipment, tools, and materials, as needed at the scene of an emergency	<u>Section 7.1, Appendix B</u>
5. Actions directed toward protecting people first and then property	<u>Section 2</u>
6. Emergency shutdown and pressure reduction in any section of the operator's pipeline system necessary to minimize hazards to life or property	
7. Making safe any actual or potential hazard to life or property	<u>Section 2</u>
8. Notifying appropriate fire, police, and other public officials of gas pipeline emergencies and coordinating with them both planned responses and actual responses during an emergency	<u>Section 2, Section 4.4</u>
9. Safely restoring any service outage	
10. Beginning action under ?192.617, if applicable, as soon after the end of the emergency as possible	
b. Each operator shall:	
1. Furnish its supervisors who are responsible for emergency action a copy of that portion of the latest edition of the emergency procedures established under paragraph (a) of this section as necessary for compliance with those procedures	<u>Figure 1-2</u>
2. Train the appropriate operating personnel to assure that they are knowledgeable of the emergency procedures and verify that the training is effective	<u>Appendix A</u>
3. Review employee activities to determine whether the procedures were effectively followed in each emergency	<u>Section 8.3</u>

**FIGURE D-2 - DOT EMERGENCY PLANS FOR TRANSPORTATION OF NATURAL  
AND OTHER  
GAS BY PIPELINE CROSS-REFERENCE, CONTINUED**

<b>EMERGENCY PLAN REQUIREMENTS (49 CFR 192.615)</b>	<b>LOCATION</b>
c. Each operator shall establish and maintain liaison with appropriate fire, police, and other public officials to:	
1. Learn the responsibility and resources of each government organization that may respond to a gas pipeline emergency	<u>Appendix A</u>
2. Acquaint the officials with the operator's ability in responding to a gas pipeline emergency	<u>Appendix A</u>
3. Identify the types of gas pipeline emergencies of which the operator notifies the officials; and	<u>Section 2</u>
4. Plan how the operator and officials can engage in mutual assistance to minimize hazards to life or property	<u>Section 4</u>

**FIGURE D-3 - DOT EMERGENCY PROCEDURE MANUAL FOR  
TRANSPORTATION  
HAZARDOUS LIQUIDS BY PIPELINE**

<b>ERP REQUIREMENTS (49 CFR 195.402(e))</b>	<b>LOCATION</b>
a. Procedures for the following to provide safety when an emergency condition occurs:	
1. Receiving, identifying, and classifying notices of events which need immediate response by the operator or notice to fire, police, or other appropriate public officials and communicating this information to appropriate operator personnel for corrective action	<u>Section 2</u>
2. Prompt and effective response to a notice of each type emergency, including fire or explosion occurring near or directly involving a pipeline facility, accidental release of hazardous liquid or carbon dioxide from a pipeline facility, operational failure causing a hazardous condition, and natural disaster affecting pipeline facilities	<u>Section 2</u>
3. Having personnel, equipment, instruments, tools, and material available as needed at the scene of an emergency.	<u>Section 3, Section 7, Appendix B</u>

4. Taking necessary action, such as emergency shutdown or pressure reduction, to minimize the volume of hazardous liquid or carbon dioxide that is released from any section of a pipeline system in the event of a failure	<u>Section 2, Appendix C</u>
5. Control of released hazardous liquid or carbon dioxide at an accident scene to minimize the hazards, including possible intentional ignition in the cases of flammable highly volatile liquid	<u>Section 6</u>
6. Minimization of public exposure to injury and probability of accidental ignition by assisting with evacuation of residents and assisting with halting traffic on roads and railroads in the affected area, or taking other appropriate action	<u>Section 2, Section 5, Section 7</u>
7. Notifying fire, police, and other appropriate public officials of hazardous liquid or carbon dioxide pipeline emergencies and coordinating with them preplanned and actual responses during an emergency, including additional precautions necessary for an emergency involving a pipeline system transporting a highly volatile liquid	<u>Section 2, Section 3</u>
8. In the case of failure of a pipeline system transporting a highly volatile liquid, use of appropriate instruments to assess the extent and coverage of the vapor cloud and determine the hazardous areas	<u>Section 2</u>
9. Providing for a post accident review of employee activities to determine whether the procedures were effective in each emergency and taking corrective action where deficiencies are found	<u>Section 8</u>

**FIGURE D-4 - OSHA CROSS-REFERENCE**

<b>EAP REQUIREMENTS (29 CFR 1910.38 [a] [2])</b>	<b>LOCATION</b>
<ul style="list-style-type: none"> <li>Emergency escape procedures and emergency escape route assignments</li> </ul>	<u>Section 2</u>
<ul style="list-style-type: none"> <li>Procedures to be followed by employees who remain to operate critical plant operations before they evacuate</li> </ul>	
<ul style="list-style-type: none"> <li>Procedures to account for all employees after emergency evacuation has been completed</li> </ul>	<u>Section 2</u>

• Rescue and medical duties for those employees who are to perform them	<u>Section 2</u>
• The preferred means of reporting fires and other emergencies	<u>Section 2, Section 3</u>
• Names of regular job titles of persons or departments who can be contacted for further information or explanation of duties under the plan	<u>Section 3, Section 4</u>

<b>ERP REQUIREMENTS (29 CFR 1910.120 [I] [2])</b>	<b>LOCATION</b>
• Pre-emergency planning	
• Personnel roles, lines of authority, and communication	<u>Section 4</u>
• Emergency recognition and prevention	<u>Section 2</u>
• Safe distances and places of refuge	<u>Section 2</u>
• Site security and control	<u>Section 5, Section 7</u>
• Decontamination procedures which are not covered by the site safety and health plan	<u>Section 5</u>
• Emergency medical treatment and first aid	<u>Section 2</u>
• Emergency alerting and response procedures	<u>Section 2</u>
• Critique of response and follow-up	<u>Section 8</u>
• PPE and emergency equipment	<u>Section 7, Appendix B</u>

**APPENDIX E**  
**ACRONYMS AND DEFINITIONS**

Last revised: July 2008

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E.1 Acronyms

E.2 Definitions

## E.1 ACRONYMS

ACP	Area Contingency Plan
API	American Petroleum Institute
ART	Alternative Response Technologies
BBL	Barrel(s)
BCT	Business Crisis Team
BPH	Barrels Per Hour
CFR	Code of Federal Regulations
CO <sub>2</sub>	Carbon Dioxide
COTP	Captain of the Port (USCG)
DOT	Department of Transportation
EAP	Emergency Action Plan
EMS	Emergency Medical Services
EOC	Emergency Operations Center
EPA	U. S. Environmental Protection Agency
ERP	Emergency Response Plan
FAA	Federal Aviation Administration
FOG	Field Operations Guide
FOSC	Federal On-Scene Coordinator
GAL	Gallons
HASP	Health and Safety Plan
HCC	Houston Crisis Center
HSE	Health, Safety and Environment
IAP	Incident Action Plan
IC	Incident Commander
ICP	Incident Command Post
ICS	Incident Command System
IMT	Incident Management Team
LEL	Lower Explosive Limit
LOSC	Louisiana Oil Spill Coordinator
LOSCO	Louisiana Oil Spill Coordinator's Office
LSP	Louisiana State Police
MMS	Mineral Management Services
MSDS	Material Safety Data Sheets
MSRS	Marine Spill Response Corporation
N/A	Not Applicable
NCP	National Oil and Hazardous Substances Pollution Contingency Plan

NOAA	National Oceanic and Atmospheric Administration
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NPMS	National Pipeline Mapping System
NRC	National Response Center
NRDA	National Resource Damage Assessment
OOPS	O'Briens Oil Pollution Service
OPA	Oil Pollution Act of 1990
OPS	Office of Pipeline Safety, U.S. Department of Transportation
OSC	On-Scene Commander (OC), On-Shore Coordinator
OSHA	Occupational Safety and Health Administration
OSROs	Oil Spill Removal Organizations
PHMSA	Pipeline and Hazardous Materials Safety Administration, US Department of Transportation
PPE	Personal Protective Equipment
PREP	(National) Preparedness for Response Exercise Program
QI	Qualified Individual
RP	Responsible Party
SCADA	Supervisory Control and Data Acquisition (System)
SOSC	State On-Scene Coordinator
TCP	Tactical Command Post
TGLO	Texas General Land Office
TRRC	Texas Railroad Commission
TRT	Tactical Response Team
USCG	U. S. Coast Guard
USFWS	U. S. Fish and Wildlife Service

## E.2 DEFINITIONS

### Abandoned Pipeline

A pipeline that is no longer connected to the system and is no longer maintained. The pipeline can be abandoned in place, by removal, or sold.

### Adverse Weather

The weather conditions considered by the operator in identifying the response systems and equipment to be deployed in accordance with a response plan, including wave height, ice, temperature, visibility, and currents within the inland or Coastal Response Zone (defined in the National Contingency Plan (40 CFR part 300)) in which those systems or equipment are intended to function.

### Alignment Sheet

A general purpose drawing designed to be used by company personnel during the operation and maintenance of the pipeline.

### Barrel(s)

Measure of space occupied by 42 U. S. gallons at 60 degrees Fahrenheit.

*Breakout tank* means a tank used to:

- (1) Relieve surges in an oil pipeline system or
- (2) Receive and store oil transported by a pipeline for reinjection and continued transportation by pipeline.

### Coastal Zone

All United States waters subject to the tide, United States waters of the Great Lakes and Lake Champlain, specified ports and harbors on inland rivers, waters of the contiguous zone, other waters of the high seas subject to the National Contingency Plan, and the land surface or land substrate, ground waters, and ambient air proximal to those waters. (The term "coastal zone" delineates an area of federal responsibility for response action. Precise boundaries are determined by agreements between the Environmental Protection Agency (EPA) and the US Coast Guard (USCG), and are identified in Federal Regional Contingency Plans and Area Contingency Plans.)

### 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 contract or other legally binding agreement between the operator and a response contractor or other spill response organization identifying and ensuring the availability of the specified personnel and equipment within stipulated response times for a specified geographic area;
- Certification that specified equipment is owned or operated by the pipeline operator, and operator personnel and equipment are available within stipulated response times for a specified geographic area; or
- Active membership in a local or regional oil spill removal organization that has identified specified personnel and equipment to be available within stipulated response times for a specified geographic area.
- 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.

### Crude Oil

Liquid petroleum out of the ground, as distinguished from refined oils manufactured from crude oil.

### 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

An area of environmental importance which is in or adjacent to navigable waters.

### 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.

### Facilities

Parts of the pipeline system, such as the pipe, valves, compressor stations, etc.

### 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.

### 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.

#### High Volume Area

An area which an oil pipeline having a nominal outside diameter of 20 inches (508 millimeters) or more crosses a major river or other navigable waters, which, because of the velocity of the river flow and vessel traffic on the river, would require a more rapid response in case of a worst case discharge or substantial threat of such a discharge. Appendix B to this part contains a list of some of the high volume areas in the United States.

#### 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.

#### Ignition Temperature

The lowest temperature at which a fuel will burn without continued application of an ignition source.

#### Inactive/Idle Pipeline

The pipeline is maintained and can be brought back into service.

#### 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.

#### Inland Zone

The environment inland of the coastal zone excluding the Great Lakes, Lake Champlain, and specified ports and harbors on inland rivers. (The term inland zone delineates an area of federal

responsibilities for response actions. Precise boundaries are determined by agreements between the EPA and the USCG and are identified in Federal Regional Contingency Plans.)

#### In-Service Pipeline

A pipeline that transports natural gas or hazardous liquid, or is not currently transporting products but is maintained and can be brought back into service.

#### 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.

#### Interstate Pipeline

A pipeline or part of a pipeline that is used in the transportation of natural gas, hazardous liquid, or carbon dioxide in interstate or foreign commerce across state boundaries.

#### 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.

#### Line Section

A continuous run of pipe that is contained between adjacent pressure pump stations, between a pressure pump station and a terminal or breakout tank, between a pressure pump station and a block valve, or between adjacent block valves.

#### Maximum Extent Practicable

The limits of available technology and the practical and technical limits on a pipeline operator in planning the response resources required 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 pipeline in adverse weather.

#### National Contingency Plan (NCP)

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.

#### Navigable Waters

The waters of the United States, including the territorial sea and such waters as lakes, rivers,

streams; waters which are used for recreation; and waters from which fish or shellfish are taken and sold in interstate or foreign commerce.

#### 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.

#### Oil

Oil of any kind or in any form, including, but not limited to, petroleum, fuel oil, vegetable oil, animal oil, sludge, oil refuse, oil mixed with wastes other than dredged spoil.

#### 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 response resources.

#### One-Call

Service to notify underground utilities of planned excavations.

#### On-Scene Coordinator (OSC)

The federal official designated by the Administrator of the EPA or by the Commandant of the USCG to coordinate and direct federal response under subpart D of the National Contingency Plan (40 CFR part 300).

#### Onshore Oil Pipeline Facilities

New and existing pipe, rights-of-way and any equipment, facility, or building used in the transportation of oil located in, on, or under, any land within the United States other than submerged land.

#### Operator

A person or firm who operates a pipeline system and engages in the transportation of gas or hazardous liquid. The operator may or may not also be the owner of the pipeline system.

#### 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.

#### Owner or Operator

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

#### Persistent Oil

A petroleum-based oil that does not meet the distillation criteria for a non-persistent oil. For the purposes of this Appendix, persistent oils are further classified based on specific gravity as follows:

- Group II - specific gravity less than .85
- Group III - specific gravity between .85 and less than .95
- Group IV - specific gravity .95 to and including 1.0
- Group V - specific gravity greater than 1.0

#### Petroleum

Crude oil, condensate, natural gasoline, natural gas liquids, and liquefied petroleum gas.

#### Petroleum Product

Flammable, toxic, or corrosive products obtained from distilling and processing crude oil, unfinished oils, natural gas liquids, blend stocks, and other miscellaneous hydrocarbon compounds.

#### Pipeline

All parts of an onshore pipeline facility through which oil moves including, but not limited to, line pipe, valves, and other appurtenances connected to line pipe, pumping units, fabricated assemblies associated with pumping units, metering and delivery stations and fabricated assemblies therein, and breakout tanks.

#### Pipeline Corridor

A linear area where two or more pipelines (either part of the same or different pipeline systems) are closely grouped in a single right-of-way. Pipeline corridors pose a cartographic challenge, and NPMS handles them differently on hard-copy and digital maps. On hard-copy maps, a single line with multiple annotations may represent pipeline corridors. In digital files, multiple lines are required, and operators should separate them into individual layers or files.

#### Pipeline Crossing

A point where two or more pipelines cross, but where there is no physical connection between the pipelines. Pipeline segments should not be broken at pipeline crossings.

#### Pipeline Intersection

A point where a physical connection between two pipelines occurs. A commodity from one pipeline can flow into another pipeline(s), either a branch within a pipeline system or a connection between two pipeline systems.

#### Pipeline Segment

A linear feature representing part or all of a pipeline system on a digital or hard-copy map. A pipeline segment must have only two ends. No branches are allowed. A pipeline segment may be a straight line or may have any number of vertices. Each pipeline segment must be uniquely

identified. The number of pipeline segments should be kept to the minimum needed to represent a pipeline system and its associated attributes. When submitting hard-copy maps, the beginning and ending points of each pipeline segment should be marked with a clear, visible dot. When submitting digital geospatial data, a unique line segment in the computer-aided drafting (CAD) or GIS data set should represent each pipeline segment

#### Pipeline System

All parts of a major natural gas transmission line or hazardous liquid trunkline through which gas or hazardous liquid is transported. By definition, only one firm can operate a pipeline system. Operators should assign unique names to each of their pipeline systems. A pipeline system may have an unlimited number of branches. Each pipeline system must be represented by one or more pipeline segments.

#### 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) (QI)

An English-speaking representative of an operator, located in the United States, available on a 24-hour basis, with full authority to: activate and contract with required oil spill removal organization(s); activate personnel and equipment maintained by the operator; act as liaison with the OSC; and obligate any funds required to carry out all required or directed oil response activities. This includes:

- Activating and engaging in contracting with identified oil spill removal organization(s)

#### Qualified Individual(s) (QI), Continued

- Acting as a liaison with the predesignated of Federal On-Scene Coordinator (FOSC)
- Obligating, either directly or through prearranged contracts, funds required to carry out all necessary or directed response activities

#### Regional Response Team

The Federal Response Organization (consisting of representatives from selected Federal and State agencies) which acts as a regional body responsible for planning and preparedness before an oil spill occurs and providing advice to the FOSC in the event of a major or substantial spill.

#### Response Activities

The containment and removal of oil from the water and shorelines, the temporary storage and disposal of recovered oil, or the taking of other actions as necessary to minimize or mitigate damage to the environment.

#### Response Area

The inland zone or coastal zone, as defined in the National Contingency Plan (40 CFR part 300), in which the response activity is occurring.

#### Responsible Party (RP)

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.

#### Response Plan

The operator's core plan and the response zone appendices for responding, to the maximum extent practicable, to a worse case discharge of oil, or the substantial threat of such a discharge.

#### Response Resources

The personnel, equipment, supplies, and other resources necessary to conduct response activities.

#### Response Zone

A geographic area either along a length of pipeline or including multiple pipelines, containing one or more adjacent line sections, for which the operator must plan for the deployment of, and provide, spill response capabilities. The size of the zone is determined by the operator after considering available capability, resources, and geographic characteristics.

#### Retired Pipeline

A pipeline that is still connected to the system but has been taken out of service and is no longer maintained. The operator plans to abandon the pipeline and is waiting for approval.

#### Right-of-Way

a section of land designated for use by a pipeline. The NPMS refers to ROWs as pipeline corridors.

#### Rivers and Canals

A body of water confined within the inland area that has a projected depth of 12 feet or less, including the Intracoastal Waterway and other waterways artificially created for navigation.

#### Skimmers

Mechanical devices used to skim the surface of the water and recover floating oil. Skimmers fall into four basic categories (suction heads, floating weirs, oleophilic surface units, and hydrodynamic devices) which vary in efficiency depending on the type of oil and size of spill.

#### 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.

#### 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.

### 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.

### 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.

### Worst Case Discharge

The largest foreseeable discharge of oil, including a discharge from fire or explosion, in adverse weather conditions. This volume will be determined by each pipeline operator for each response zone and is calculated according to ? 194.105.

**APPENDIX F**  
ADDITIONAL INFORMATION

Last revised: August 2012

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- 
- Hazardous Waste Contingency Plan - Pipelines
  - Appointment and Authorization of Qualified Individuals 03/29/12
  - AQI Kathy Reed CBD Notification Letter 4/25/12
  - AQI Terry Chance CBD Notification Letter 4/25/12
  - AQI Isabelita Strong CBD Notification Letter 7/30/12

# **LINK FILES**



US Pipelines and Logistics  
150 West Warrenville Road  
Naperville IL 60563

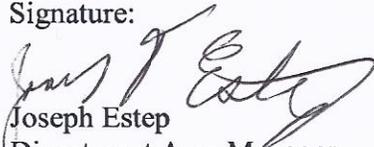
Date: July 30, 2012

**Appointment and Authorization of "Alternate Qualified Individuals"**

Pursuant to the Federal Water Pollution Control Act, as amended by the Oil Pollution Act of 1990, and the regulations promulgated thereto with respect to required Response Plans, as may be applicable, I hereby appoint Isabelita Strong for and on behalf of the Company to serve as "Alternate Qualified Individual" for the Central District. He/she is hereby expressly granted authority under the applicable Response Plan to:

- (1) Activate and engage necessary oil spill removal organization(s);
- (2) Act as liaison with the predesignated Federal On-Scene Coordinator (FOSC); and
- (3) Obligate, either directly or through prearranged contracts, funds necessary to carry out all required or directed oil spill response activities.

Signature:

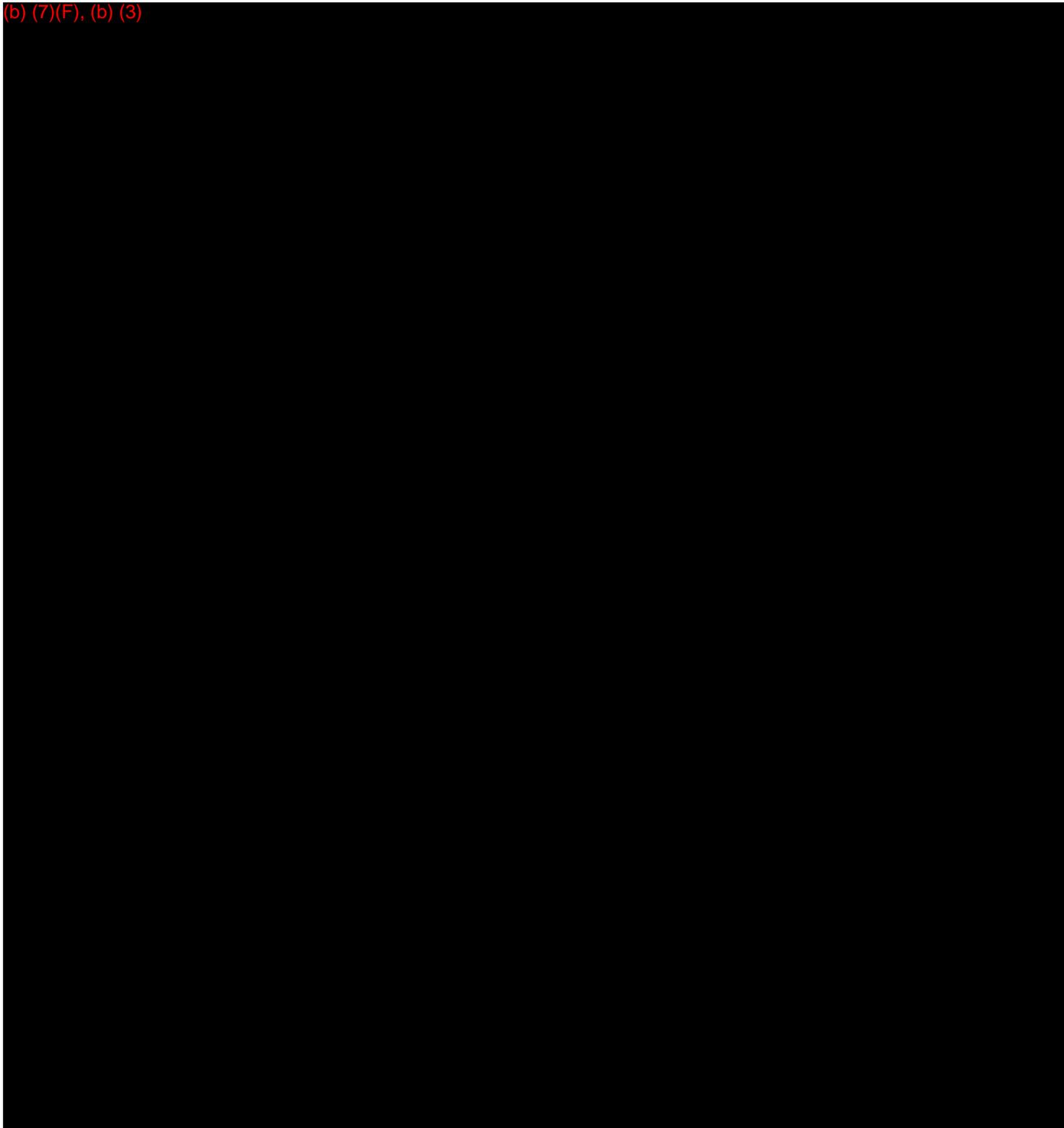
  
Joseph Estep  
Divestment Area Manager







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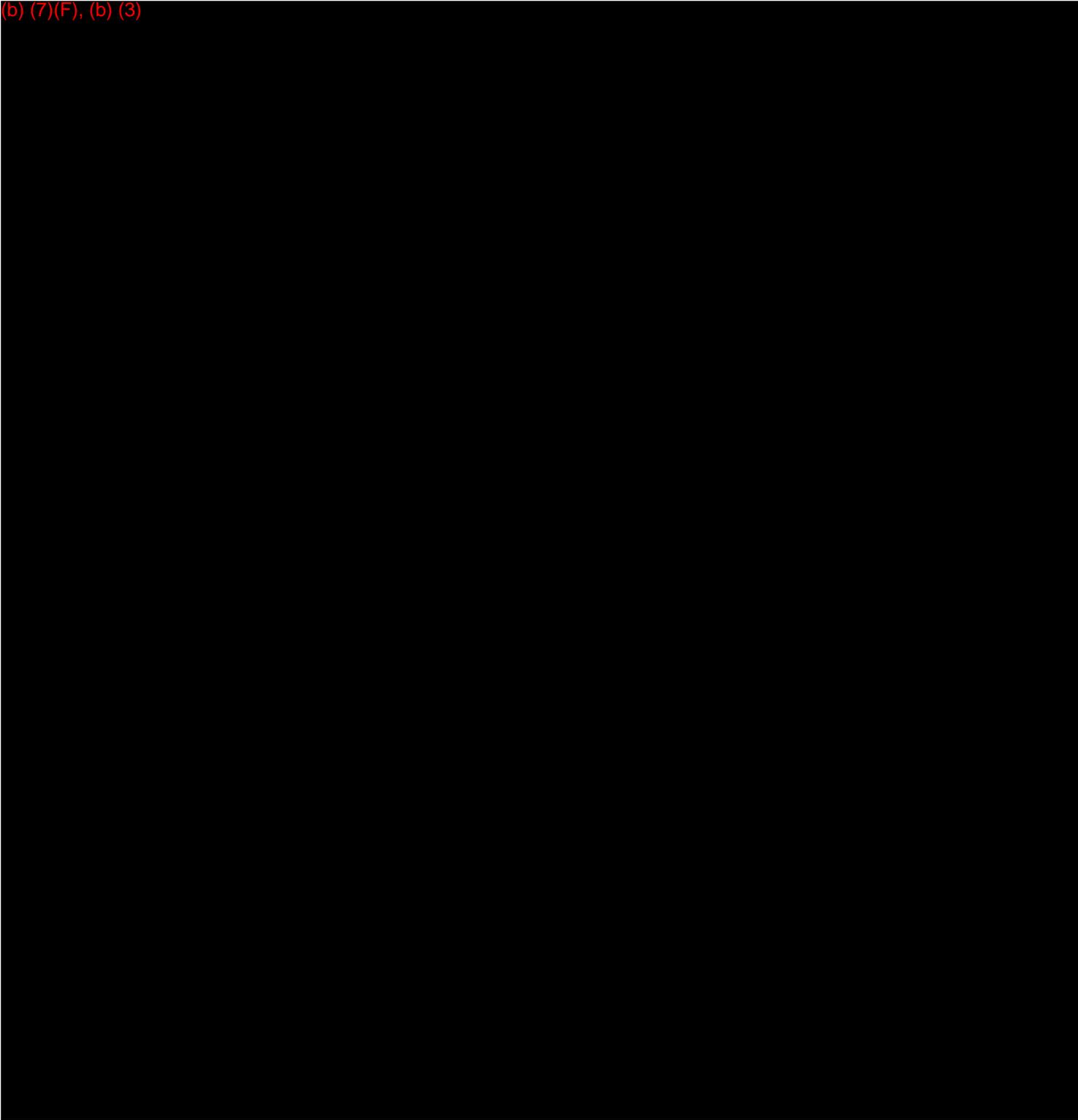




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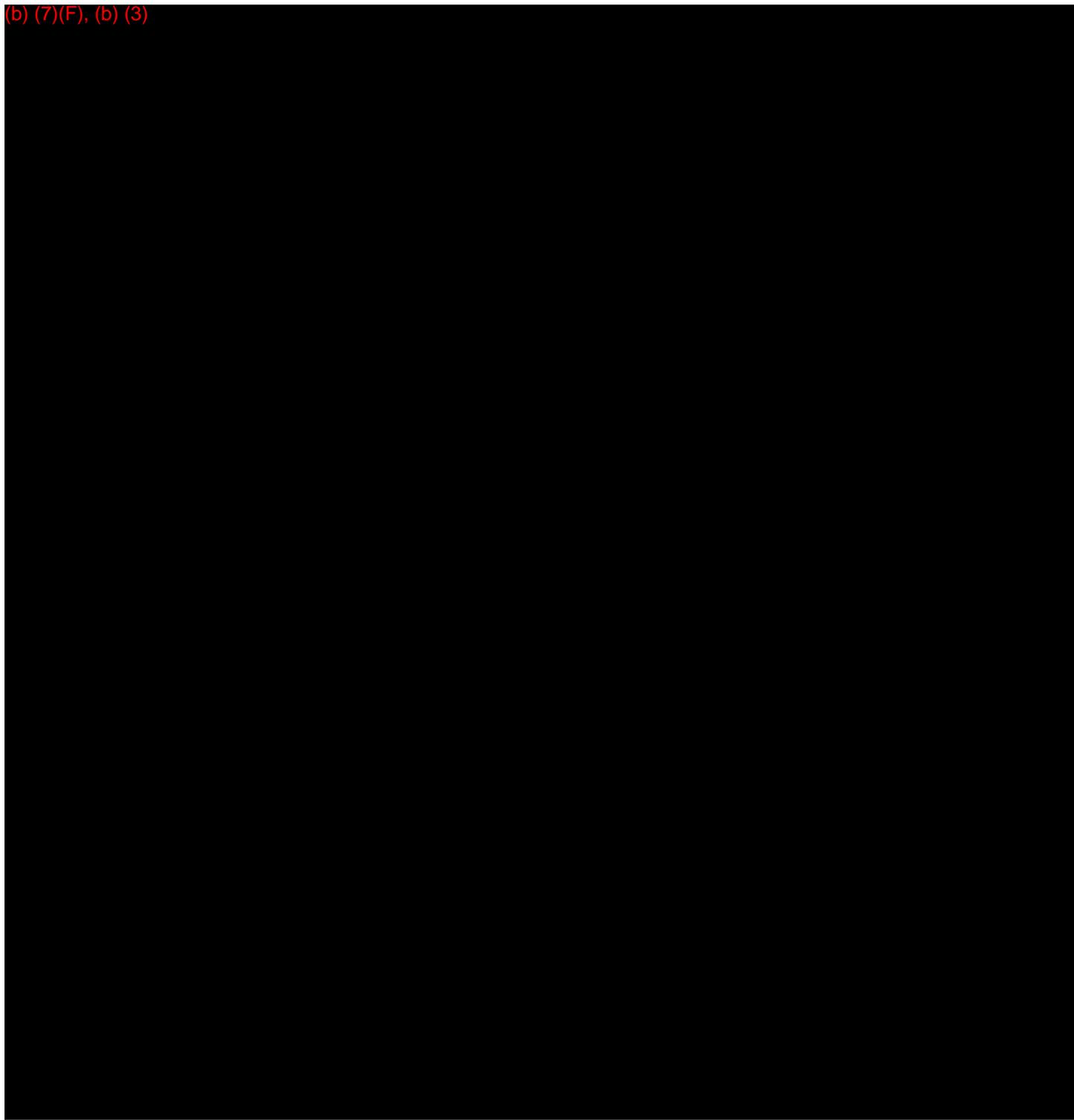
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QUALITY SERVICES SINCE 1995

January 20, 2014

David K. Lehman, Acting Director  
Emergency Support and Security Division  
Pipeline and Hazardous Safety Administration  
U.S. Department of Transportation  
1200 New Jersey Avenue SE  
Washington, D.C. 20590

RE: Spill Response Plan for BP Pipelines N.A. Central Business District (PHMSA Sequence Number BPI0)

Dear Mr. Lehman:

Enclosed is one flash drive of the above referenced plan in response to changes requested in your letter dated September 11, 2013.

Attached for your convenience is a deficiency checklist outlining your specified plan deficiencies and the location in the plan where the deficiency has been satisfied.

If you have any questions please contact me at 1610 Woodstead Court, Ste. 355, The Woodlands, TX 77380, by phone at (281) 955-9600, ext. 115, or e-mail [gdesmond@trpcorp.com](mailto:gdesmond@trpcorp.com).

Sincerely,  
TECHNICAL RESPONSE PLANNING CORPORATION

Greg Desmond  
Senior Project Manager

Federal Express

Page 2  
January 20, 2014

**RE: PHMSA RESPONSE - DEFICIENCY CHECKLIST  
PHMSA SEQUENCE NUMBER BPIO**

\*Section numbers correspond with the Spill Response Plan.

PLAN DEFICIENCY ITEM	LOCATION IN PLAN WHERE DEFICIENCY IS SATISFIED*
<b>NCP and ACP Certification:</b>	Section 1.2 currently contains a statement of certification as the regulations request. The regulations do not specific that a signature is required. "This Plan is intended to satisfy the requirements of the Oil Pollution Act of 1990 (OPA 90), and certifies [49 CFR 194.107(b)] that it has been prepared in accordance with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) and applicable Area Contingency Plans (ACP)"
<b>Worst Case Discharge Determination Methodology:</b>	<p>Appendix C.4 was updated stating "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.</p> <p>If applicable, 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 50% per the company guidelines.</p> <p>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."</p>
<b>Environmentally and Economically Sensitive Areas:</b>	The new submittal includes the HCA maps in Section 6.7.



**BP Pipelines (North America), Inc.**

28100 Torch Parkway  
Warrenville, IL 60555  
(office) 630-836-3498  
(fax) 630-836-3582

August 3, 2010

Melanie Barber  
U.S. Department of Transportation  
Office of Pipeline Safety  
1200 New Jersey Avenue, S.E.  
Room 22-210  
Washington, D.C. 20590

**RE: BP Facility Response Plan Revisions**

Dear Ms Barber:

We hereby submit two (2) updated electronic copies of the response plan listed below as requested:

BPI0 – Central Business District

If you have any questions regarding these submittals, please contact me at (281) 955-9600 or [gdesmond@trpcorpc.com](mailto:gdesmond@trpcorpc.com).

Sincerely,

A handwritten signature in black ink that reads "Greg Desmond".

Greg Desmond  
Technical Response Planning Corp

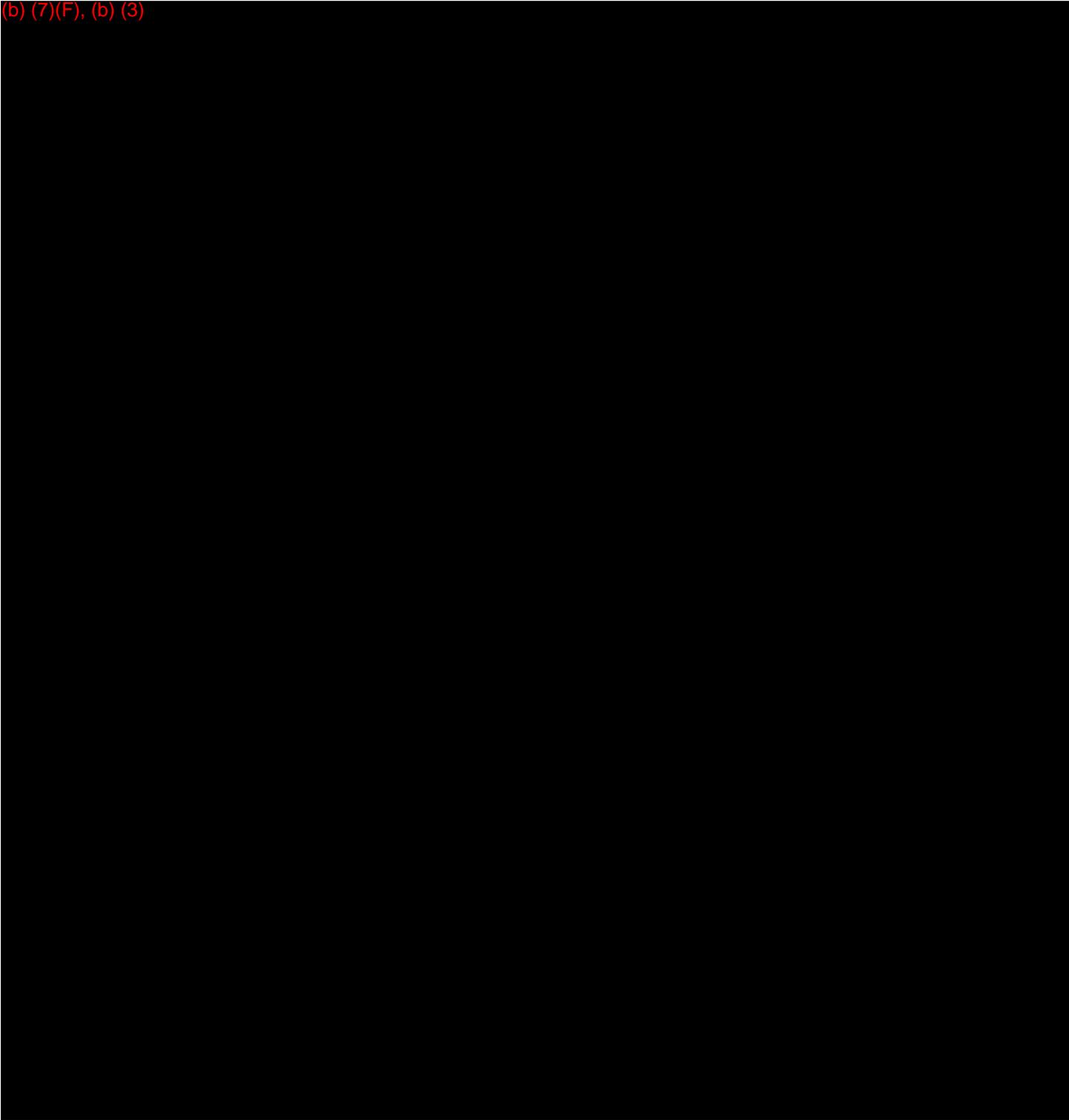




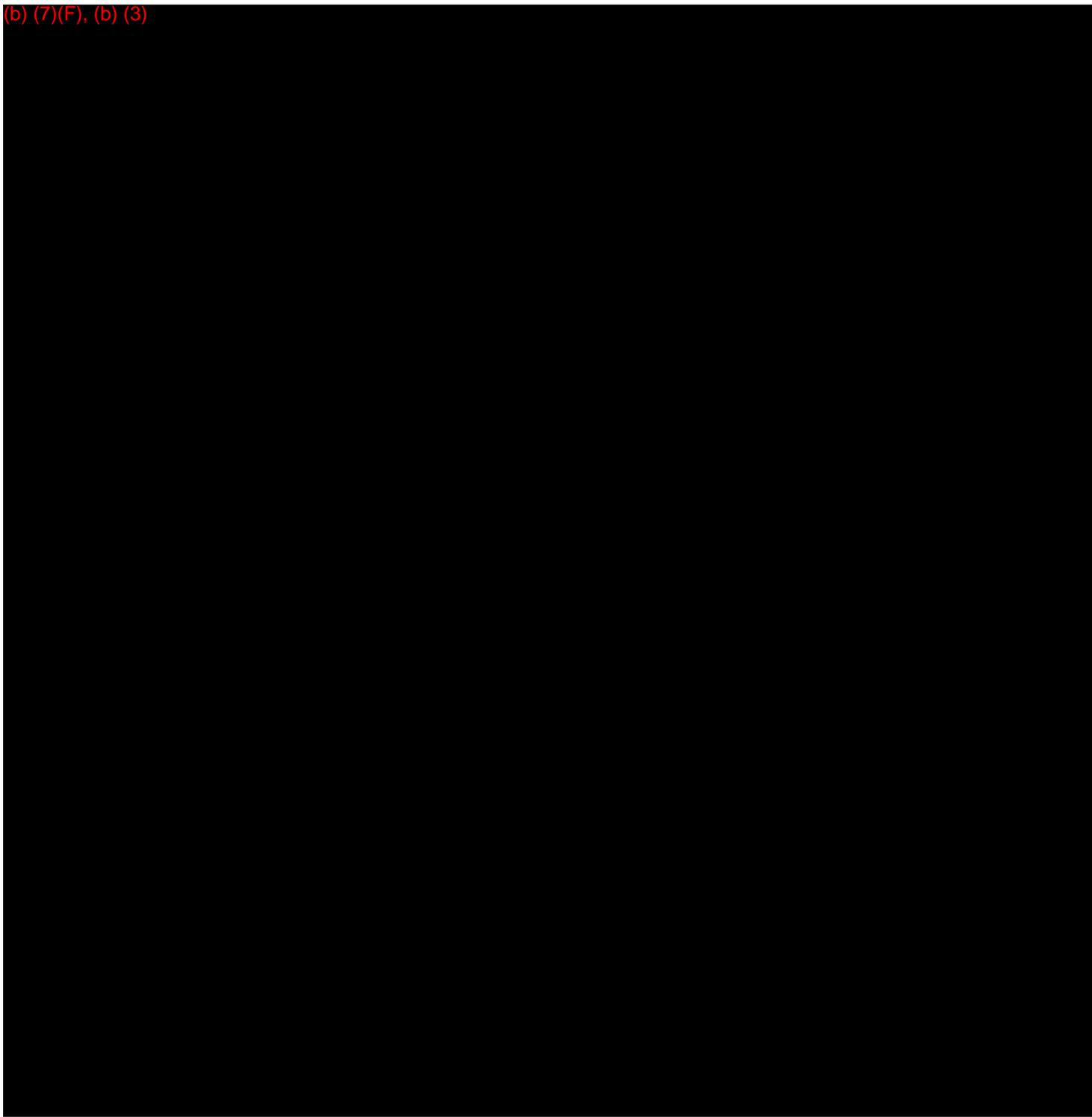




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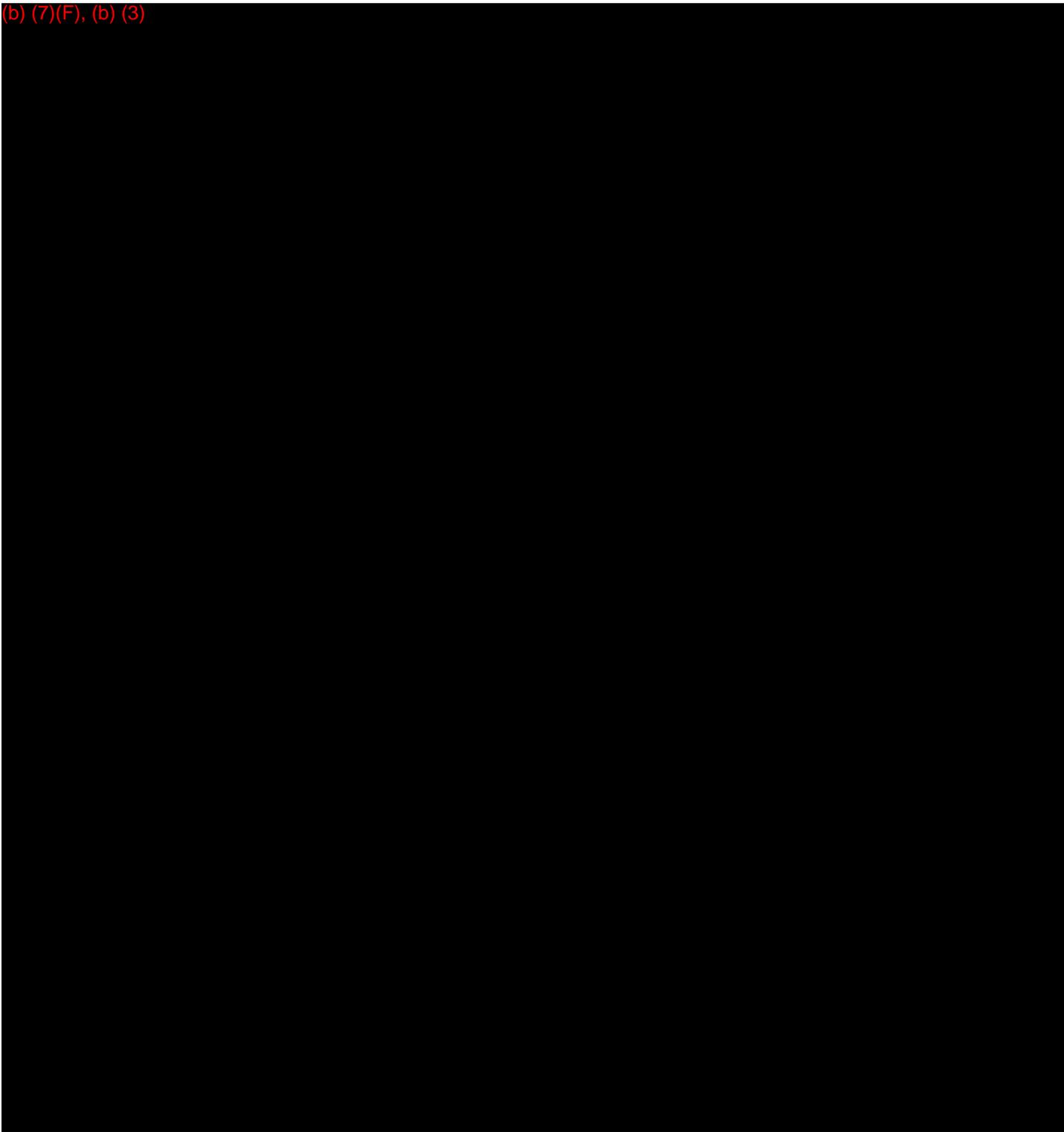
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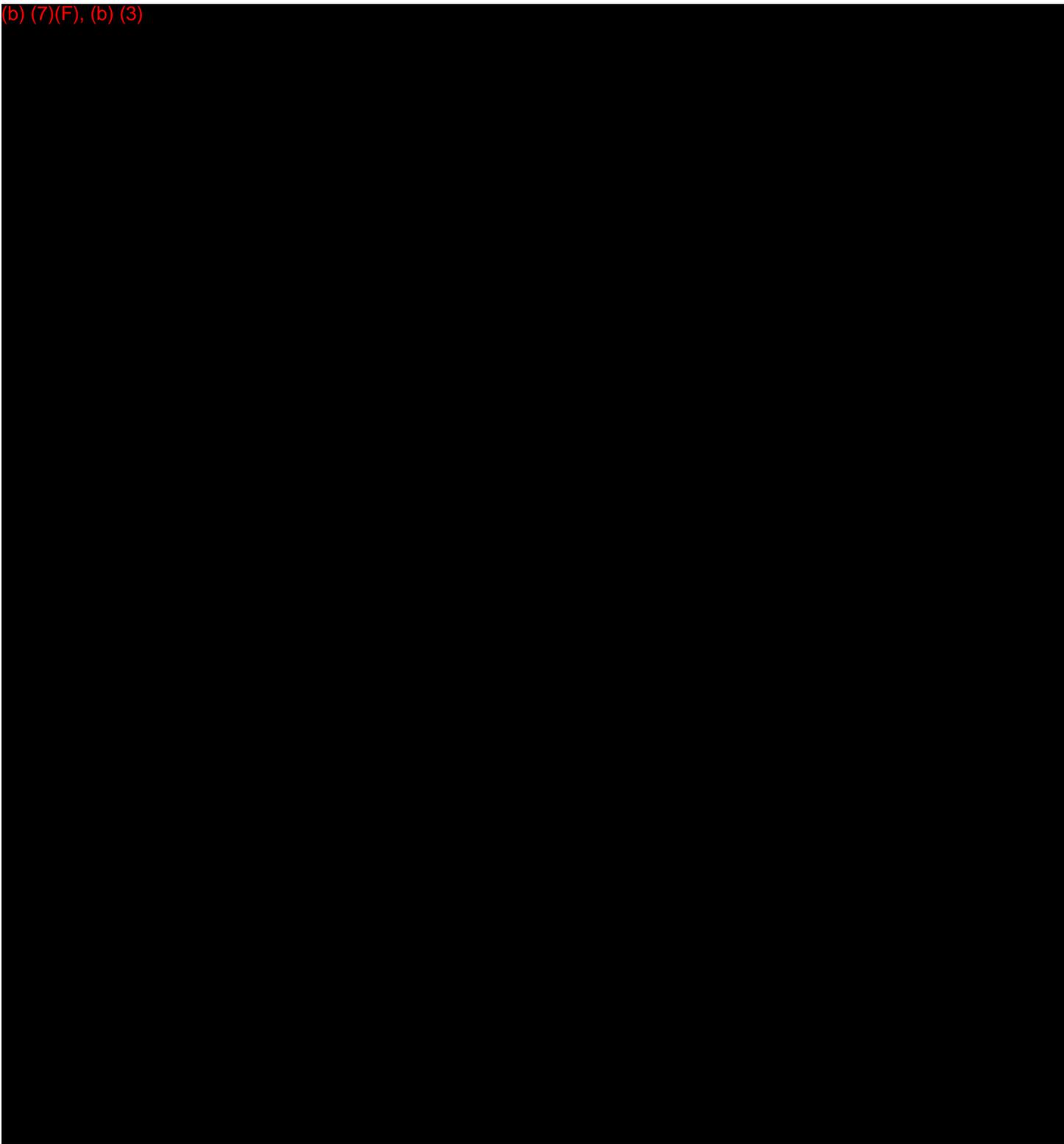
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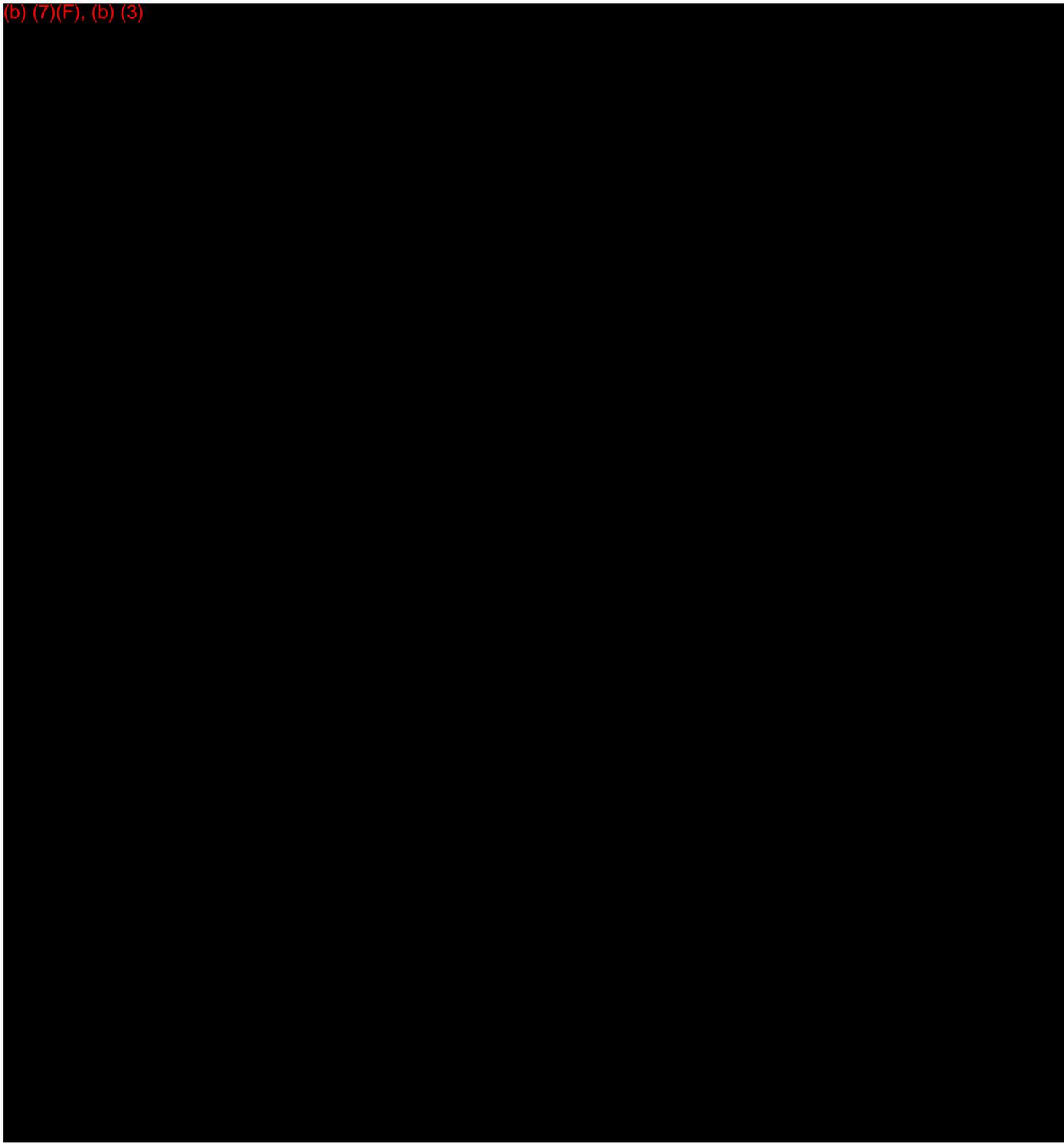




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**Facility Response Plan Review**  
**United States Department of Transportation**  
**Pipeline and Hazardous Materials Safety Administration (PHMSA)**  
**Office of Pipeline Safety (OPS)**

---

**OPS Sequence Number:** BPIO

**Facility Response Plan Version Date:**

July 2010

**Pipeline Operator Name:**

BP Pipelines (North America), Inc. – Central BD

**Contact Name:**

Beth Crisp

**Contact Office, Fax, and Cellular Telephone Numbers:**

(414) 218-8540 (Office)

(b) (6) (Mobile)

(219) 736-3819 (fax)

**Contact Mailing Address:**

9101 107th St.

Milwaukee, WI 53224

**Contact Electronic Mail Address:**

[Beth.Crisp@bp.com](mailto:Beth.Crisp@bp.com)

**If different from the Contact Name, Facility Response Plan Author Name:**

Greg Desmond

**Facility Response Plan Author Office, Fax, and Cellular Phone Numbers:**

281-955-9600 ext 115 (Office)

281-955-0369 (fax)

None (mobile)

**Facility Response Plan Author Mailing Address:**

9720 Cypresswood Drive Suite 340

Houston, TX 77070

**Facility Response Plan Author Electronic Mail Address:**

[gdesmond@trpcorp.com](mailto:gdesmond@trpcorp.com)

**Date of Review:**

July 2010

**National Contingency Plan and Area Contingency Plan Certifications**  
**For Sequence Number: BPIO**

---

1. A. Has the operator reviewed the National Contingency Plan (NCP) and each applicable Area Contingency Plan (ACP)? B. Does the Facility Response Plan follow the Area Contingency Plans? C. Please list the names of the Area Contingency Plans and the pages in the Facility Response Plan that relate to the Area Contingency Plans. (49 CFR 194.107(b)) **Yes, the operator has reviewed the National Contingency Plan (NCP) and applicable Area Contingency Plan (ACP). The Facility Response Plan also follows the Area Contingency Plans, EPA Region IV Regional Contingency Plan and EPA Region V Regional Contingency Plan. A list of the Area Contingency Plans can be found in the Facility Response Plan in Section 1.1 on page 10.**

Area Contingency Plans and Related Pages: **Section 1.1 Purpose / Scope of Plan**

Comment:

Recommendation:

**Plan Information Summary**  
**For Sequence Number: BPI0**

2. Does the Plan Information Summary contain the following? (49 CFR 194.107(c)(1), (c)(1)(i) and (c)(2) and 49 CFR 194.113) **Yes, the Plan Information Summary contains each of the following.**

- The Operator Name, Street Address, City, State, and Zip Code **Yes, the Operator Name, Street Address, City, State, and Zip Code can be found in the Facility Response Plan in Figure 1-3 on page 4.**

A list of response zones that meet the criteria for significant and substantial harm (49 CFR 194.113(a)(2)) and a list of response zones in which a worst-case discharge could cause substantial harm **Yes, a list of response zones that meet the criteria for significant and substantial harm (49 CFR 194.113(a)(2)) and a list of response zones in which a worst-case discharge could cause substantial harm can be found in the Facility Response Plan in Figure 1-3 on page 7.**

The basis for the operator's determination that the response zone meets the criteria for significant and substantial harm and a statement that a worst-case discharge in the response zone can be expected to cause significant and substantial harm for each response zone. **Yes, the basis for the operator's determination that the response zone meets the criteria for significant and substantial harm and a statement that a worst-case discharge in the response zone can be expected to cause significant and substantial harm for each response zone can be found in the Facility Response Plan in Figure 1-3 on page 7.**

Description of each response zone, including the County(s) or Parish(es) and State(s) **Yes, a description of the each response zone, including the County(s) or Parish(es) and State(s) can be found in the Facility Response Plan in Figure 1-3 on page 7.**

Explanation for each response zone designation **Yes an explanation for each response zone designation can be found in the Facility Response Plan in Figure 1-3 on page 7.**

- Name(s), title(s), and office and cellular telephone number(s) for the Qualified Individual(s) twenty-four hours a day in each response zone. **Yes, the name(s), title(s), and office and cellular telephone number(s) for the Qualified Individual(s) twenty-four hours a day in each response zone can be found in the Facility Response Plan in Figure 1-3 on page 4 and below:**

Joe Estep Central District Operations Manager (219) 472-2325 (Office) (b) (6) (Home) (Mobile) <a href="mailto:estepjt@bp.com">estepjt@bp.com</a> (email)	8230 Whitcomb St Merrillville, IN 46410
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- Name(s), title(s), and office and cellular telephone number(s) for the Alternate Qualified Individual(s) twenty-four hours a day in each response zone **Yes, the name(s), title(s), and office and cellular telephone number(s) for the Alternate Qualified Individual(s) twenty-four hours a day in each response zone can be found in Figure 1-3 on page 4 and below:**

Beth Crisp Chicago Area Manager, Alt QI (414) 218-8540 (Office) (b) (6) (Home) (b) (6) (Mobile) <u>Beth.Crisp@bp.com</u> (email)	9101 107th St. Milwaukee, WI 53224
Jeff Schimmel Michigan Area Manager, Alt QI (630) 420-5517 (Office) (b) (6) (Home) (b) (6) (Mobile) <u>Jeffery.Schimmel@bp.com</u> (email)	150 Warrenville Rd Naperville, IL 60563

List of line sections in each response zone by milepost, survey station number, or other operator designation **Yes, a list of line sections in each response zone by milepost, survey station number, or other operator designation can be found in the Facility Response Plan in Figure 1-3 on pages 5 and 6.**

- If any response zone contains multiple pipeline systems, all pipeline systems are described and the oils they transport are listed **Yes, the response zone contains multiple systems. Refer to the Facility Response Plan in Figure 1-3 on pages 5 and 6.**
- The type of oil and the volume of the worst-case discharge in each response zone? **Yes, the type of oil and the volume of the worst-case discharge in each response zone can be found in the Facility Response Plan in Figure 1-3 on page 7 and below:**

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

Page Reference: **Figure 1-3 - Central Business District Information Summary**

Comment:

Recommendation:

**Notifications**  
**For Sequence Number: BPIO**

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**3.1** What person, position, or facility is responsible for starting immediate notification? (49 CFR 194.107(c)(1)(ii)) Please list the person's, position's, or facility's mailing and electronic mail addresses and office, fax, and cellular telephone information. **Yes, the person, position, or facility that is responsible for starting immediate notification, including mailing and electronic mail addresses and office, fax, and cellular telephone information can be found in the Facility Response Plan in Figure 1-3 on page 4 and in Section 3.1 on page 2.**

Page Reference: **Figure 1-3 – Central Business District Information Summary and Section 3.1 Emergency Information and Notification Procedures**

Comment:

Recommendation:

**3.2** Is the person, position, or facility capable of starting immediate notification twenty-four hours a day, three hundred sixty-five days a year? (49 CFR 194.107(c)(1)(ii)) Please describe your immediate notification plan. **Yes, the person, position, or facility is capable of starting immediate notification twenty-four hours a day, three hundred sixty-five days a year. Refer to the Facility Response Plan in Section 3.1 on page 2 and in Figure 3.1-4 on pages 9 through 11 for a description of the immediate notification plan.**

Page Reference: **Section 3.1 Emergency Information and Notification Procedures and Figure 3.1-4 - Notifications and Telephone Numbers**

Comment:

Recommendation:

**3.3** Do the Facility Response Plan notification procedures include telephone numbers so that the qualified individual(s) and oil spill removal organization(s) can be reached twenty-four hours a day, three hundred sixty-five days a year? (49 CFR 194.107(b)(1) and (2), 194.107(c)(1)(ii) and 194.113(b)(2)) **Yes, the Facility Response Plan notification procedures include telephone numbers so that the qualified individual(s) and oil spill removal organization(s) can be reached twenty-four hours a day, three hundred sixty-five days a year. Refer to the Facility Response Plan in Figure 3.1-4 on pages 9 through 11, 13 and 14 and in Figure B.1-2 on page 6.**

- Qualified Individual(s)? : **Yes, qualified individual(s) information can be found in the Facility Response Plan in Figure 3.1-4 on pages 9 through 11.**
- Oil Spill Removal Organization(s)? : **Yes, Oil Spill Removal Organization(s) can be found in the Facility Response Plan in Figure 3.1-4 on pages 13 and 14 and in Figure B.1-2 on page 6.**

- Are the National Response Center numbers correctly listed as 1-800-424-8802 and 202-267-2675 in the plan? : **Yes, the National Response Center numbers are correctly listed as 1-800-424-8802 and 202-267-2675 in the Facility Response Plan. Refer to the Facility Response Plan in Figure 3.1-4 on page 12.**
- Company personnel? : **Yes, Company personnel information can be found in the Facility Response Plan in Figure 3.1-4 on pages 9 through 11.**

Page Reference: **Figure 3.1-4 - Notifications and Telephone Numbers and Figure B.1-2 - Emergency Response Contractors**

Comment:

Recommendation:

**3.4** Does the notification section include the following information? (49 CFR 194.107(b)(1) and (2), and 194.107(c)(1)(ii))

- Name of pipeline operator? : **Yes, the name of the pipeline operator can be found in the Facility Response Plan in Figure 3.1-2 on page 4.**
- Time of discharge? : **Yes, the time of discharge can be found in the Facility Response Plan in Figure 3.1-2 on page 4.**
- Location of discharge? : **Yes, the location of discharge can be found in the Facility Response Plan in Figure 3.1-2 on page 4.**
- Name of oil involved? : **Yes, the name of the oil involved can be found in the Facility Response Plan in Figure 3.1-2 on page 4.**
- Reason for discharge? : **Yes, the reason for discharge can be found in the Facility Response Plan in Figure 3.1-2 on page 4.**
- Estimated volume of oil discharged? : **Yes, the estimated volume of oil discharged can be found in the Facility Response Plan in Figure 3.1-2 on page 4.**
- Weather conditions on scene? : **Yes, the weather conditions on scene can be found in the Facility Response Plan in Figure 3.1-2 on page 4.**

Page Reference: **Figure 3.1-2 - Initial Incident Report Form**

Comment:

Recommendation:

**3.5** Does the Facility Response Plan name and give the address(es) and telephone number(s) for the operator's oil spill removal organization(s)? (49 CFR 194.107(c)(1)(iv) and 194.115)

- Name(s)? : **Yes, the Facility Response Plan provides the name(s) of the operator's oil spill removal organization(s) in Section B.1.1 on pages 2 through 4.**
- Address(es)? : **Yes, the Facility Response Plan provides the address(es) of the operator's oil spill removal organization(s) in Section B.1.1 on pages 2 through 4.**
- Telephone Number(s)? : **Yes, the Facility Response Plan provides the telephone number(s) of the operator's oil spill removal organization(s) in Figure 3.1-4 on pages 13 and 14.**

Page Reference: **Appendix B.1.1 OSRO Classification and Figure 3.1-4 - Notifications and Telephone Numbers**

Comment:

Recommendation:

**Spill Detection and Mitigation Procedures**  
**For Sequence Number: BPI0**

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- 4.1** Does the Facility Response Plan contain procedures to name and mitigate or prevent a substantial threat of a worst-case discharge? (49 CFR 194.107(a) and (b)(2)(i)) **Yes, the Facility Response Plan contains procedures to name and mitigate or prevent a substantial threat of a worst-case discharge in Section C.2 on pages 7 and 8.**

Page Reference: **Appendix C.2 Worst Case Discharge (WCD) Scenario**

Comment:

Recommendation:

- 4.2** Does the Facility Response Plan name personnel, equipment, and procedures for detecting leaks and spills and locating spills throughout the response zone? (49 CFR 194.107(c)(1)(iii)): **Yes, the Facility Response Plan names personnel, equipment, and procedures for detecting leaks and spills and locating spills throughout the response zone in Section 2.1.1 on page 10 and in Section C.1 on pages 2 through 6.**

Page Reference: **Section 2.1.1 Spill Detection and Mitigation Procedures and Appendix C.1 Spill Detection/Prevention**

Comment:

Recommendation:

- 4.3** Does the Facility Response Plan name the maximum time to detect the spill and shut down flow in affected pipeline(s) in bad weather? (49 CFR 194.105(b)(1)): **Yes, the Facility Response Plan names the maximum time to detect the spill and shut down flow in affected pipeline(s) in bad weather in Section C.4 on pages 10 through 12.**

Page Reference: **Appendix C.4 Spill Volume Calculations**

Comment:

Recommendation:

**4.4** Does the Facility Response Plan have procedures to mitigate spills appropriate for the response zone(s) and consistent with applicable Area Contingency Plan(s)? (49 CFR 194.107(b)(2)(i), and (c)(1)(iii) and (v)) **Yes, the Facility Response Plan has procedures to mitigate spills appropriate for the response zone(s) and is consistent with applicable Area Contingency Plan(s). Refer to the Facility Response Plan in Section 2.1.1 on page 10 and in Section C.1 on pages 2 through 6.**

Page Reference: **Section 2.1.1 Spill Detection and Mitigation Procedures and Appendix C.1 Spill Detection/Prevention**

Comment:

Recommendation:

**Spill Containment**  
**For Sequence Number: BPI0**

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**5.1** Does the Facility Response Plan name spill containment strategies appropriate for the response zone(s) and consistent with applicable Area Contingency Plans? (49 CFR 194.107(b)(1)(iii), (b)(2)(i), and (c)(1)(v)) **Yes, the Facility Response Plan names spill containment strategies appropriate for the response zone(s) and it is consistent with applicable Area Contingency Plans. Refer to the Facility Response Plan in Section 6.2 on pages 2 through 6.**

Page Reference: **Section 6.2 Spill Containment / Recovery**

Comment:

Recommendation:

**5.2** Can planned spill containment activities be accomplished within the appropriate tier times? (49 CFR 194.107(b)(2)(i) and (c)(1)(v), and 194.115) **Yes, planned spill containment activities can be accomplished within the appropriate tier times. Refer to the Facility Response Plan in Section 6.2 on pages 2 through 6, in Section 7.1.2 on page 4, and in Section B.1.1 on pages 2 through 4.**

Page Reference: **Section 6.2 Spill Containment / Recovery, Section 7.1.2 Response Equipment Inspection and Maintenance, and Appendix B.1.1 OSRO Classification**

Comment:

Recommendation:

**5.3** Are containment equipment capacities described in sufficient detail and does the Facility Response Plan identify enough spill containment equipment to respond to a worst-case discharge to the maximum extent practicable? (49 CFR 194.107(b)(2)(i) and (c)(1)(v), and 194.115) **Yes, containment equipment capacities are described in sufficient detail and the Facility Response Plan identifies enough spill containment equipment to respond to a worst-case discharge to the maximum extent practicable. Refer to the Facility Response Plan in Section 7.1.1 on page 2, in Figure 7.1-1 on page 3, and in Section B on pages 1 through 6.**

Page Reference: **Section 7.1.1 Response Equipment, Figure 7.1-1 - Regional Company and Response Contractor's Equipment List / Response Time, and Appendix B Contractor Response Equipment**

Comment:

Recommendation:

**Spill Recovery**  
**For Sequence Number: BPI0**

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**6.1** Does the Facility Response Plan identify the spill recovery strategies appropriate for the response zone(s) and consistent with applicable Area Contingency Plan(s)? (49 CFR 194.107(b)(1)(iii), (b)(2)(i) and (iv), and (c)(1)(v)): **Yes, the Facility Response Plan identifies the spill recovery strategies appropriate for the response zone(s) and is consistent with applicable Area Contingency Plan(s), EPA Region VI Regional Integrated Contingency Plan. Refer to the Facility Response Plan in Section 6.2 on pages 2 through 6.**

Page Reference: **Section 6.2 Spill Containment / Recovery**

Comment:

Recommendation:

**6.2** Can planned spill recovery activities be accomplished within the appropriate tier times?  
**5.4** (49 CFR 194.107(b)(2)(i) and (c)(1)(v), and 194.115) **Yes, planned spill recovery activities can be accomplished within the appropriate tier times. Refer to the Facility Response Plan in Section 6.2 on pages 2 through 6, in Section 7.1.2 on page 4, and in Section B.1.1 on pages 2 through 4.**

Page Reference: **Section 6.2 Spill Containment / Recovery, Section 7.1.2 Response Equipment Inspection and Maintenance, and Appendix B.1.1 OSRO Classification**

Comment:

Recommendation:

**6.3** Are recovery equipment capacities described in sufficient detail and does the Facility Response Plan identify sufficient spill recovery equipment to respond to a worst-case discharge to the maximum extent practicable? (49 CFR 194.107(b)(2)(i) and (c)(1)(v), and 194.115) **Yes, recovery equipment capacities are described in sufficient detail and the Facility Response Plan identifies sufficient spill recovery equipment to respond to a worst-case discharge to the maximum extent practicable. Refer to the Facility Response Plan in Section 7.1.1 on page 2, in Figure 7.1-1 on page 3, and in Section B on pages 1 through 6.**

Page Reference: **Section 7.1.1 Response Equipment, Figure 7.1-1 - Regional Company and Response Contractor's Equipment List / Response Time, and Appendix B Contractor Response Equipment**

Comment:

Recommendation:

**Disposal**  
**For Sequence Number: BPI0**

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**7.1** Does the Facility Response Plan identify disposal procedures, including temporary storage equipment for recovered oil appropriate for the response zone and consistent with applicable Area Contingency Plans? (49 CFR 194.107(b)(1)(iii), (b)(2)(i), and (c)(1)(v)) **Yes, the Facility Response Plan identifies disposal procedures, including temporary storage equipment for recovered oil appropriate for the response zone and is consistent with applicable Area Contingency Plans. Refer to the Facility Response Plan in Section 5.5 on pages 39 through 40 and in Section 7.3 on pages 9 through 12.**

Page Reference: **Section 5.5 Disposal Plan** and **Section 7.3 Waste Management**

Comment:

Recommendation:

**7.2** Can planned temporary storage and waste disposal activities be accomplished within the appropriate tier times? (49 CFR 194.107(b)(2)(i) and (c)(1)(v), and 194.115) **Yes, planned temporary storage and waste disposal activities can be accomplished within the appropriate tier times. Refer to the Facility Response Plan in Section 7.3 on pages 9 through 12 and in Section B.1.1 on pages 2 through 4.**

Page Reference: **Section 7.3 Waste Management** and **Appendix B.1.1 OSRO Classification**

Comment:

Recommendation:

**7.3** Does the Facility Response Plan identify sufficient temporary storage capabilities to respond to a worst-case discharge to the maximum extent practicable? (49 CFR 194.107(b)(2)(i) and (c)(1)(v), and 194.115) **Yes, the Facility Response Plan identifies sufficient temporary storage capabilities to respond to a worst-case discharge to the maximum extent practicable in Figure 7.3-3 on page 12.**

Page Reference: **Figure 7.3-3 - Temporary Storage Methods**

Comment:

Recommendation:

**Sensitive Area Protection**  
**For Sequence Number: BPI0**

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**8.1** Does the Facility Response Plan identify the protection strategies appropriate for the response zone and consistent with applicable Area Contingency Plans? (49 CFR 194.107(b)(1)(iii), (b)(2)(i) and (ii), and (c)(1)(v)) **Yes, the Facility Response Plan identifies the protection strategies appropriate for the response zone and is consistent with applicable Area Contingency Plans in Section 6.3 on pages 7 through 12 and in Section 6.4 on pages 13 through 15.**

Page Reference: **Section 6.3 Sensitive Area Protection and Section 6.4 Alternative Response Strategies**

Comment:

Recommendation:

**8.2** Can planned protection activities be accomplished within the appropriate tier times? (49 CFR 194.107(b)(2)(i) and (c)(1)(v), and 194.115) **Yes, planned protection activities can be accomplished within the appropriate tier times. Refer to the Facility Response Plan in Section 6.3 on pages 7 through 12, in Section 6.4 on pages 13 through 15, in Section 7.1.2 on page 4, and in Section B.1.1 on pages 2 through 4.**

Page Reference: **Section 6.3 Sensitive Area Protection, Section 6.4 Alternative Response Strategies, Section 7.1.2 Response Equipment Inspection and Maintenance, and Appendix B.1.1 OSRO Classification**

Comment:

Recommendation:

**Response Management**  
**For Sequence Number: BPI0**

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**9.1** Is the response management system described in the Facility Response Plan based on an Incident Command System? (49 CFR 194.107(b)(1)(i), (b)(2)(iii), and (c)(3)) **Yes, the response management system described in the Facility Response Plan is based on an Incident Command System. Refer to the Facility Response Plan in Figure 3.1-4 on pages 9 through 14 and in Section 4.2 on page 5.**

Page Reference: **Figure 3.1-4 - Notifications and Telephone Numbers and Section 4.2 Activation Procedures**

Comment:

Recommendation:

**9.2** Does the operator's response organization describe roles and responsibilities for (49 CFR 194.107(b)(1)(i), (b)(2)(iii), and (c)(3))

- **Qualified Individual? : Yes, the roles and responsibilities for the Qualified Individual are described in the Facility Response Plan in Section 4.5 on pages 5 through 8.**
- **Other operator response personnel including the spill management team? : Yes, the roles and responsibilities for other operator response personnel including the spill management team, are described in the Facility Response Plan in Section 4.6 on pages 9 through 18.**
- **Contracted Oil Spill Removal Organization(s)? : Yes, the roles and responsibilities for contracted Oil Spill Removal Organization(s) are described in the Facility Response Plan in Section B on pages 1 through 6.**

Page Reference: **Section 4.5 Qualified Individual (QI), Section 4.6 Incident Management Team (IMT) Job Description Checklists, and Appendix B Contractor Response Equipment**

Comment:

Recommendation:

**9.3** Does the operator's response organization describe how the operator works with the Unified Command and with responders including (49 CFR 194.107(b)(1)(i), (b)(2)(iii), and (c)(3)):

- Oil Spill Removal Organization(s)? : **Yes, a description of how the operator works with the Unified Command and with responders, including Oil Spill Removal Organization(s), are described in the Facility Response Plan in Section 4.1.1 on page 2.**
- State and Local responders? : **Yes, a description of how the operator works with the Unified Command and with responders, including State and Local responders, are described in the Facility Response Plan in Section 4.4 on page 5 and in Section 4.6 on page 10.**
- Federal On-Scene Coordinator? : **Yes, a description of how the operator works with the Unified Command and with responders, including Federal On-Scene Coordinator, are described in the Facility Response Plan in Section 4.4 on page 5 and in Section 4.6 on page 10.**

Page Reference: **Section 4.1.1 Facility Response Team, Section 4.4 Incident Command System / Unified Command, and Section 4.6 Incident Management Team (IMT) Job Description Checklists**

Comment:

Recommendation:

**Communications, Response Equipment and Transportation**  
**For Sequence Number: BPI0**

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**10.1** Does the Facility Response Plan describe appropriate communications procedures and system(s) adequate for notifications and response operations? (49 CFR 194.107(c)(1)(ii) and (v)) **Yes, the Facility Response Plan describes appropriate communications procedures and system(s) adequate for notifications and response operations in Section 7.1.6 on pages 6 through 7.**

Page Reference: **Section 7.1.6 Communications Plan**

Comment:

Recommendation:

**10.2** Does the Facility Response Plan identify response equipment that the operator owns and maintains? (49 CFR 194.107(c)(1)(v) and 194.115(a)) **Yes, the Facility Response Plan identifies response equipment that the operator owns and maintains in Section 7.1.1 on page 2.**

Page Reference: **Section 7.1.1 Response Equipment**

Comment:

Recommendation:

**10.3** Does the Facility Response Plan describe procedures for maintaining response equipment the operator owns? (49 CFR 194.107(c)(1)(viii)) **Yes, the Facility Response Plan describes procedures for maintaining response equipment the operator owns in Section 7.1.2 on page 4.**

Page Reference: **Section 7.1.2 Response Equipment Inspection and Maintenance**

Comment:

Recommendation

**10.4** Does the Facility Response Plan identify Oil Spill Removal Organization(s)' response equipment when the U.S. Coast Guard has not classified the Oil Spill Removal Organization? (49 CFR 194.107(c)(1)(v) and 194.115(a)) **Yes, the Facility Response Plan identifies Oil Spill Removal Organization(s)' response equipment when the U.S. Coast Guard has not classified the Oil Spill Removal Organization in Section B.1.1 on page 4, in Figure B.1-1 on page 5, and in Figure 7.1-1 on page 3.**

Page Reference: **Appendix B.1.1 OSRO Classification, Figure B.1-1 - Evidence of Contracts, and Figure 7.1-1 - Regional Company and Response Contractor's Equipment List / Response Time**

Comment:

Recommendation:

**10.5** Does the Facility Response Plan describe procedures for maintaining Oil Spill Removal Organization(s)' response equipment when the U.S. Coast Guard has not classified the Oil Spill Removal Organization? (49 CFR 194.107(c)(1)(viii)) **Yes, the Facility Response Plan describes procedures for maintaining Oil Spill Removal Organization(s)' response equipment when the U.S. Coast Guard has not classified the Oil Spill Removal Organization in Figure A.1-2 on page 4.**

Page Reference: **Figure A.1-2 - Exercise Requirements**

Comment:

Recommendation:

**10.6** Does the Facility Response Plan identify location(s) for operator-owned and Oil Spill Removal Organization-owned response equipment? (49 CFR 194.115(b)) **Yes, the Facility Response Plan identifies location(s) for operator-owned and Oil Spill Removal Organization-owned response equipment in Section 7.1.1 on page 2 and in Section B on pages 1 through 6.**

Page Reference: **Section 7.1.1 Response Equipment and Appendix B Contractor Response Equipment**

Comment:

Recommendation:

**10.7** Does the Facility Response Plan describe mobilizing and deploying response equipment within the appropriate tier times consistent with the plan's response activities? (49 CFR 194.107(c)(1)(v) and 194.115(b)) **Yes, the Facility Response Plan describes mobilizing and deploying response equipment within the appropriate tier times consistent with the plan's response activities in Section 7.1.1 on page 2, in Section 7.1.2 on page 4, and in Section B.1.1 on pages 2 through 4.**

Page Reference: **Section 7.1.1 Response Equipment, Section 7.1.2 Response Equipment Inspection and Maintenance, and Appendix B.1.1 OSRO Classification**

Comment:

Recommendation:

**10.8** Does the size of the response zone permit planned response activities, including equipment mobilization and deployment, within the appropriate tier times? (49 CFR 194.115(b)) **Yes, the size of the response zone permits planned response activities, including equipment mobilization and deployment, within the appropriate tier times. Refer to the Facility Response Plan in Section 7.1.1 on page 2 and in Section B.1.1 on pages 2 through 4.**

Page Reference: **Section 7.1.1 Response Equipment and Appendix B.1.1 OSRO Classification**

Comment:

Recommendation:

**Response Personnel and Mobilization**  
**For Sequence Number: BPI0**

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**11.1** Does the Facility Response Plan identify enough trained personnel to respond to the worst-case discharge consistent with the Plan's response activities? (49 CFR 194.107(a), (c)(1)(v), and (c)(3), 194.115, and 194.117): **Yes, the Facility Response Plan identifies enough trained personnel to respond to the worst-case discharge consistent with the Plan's response activities. Refer to the Facility Response Plan in Figure 3.1-4 on page 9 through 11 and in Section B on pages 1 through 6.**

Page Reference: **Figure 3.1-4 - Notifications and Telephone Numbers and Appendix B Contractor Response Equipment**

Comment:

Recommendation:

**11.2** Does the Facility Response Plan describe procedures for mobilizing and deploying response personnel throughout the response zone(s) consistent with the Plan's response activities? (49 CFR 194.107(b)(2)(i) and (c)(1)(v), and 194.115): **Yes, the Facility Response Plan describes procedures for mobilizing and deploying response personnel throughout the response zone(s) consistent with the Plan's response activities. Refer to the Facility Response Plan in Section 3.1 on page 2, in Figure 3.1-1 on page 3, in Section 4.2 on page 5, and in Figure 2-1 on pages 3 through 5.**

Page Reference: **Section 3.1 Emergency Information and Notification Procedures, Figure 3.1-1 - Emergency Notification Flow Chart, Section 4.2 Activation Procedures, and Figure 2-1 - Initial Response Action Guidelines**

Comment:

Recommendation:

**Response Documentation and Worst Case Discharge  
For Sequence Number: BPI0**

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**12.1** Does the operator describe procedures the response management organization must use to document response decisions, activities, and costs? (49 CFR 194.107(c)(3)) **Yes, the operator describes procedures the response management organization must use to document response decisions, activities, and costs in the Facility Response Plan in Section 5.1 on page 2.**

Page Reference: **Section 5.1 Documentation Procedures**

Comment:

Recommendation:

**12.2** Does the Facility Response Plan provide the calculations and methodology used for determining the worst-case discharge for the response zone(s)? (49 CFR 194.105) **Yes, the Facility Response Plan provides the calculations and methodology used for determining the worst-case discharge for the response zone(s) in Section C.4 on pages 10 through 12.**

Page Reference: **Appendix C.4 Spill Volume Calculations**

Comment:

Recommendation:

**12.3** Is the worst-case discharge volume calculated using the three specified methods in the Department of Transportation regulation? Are the calculations accurate and as prescribed? (49 CFR 194.105(b)) **Yes, the worst-case discharge volume is calculated using the three specified methods in the Department of Transportation regulation and the calculations are accurate and as prescribed. Refer to the Facility Response Plan in Section C.4 on pages 10 through 12.**

Page Reference: **Appendix C.4 Spill Volume Calculations**

Comment:

Recommendation:

**Training: Program and Procedures**  
**For Sequence Number: BPI0**

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**13.1** Does the Facility Response Plan describe a training program that teaches response personnel about the Plan and their responsibilities under the Plan? (49 CFR 194.107(b)(1)(ii), (c)(1)(vii) and (c)(3), and 194.117): **Yes, the Facility Response Plan describes a training program that teaches response personnel about the Plan and their responsibilities under the Plan in Section A.2 on pages 7 through 11.**

Page Reference: **Appendix A.2 Training Program**

Comment:

Recommendation:

**13.2** Does the Facility Response Plan describe a training program that teaches response personnel about matters including (49 CFR 194.117(a)(3)):

- Oil characteristics and hazards? : **Yes, the Facility Response Plan describes a training program that teaches response personnel about matters including oil characteristics and hazards in Figure A.2-2 on pages 8 through 10.**
- Conditions that are likely to worsen emergencies, including the consequences of facility malfunctions or failures and appropriate corrective actions? : **Yes, the Facility Response Plan describes a training program that teaches response personnel about matters including conditions that are likely to worsen emergencies, including the consequences of facility malfunctions or failures and appropriate corrective actions in Figure A.2-2 on pages 8 through 10.**
- Steps necessary to control an accidental discharge of oil? : **Yes, the Facility Response Plan describes a training program that teaches response personnel about matters including steps necessary to control an accidental discharge of oil in Figure A.2-2 on pages 8 through 10.**
- Steps necessary to minimize the potential for fire, explosion, or environmental damage? : **Yes, the Facility Response Plan describes a training program that teaches response personnel about matters including steps necessary to minimize the potential for fire, explosion, or environmental damage in Figure A.2-2 on pages 8 through 10.**
- Proper fire-fighting procedures and use of personal protective equipment? : **Yes, the Facility Response Plan describes a training program that teaches response personnel about matters including proper fire-fighting procedures and use of personal protective equipment in Figure A.2-2 on pages 8 through 10.**

Page Reference: **FIGURE A.2-2 - PREP Training Program Matrix**

Comment:

Recommendation:

**13.3** Does the Facility Response Plan describe a response-training program that addresses the appropriate levels of training and the requirements in OSHA 29 CFR 1910.120? (49 CFR 194.107(b)(1)(ii) and 194.117(c)) **Yes, the Facility Response Plan describes a response-training program that addresses the appropriate levels of training and the requirements in OSHA 29 CFR 1910.120 in Figure A.2-1 on page 7.**

Page Reference: **Figure A.2-1 - Training Requirements**

Comment:

Recommendation:

**13.4** Does the Facility Response Plan describe the operator's procedures for maintaining records for response personnel? (49 CFR 194.117(b)) **Yes, the Facility Response Plan describes the operator's procedures for maintaining records for response personnel in Figure A.1-2 on page 4 and in Figure A.2-1 on page 7.**

Page Reference: **Figure A.1-2 - Exercise Requirements and Figure A.2-1 - Training Requirements**

Comment:

Recommendation:

**Spill Response Drill Program**  
**For Sequence Number: BPI0**

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**14.1** Does the Facility Response Plan describe procedures for conducting internal and external drills that include (49 CFR 194.107(c)(1)(ix)):

- Responsibility for planning, carrying out, and monitoring drills? : **Yes, the Facility Response Plan describes procedures for conducting internal and external drills that include responsibility for planning, carrying out, and monitoring drills in Section A.1 on page 2.**
- Announced drills? : **Yes, the Facility Response Plan describes procedures for conducting internal and external drills that include announced drills in Figure A.1-2 on page 4.**
- At least one unannounced internal drill? : **Yes, the Facility Response Plan describes procedures for conducting internal and external drills that include at least one unannounced internal drill in Figure A.1-2 on page 4.**
- Quarterly Qualified Individual notifications drills? : **Yes, the Facility Response Plan describes procedures for conducting internal and external drills that include quarterly Qualified Individual notifications drills in Figure A.1-2 on page 4.**
- Annual spill management team tabletop drills? : **Yes, the Facility Response Plan describes procedures for conducting internal and external drills that include annual spill management team tabletop drills in Figure A.1-2 on page 4.**
- Annual Oil Spill Removal Organization(s) equipment deployment drills of representative types and amounts of key equipment in the Facility Response Plan? : **Yes, the Facility Response Plan describes procedures for conducting internal and external drills that include annual Oil Spill Removal Organization(s) equipment deployment drills of representative types and amounts of key equipment in the Facility Response Plan in Figure A.1-2 on page 4.**
- At least one drill that tests the entire response plan for each response zone at least once every three years? : **Yes, the Facility Response Plan describes procedures for conducting internal and external drills that include at least one drill that tests the entire response plan for each response zone at least once every three years in Figure A.1-2 on page 4.**

Page Reference: **Appendix A.1 Exercise Requirements and Schedules and Figure A.1-2 - Exercise Requirements**

Comment:

Recommendation:

**14.2** Does the Facility Response Plan describe a three-year drill and exercise cycle and the frequencies for each type of drill in that cycle? (49 CFR 194.107(c)(1)(ix)) **Yes, the Facility Response Plan describes a three-year drill and exercise cycle and the frequencies for each type of drill in that cycle in Section A.1 on page 2 and in Figure A.1-2 on page 4.**

Page Reference: **Appendix A.1 Exercise Requirements and Schedules and Figure A.1-2 - Exercise Requirements**

Comment:

Recommendation:

**14.3** Does the Facility Response Plan describe procedures for maintaining drill documentation for three years? (49 CFR 194.107(c)(1)(ix)) **Yes, the Facility Response Plan describes procedures for maintaining drill documentation for three years in Figure A.1-2 on page 4.**

Page Reference: **Figure A.1-2 - Exercise Requirements**

Comment:

Recommendation:

**Response Plan Maintenance**  
**For Sequence Number: BPI0**

---

**15.1** Does the Facility Response Plan describe the requirements and procedures for the operator to (a) review the Facility Response Plans at least once every five years from the date the Office of Pipeline Safety approves the plan, (b) modify the Facility Response Plan to address new or different operating conditions or information in the Facility Response Plan, and (c) submit the plan for the Office of Pipeline Safety to review, require changes, and approve? (49 CFR 194.107(c)(1)(x) and 194.121(a)) **Yes, the Facility Response Plan describes the requirements and procedures for the operator to (a) review the Facility Response Plans at least once every five years from the date the Office of Pipeline Safety approves the plan, (b) modify the Facility Response Plan to address new or different operating conditions or information in the Facility Response Plan, and (c) submit the plan for the Office of Pipeline Safety to review, require changes, and approve in Section 1.2 on page 11.**

Page Reference: **Section 1.2 Plan Review and Update Procedure**

Comment:

Recommendation:

**15.2** Does the Facility Response Plan identify key factors that may cause revisions to the response plan and require the operator to submit revisions to the Office of Pipeline Safety within 30 days of making the revisions for factors including: (49 CFR 194.121(b)):

- New pipeline construction or purchase? : **Yes, the Facility Response Plan identifies key factors that may cause revisions to the response plan and requires the operator to submit revisions to the Office of Pipeline Safety within 30 days of making the revisions for factors including new pipeline construction or purchase in Section 1.2 on page 11.**
- Different worst-case discharge volume? : **Yes, the Facility Response Plan identifies key factors that may cause revisions to the response plan and requires the operator to submit revisions to the Office of Pipeline Safety within 30 days of making the revisions for factors including different worst-case discharge volume in Section 1.2 on page 11.**
- Change in commodities transported? : **Yes, the Facility Response Plan identifies key factors that may cause revisions to the response plan and requires the operator to submit revisions to the Office of Pipeline Safety within 30 days of making the revisions for factors including change in commodities transported in Section 1.2 on page 11.**
- Change in Oil Spill Removal Organization(s)? : **Yes, the Facility Response Plan identifies key factors that may cause revisions to the response plan and requires the operator to submit revisions to the Office of Pipeline Safety within 30 days of making the revisions for factors including change in Oil Spill Removal Organization(s) in Section 1.2 on page 11.**

- Change in Qualified Individual(s)? : **Yes, the Facility Response Plan identifies key factors that may cause revisions to the response plan and requires the operator to submit revisions to the Office of Pipeline Safety within 30 days of making the revisions for factors including change in Qualified Individual(s) in Section 1.2 on page 11.**
- Change in a National Contingency Plan or Area Contingency Plan that has a significant impact on the appropriateness of response equipment or response strategies? : **Yes, the Facility Response Plan identifies key factors that may cause revisions to the response plan and requires the operator to submit revisions to the Office of Pipeline Safety within 30 days of making the revisions for factors including change in a National Contingency Plan or Area Contingency Plan that has a significant impact on the appropriateness of response equipment or response strategies in Section 1.2 on page 11.**
- Change in response procedures? : **Yes, the Facility Response Plan identifies key factors that may cause revisions to the response plan and requires the operator to submit revisions to the Office of Pipeline Safety within 30 days of making the revisions for factors including change in response procedures in Section 1.2 on page 11.**

Page Reference: **Section 1.2 Plan Review and Update Procedure**

Comment:

Recommendation:

**15.3** Does the Facility Response Plan describe procedures for incorporating improvements in the following? (49 CFR 194.121(b)(8))

- Post-drill evaluation results? : **Yes, the Facility Response Plan describes procedures for incorporating improvements in post-drill evaluation results in Figure A.1-2 on page 4.**
- Post-incident evaluation results? : **Yes, the Facility Response Plan describes procedures for incorporating improvements in post-incident evaluation results in Section 8.3 on pages 4 through 7.**

Page Reference: **Figure A.1-2 - Exercise Requirements and Section 8.3 Post-Incident Review**

Comment:

Recommendation:

**National Contingency Plan and Area Contingency Plan Consistency  
and Concept of Operations  
For Sequence Number: BPI0**

---

**16.1** Is the Plan consistent with the National Contingency Plan in effect at the time of submission? (49 CFR 194.107(b)(1)) Please answer yes or no. **Yes, the Plan is consistent with the National Contingency Plan in effect at the time of submission.**

Page Reference: **Entire Plan**

Comment:

Recommendation:

**16.2** Is the Plan consistent with the Area Contingency Plans in effect for each response zone at the time of submission? (49 CFR 194.107(b)(2)) Please answer yes or no. **Yes, the Plan is consistent with the Area Contingency Plans in effect for each response zone at the time of submission.**

Page Reference: **Entire Plan**

Comment:

Recommendation:

**16.3** Is the Plan's concept of operations adequate to carry out a response to the worst-case discharge under 49 CFR 194? (49 CFR 194.107) Please answer yes or no. **Yes, the Plan's concept of operations is adequate to carry out a response to the worst-case discharge under 49 CFR 194.**

Page Reference: **Entire Plan**

Comment:

Recommendation:

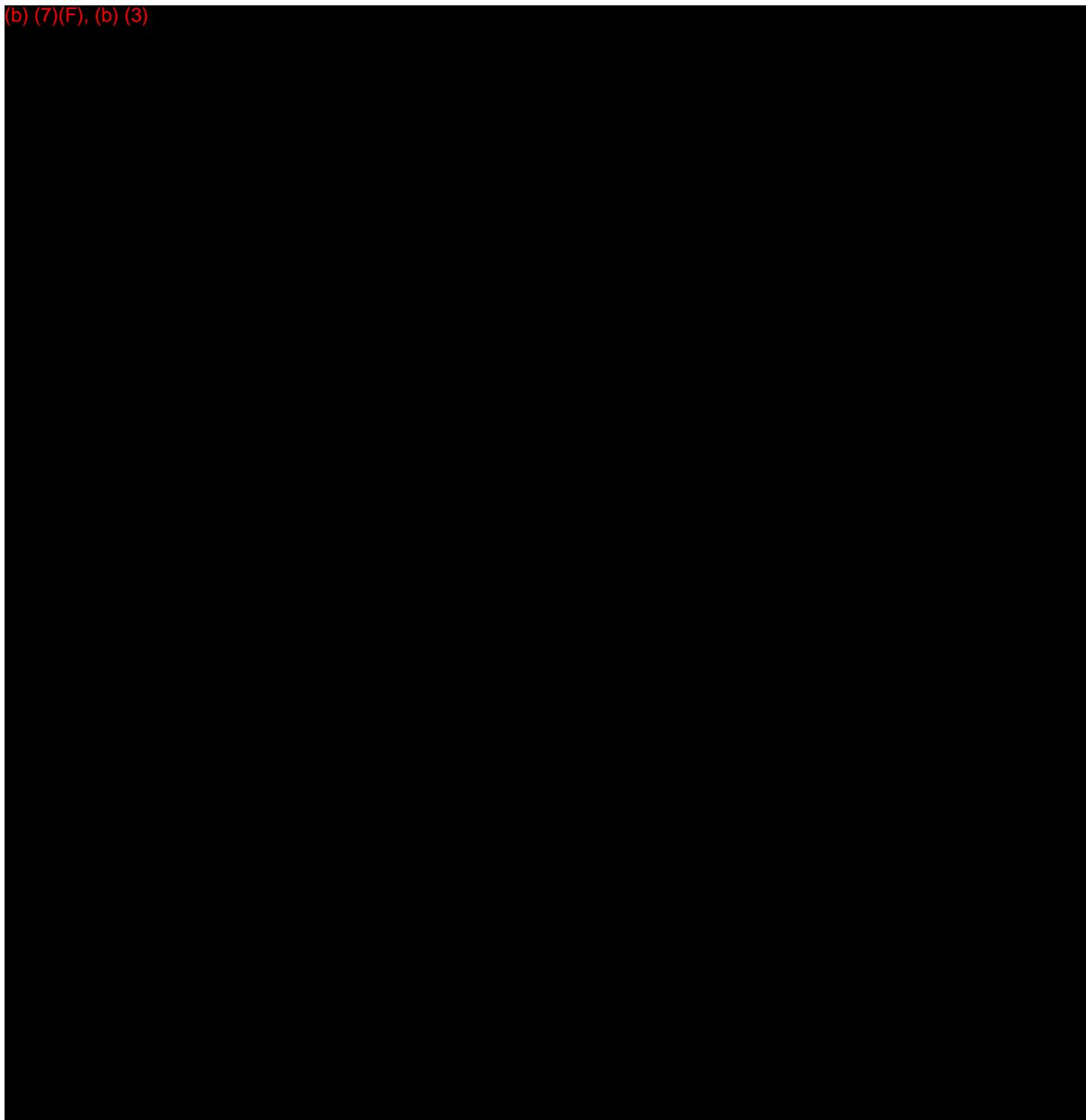
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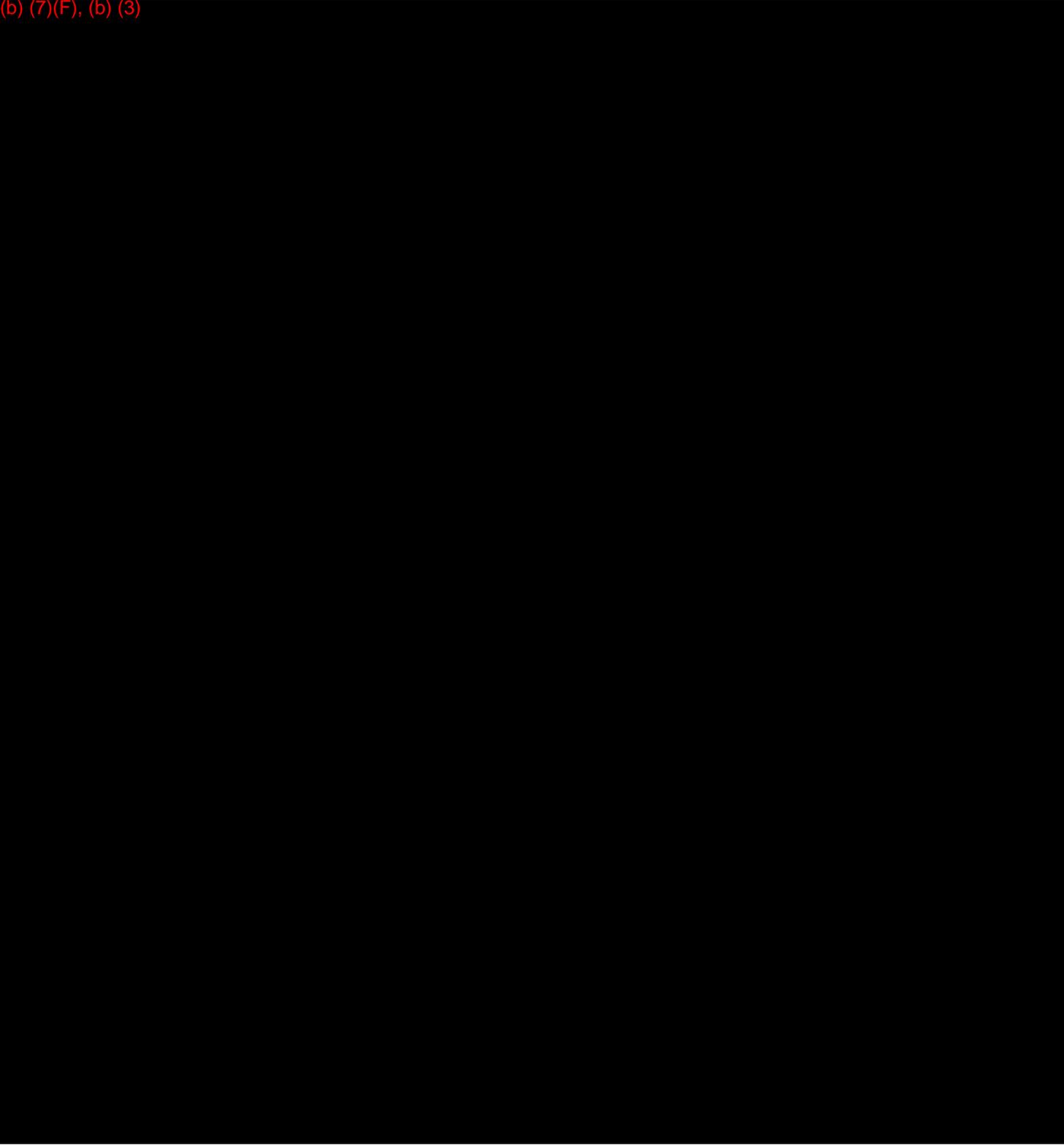
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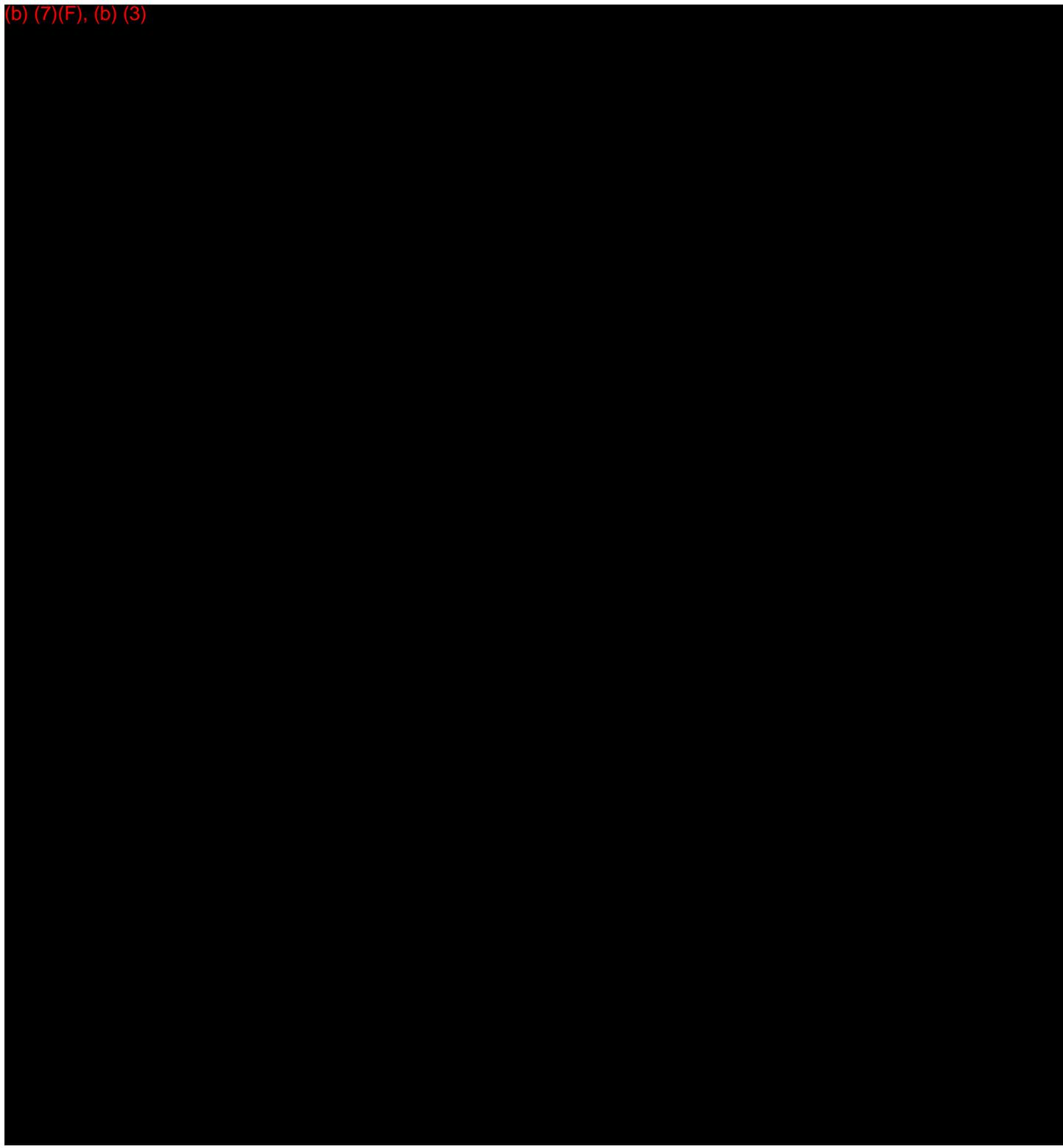








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US Pipelines and Logistics  
150 West Warrenville Road  
Naperville IL 60563

Date: April 25, 2012

**Appointment and Authorization of "Alternate Qualified Individuals"**

Pursuant to the Federal Water Pollution Control Act, as amended by the Oil Pollution Act of 1990, and the regulations promulgated thereto with respect to required Response Plans, as may be applicable, I hereby appoint Kathy Reed for and on behalf of the Company to serve as "Alternate Qualified Individual" for the Central Business District. He/she is hereby expressly granted authority under the applicable Response Plan to:

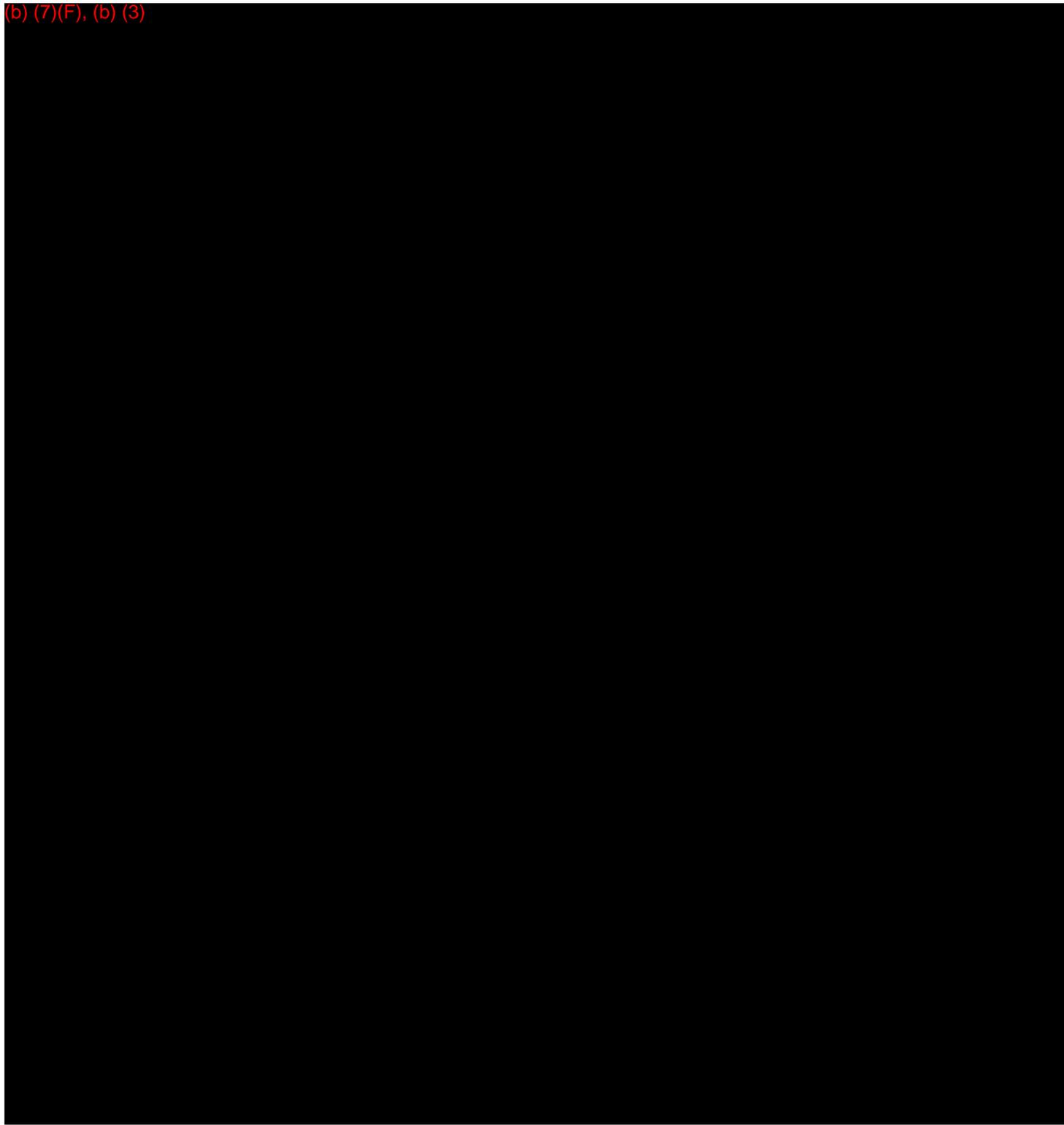
- (1) Activate and engage necessary oil spill removal organization(s);
- (2) Act as liaison with the predesignated Federal On-Scene Coordinator (FOSC); and
- (3) Obligate, either directly or through prearranged contracts, funds necessary to carry out all required or directed oil spill response activities.

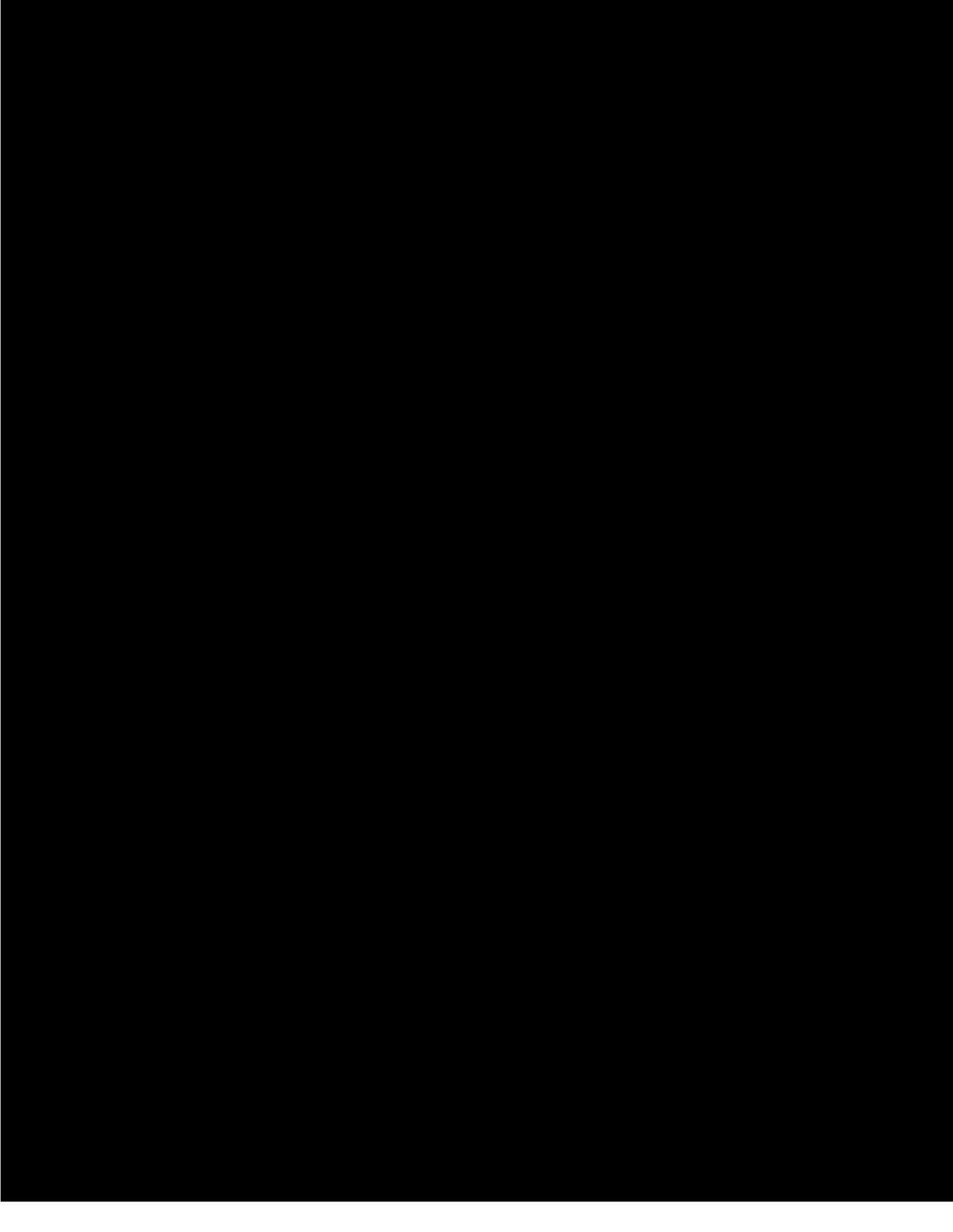
Signature:

A handwritten signature in blue ink that reads "Timothy J. R. Smith".

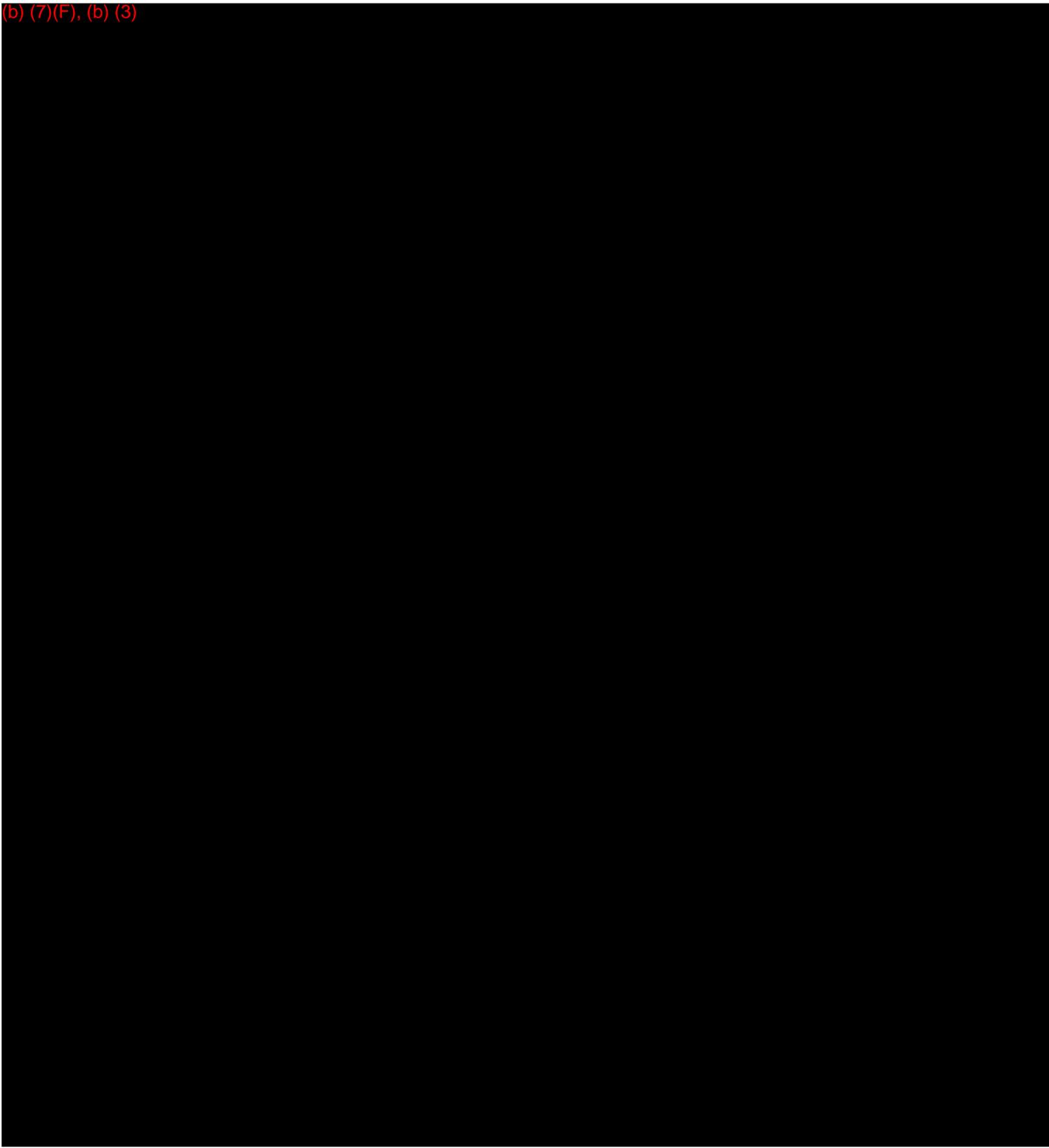
Timothy J. R. Smith  
Pipelines Area Manager

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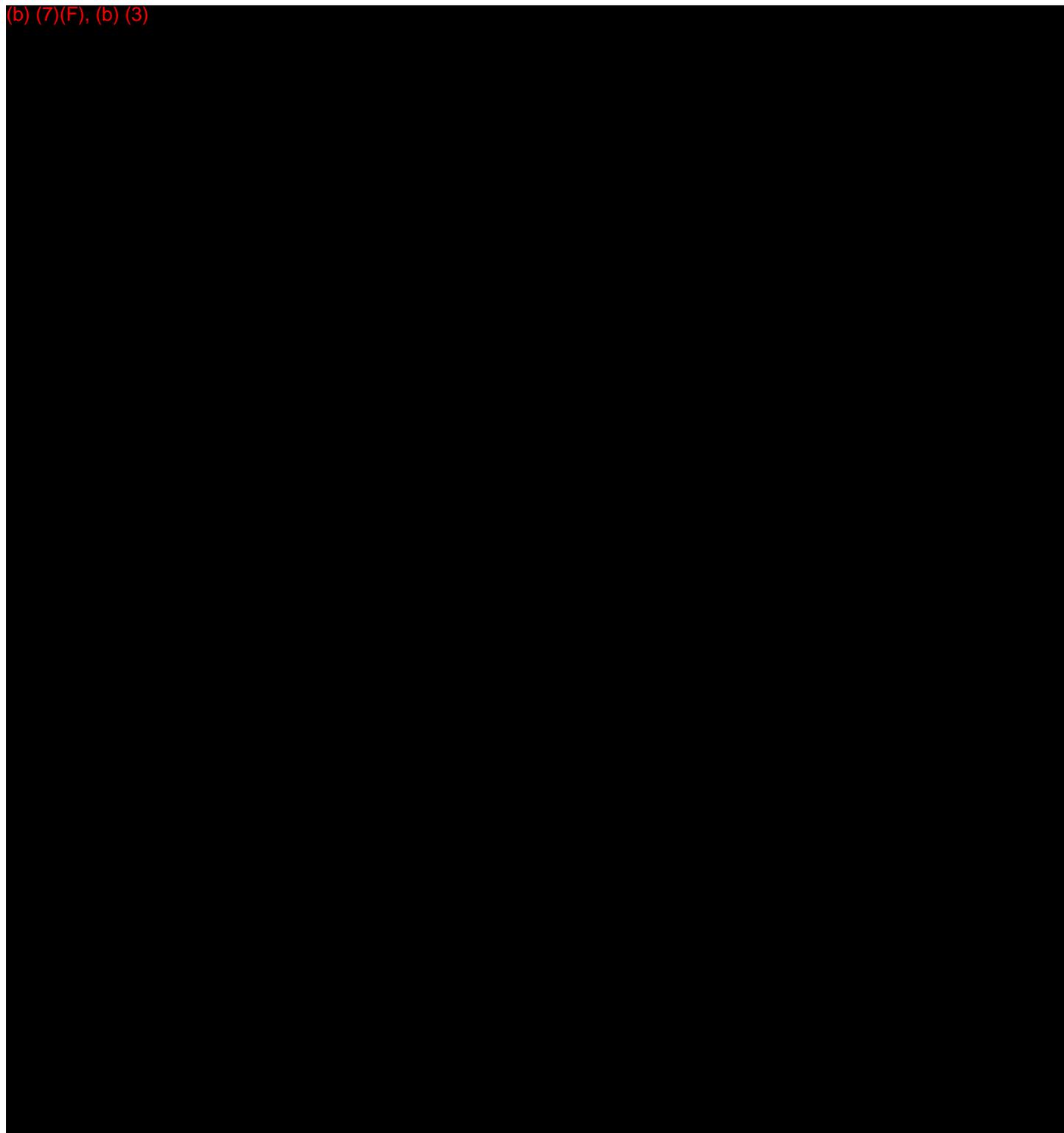




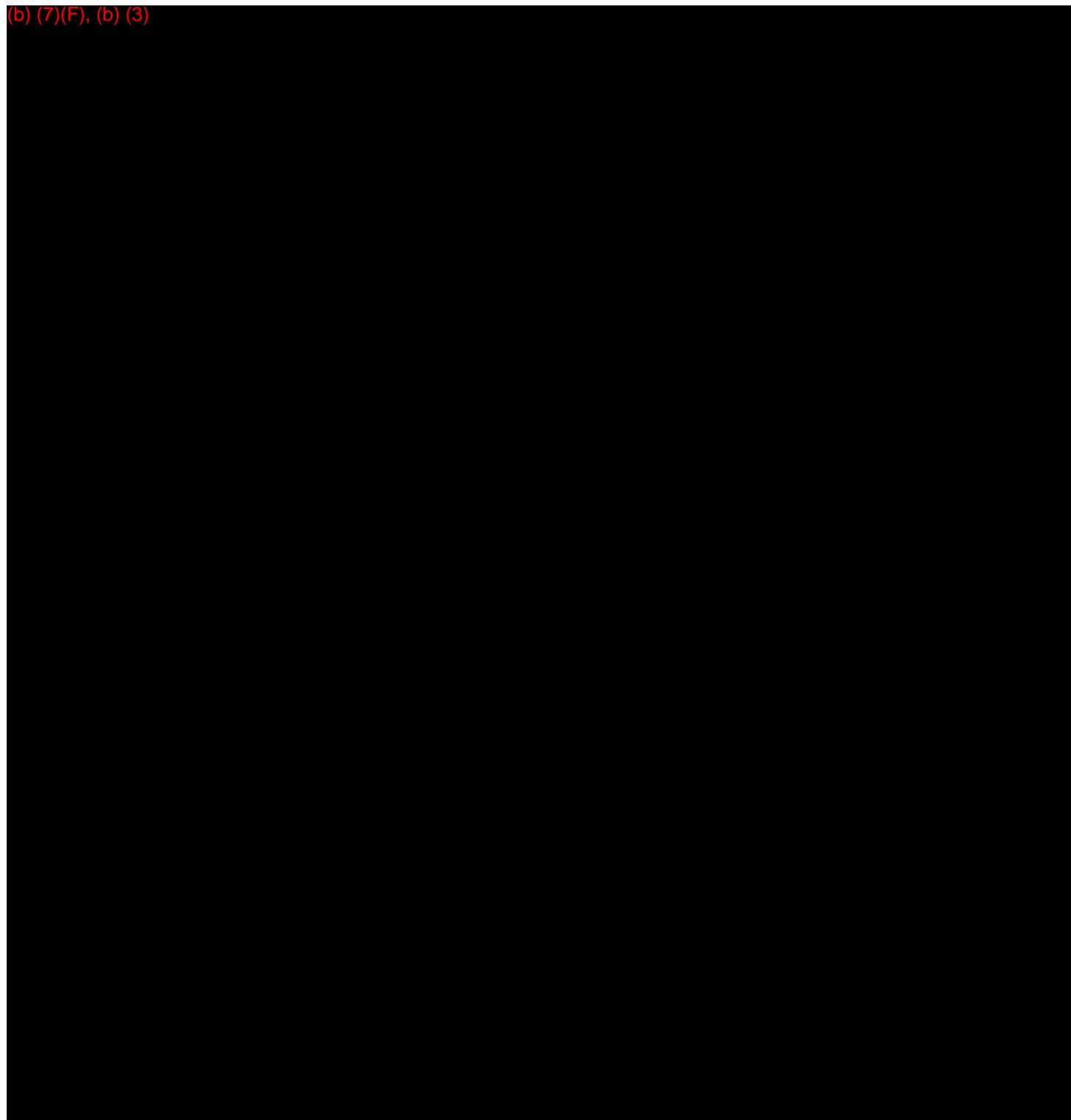
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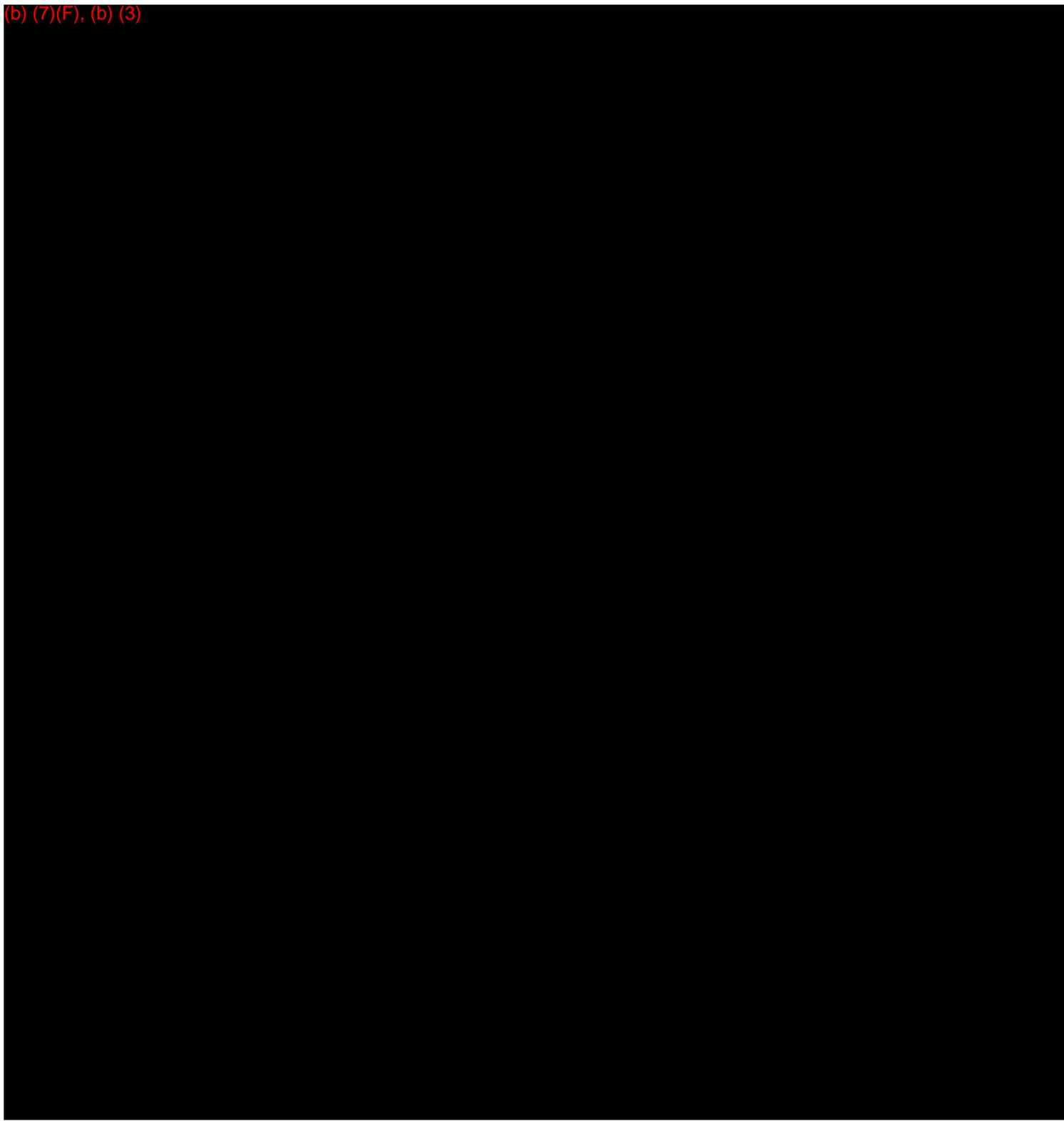


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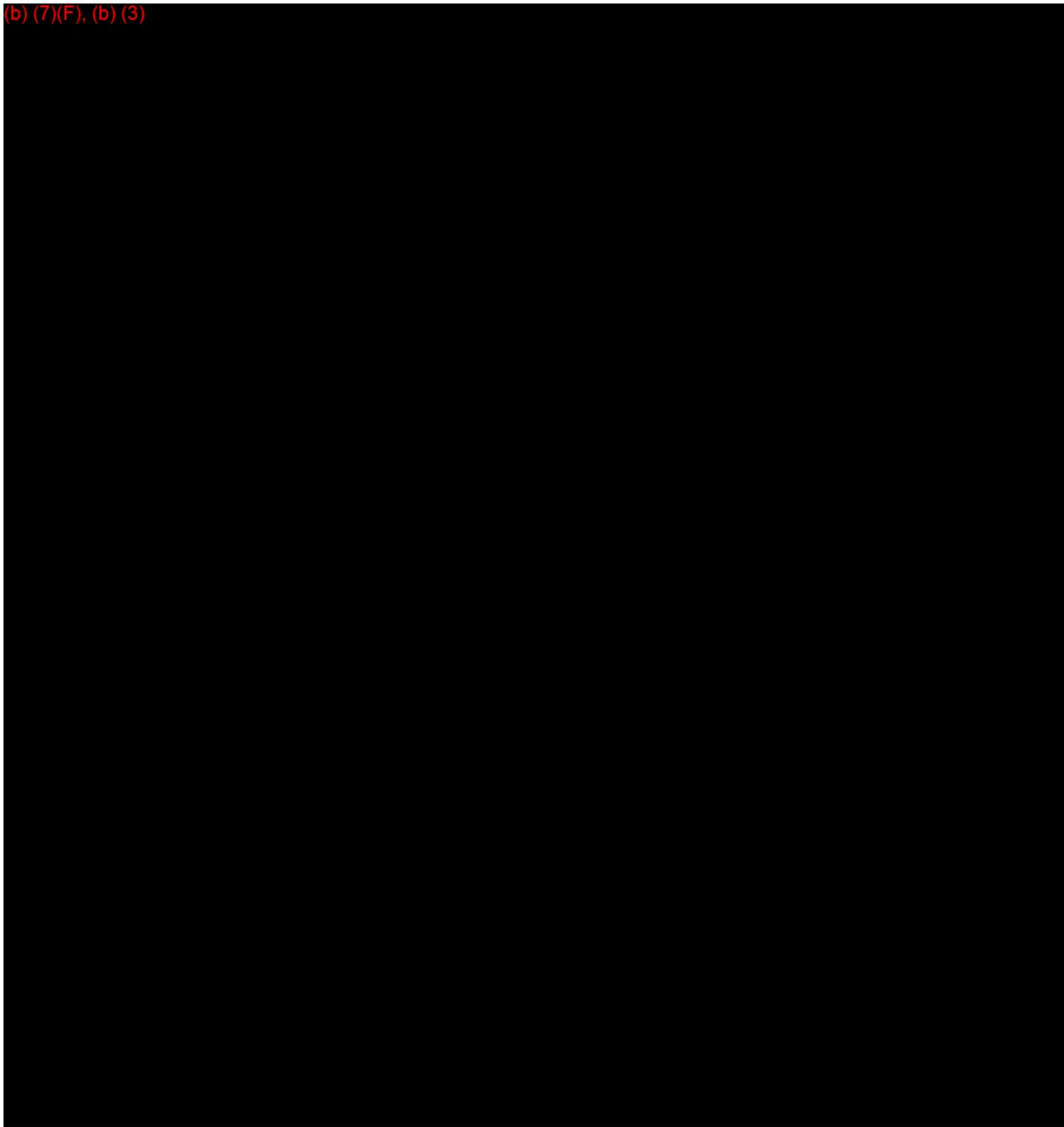


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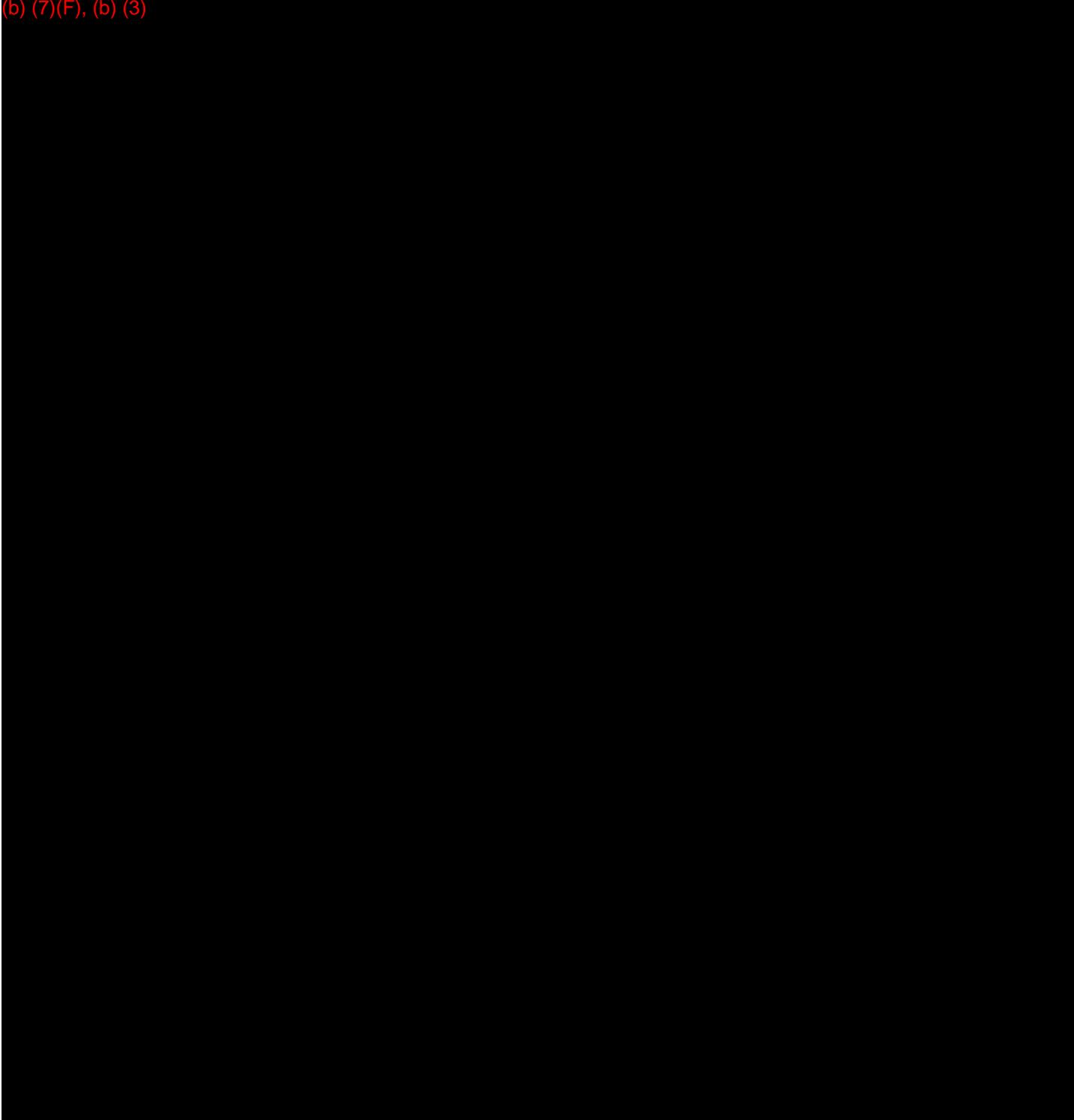




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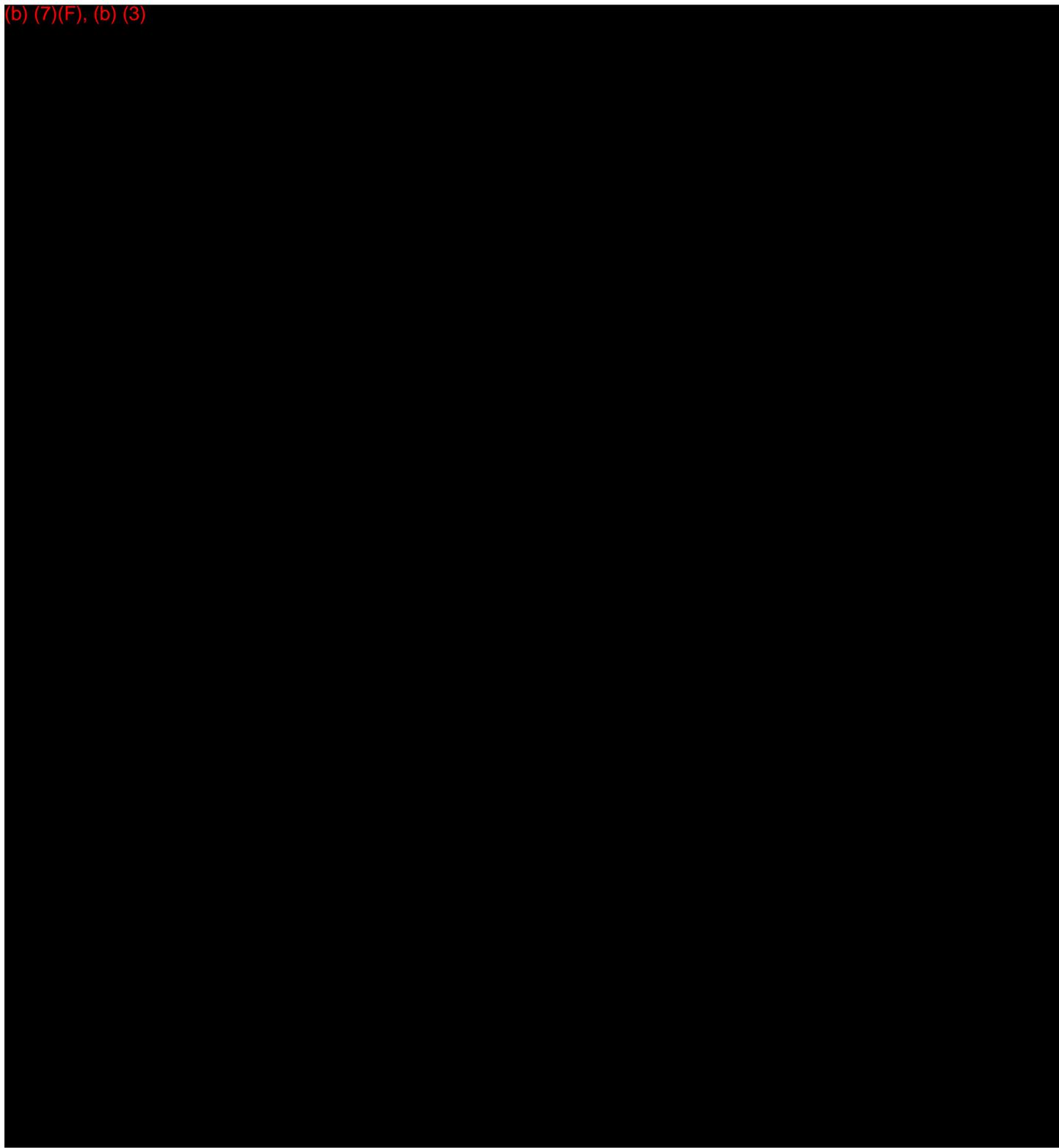




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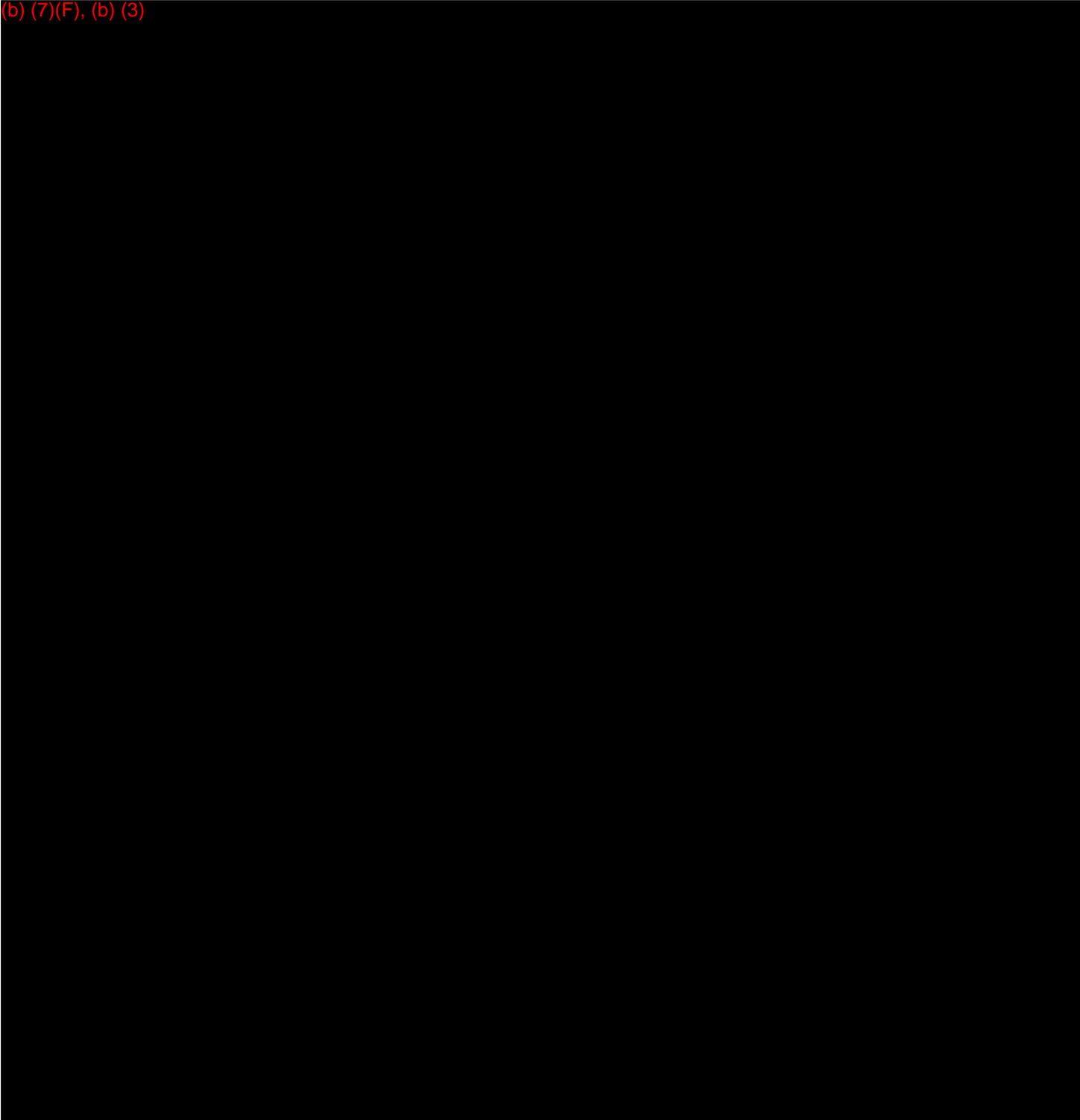
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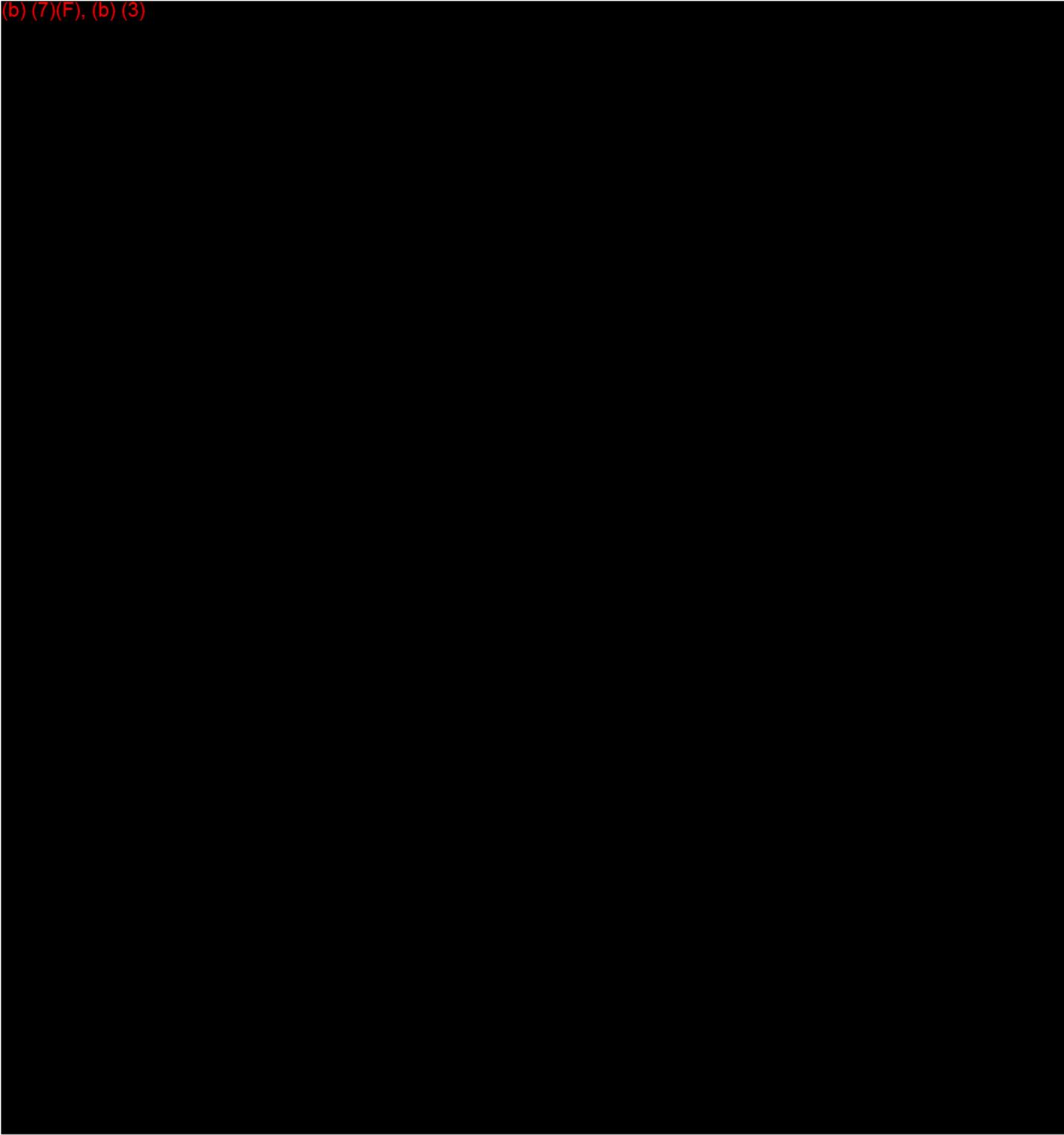


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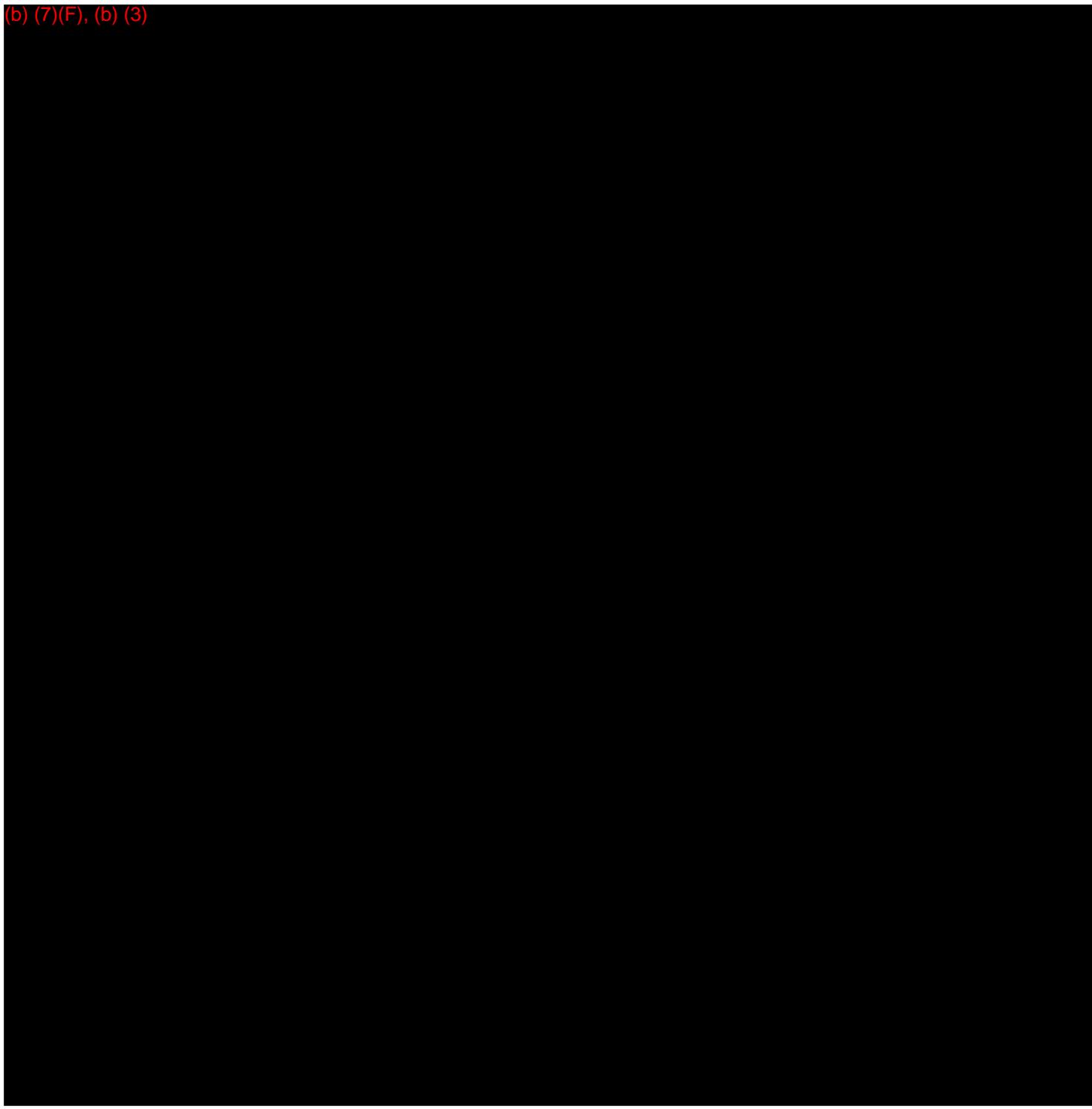
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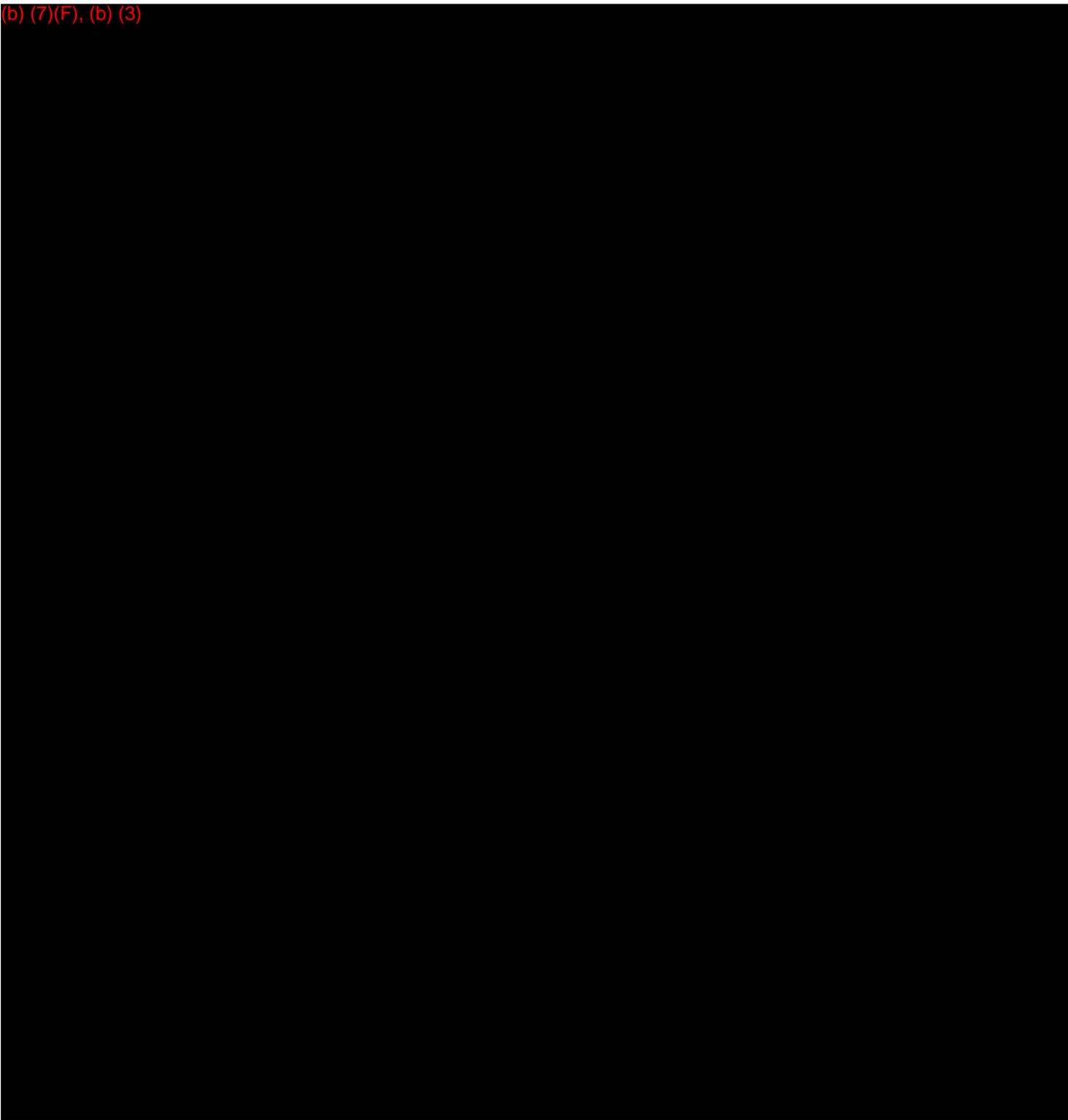


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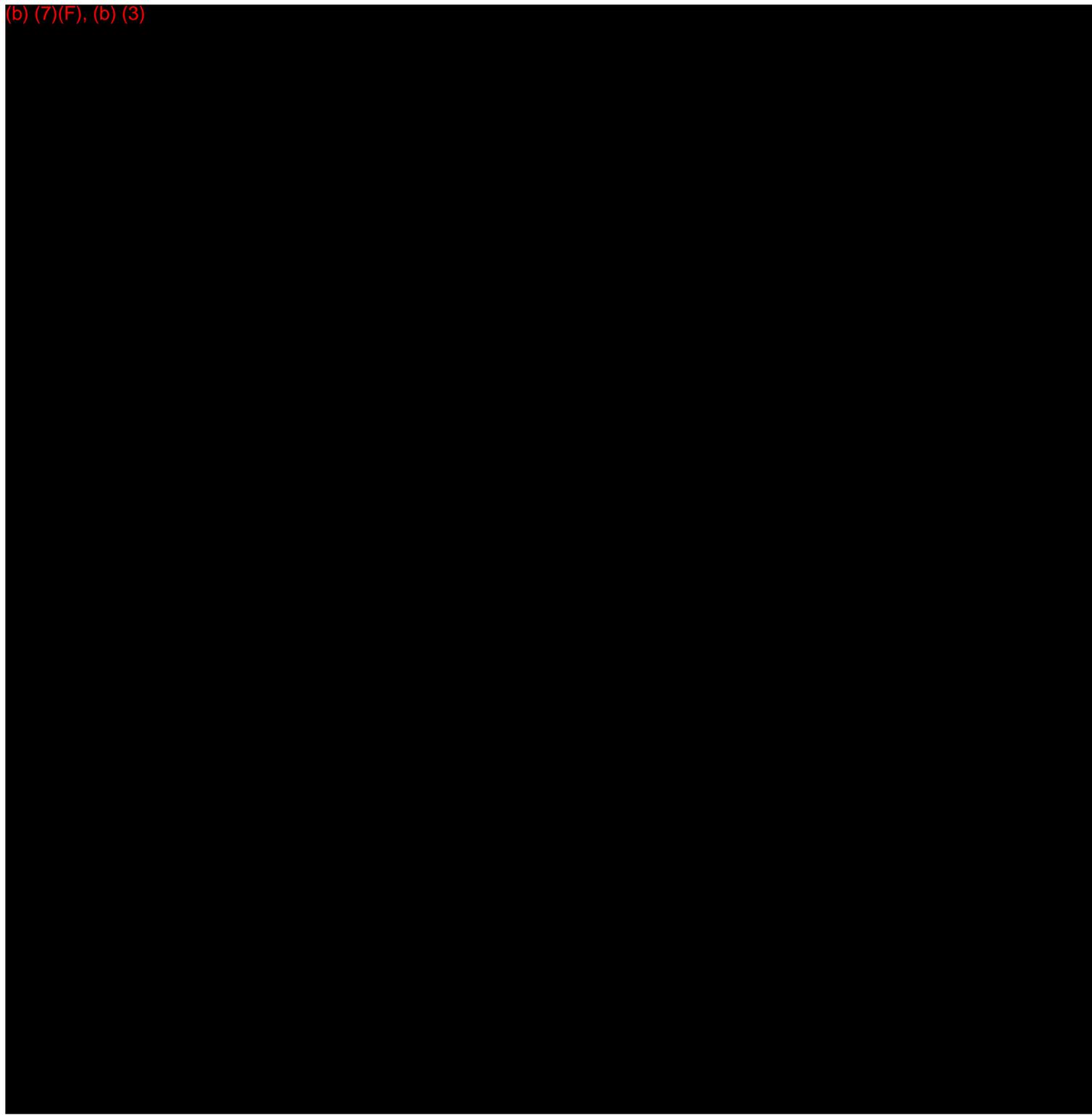




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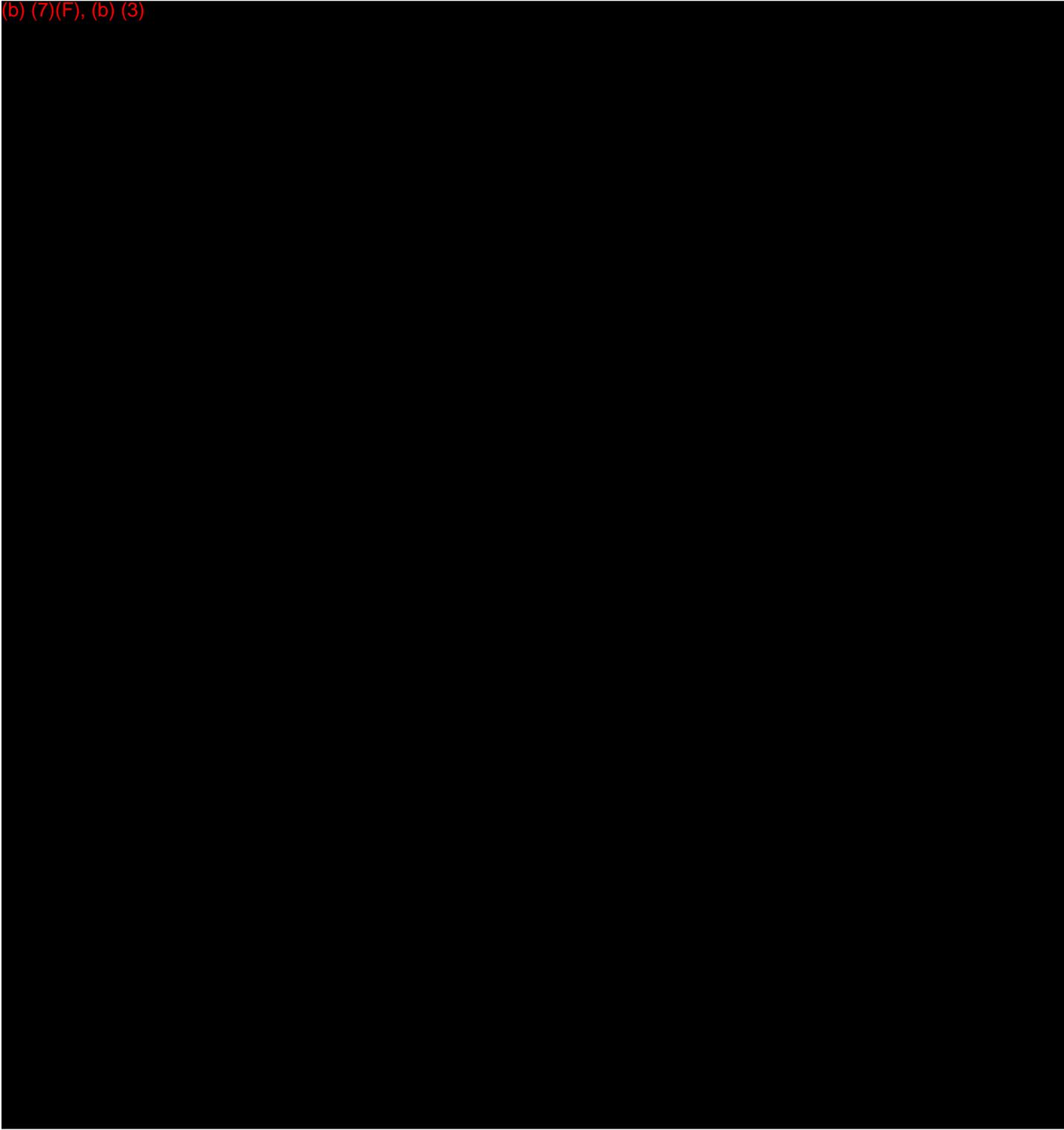


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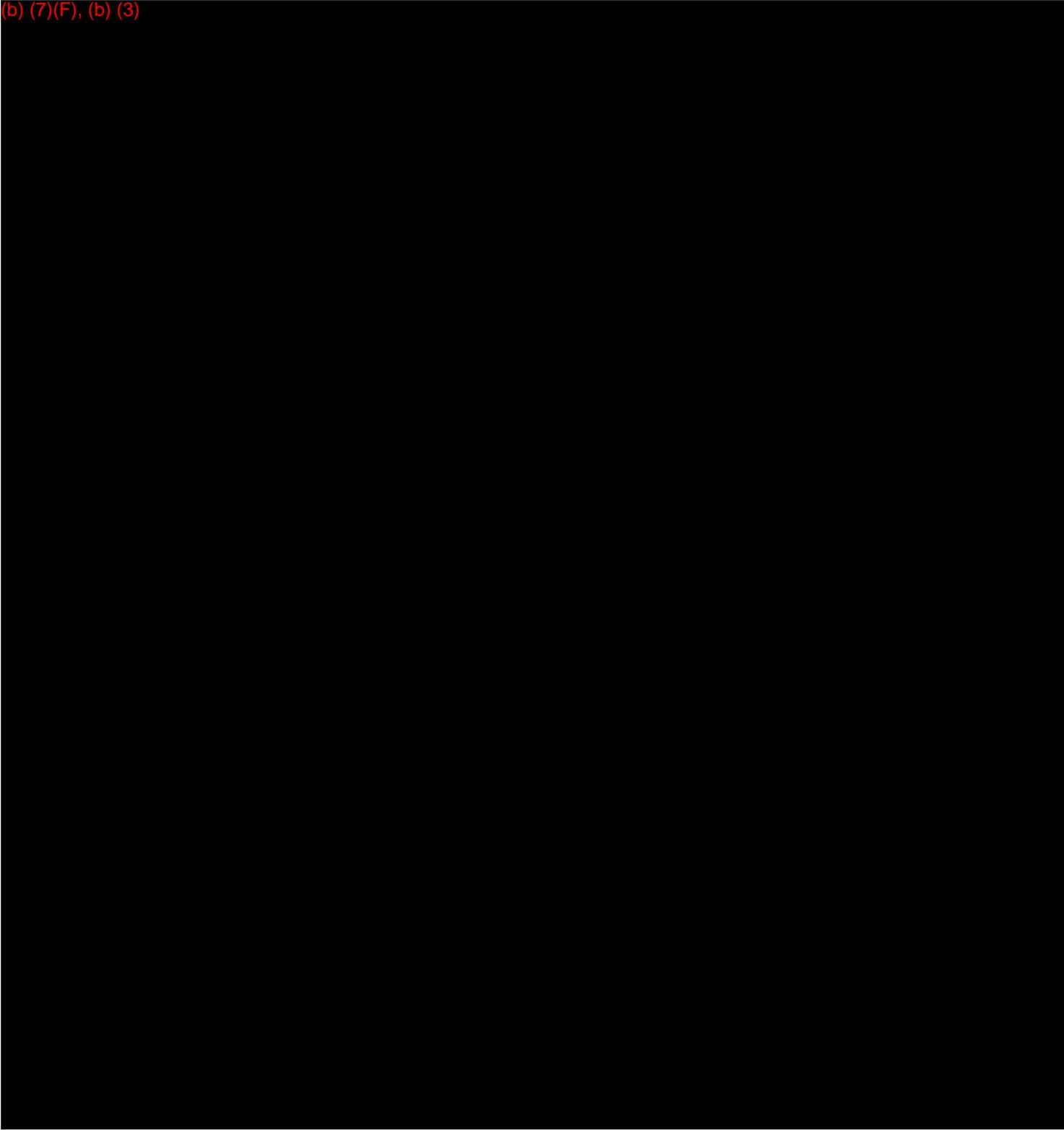




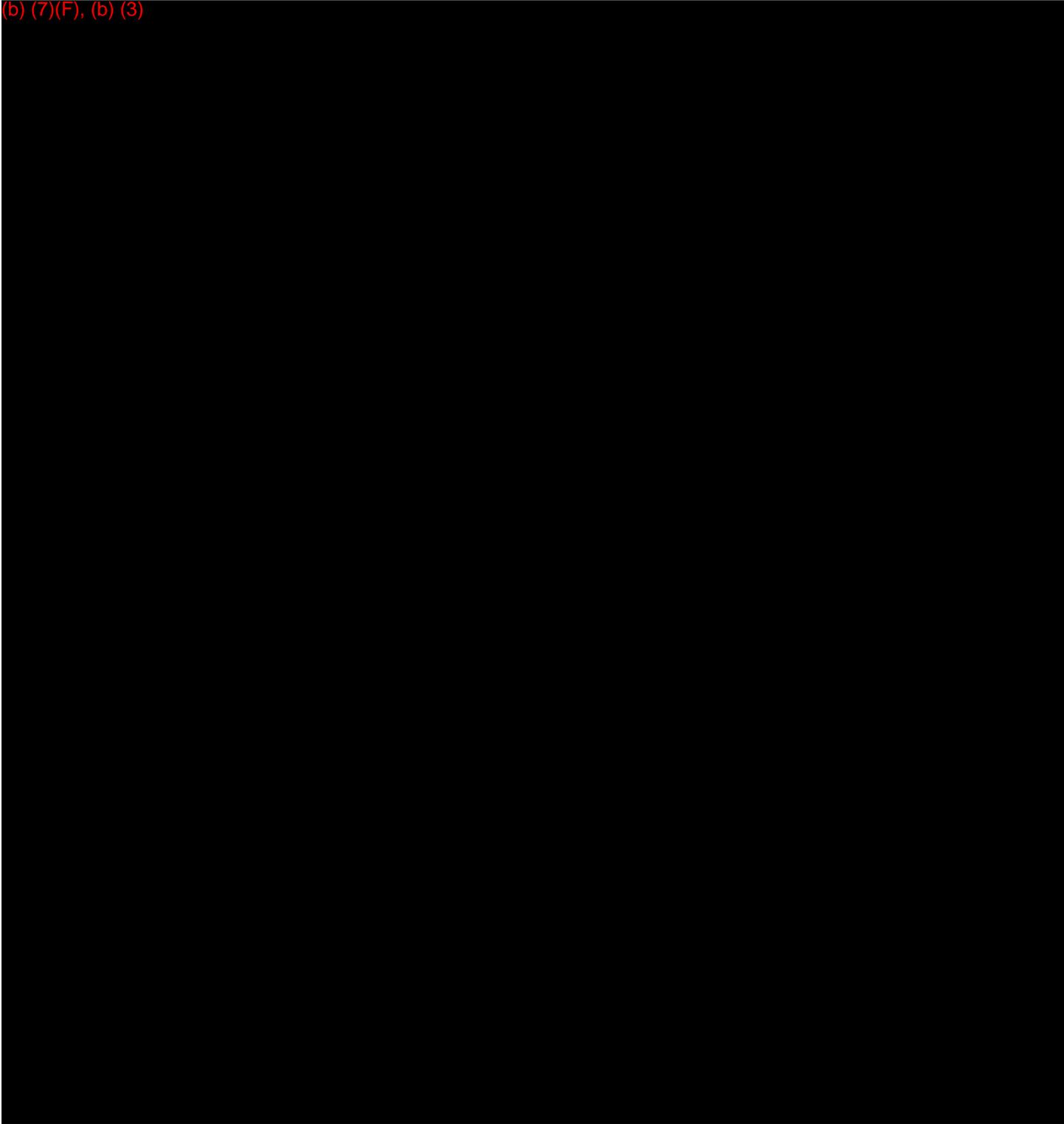




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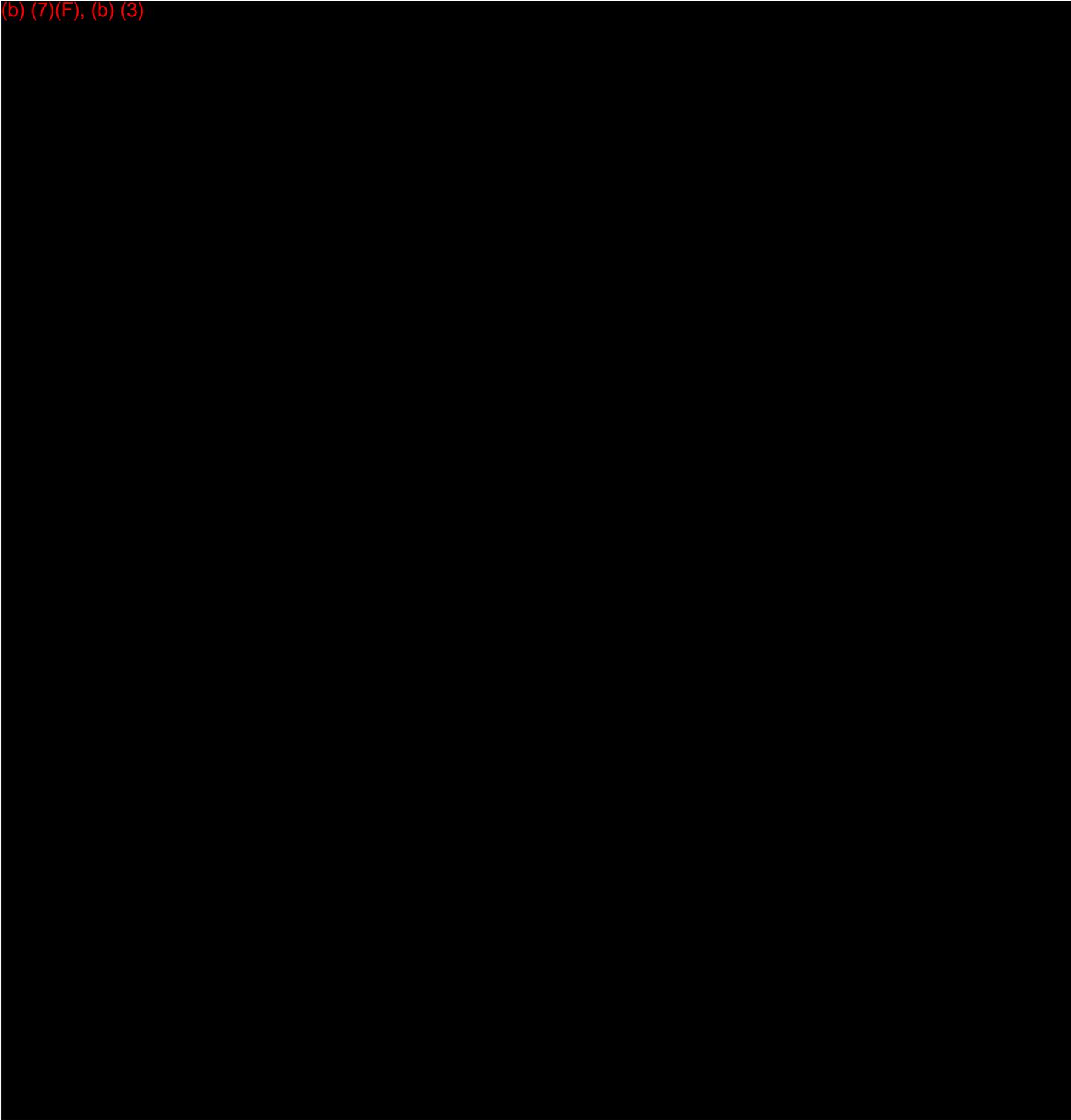






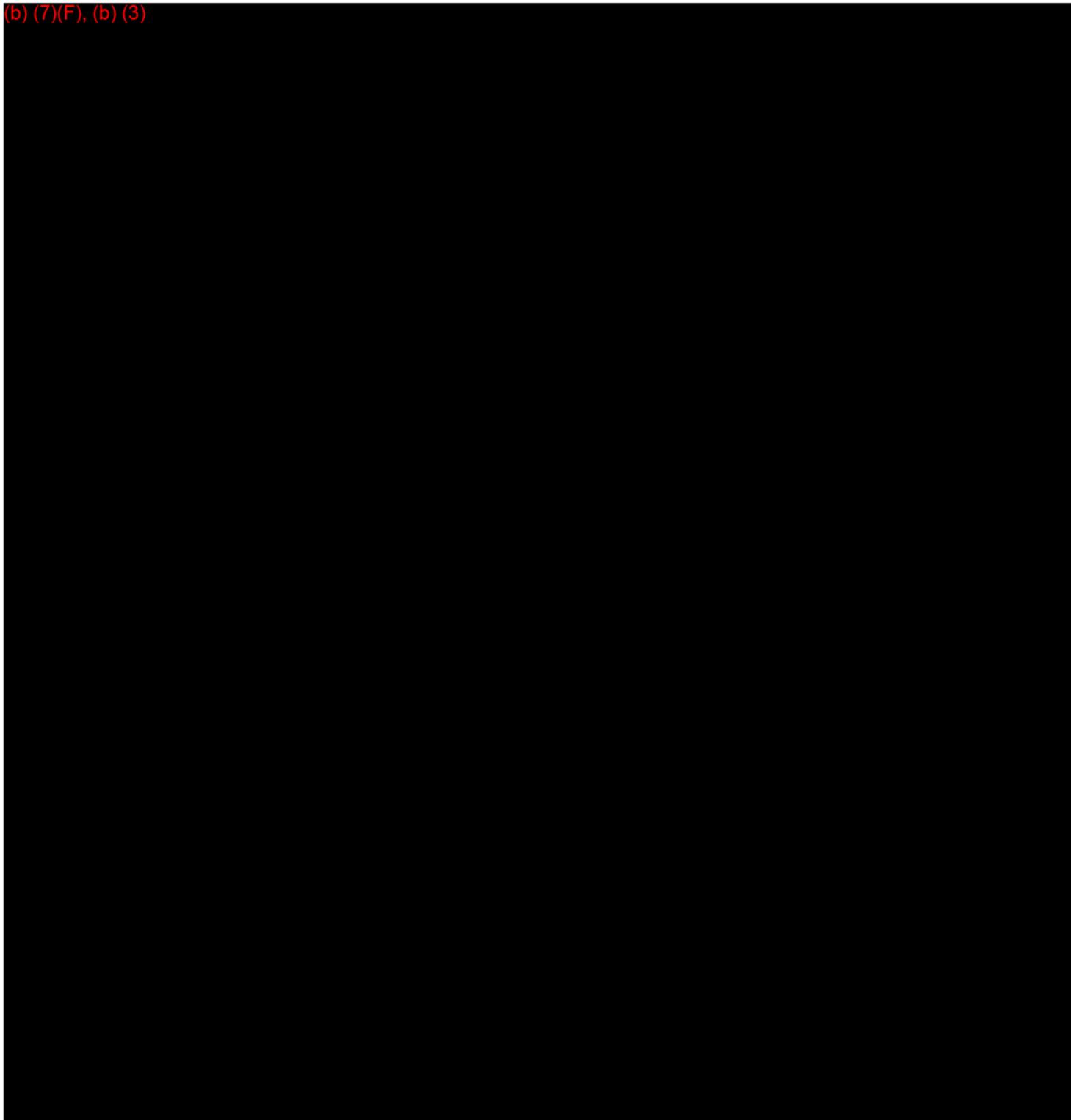


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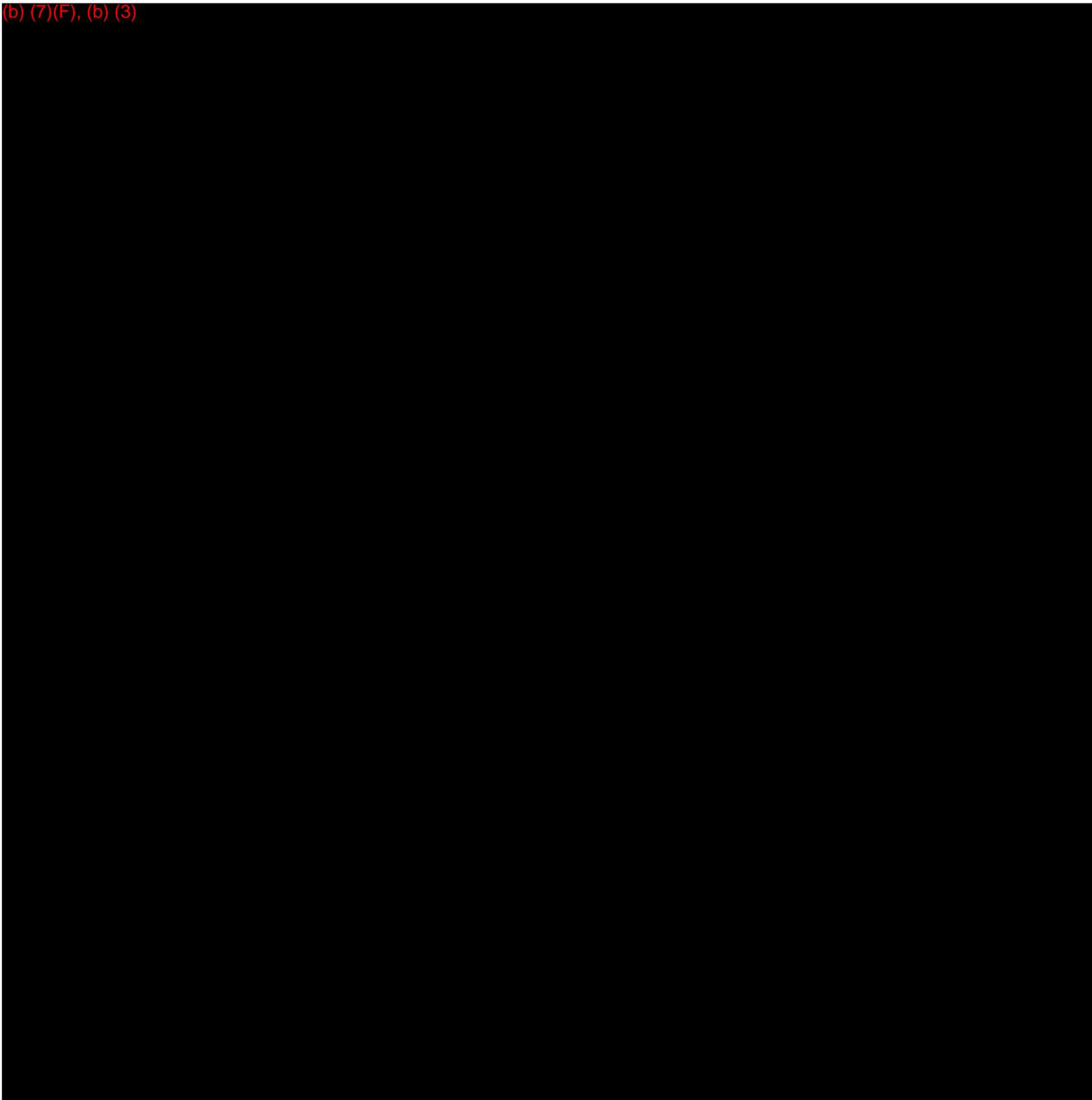








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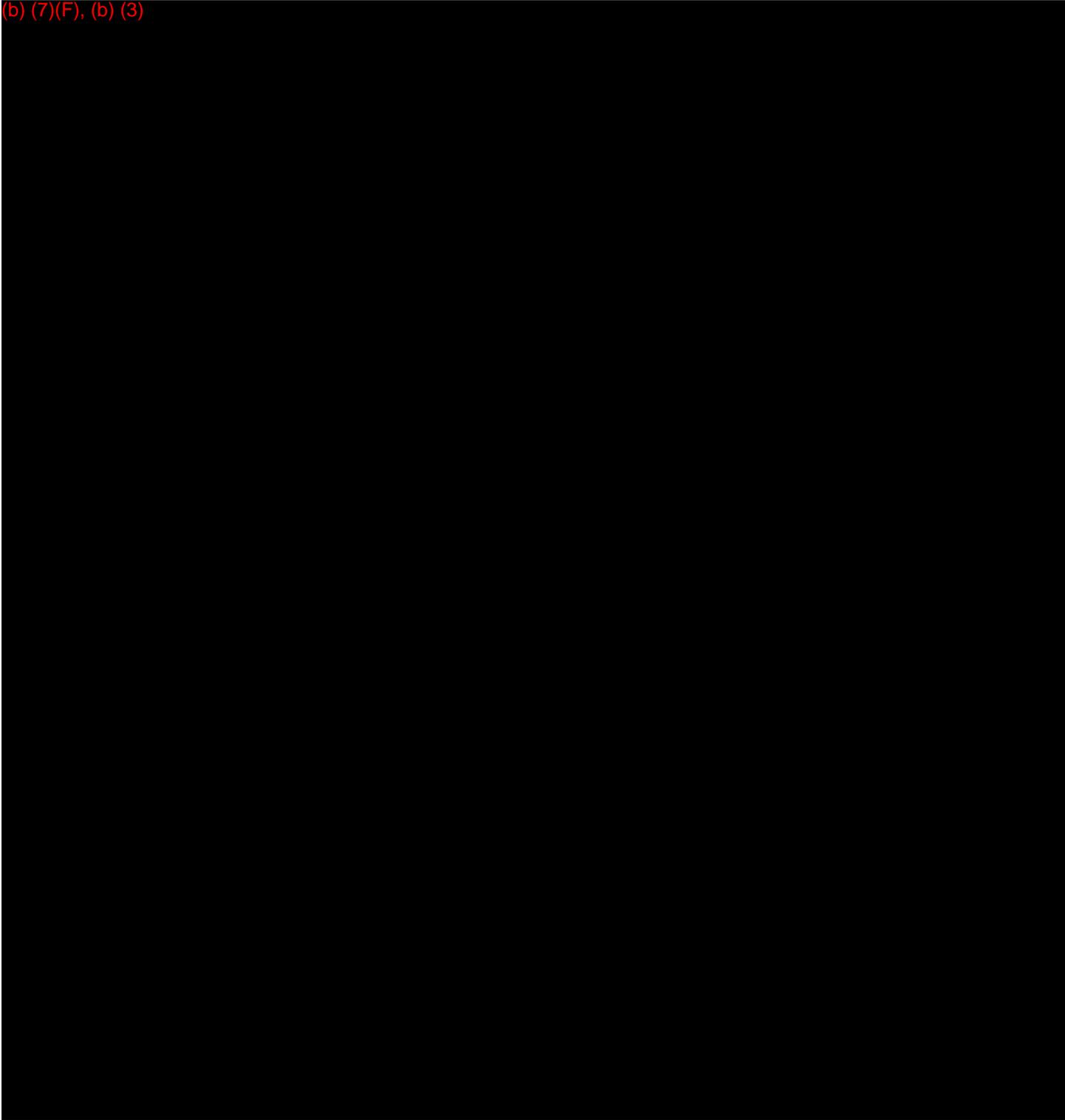


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U.S. Department of Transportation  
**Pipeline and Hazardous Materials  
Safety Administration**

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

**SEP 11 2013**

**Received**

**SEP 20 2013**

**BP  
Pipeline & Logistics**

Mr. Michael Sanders  
BP Pipelines (North America), Inc.  
150 W. Warrenville Rd.  
Naperville, IL 60563

**RE: Response Plan (BP Pipelines (North America), Inc. - Central Business District)  
Sequence Number: 2325 (Previously "BP10")  
Operator ID: 31189**

Dear Mr. Sanders:

PHMSA has completed its review of the BP Pipelines (North America), Inc., Central Business District Facility Response Plan ("the Plan"). We have identified deficiencies in the Plan and cannot approve it without the following corrections. The following items should be addressed, as shown in the Corrective Action section following each item and submitted to PHMSA within thirty (30) days from the date of this letter. If you are unable to address these issues within that time, you may request an extension via mail or to the email address listed below.

### **National Oil and Hazardous Substances Pollution Contingency Plan (NCP) & Area Contingency Plan (ACP) Certification**

49 CFR § 194.107(b) states, "An operator must certify in the response plan that it reviewed the NCP and each applicable ACP and that its response plan is consistent with the NCP and each applicable ACP..."

**Discrepancy:** The Plan contains a statement in Section 1.1 similar to the above required element, but the statement is not certified by the operator.

**Corrective Action:** Amend the Plan by certifying the referenced statement, as required by 49 CFR §194.107(b).

## Certification of Adequate Resources

**Discrepancy:** The Plan contains a Certification of Response Preparedness (Section 1.3), but the signature is missing.

**Corrective Action:** Update the certification to include the signature and printed name of the certifying official referenced in the certification.

## Worst Case Discharge Determination Methodology

49 CFR § 194.105(a) states, "Each operator shall determine the worst case discharge for each of its response zones and provide the methodology, including calculations, used to arrive at the volume."

The methodology referenced in the regulation above includes the comparison of the three volumes of Worst Case Discharge sources: pipeline, breakout tank, and maximum historic discharge.

**Discrepancy:** A statement is made in Appendix C, Section 4 (Page C-11) regarding worst case discharge, as follows: "the worst case discharge for each pipeline segment is the largest breakout tank." The next sentence further leads one to believe that there are breakout tanks covered within the Zone, "These tank volumes are as follows:", but no tank volumes or data are provided.

Further, the Plan states that "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 50% and the worst case discharge volume is 50% of the total volume.  $( ) \times 0.50 = \text{bbls.}$ " This paragraph is inconsistent and unclear, for two reasons. First, if all of the spill prevention credits, except the 5% for tertiary containment, are implemented, the total would be 70%, not 50%. See the "Prevention measure" table at 49 CFR § 194.105(a)(4). Second, the Plan again fails to provide breakout tank volumes and you did not complete the prevention credits calculation provided with breakout tank data.

**Corrective Action:** Amend the Plan to provide breakout tank volumes within the Response Zone, and complete prevention credits calculation consistent with the "Prevention measure" table. If there are no breakout tanks within the Response Zone, please provide a statement in your Plan affirming this.

## Environmentally and Economically Sensitive Areas

49 CFR § 194.107(b)(2) states, "As a minimum, to be consistent with the applicable ACP the plan must:...(ii) Identify environmentally and economically sensitive areas.

**Discrepancy:** The Plan provides links to several "sensitivity maps" in Section 6.7, but the maps are not accessible either in HTML version or within the folders/files that you submitted in CD format. The status of whether this requirement has been satisfied is unverifiable with the documentation provided.

**Corrective Action:** Amend the Plan to provide working links to the sensitivity maps, which are to include environmentally and economically sensitive areas in the Response Zone.

Once the above listed issues are addressed, PHMSA can approve this Plan. If additional information or clarification for these items is needed, please contact me at 202-366-4595 or by email at PHMSA.OPA90@dot.gov.

We have researched PHMSA's Operator Identification ("OPID") Number Registry and have made a preliminary finding that your OPID is 31189 with a headquarters address of 150 W. Warrenville Rd., Naperville, IL 60563. Please advise if you believe that this pipeline system should be associated with a different OPID. Please include your OPID number and the sequence number for this plan (2325) in any plan-related correspondence.

Sincerely,



John C. Hess, Director  
Emergency Support and Security Division  
Office of Pipeline Safety

---

cc: PHMSA Central Regional Office;  
PHMSA Southern Regional Office; and  
Mr. Greg Desmond, Technical Response Planning Corp.  
9720 Cypresswood Dr. Suite 340  
Houston, TX 77070-3356

//6800



**BP Pipelines NA, Inc.**  
Central Business District  
8230 Whitcomb Street  
Merrillville, IN 46410

**Certified Mail – Return Receipt Requested**

July 9, 2010

U.S. Department of Transportation  
Office of Pipeline Safety  
1200 New Jersey Avenue, S.E.  
Room 22-210  
Attention: Melanie Barber, Response Plans Officer  
Washington D.C. 20590

**RE: Change of Qualified Individual for BP Pipelines Central Business District (PHMSA FRP# requested previously) located at 8230 Whitcomb Street, Merrillville, IN 46410 \***

Dear Ms. Barber:

This will serve as notification that one of the Qualified Individuals named in subject FRP (Michael J. Liebman) has been replaced by me. I am now serving as District Operations Manager of BP's Central Business District; and, as such, am assuming the role of primary Qualified Individual. If you have any questions, please contact me at (219) 472-2325.

**\* NOTE: District office address has changed. Former address was 150 Warrenville Road, D-6, Naperville, IL 60563.**

Sincerely,

  
Joseph T. Estep  
District Operations Manager

cc: Beth Crisp, Area Manager  
Jeff Schimmel, Area Manager  
Terry Chance, O&M Team Leader  
John Murray, O&M Team Leader  
Ron Bozarth, Sr. Emergency Preparedness & Crisis Mgmt Advisor  
Greg Desmond, Sr. Project Manager, Technical Response Planning Corp.

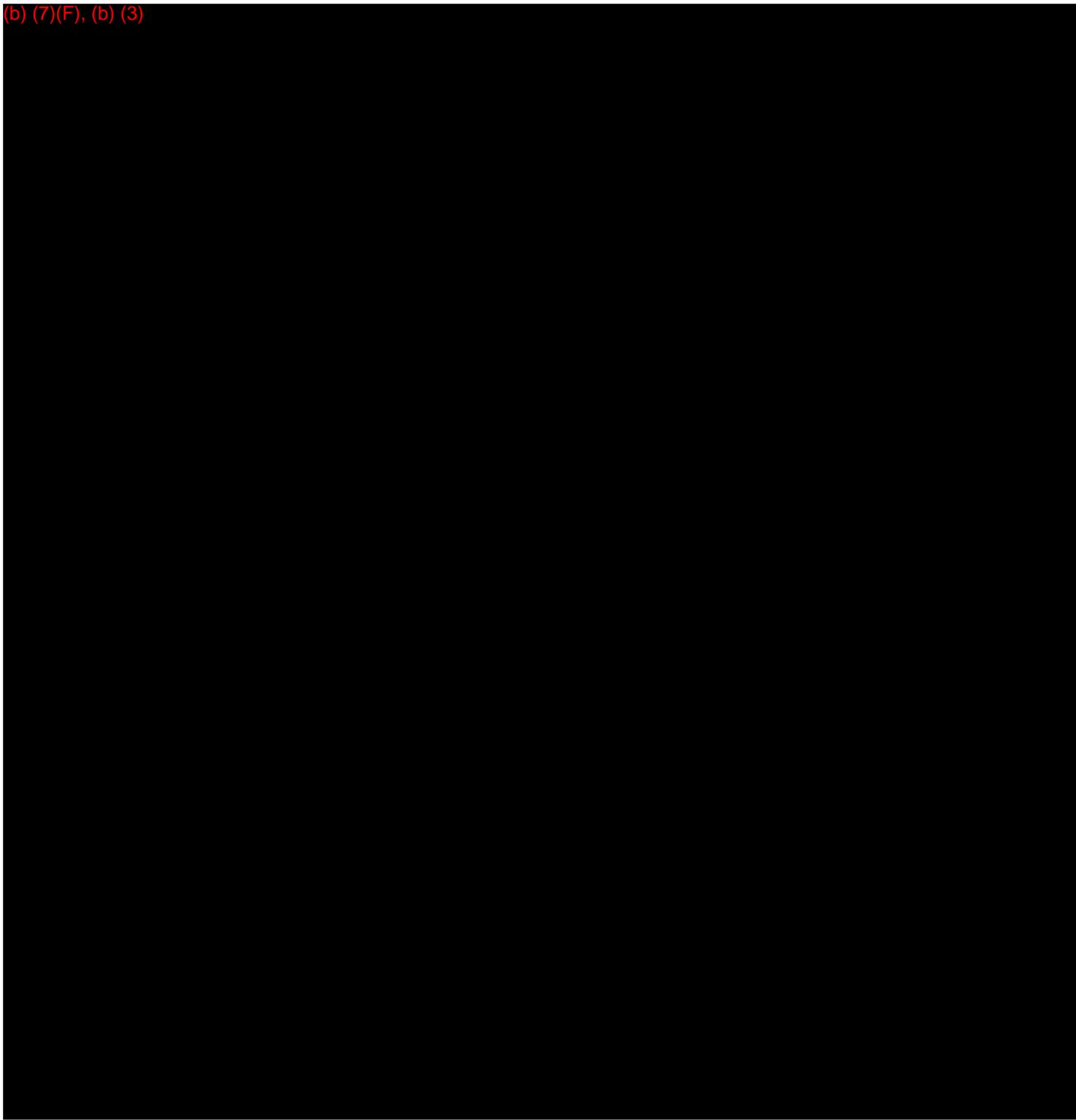








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US Pipelines and Logistics  
 150 West Warrenville Road  
 Naperville IL 60563

29 March 2012

**Appointment and Authorization of "Qualified Individuals"**

**BP Pipelines (North America) Inc.**, a corporation duly organized and subsisting in good standing under the laws of the State of Maine, United States of America, operator of fuel distribution terminals of BP Products North America Inc., BP West Coast Products LLC and Arco Terminal Services Corporation (the "**Company**") and owner/operator of pipeline pump stations; by Steve Pankhurst, its President, does hereby constitute, designate and appoint the following individuals:

**Performance Unit Leaders and Area Operations and Area Pipelines Managers:**

Bobby Talley	East of Rockies Performance Unit Leader
Tyrone Mitchell	East of Rockies Operations Manager
Julea Mitchell	Northeast Terminals Area Manager
Jeffery Schimmel	Southeast Terminals Area Manager
Mike Cunningham	Midwest Terminal Area Manager
Timothy Smith	Pipelines Area Manager
Houston Johnson	Divestment Operations Manager East
Joseph Estep	Divestment Operations Manager MA/Central
Robert Turner	Divestment Operations Manager Ohio
Kirsty Clode	Gulf Region Performance Unit Leader
Brian Miller	Gulf Region Maintenance & Reliability Manager
Chris Maudlin	West Region Performance Unit Leader
Timothy Hayes	Los Angeles Basin Pipeline District Operations Manager
Steve Maulding	Olympic Pipeline District Operations Manager
Rosanne Lopez	Olympic Pipeline Sr. Operation and Maintenance Team Lead
W. (Tim) Jacobs	Pacific NW/Central California District Operations Manager
Ben Martinez	Southern California District Operations Manager

Pursuant to the Federal Water Pollution Control Act, as amended by the Oil Pollution Act of 1990, and the regulations promulgated thereto with respect to required Response Plans, as may be applicable, you are each hereby appointed for and on behalf of the Company to serve as "Qualified Individual" for the particular assets / facilities of which you are manager.

You are hereby expressly granted authority under the applicable Response Plan to:

- (1) Activate and engage necessary oil spill removal organization(s);
- (2) Act as liaison with the predesignated Federal On-Scene Coordinator (FOSC); and
- (3) Obligate, either directly or through prearranged contracts, funds necessary to carry out all required or directed oil spill response activities.

You are also authorized to further delegate these spill response authorities to an appropriate "Alternate Qualified Individual". You must delegate the spill response authorities to those persons listed in your area's / district's Emergency Response Plans as "Alternate Qualified Individual". Such delegation must be made promptly, in writing, by issuing a copy of the letter enclosed to each person so designated, and each delegation letter must be kept on file.



Steve Pankhurst - Business Unit Leader, US Pipelines & Logistics

(Note: original on file in the office of the S&O HSSE Manager)

cc: Bobby Talley, Performance Unit Leader, East of Rockies  
Kirsty Clode, Performance Unit Leader, Gulf of Mexico  
Chris Maudlin Performance Unit Leader, West



**BP Pipelines (North America), Inc.**

28100 Torch Parkway  
Warrenville, IL 60555  
(office) 630-836-3494  
(fax) 630-836-3582

November 2, 2007

Melanie Barber  
U.S. Department of Transportation  
Office of Pipeline Safety  
1200 New Jersey Avenue, S.E.  
Room 22-210  
Washington, D.C. 20590

**RE: BP Facility Response Plan Revisions**

Dear Melanie Barber:

We hereby submit two (2) electronic copies each for the response plans listed below and includes comments to assist in tracking these plans:

1131 Mid America Business District – now split into two separate districts, Central Business District and Mid-America Business District each with separate plans

New PHMSA # needed – Central Business District which consists of assets from the Mid America Business District

Other plan changes include Qualified Individual changes, worst case discharge volume changes and response zone changes.

If you have any questions regarding these submittals, please contact me at 630-836-3498.

Sincerely,

A handwritten signature in black ink, appearing to read "R. Khanishu", written in a cursive style.

Robert Khanishu  
DOT Team Lead

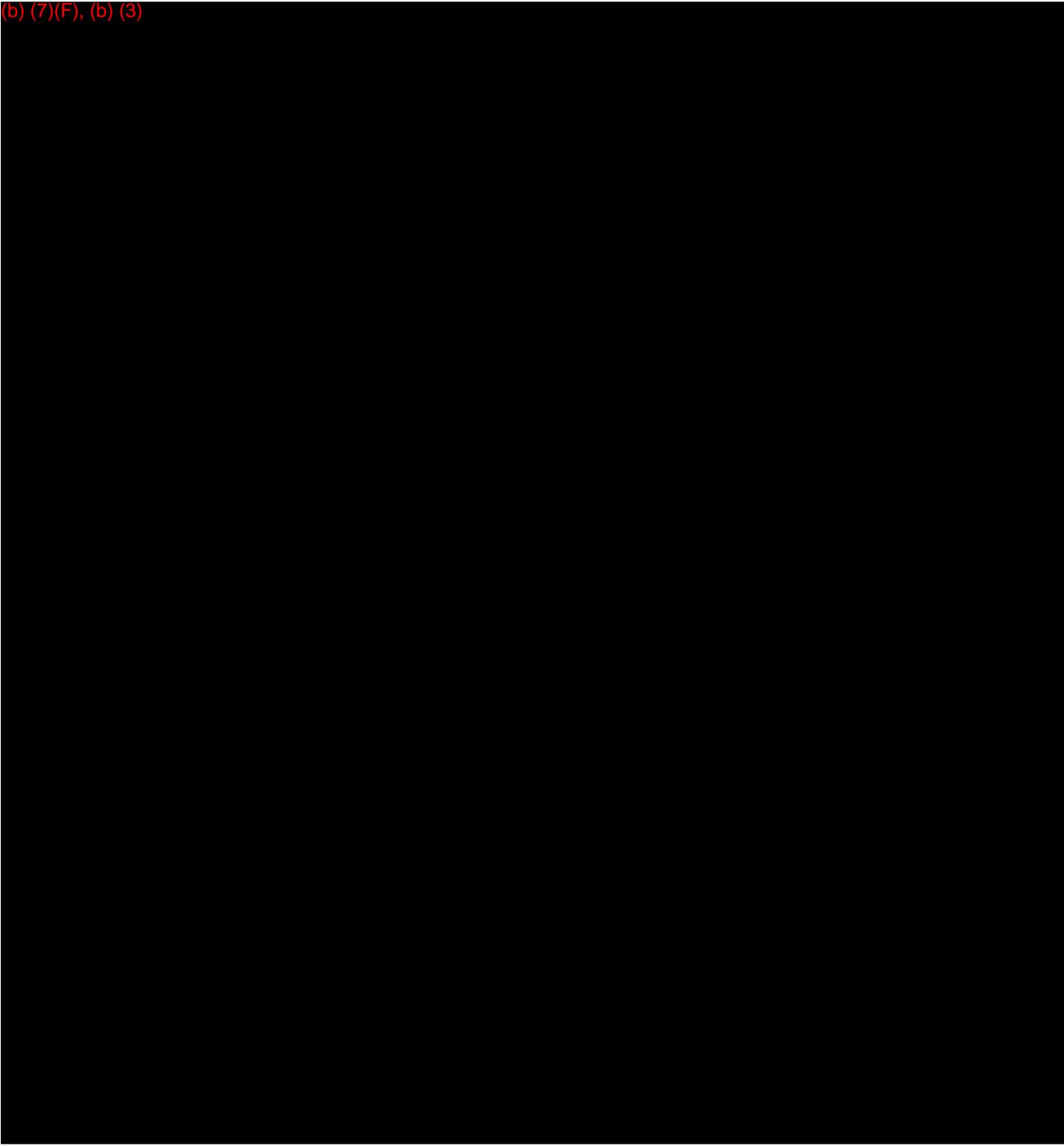
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US Pipelines and Logistics  
150 West Warrenville Road  
Naperville IL 60563

Date: April 25, 2012

**Appointment and Authorization of "Alternate Qualified Individuals"**

Pursuant to the Federal Water Pollution Control Act, as amended by the Oil Pollution Act of 1990, and the regulations promulgated thereto with respect to required Response Plans, as may be applicable, I hereby appoint Terry Chance for and on behalf of the Company to serve as "Alternate Qualified Individual" for the Central Business District. He/she is hereby expressly granted authority under the applicable Response Plan to:

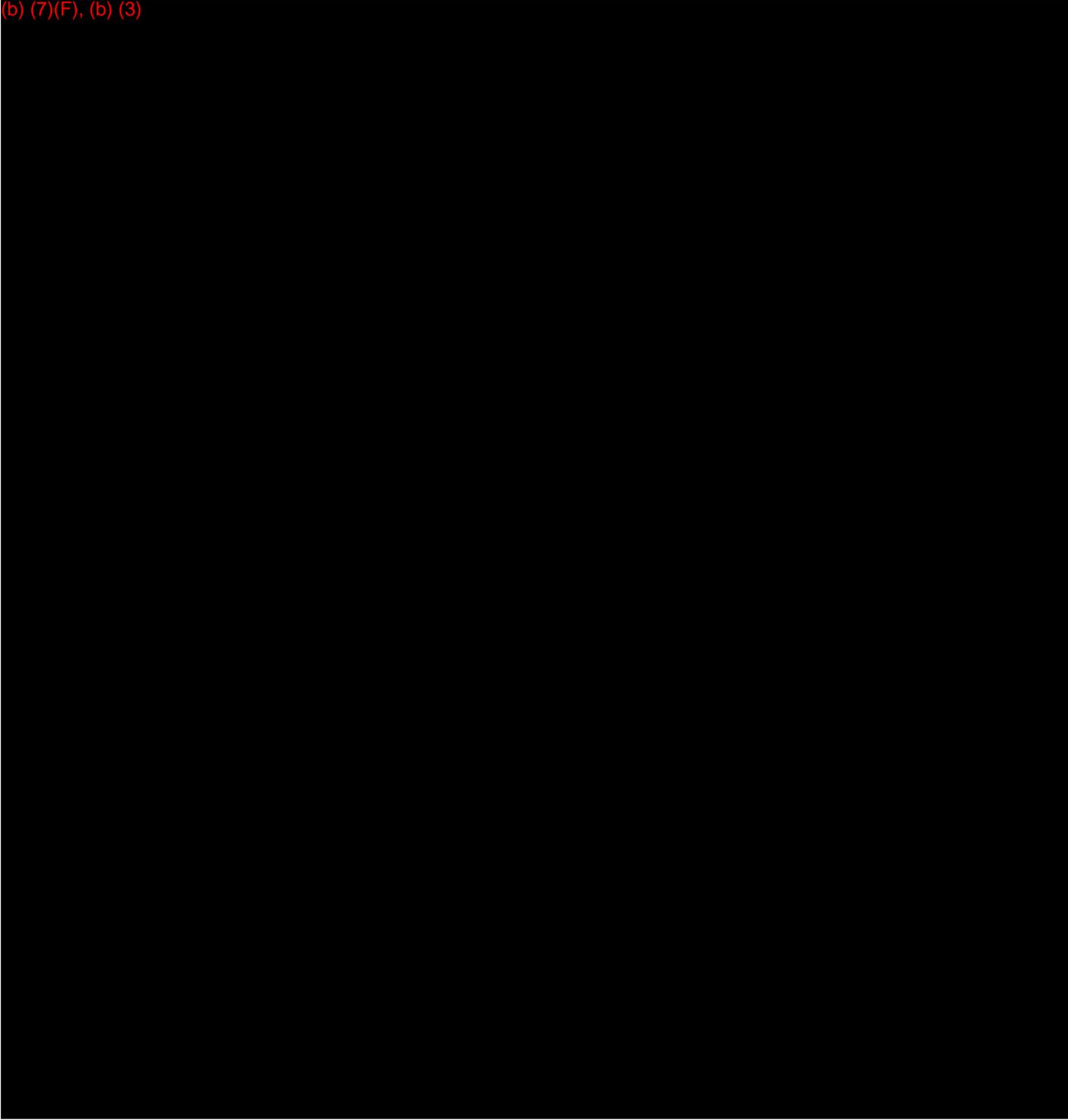
- (1) Activate and engage necessary oil spill removal organization(s);
- (2) Act as liaison with the predesignated Federal On-Scene Coordinator (FOSC); and
- (3) Obligate, either directly or through prearranged contracts, funds necessary to carry out all required or directed oil spill response activities.

Signature:

A handwritten signature in blue ink that reads "Timothy J. R. Smith".

Timothy J. R. Smith  
Pipelines Area Manager

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









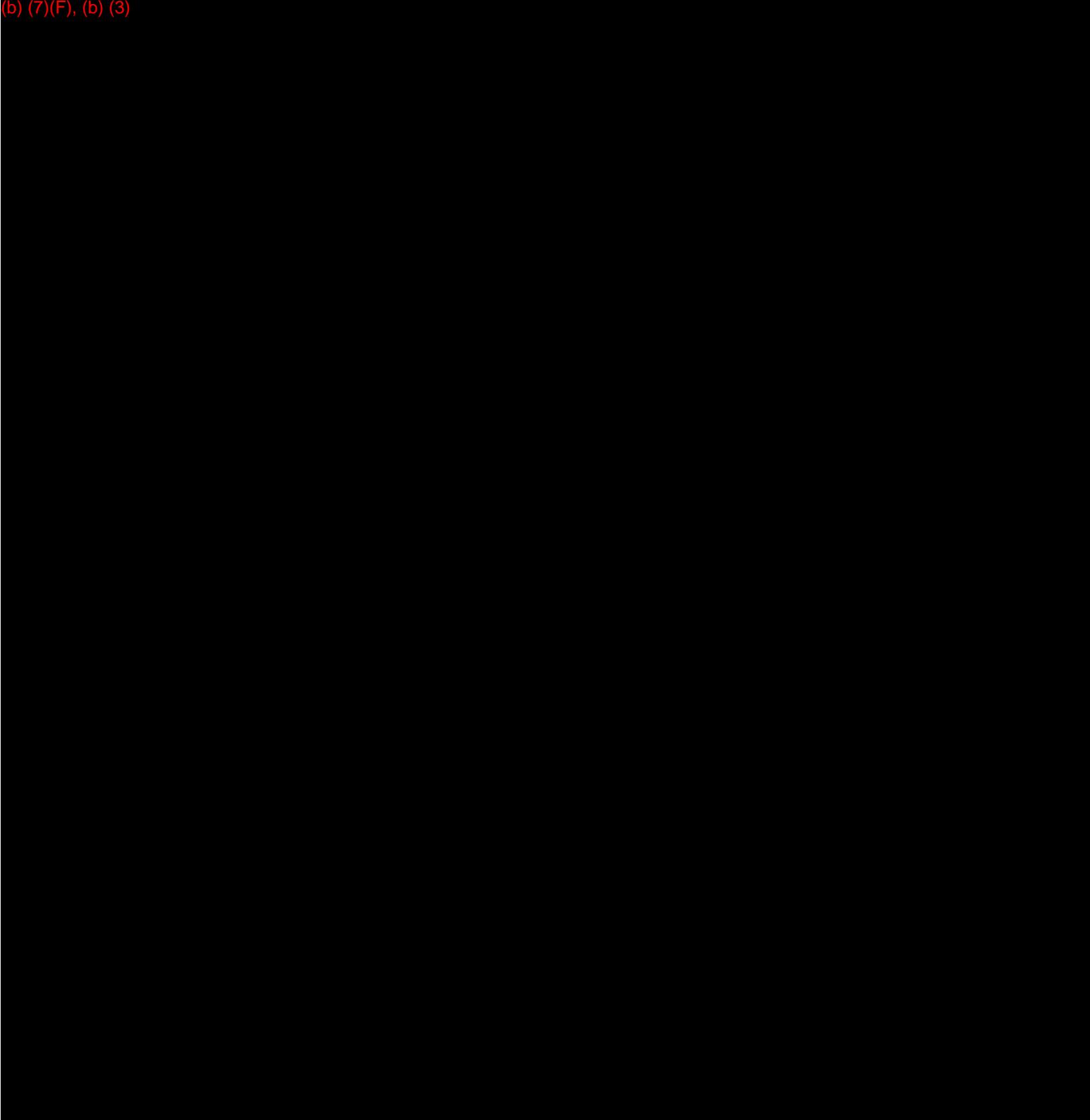
**(b) (7)(F), (b)(3)**





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

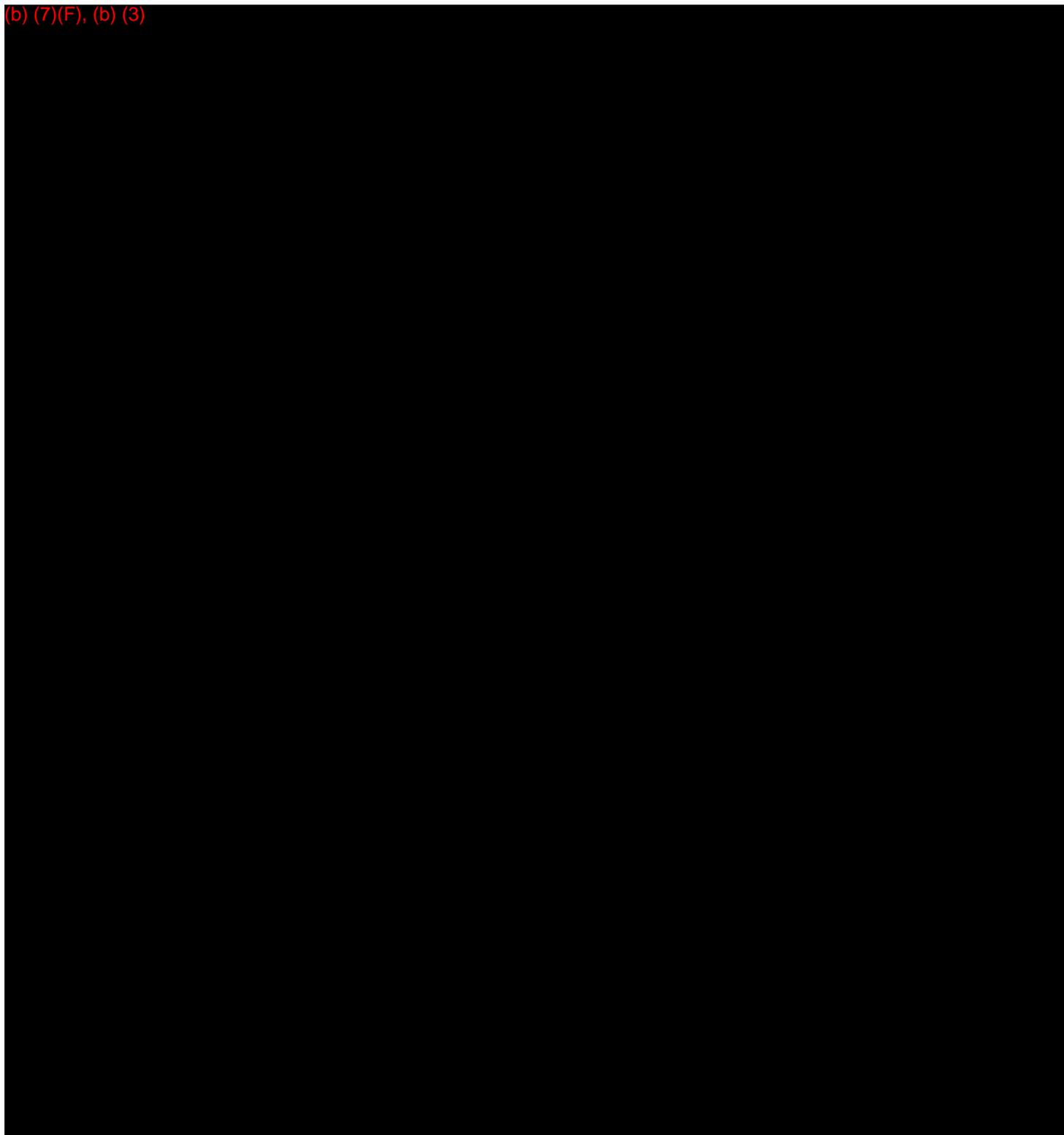








(b) (7)(F), (b) (3)



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





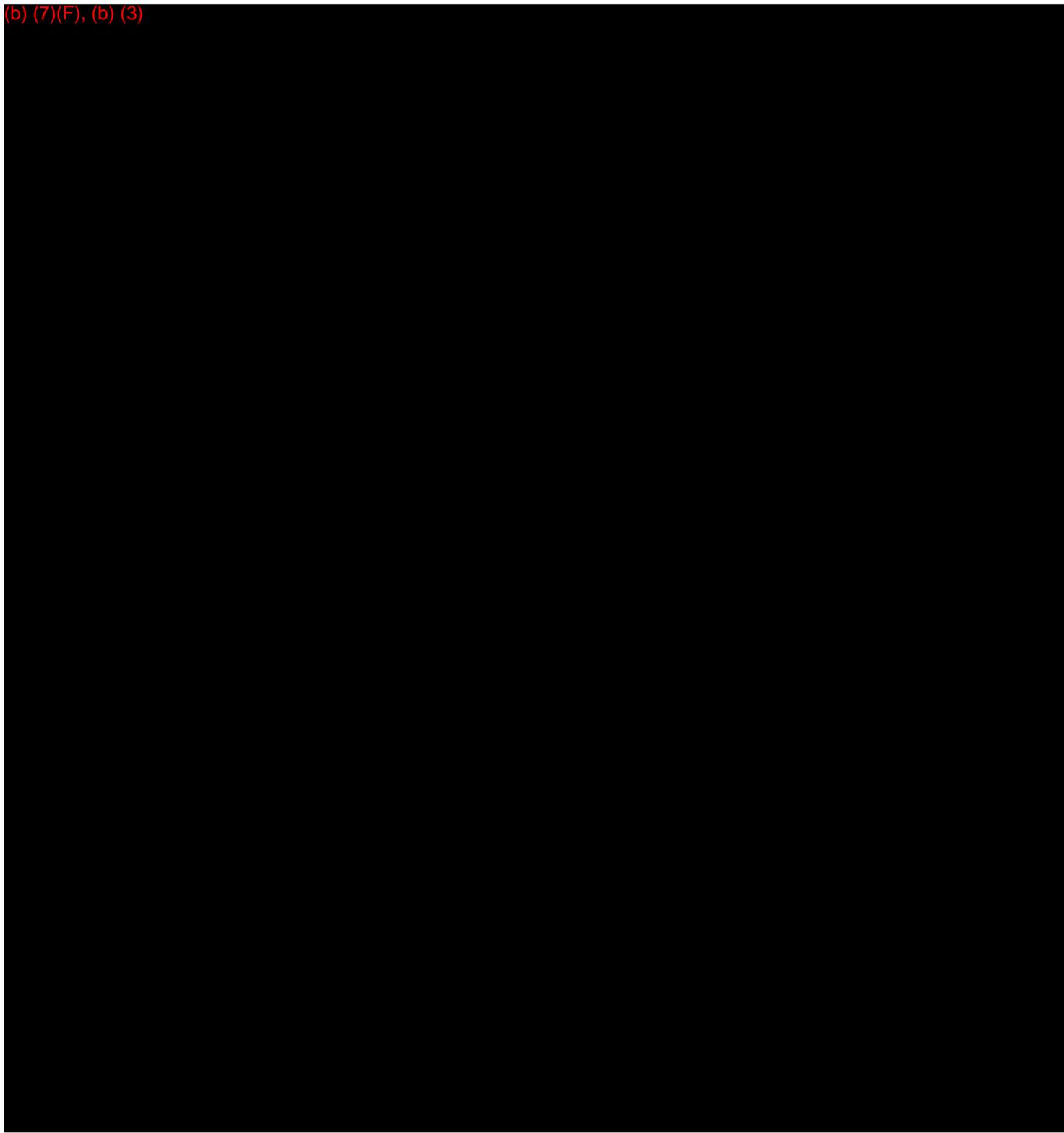








(b) (7)(F), (b) (3)











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

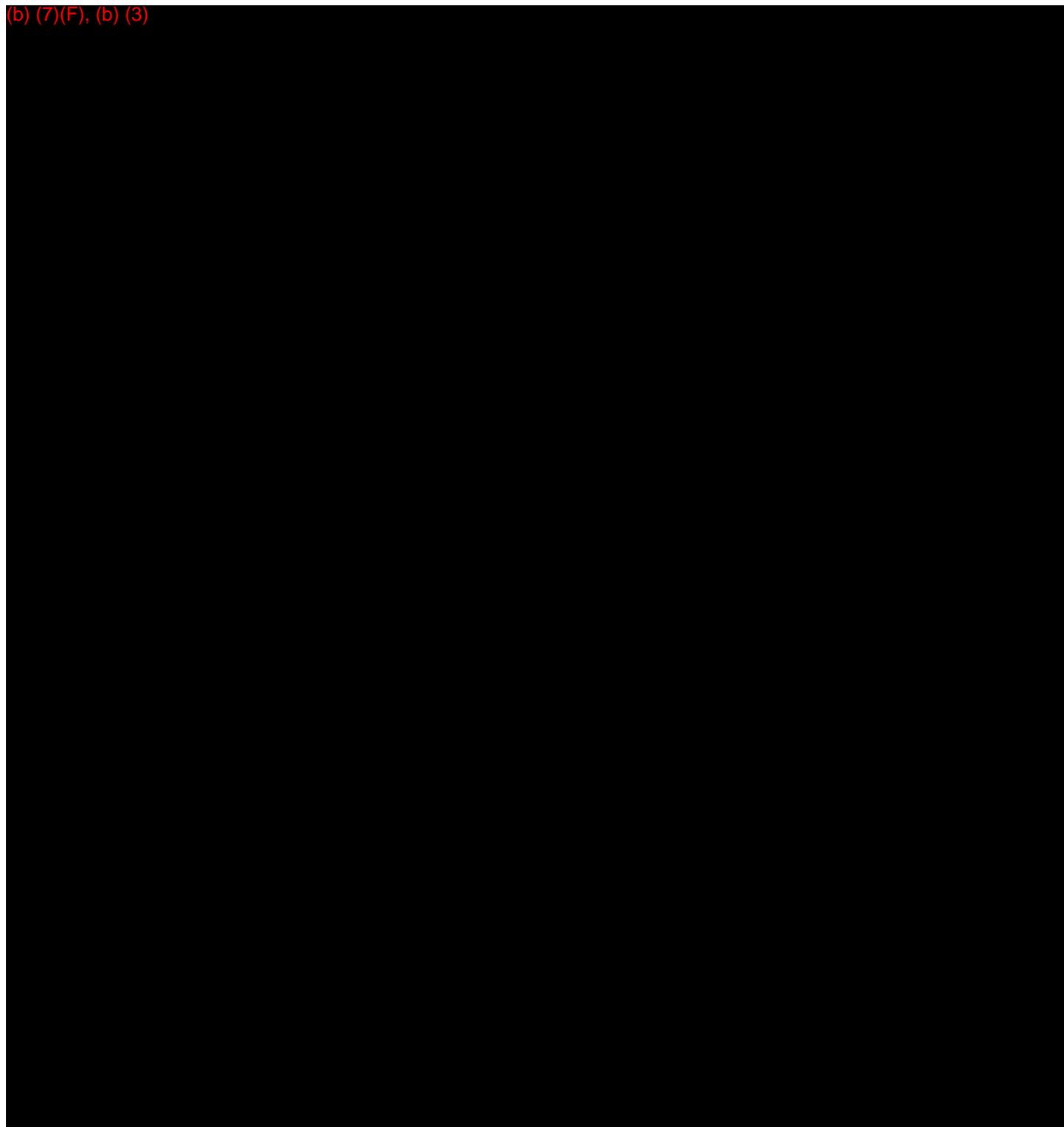
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(b) (7)(F), (b) (3)

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





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

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



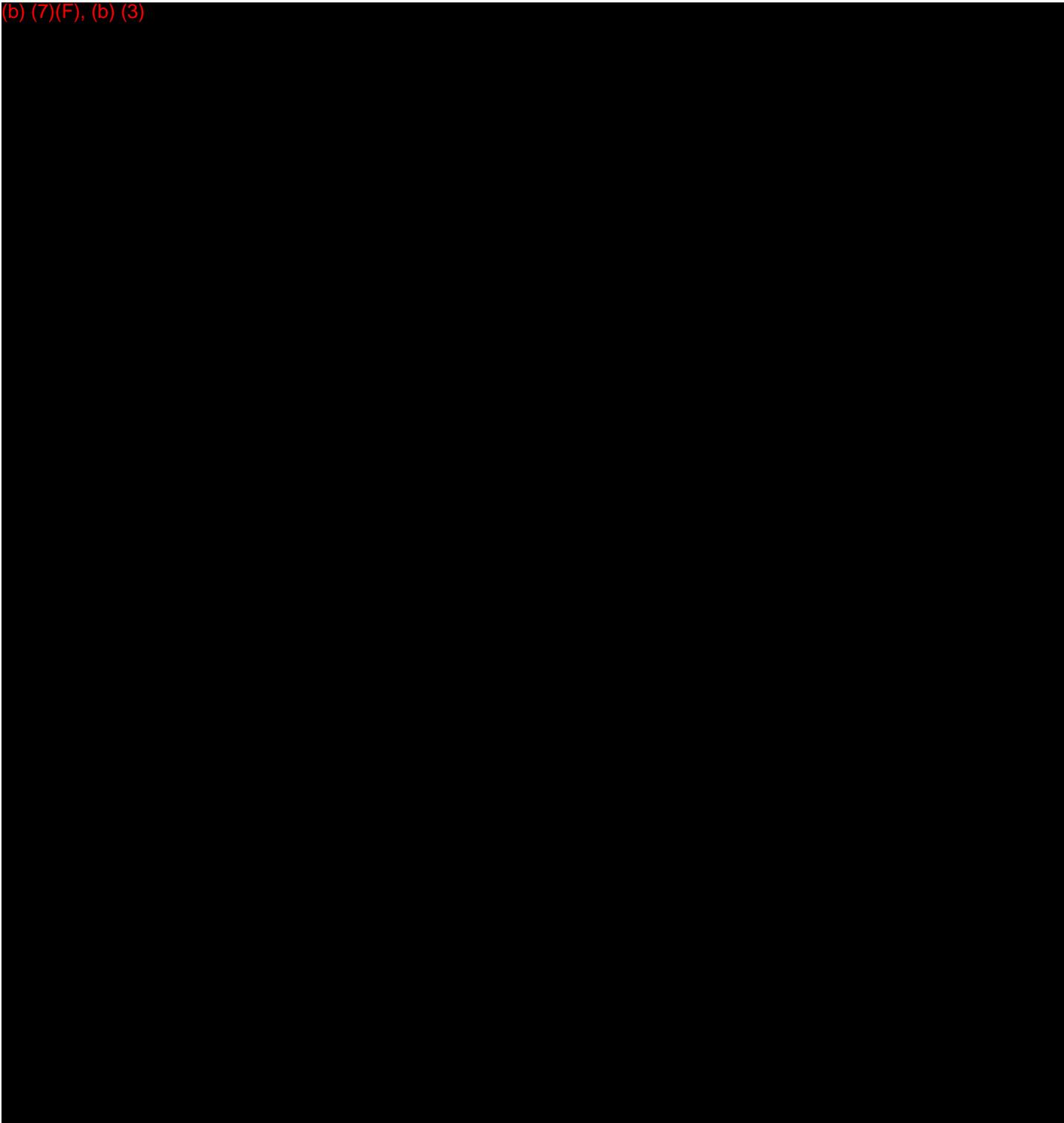




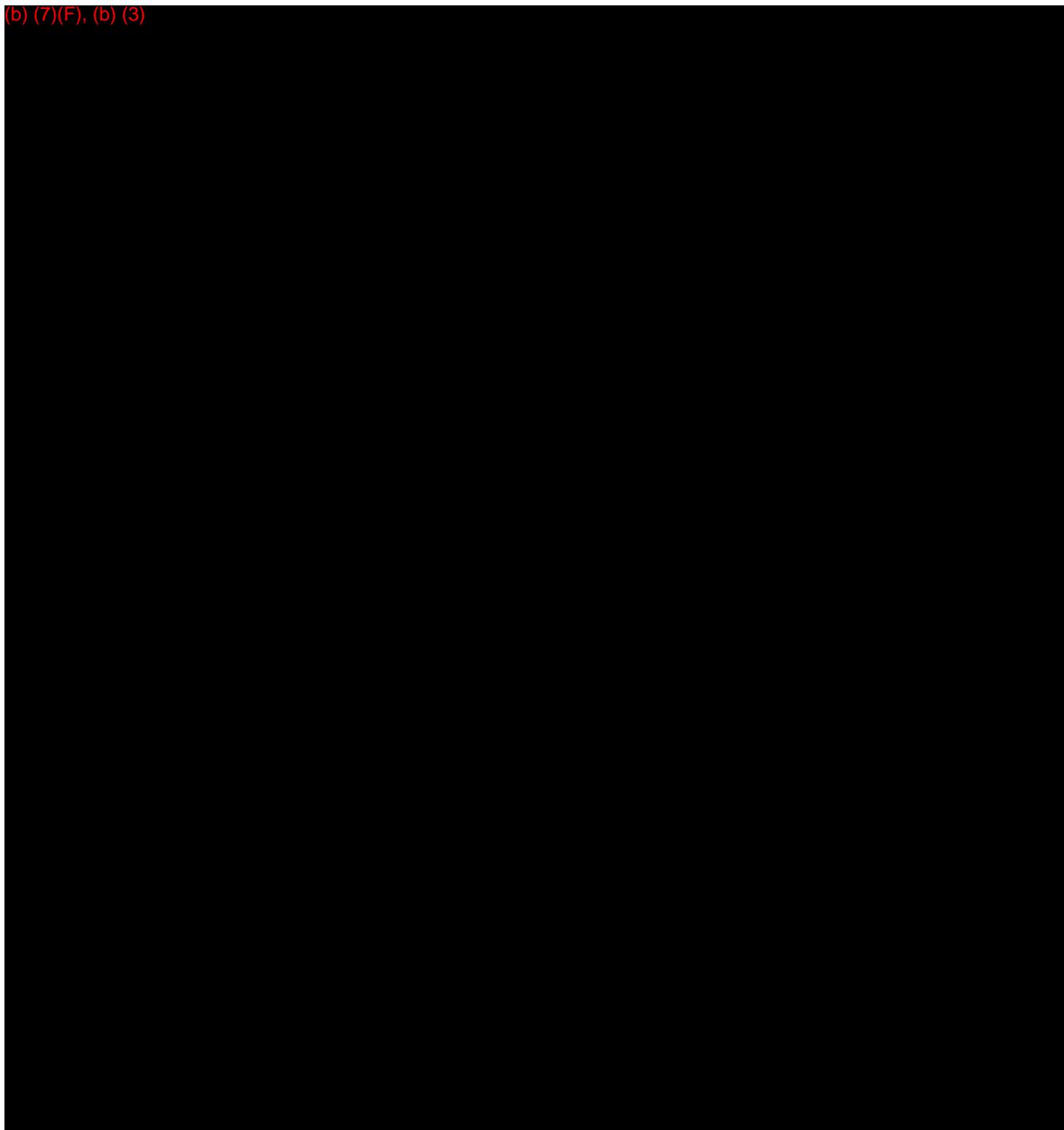




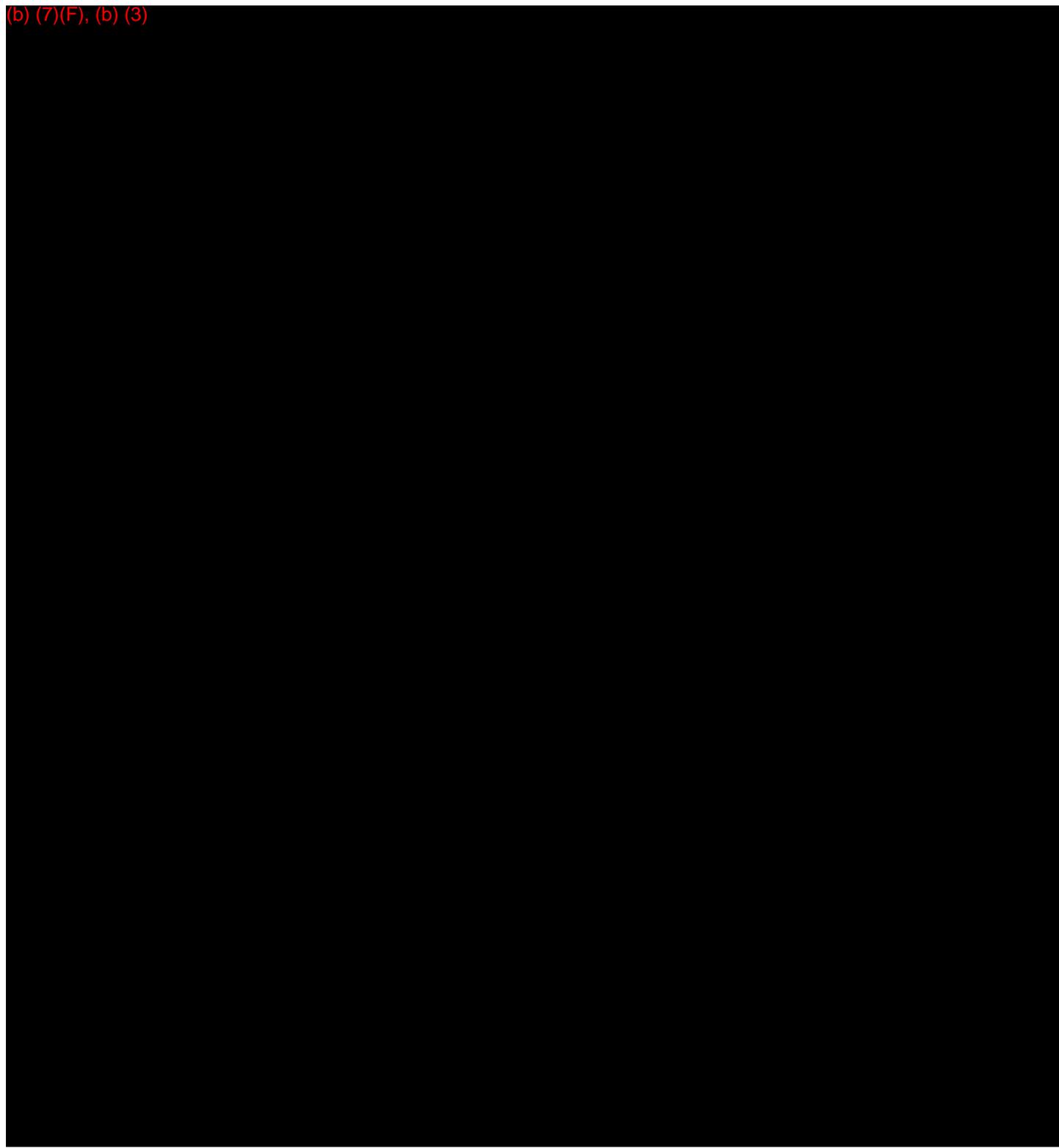
(b) (7)(F), (b) (3)



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



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



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

